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DEPARTMENT OF AGRICULTURE

Rural Utilities Service

7 CFR Part 1738

Rural Broadband Access Loans and Loan Guarantees

AGENCY: Rural Utilities Service, USDA.

ACTION: Final rule; technical correction.

SUMMARY: The Rural Utilities Service (RUS) published in the *Federal Register* on Thursday, January 30, 2003, at 68 FR 4684, a rule amending its regulations in order to establish the Rural Broadband Access Loan and Loan Guarantee Program as authorized by the Farm Security and Rural Investment Act of 2002 (Pub. L. 101-171) (2002 Act). Section 6103 of the Farm Security and Rural Investment Act of 2002 amended the Rural Electrification Act of 1936, as amended (RE Act), to add Title VI, Rural Broadband Access, to provide loans and loan guarantees to fund the cost of construction, improvement, or acquisition of facilities and equipment for the provision of broadband service in eligible rural communities. This document makes a technical correction to the final rule.

DATES: Effective January 30, 2003.

FOR FURTHER INFORMATION CONTACT: Roberta D. Purcell, Assistant Administrator, Telecommunications Program, Rural Utilities Service, U.S. Department of Agriculture, 1400 Independence Avenue, SW., STOP 1590, Room 4056, Washington, DC 20250-1590. Telephone number (202) 720-9554, Facsimile (202) 720-0810.

SUPPLEMENTARY INFORMATION: In FR Doc. 03-2199, published on January 30, 2003, at 68 FR 4684, make the following correction:

§ 1738.10 [Corrected]

1. On page 4688, in column one, in the fourth line of § 1738.10(b), in the

fourth line, remove “telecommunications loan made under”, and add, “telecommunications loan made or guaranteed under” in its place.

Dated: February 14, 2003.

Hilda Gay Legg,

Administrator, Rural Utilities Services.

[FR Doc. 03-4563 Filed 2-26-03; 8:45 am]

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DEPARTMENT OF JUSTICE

Immigration and Naturalization Service

8 CFR Part 103

[INS No. 2260-03]

RIN 1115-AH00

Readjustment of Immigration Benefit Application Fees

AGENCY: Immigration and Naturalization Service, Justice.

ACTION: Interim rule with request for comments.

SUMMARY: On January 24, 2003, the Immigration and Naturalization Service (Service) published an interim rule in the *Federal Register* adjusting the immigration benefit application fee schedule by subtracting the applicable amount of surcharges used for asylum and refugee services, fee exemptions and fee waivers. The Service was required to take that action under provisions of section 457 of the Homeland Security Act of 2002, Public Law 107-296. However, Congress has now repealed that section in the Homeland Security Act Amendments of 2003. Accordingly, this rule readjusts the immigration benefit application fee schedule to the levels that existed prior to January 24, 2003. Fees collected from persons filing immigration benefit applications are deposited into the Immigration Examinations Fee Account and recover the cost of processing immigration benefit applications and associated administrative costs and the costs of asylum applications pursuant to law. Federal guidelines require the Service to establish and collect fees to recover the full costs of processing immigration benefit applications.

DATES: *Effective date:* This rule is effective February 27, 2003.

Comment date: Written comments must be submitted on or before April 28, 2003. Comments on the interim rule published on January 24, 2003, and comments on this interim rule will be addressed jointly in the final rule.

ADDRESSES: Please submit written comments to the Director, Regulations and Forms Services Division, Immigration and Naturalization Service, 425 I Street NW., Room 4034, Washington DC 20536. To ensure proper handling, please reference INS Number 2260-03 on your correspondence. You may also submit comments electronically at insregs@usdoj.gov. When submitting comments electronically, you must include INS No. 2257-03 in the subject box so that your comments can be properly routed to the appropriate office. Comments are available for public inspection at the above address by calling (202) 514-3291 to arrange for an appointment.

FOR FURTHER INFORMATION CONTACT: Paul Schlesinger, Chief, Immigration Services Branch, Office of Budget, Immigration and Naturalization Service, 425 I Street NW., Room 5307, Washington, DC 20536, telephone (202) 514-3410.

SUPPLEMENTARY INFORMATION:

Legal Authority To Charge Fees

A. Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriation Acts of 1989 and 1991

As a federal agency, the Immigration and Naturalization Service (Service) long has had statutory authority to charge fees for services provided. *e.g.*, 31 U.S.C. 9701. The Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriation Act, 1989, Pub. L. No. 100-459, sec. 209, 102 Stat. 2186, 2203 (October 1, 1988), authorized the establishment of the Immigration Examinations Fee Account (IEFA) in the Treasury of the United States. All revenue from fees collected for immigration and naturalization benefits are deposited in the IEFA and remain available to provide immigration and naturalization services. 8 U.S.C. 1356(n).

In subsequent legislation, the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1991, Pub. L. No. 101-515, sec. 210(d), 104

Stat. 2101, 2121 (November 5, 1990), Congress further provided that “fees for providing adjudication and naturalization services may be set at a level that will ensure recovery of the full costs of providing all such services, including the costs of similar services provided without charge to asylum applicants or other immigrants. Such fees may also be set at a level that will recover any additional costs associated with the administration of the fees collected.” 8 U.S.C. 1356(m).

The House Conference Report to the bill, entitled “Making Appropriations for the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies for the Fiscal Year Ending September 30, 1996, and For Other Purposes” H.R. Conf. Rep. No. 104-378, at 82 (1995), directs the Service to fund the cost of the Cuban-Haitian Entrant Program from the IEFA. The Report states “(t)he conferees have also agreed that the activities related to the resettlement of Cubans and Haitians should be transferred to the * * * Service and that the costs of these activities should be supported by the [IEFA].” *Id.*

In a final rule effective October 13, 1998, (except for the Form N-400, which took effect on January 15, 1999)

the Service raised the majority of fees to recover the full costs of processing immigration benefit applications, and added a “surcharge” setting the fees at a level sufficient to fund the processing of asylum and refugee applications as well as those immigration benefit applications processed at no charge to applicants/petitioners. The Service subsequently adjusted the levels of fees in the IEFA, after notice and comment, effective February 19, 2002.

The Impact of Section 457 of the Homeland Security Act on the Fee Structure

In section 457 of the Homeland Security Act of 2002, Congress amended section 286(m) of the Immigration and Nationality Act (8 U.S.C. 1356(m)) by striking “services, including the costs of similar services provided without charge to asylum applicants or other immigrants.” and inserting “services.”. This amendment effectively repealed the statutory basis for surcharges. Accordingly, the Service reduced the immigration benefit application fees by an average of \$50, or 25 percent, for the surcharges applied to the majority of immigration benefit applications (see 68 FR 3798, dated January 24, 2003).

The Impact of the Homeland Security Act Amendments of 2003

In section 107 of Homeland Security Act Amendments of 2003, Congress amended the Homeland Security Act by striking section 457, including the amendment made by such section. As a result, the Service is once again authorized to add a surcharge to immigration benefit applications in order to fund the processing of asylum and refugee applications as well as those immigration benefit applications processed at no charge to applicants/petitioners. Accordingly, the Service is readjusting the immigration benefit application fee schedule by adding in the surcharges that were removed on January 24, 2003, thus restoring the fees to the pre-January 24, 2003, levels. The submission of the reinstated fees reflected in the table below is required for applications submitted on or after February 27, 2003. The Service will accept applications or petitions submitted with the fee that was in effect before the publication of this interim rule, if the application or petition is postmarked on or before February 27, 2003. The following table displays the new immigration benefit application fees.

TABLE 1.—CURRENT VERSUS NEW IMMIGRATION BENEFIT APPLICATION FEES

Form No.	Description	Fee prior to 1/23/03	Current fee	Fee under this rule
I-17	Petition for Approval of School Attendance by Nonimmigrant Student ..	\$580	\$517	\$580
I-90	Application to Replace Permanent Resident Card	130	95	130
I-102	Application for Replacement/Initial Nonimmigrant Arrival/Departure Record.	100	73	100
I-129	Petition for A Nonimmigrant Worker	130	96	130
I-129F	Petition for Alien Fiancé(e)	110	81	110
I-130	Petition for Alien Relative	130	96	130
I-131	Application for Travel Document	110	80	110
I-140	Immigrant Petition for Alien Worker	135	99	135
I-191	Application for Permission to Return to an Unrelinquished Domicile	195	142	195
I-192	Application for Advance Permission to Enter as a Nonimmigrant	195	142	195
I-193	Application for Waiver of Passport and/or Visa	195	142	195
I-212	Application for Permission to Reapply for Admission into the U.S. After Deportation or Removal.	195	142	195
I-485	Application to Register Permanent Residence or to Adjust Status	255	186	255
I-526	Immigrant Petition by Alien Entrepreneur	400	290	400
I-539	Application to Extend/Change Nonimmigrant Status	140	102	140
I-600/600 A	Petition to Classify Orphan as an Immediate Relative/Application for Advance Processing or Orphan Petition.	460	332	460
I-601	Application for Waiver of Grounds of Excludability	195	142	195
I-612	Application for Waiver of the Foreign Residence Requirement	195	142	195
I-751	Petition to Remove the Conditions on Residence	145	105	145
I-765	Application for Employment Authorization	120	88	120
I-817	Application for Family Unity Benefits	140	102	140
I-824	Application for Action on an Approved Application or Petition	140	103	140
I-829	Petition by Entrepreneur to Remove Conditions	395	286	395
N-400	Application for Naturalization	260	188	260
N-565	Application for Replacement Naturalization Citizenship Document	155	113	155
N-600	Application for Certification of Citizenship	185	134	185
N-643	Application for Certificate of Citizenship in Behalf of an Adopted Child	145	105	145

The Impact of the Homeland Security Act Amendments of 2003 on Current Programs

The statutory amendment restores the funding for the asylum and refugee programs and assures the continued ability of the Service to adjudicate applications for these programs. This amendment also restores funding for the adjudication of other applications for which the Service grants a fee waiver or exemption under the relevant standards, and allows the Service to once again process those applications at no charge to designated applicants and petitioners.

Good Cause Exception

This interim rule is effective on February 27, 2003, although the Service invites post promulgation comments and will address any such comments in a final rule. The Service finds that good cause exists to adopt this rule without the prior notice and comment period and delayed effective date ordinarily required by 5 U.S.C. 553(b) and (d). The Service had set the pre-January 24, 2003, fee levels through a notice and comment rulemaking and this rule simply restores that same fee schedule now that Congress has reinstated the legal authority for the Service to collect fees at these levels.

Since section 107 of the Homeland Security Act Amendments of 2003 is effective upon enactment, and the past hiatus in funding the asylum and fee waiver programs has the potential for causing disruption of those programs, this rule is made effective upon publication. This rule merely restores the preexisting fee structure after a short lapse in statutory authority, and the surcharges set by this rule are needed in order to be able to fund asylum and refugee, fee waiver and exemption, and other humanitarian programs. It would be impracticable and contrary to the public interest to make this interim final rule effective 30 days after publication in the **Federal Register**.

Regulatory Flexibility Act

The Acting Commissioner, Immigration and Naturalization Service, in accordance with 5 U.S.C. 605(b), has reviewed this regulation and by approving it has determined that this rule will not have a significant economic impact on a substantial number of small entities. The majority of applications and petitions are submitted by individuals and not small entities as that term is defined in 5 U.S.C. 601(6).

The Service acknowledges that a number of small entities, particularly those filing business-related

applications and petitions, such as Form I-140, Immigrant Petition for Alien Worker; Form I-526, Immigrant Petition by Alien Entrepreneur; and Form I-829, Petition by Entrepreneur to Remove Conditions, may be affected by this rule. For FY 2003, the INS projects approximately 110,000 Forms I-140, 300 Forms I-526, and 200 Forms I-829 will be filed. However, this volume represents petitions filed by a variety of businesses, ranging from large multinational corporations to small domestic businesses. The Service does not collect data on the size of the businesses filing petitions, and therefore does not know the number of small businesses that may be affected by this rule. However, even if all of the employers applying for benefits met the definition of small businesses, the resulting degree of economic impact would not require a Regulatory Flexibility Analysis to be performed.

Unfunded Mandates Reform Act of 1995

This rule will not result in the expenditure by state, local and tribal governments, in the aggregate, or by the private sector of \$100 million or more in any one year, and it will not significantly or uniquely affect small governments. Therefore, no actions were deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995.

Small Business Regulatory Enforcement Fairness Act of 1996

This rule is not a major rule as defined by section 804 of the Small Business Regulatory Enforcement Act of 1996. This rule will not result in an annual effect on the economy of \$100 million or more; a major increase in costs or prices; or significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based companies to compete with foreign-based companies in domestic and export markets.

Executive Order 12866

This rule is considered by the Department of Justice, Immigration and Naturalization Service, to be a "significant regulatory action" under Executive Order 12866, section 3(f), Regulatory Planning and Review. Accordingly, this rule has been submitted to the Office of Management and Budget (OMB) for review.

The Service has assessed both the costs and benefits of this rule as required by section 1(b)(6) of Executive Order 12866 and has made a determination that although restoring

the surcharge will increase the costs to individual applicants and petitioners who submitted applications or petitions to the Service for adjudication, the benefit to other applicants and the public interest of the Service being able to continue to provide asylum, refugee, and other humanitarian programs at the funding levels intended by Congress through its repeal of section 457 substantially exceeds the costs.

The determination of the economic impact of the restoration of the immigration benefit application fee schedule to the levels that existed prior to January 24, 2003 depends on the baseline used for comparison. Although the difference in the fees collected would exceed \$100 million a year if compared to the fees contained in the schedule made effective on January 24, 2003, that fee schedule is not the appropriate baseline for purposes of determining whether this rule has a economically significant regulatory impact under Executive Order 12866. By striking section 457 of the Homeland Security Act of 2002, Congress has indicated that the Service should return to the fee schedule in place prior to January 24, 2003. This interim rule merely restores the previous fee schedule. Using the pre-January 24th fee schedule as a baseline, this interim rule will not have a significant economic impact.

Executive Order 13132

This 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. Therefore, in accordance with section 6 of Executive Order 13132, the Department of Justice has determined that this rule does not have sufficient federalism implications to warrant the preparation of a federalism summary impact statement.

Executive Order 12988: Civil Justice Reform

This rule meets the applicable standards set forth in sections 3(a) and 3(b)(2) of Executive Order 12988.

Paperwork Reduction Act

This rule requires that the fees for application and petition forms identified in this interim rule be increased in light of section 107 of Homeland Security Act Amendments of 2003. Since this is merely a reinstatement of fees prior to Section 457 of Public Law 107-296, the net effect of the cost burden on the public is negligible, the Service has submitted

the required Paperwork Reduction Change Worksheet (OMB-83C) to the OMB reflecting the new fees and cost burdens on the public, and the OMB has approved the changes.

To ensure that the public is fully aware of these changes the new fees will be highlighted on the Service's Web site at: www.ins.usdoj.gov.

List of Subjects in 8 CFR Part 103

Administrative practice and procedure, Authority delegations (government agencies), Freedom of Information, Privacy, Reporting and recordkeeping requirements, Surety bonds.

Accordingly, part 103 of chapter I of title 8 of the Code of Federal Regulations is amended as follows:

PART 103—POWERS AND DUTIES OF SERVICE OFFICERS; AVAILABILITY OF SERVICE RECORDS

1. The authority citation for part 103 continues to read as follows:

Authority: 5 U.S.C. 552, 552(a); 8 U.S.C. 1101, 1103, 1304, 1356; 31 U.S.C. 9701; E.O. 12356, 47 FR 14874, 15557; 3 CFR, 1982 Comp., p.166; 8 CFR part 2.

2. Section 103.7(b)(1) is amended by revising the entries for the following forms, to read as follows:

§ 103.7 Fees.

*	*	*	*	*
	(b)	*	*	*
	(1)	*	*	*
*	*	*	*	*

Form I-17. For filing a petition for school approval or recertification—\$580 plus \$350 per additional campus listed on Form I-17B.

*	*	*	*	*

Form I-90. For filing an application for a Permanent Resident Card (Form I-551) in lieu of an obsolete card or in lieu of one lost, mutilated, or destroyed, or for a change in name—\$130.

*	*	*	*	*

Form I-102. For filing a petition for an application (Form I-102) for Arrival/Departure Record (Form I-94) or Crewman's Landing (Form I-95), in lieu of one lost, mutilated, or destroyed—\$100.

Form I-129. For filing a petition for a nonimmigrant worker, a base fee of \$130. For filing an H-1B petition a base fee of \$130 plus an additional \$1,000 fee in a single remittance of \$1,130. The remittance may be in the form of one or two checks (one in the amount of \$1,000 and the other in the amount of \$130). Payment of this additional \$1,000 fee is not waivable under § 103.7(c)(1). Payment of this additional \$1,000 fee is

not required if an organization is exempt under § 214.2(h)(19)(iii) of this chapter, and this additional \$1,000 fee also does not apply to certain filings by any employer as provided in § 214.2(h)(19)(v) of this chapter.

Form I-129F. For filing a petition to classify nonimmigrant as fiancée or fiancé under section 214(d) of the Act—\$110.

Form I-130. For filing a petition to classify status of alien relative for issuance of immigrant visa under section 204(a) of the Act—\$130.

Form I-131. For filing an application for travel documents—\$110.

Form I-140. For filing a petition to classify preference status of an alien on the basis of profession or occupation under section 204(a) of the Act—\$135.

*	*	*	*	*

Form I-191. For filing applications for discretionary relief under section 212(c) of the Act—\$195.

Form I-192. For filing an application for discretionary relief under section 212(d)(3) of the Act, except in an emergency case, or where the approval of the application is in the interest of the United States Government—\$195.

Form I-193. For filing an application for waiver of passport and/or visa—\$195.

Form I-212. For filing an application for permission to reapply for an excluded, deported or removed alien, an alien who has fallen into distress, an alien who has been removed as an alien enemy, or an alien who has been removed at Government expense in lieu of deportation—\$195.

*	*	*	*	*

Form I-485. For filing an application for permanent resident status or creation of a record of lawful permanent residence—\$255 for an applicant 14 years of age or older—\$160 for an applicant under the age of 14 years; no fee for an applicant filing as a refugee under section 209(a) of the Act.

*	*	*	*	*

Form I-526. For filing a petition for an alien entrepreneur—\$400.

Form I-539. For filing an application to extend or change nonimmigrant status—\$140.

*	*	*	*	*

Form I-600. For filing a petition to classify an orphan as an immediate relative for issuance of immigrant visa under section 204(a) of the Act. (When more than one petition is submitted by the same petitioner on behalf of orphans who are brothers or sisters, only one fee will be required.)—\$460.

Form I-600A. For filing an application for advance processing of orphan petition. (When more than one

petition is submitted by the same petitioner on behalf of orphans who are brothers or sisters, only one fee will be required.)—\$460.

Form I-601. For filing an application for waiver of ground of inadmissibility under section 212(h) or (i) of the Act. (Only a single application and fee shall be required when the alien is applying simultaneously for a waiver under both those subsections.)—\$195.

Form I-612. For filing an application for waiver of the foreign-residence requirement under section 212(e) of the Act—\$195.

*	*	*	*	*

Form I-751. For filing a petition to remove the conditions on residence, based on marriage—\$145.

Form I-765. For filing an application for employment authorization pursuant to 8 CFR 274a.13—\$120.

*	*	*	*	*

Form I-817. For filing an application for voluntary departure under the Family Unity Program—\$140.

*	*	*	*	*

Form I-824. For filing for action on an approved application or petition—\$140.

Form I-829. For filing a petition by entrepreneur to remove conditions—\$395.

*	*	*	*	*

Form N-400. For filing an application for naturalization—\$260.

*	*	*	*	*

Form N-565. For filing an application for a certificate of naturalization or declaration of intention in lieu of a certificate or declaration alleged to have been lost, mutilated, or destroyed; for a certificate of citizenship in a changed name under section 343(c) of the Act; or for a special certificate of naturalization to obtain recognition as a citizen of the United States by a foreign state under section 343(b) of the Act—\$155.

Form N-600. For filing an application for a certificate of citizenship under section 309(c) or section 341 of the Act—\$185.

Form N-643. For filing an application for a certificate of citizenship on behalf of an adopted child—\$145.

*	*	*	*	*

Dated: February 25, 2003.

Michael J. Garcia,

Acting Commissioner, Immigration and Naturalization Service.

[FR Doc. 03-4747 Filed 2-25-03; 11:36 am]

BILLING CODE 4410-10-P

FEDERAL RESERVE SYSTEM**12 CFR Part 220****[Regulation T]****Credit by Brokers and Dealers; List of Foreign Margin Stocks**

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Final rule; determination of applicability of regulations.

SUMMARY: The List of Foreign Margin Stocks (Foreign List) is composed of certain foreign equity securities that qualify as *margin securities* under Regulation T. The Foreign List is published twice a year by the Board.

EFFECTIVE DATE: March 1, 2003.

FOR FURTHER INFORMATION CONTACT: Peggy Wolfrum, Financial Analyst, Division of Banking Supervision and Regulation, (202) 452-2837, or Scott Holz, Senior Counsel, Legal Division, (202) 452-2966, Board of Governors of the Federal Reserve System, Washington, DC 20551.

SUPPLEMENTARY INFORMATION: Listed below is a complete edition of the Board's Foreign List. The Foreign List was last published on August 20, 2002 (67 FR 53875), and became effective September 1, 2002.

The Foreign List is composed of foreign equity securities that qualify as margin securities under Regulation T by meeting the requirements of § 220.11(c) and (d). Additional foreign securities qualify as margin securities if they are deemed by the Securities and Exchange Commission (SEC) to have a "ready market" under SEC Rule 15c3-1 (17 CFR 240.15c3-1) or a "no-action" position issued thereunder. This includes all foreign stocks in the FTSE World Index Series.

It is unlawful for any creditor to make, or cause to be made, any representation to the effect that the inclusion of a security on the Foreign List is evidence that the Board or the SEC has in any way passed upon the merits of, or given approval to, such security or any transactions therein. Any statement in an advertisement or other similar communication containing a reference to the Board in connection with the Foreign List or the stocks thereon shall be an unlawful representation.

There are no additions to the Foreign List. The following six stocks are being removed because they no longer substantially meet the provisions of § 220.11(d) of Regulation T:

Bandai Co., Ltd.
¥ 50 par common

Clarion Co., Ltd.
¥ 50 par common
Kyowa Exeo Corp.
¥ 50 par common
Matsushita Seiko Co., Ltd.
¥ 50 par common
Nippon Comsys Corp.
¥ 50 par common
Takuma Co., Ltd.
¥ 50 par common

Public Comment and Deferred Effective Date

The requirements of 5 U.S.C. 553 with respect to notice and public participation were not followed in connection with the issuance of this amendment due to the objective character of the criteria for inclusion and continued inclusion on the Foreign List specified in § 220.11(c) and (d). No additional useful information would be gained by public participation. The full requirements of 5 U.S.C. 553 with respect to deferred effective date have not been followed in connection with the issuance of this amendment because the Board finds that it is in the public interest to facilitate investment and credit decisions based in whole or in part upon the composition of the Foreign List as soon as possible. The Board has responded to a request by the public and allowed approximately a one-week delay before the Foreign List is effective.

List of Subjects in 12 CFR Part 220

Brokers, Credit, Margin, Margin requirements, Investments, Reporting and recordkeeping requirements, Securities.

Accordingly, pursuant to the authority of sections 7 and 23 of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78g and 78w), and in accordance with 12 CFR 220.2 and 220.11, there is set forth below a complete edition of the Foreign List.

Japan

Akita Bank, Ltd.
¥ 50 par common
Aomori Bank, Ltd.
¥ 50 par common
Asatsu-DK Inc.
¥ 50 par common
Bank of Nagoya, Ltd.
¥ 50 par common
Chudenko Corp.
¥ 50 par common
Chugoku Bank, Ltd.
¥ 50 par common
Daihatsu Motor Co., Ltd.
¥ 50 par common
Dainippon Screen Mfg. Co., Ltd.
¥ 50 par common
Denki Kagaku Kogyo
¥ 50 par common

Eighteenth Bank, Ltd.
¥ 50 par common
Futaba Corp.
¥ 50 par common
Futaba Industrial Co., Ltd.
¥ 50 par common
Higo Bank, Ltd.
¥ 50 par common
Hitachi Software Engineering Co., Ltd.
¥ 50 par common
Hokkoku Bank, Ltd.
¥ 50 par common
Hokuetsu Paper Mills, Ltd.
¥ 50 par common
Iyo Bank, Ltd.
¥ 50 par common
Japan Airport Terminal Co., Ltd.
¥ 50 par common
Juroku Bank, Ltd.
¥ 50 par common
Kagoshima Bank, Ltd.
¥ 50 par common
Kamigumi Co., Ltd.
¥ 50 par common
Katokichi Co., Ltd.
¥ 50 par common
Keisei Electric Railway Co., Ltd.
¥ 50 par common
Keiyo Bank, Ltd.
¥ 50 par common
Komori Corp.
¥ 50 par common
Konami Co., Ltd.
¥ 50 par common
Michinoku Bank, Ltd.
¥ 50 par common
Musashino Bank, Ltd.
¥ 500 par common
Namco, Ltd.
¥ 50 par common
Nichicon Corp.
¥ 50 par common
Nihon Unisys, Ltd.
¥ 50 par common
Nishi-Nippon Bank, Ltd.
¥ 50 par common
Nishi-Nippon Railroad Co., Ltd.
¥ 50 par common
Nissan Chemical Industries, Ltd.
¥ 50 par common
Ogaki Kyoritsu Bank, Ltd.
¥ 50 par common
Q.P. Corp.
¥ 50 par common
Rinnai Corp.
¥ 50 par common
Sagami Railway Co., Ltd.
¥ 50 par common
Sakata Seed Corp.
¥ 50 par common
Santen Pharmaceutical Co., Ltd.
¥ 50 par common
Shimadzu Corp.
¥ 50 par common
Shimamura Co., Ltd.
¥ 50 par common
Sumitomo RubbeR Industries, Ltd.
¥ 50 par common
Taiyo Yuden Co., Ltd.

¥ 50 par common
Takara Standard Co., Ltd.
¥ 50 par common
Toho Bank, Ltd.
¥ 50 par common
Toho Gas Co., Ltd.
¥ 50 par common
Tokyo Ohka Kogyo Co., Ltd.
¥ 50 par common
Uni-Charm Corp.
¥ 50 par common
Ushio, Inc.
¥ 50 par common
Yamaha Motor Co., Ltd.
¥ 50 par common

By order of the Board of Governors of the Federal Reserve System, acting by its Director of the Division of Banking Supervision and Regulation pursuant to delegated authority (12 CFR 265.7(f)(10)), February 21, 2003.

Jennifer J. Johnson,
Secretary of the Board.

[FR Doc. 03-4619 Filed 2-26-03; 8:45 am]

BILLING CODE 6210-01-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-SW-06-AD; Amendment 39-13064; AD 2003-04-15]

RIN 2120-AA64

Airworthiness Directives; Sikorsky Aircraft Corporation Model S-76A, B, and C Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) for the specified Sikorsky Aircraft Corporation (Sikorsky) model helicopters. This action requires determining the manufacturer of a certain part-numbered rotor brake disc (RBD) and if the manufacturer is Parker Hannifin Corporation (PHC), re-identifying the RBD as appropriate. This action also requires before the first flight of the next day following any day in which a certain RBD was used, visually inspecting the RBD for a crack. If a crack is found, this AD also requires replacing the RBD with an airworthy RBD or deactivating it as applicable depending on the nature of the crack. This amendment is prompted by the discovery that certain RBDs manufactured by PHC were improperly heat treated resulting in "soft" RBDs that have an increased wear rate compared to those heat treated in

accordance with the type design requirement. Further investigation reveals that "soft" RBDs develop cracks more frequently than previously manufactured RBDs. The actions specified in this AD are intended to prevent failure of the RBD, damage to the rotor blades and nearby hydraulic and fuel lines, and subsequent loss of control of the helicopter.

DATES: Effective February 27, 2003.

Comments for inclusion in the Rules Docket must be received on or before April 28, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 2003-SW-06-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. You may also send comments electronically to the Rules Docket at the following address: 9-asw-adcomments@faa.gov.

FOR FURTHER INFORMATION CONTACT:

Terry Fahr, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7155, fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: This amendment adopts a new AD for the specified Sikorsky model helicopters. This amendment is prompted by the discovery that a certain part-numbered RBD manufactured by PHC was improperly heat treated resulting in "soft" RBDs that have an increased wear rate compared to those heat treated in accordance with the type design requirement. Further investigation reveals that "soft" RBDs develop cracks more frequently than previously manufactured RBDs. The actions specified in this AD are intended to prevent failure of the RBD, damage to the rotor blades and nearby hydraulic and fuel lines, and subsequent loss of control of the helicopter.

The FAA has reviewed Sikorsky Alert Service Bulletin (ASB) Nos. 76-66-36, dated November 12, 2002, and 76-66-37, dated January 31, 2003. ASB No. 76-66-36 describes a one-time visual inspection of the RBD to determine the manufacturer and to reidentify the RBD if necessary. ASB No. 76-66-36 also specifies an initial and recurring inspection for certain reidentified RBDs. ASB No. 76-66-37 specifies removing certain RBDs from service and provides interim instructions for operating the helicopter until a replacement RBD is installed.

This unsafe condition is likely to exist or develop on other helicopters of these same type designs. Therefore, this AD is being issued to prevent failure of the

RBD, damage to the rotor blades and nearby hydraulic and fuel lines, and subsequent loss of control of the helicopter. This AD requires the following:

- Before further flight, determine the manufacturer of each RBD by examining the part number (P/N) markings. This AD requires no further action if the manufacturer is BF Goodrich or Goodyear.

- If the RBD is manufactured by PHC, reidentify it with a P/N 76363-09103-104 or -105, as applicable, depending on the serial number of the RBD. If you cannot determine the PHC RBD serial number or the manufacturer, reidentify the RBD with P/N 76363-09103-104.

- Before the first flight of the next day following any day in which the RBD was used, visually inspect each RBD, P/N 76363-09103-104, for a crack.

- If you find a crack through the entire RBD thickness or two or more surface cracks between adjacent boltholes, replace the RBD with an airworthy RBD before further flight. If you find a surface crack or surface cracks separated by the boltholes, replace the RBD with an airworthy RBD or deactivate it before further flight.

- Replace PHC RBD, P/N 76363-09103-104, with an airworthy RBD on or before May 31, 2003, or within 60 days after the effective date of this AD, whichever occurs later.

- Replacement RBD, P/N 76363-09103-104, is not airworthy.

The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability of the helicopter. Therefore determining the manufacturer, reidentifying the RBD as specified, inspecting the RBD for a crack, and either replacing the RBD or deactivating it is required before further flight and this AD must be issued immediately.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

The FAA estimates that 165 helicopters will be affected by this AD, that it will take approximately 2 work hours to determine the manufacturer of the RBD, 1 hour to reidentify the RBD, 2 hours to inspect the RBD, and 6 hours to replace the RBD. The average labor rate is \$60 per work hour. Required parts will cost approximately \$1,250 per helicopter. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$315,150 per helicopter, assuming all RBDs were

manufactured by PHC, are with the affected S/N range, must be remarked, do not have sufficient cracking to warrant immediate replacement, and the rotor brake is not used until the day prior to the day that all RBDs are replaced.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption **ADDRESSES**. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 2003-SW-06-AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 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. Section 39.13 is amended by adding a new airworthiness directive to read as follows:

2003-04-15 Sikorsky Aircraft Corporation: Amendment 39-13064. Docket No. 2003-SW-06-AD.

Applicability: Model S-76A, B, and C helicopters, certificated in any category.

Note 1: This AD applies to each helicopter identified in the preceding applicability

provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of the rotor brake disc (RBD), damage to the rotor blades and nearby hydraulic and fuel lines, and subsequent loss of control of the helicopter, accomplish the following:

(a) Before further flight, determine the manufacturer of each RBD by examining the part number (P/N) markings, and perform the required actions as follows:

(1) If the P/N is 76363-09101-102, the manufacturer is Goodyear. No further action is required by this AD.

(2) If the P/N 76363-09103-102 is pressure stamped on the RBD, the manufacturer is BF Goodrich. No further action is required by this AD.

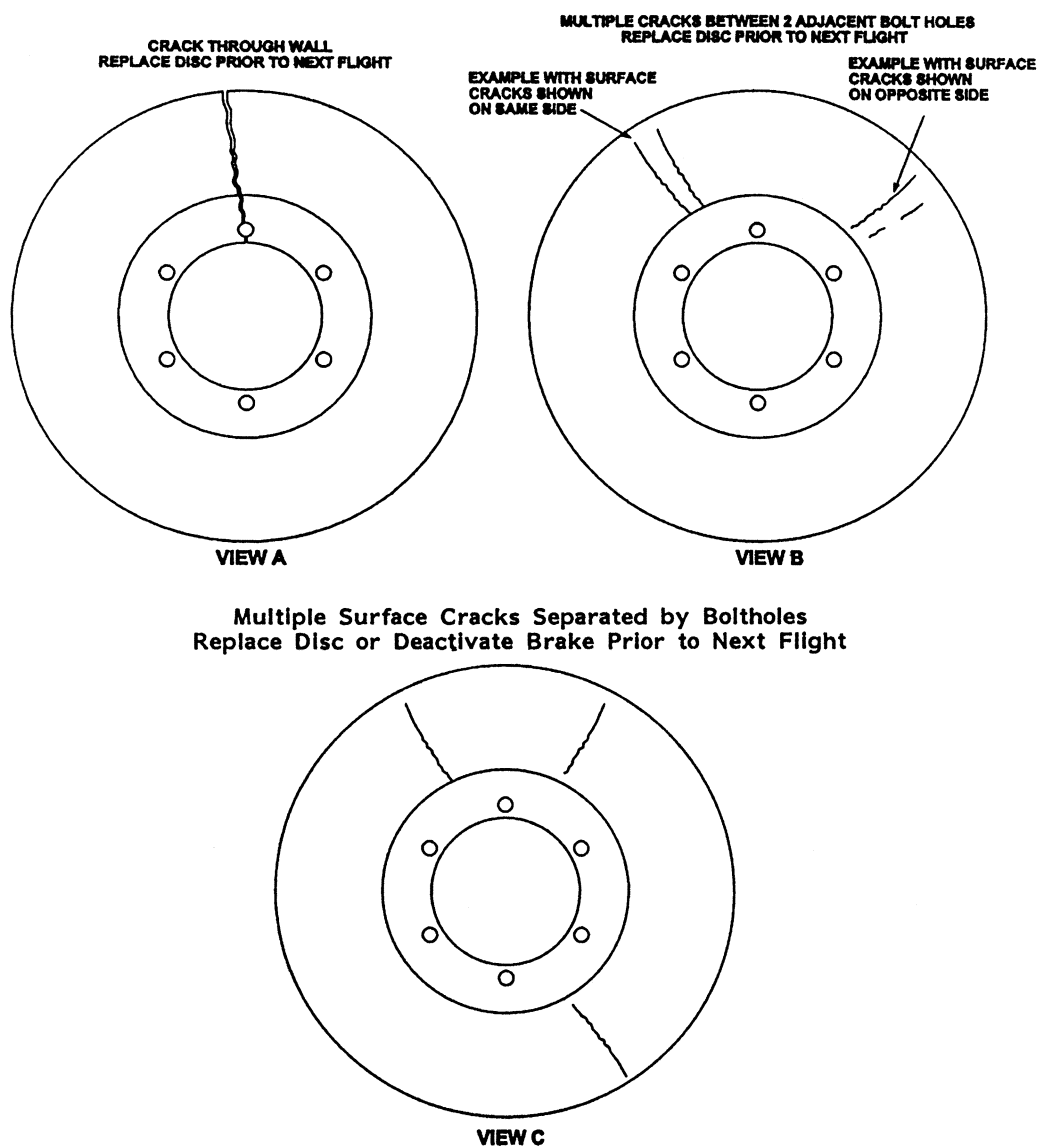
(3) If the P/N 76363-09103-102 is electrolytically etched on the RBD, the manufacturer is Parker Hannifin Corporation (PHC). For each PHC RBD with a P/N 76363-09103-102 and serial number (S/N) other than 38 through 379, remark the P/N as P/N 76363-09103-105 using the vibropeen method. No further action is required by this AD.

(4) If the RBD serial number or the manufacturer cannot be determined and for PHC RBDs with P/N 76363-09103-102 and S/N's 38 through 379, reidentify or mark the P/N as 76363-09103-104 or replace the RBD in accordance with paragraph (c) of this AD.

Note 2: Sikorsky Aircraft Corporation Alert Service Bulletin (ASB) Nos. 76-66-36, dated November 12, 2002, and ASB 76-66-37, dated January 31, 2003, pertain to the subject of this AD.

(b) Before the first flight of the next day following any day in which the RBD was used, visually inspect each RBD, P/N 76363-09103-104, for a crack, and perform the following actions. See Figure 1.

BILLING CODE 4910-13-P



**RBD INSPECTION LIMITS
FIGURE 1.**

(1) If you find a crack through the entire RBD thickness as shown in Figure 1, View A, replace the RBD with an airworthy RBD, other than P/N 76363-09103-104, before further flight.

(2) If you find two or more surface cracks between adjacent boltholes as shown in Figure 1, View B, replace the RBD with an airworthy RBD, other than P/N 76363-09103-104, before further flight.

(3) If you find a surface crack or surface cracks separated by the boltholes as shown in Figure 1, View C, replace the RBD with an airworthy RBD, other than P/N 76363-09103-104, or deactivate the RBD before further flight.

Note 3: Short "glazing" cracks are not a cause for rejection.

Note 4: PHC Component Maintenance Manual with Illustrated Parts List PH030-21300MM, Rotor Brake Assembly, P/N 030-21300, Revision C, dated November 1, 2002, pertains to the subject of this AD.

(c) Replace PHC RBD, P/N 76363-09103-104, with an airworthy RBD on or before May 31, 2003, or within 60 days after the effective date of this AD, whichever occurs later. Any replacement RBD, P/N 76363-09103-104, is not airworthy.

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Boston Aircraft Certification Office, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Boston Aircraft Certification Office.

Note 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Boston Aircraft Certification Office.

(e) Special flight permits will not be issued.

(f) This amendment becomes effective on February 27, 2003.

Issued in Fort Worth, Texas, on February 14, 2003.

David A. Downey,

Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 03-4474 Filed 2-26-03; 8:45 am]

BILLING CODE 4910-13-C

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 71**

[Docket No. FAA-2003-14347; Airspace
Docket No. 03-ACE-4]

**Modification of Class D Airspace; and
Modification of Class E Airspace;
Topeka, Philip Billard Municipal
Airport, KS**

AGENCY: Federal Aviation
Administration (FAA), DOT.

ACTION: Direct final rule; request for
comments; correction.

SUMMARY: This action corrects a direct
final rule; request for comments that
was published in the **Federal Register**
on Monday, February 10, 2003, (68 FR
6606). It corrects an error in the heading
of the legal description of Class E2
airspace at Topeka, Philip Billard
Municipal Airport, KS.

DATES: This direct final rule is effective
on 0901 UTC, May 15, 2003.

Comments for inclusion in the Rules
Docket must be received on or before
March 25, 2003.

FOR FURTHER INFORMATION CONTACT:

Kathy Randolph, Air Traffic Division,
Airspace Branch, ACE-520C, DOT
Regional Headquarters Building, Federal
Aviation Administration, 901 Locust,
Kansas City, MO 64106; telephone:
(816) 329-2525.

SUPPLEMENTARY INFORMATION:

History

Federal Register document 03-3266
published on Monday, February 10,
2003, (68 FR 6606) modified Class D
and Class E2 airspace at Topeka, Philip
Billard Municipal Airport, KS. These
airspace areas are defined, in part, with
reference to Topeka, Forbes Field, KS.
The modifications were to correct the
Topeka, Forbes Field, KS airport
reference point used in the legal
description of Topeka, Philip Billard
Municipal Airport, KS airspace areas.
The Topeka, Philip Billard Municipal
Airport, KS Class E2 airspace area was
incorrectly titled Topeka, Forbes Field,
KS.

Accordingly, pursuant to the
authority delegated to me, the Class E2
airspace at Topeka, Philip Billard
Municipal Airport, KS, as published in
the **Federal Register** on Monday,
February 10, 2003, (68 FR 6606), (FR
Doc. 03-3266), is corrected as follows:

§ 71.1 [Corrected]

On page 6607, Column 1, third
paragraph, change "ACE KS E2 Topeka,
Forbes Field, KS" to read "ACE KS E2

Topeka, Philip Billard Municipal
Airport, KS."

Issued in Kansas City, MO, on February 11,
2003.

Paul J. Sheridan,

*Acting Manager, Air Traffic Division, Central
Region.*

[FR Doc. 03-4640 Filed 2-26-03; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 71**

[Docket No. FAA-2002-13936; Airspace
Docket No. 02-AEA-22]

**Establishment of Class E Airspace;
Ridgely, MD**

AGENCY: Federal Aviation
Administration (FAA) DOT.

ACTION: Final rule.

SUMMARY: This action establishes Class
E airspace at Ridgely, MD. Controlled
airspace extending upward from 700
feet Above Ground Level (AGL) is
needed to contain aircraft operating into
Ridgely Airpark, Ridgely, MD under
Instrument Flight Rules (IFR).

EFFECTIVE DATE: 0901 UTC May 15,
2003.

FOR FURTHER INFORMATION CONTACT: Mr.
Francis Jordan, Airspace Specialist,
Airspace Branch, AEA-520, Air Traffic
Division, Eastern Region, Federal
Aviation Administration, 1 Aviation
Plaza, Jamaica, New York 11434-4809,
telephone: (718) 553-4521.

SUPPLEMENTARY INFORMATION:

History

On January 3, 2003, a notice
proposing to amend part 71 of the
Federal Aviation Regulations (14 CFR
part 71) by establishing Class E airspace
extending upward from 700 feet above
the surface within a 6-mile radius of
Ridgely Airpark, Ridgely, MD was
published in the **Federal Register** (68
FR 328-329). Interested parties were
invited to participate in this rulemaking
proceeding by submitting written
comments on the proposal to the FAA
on or before February 3, 2003. No
comments to the proposal were
received. The rule is adopted as
proposed.

The coordinates for this airspace
docket are based on North American
Datum 83. Class E airspace area
designations for airspace extending
upward from the surface of the earth are
published in paragraph 6005 of FAA
Order 7400.9K, dated August 30, 2002,

and effective September 16, 2002, which
is incorporated by reference in 14 CFR
71.1. The Class E airspace designation
listed in this document will be
published in the Order.

The Rule

This amendment to part 71 of the
Federal Aviation Regulations (14 CFR
part 71) provides controlled Class E
airspace extending upward from 700
feet above the surface for aircraft
conducting IFR operations within a 6-
mile radius of Ridgely Airpark, Ridgely,
MD.

The FAA has determined that this
regulation only involves an established
body of technical regulations for which
frequent and routine amendments are
necessary to keep them operationally
current. Therefore, this regulation: (1) Is
not a "significant regulatory action"
under Executive Order 12866; (2) is not
a "significant rule" under DOT
Regulatory Policies and Procedures (44
FR 11034; February 26, 1979); and (3)
does not warrant preparation of a
Regulatory Evaluation as the anticipated
impact is so minimal. Since this is a
routine matter that will only affect air
traffic procedures and air navigation, it
is certified that this rule will not have
significant economic impact on a
substantial number of small entities
under the criteria of the Regulatory
Flexibility Act.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference,
Navigation (air).

Adoption of the Amendment

In consideration of the foregoing, the
Federal Aviation Administration
amends 14 CFR part 71 as follows:

PART 71—[AMENDED]

1. The authority citation for 14 CFR
part 71 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40103, 40113,
40120; EO 10854, 24 FR 9565, 3 CFR, 1959-
1963 Comp., p. 389.

§ 71.1 [Amended]

The incorporation by reference in 14
CFR 71.1 of Federal Aviation
Administration Order 7400.9K, Airspace
Designations and Reporting Points,
dated August 30, 2002, and effective
September 16, 2002, is amended as
follows:

*Paragraph 6005 Class E Airspace
Areas extending upward from 700 feet
or more above the surface of the earth.*

* * * * *

AEA MD E5 Ridgely, MD [NEW]
Ridgely Airpark, MD

(Lat. 38°58'12" N., long. 75°51'58" W.)

That airspace extending upward from 700 feet above the surface within a 6-mile radius of Ridgely Airpark, excluding that portion that coincides with the Centerville, MD Class E airspace areas.

* * * * *

Issued in Jamaica, New York, on February 4, 2003.

Richard J. Ducharme,

Acting Manager, Air Traffic Division, Eastern Region.

[FR Doc. 03-4639 Filed 2-26-03; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA-2003-14461; Airspace Docket No. 03-ACE-14]

Modification of Class E Airspace; Davenport, IA

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Direct final rule; request for comments.

SUMMARY: An examination of controlled airspace for Davenport, IA revealed a discrepancy in the Davenport Municipal Airport, IA airport reference point used in the legal description for the Davenport, IA Class E airspace. This action corrects the discrepancy by modifying the Davenport, IA Class E airspace and by incorporating the current Davenport Municipal Airport, IA airport reference point in the Class E airspace legal description.

DATES: This direct final rule is effective on 0901 UTC, July 10, 2003.

Comments for inclusion in the Rules Docket must be received on or before May 1, 2003.

ADDRESSES: Send comments on this proposal to the Docket Management System, U.S. Department of Transportation, Room Plaza 401, 400 Seventh Street, SW., Washington, DC 20590-0001. You must identify the docket number FAA-2003-14461/Airspace Docket No. 03-ACE-14, at the beginning of your comments. You may also submit comments on the Internet at <http://dms.dot.gov>. You may review the public docket containing the proposal, any comments received, and any final disposition in person in the Dockets Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone 1-800-647-5527) is on the plaza level of the Department of Transportation NASSIF Building at the above address.

FOR FURTHER INFORMATION CONTACT:

Kathy Randolph, Air Traffic Division, Airspace Branch, ACE-520C, DOT Regional Headquarters Building, Federal Aviation Administration, 901 Locust, Kansas City, MO 64106; telephone: (816) 329-2525.

SUPPLEMENTARY INFORMATION: This amendment to 14 CFR part 71 modifies the Class E airspace designated as a surface area at Davenport, IA. It incorporates the current airport reference point for Davenport Municipal Airport, IA and brings the legal description of this airspace area in compliance with FAA Order 7400.2E, Procedures for Handling Airspace Matters. The area will be depicted on appropriate aeronautical charts. Class E airspace area designated as surface areas are published in Paragraph 6002 of FAA Order 7400.9K, dated August 30, 2002, and effective September 16, 2002, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designation listed in this document will be published subsequently in the Order.

The Direct Final Rule Procedure

The FAA anticipates that this regulation will not result in adverse or negative comment and, therefore, is issuing it as a direct final rule. Previous actions of this nature have not been controversial and have not resulted in adverse comments or objections. Unless a written adverse or negative comment, or a written notice of intent to submit an adverse or negative comment is received within the comment period, the regulation will become effective on the date specified above. After the close of the comment period, the FAA will publish a document in the **Federal Register** indicating that no adverse or negative comments were received and confirming the date on which the final rule will become effective. If the FAA does receive, within the comment period, an adverse or negative comment, or written notice of intent to submit such a comment, a document withdrawing the direct final rule will be published in the **Federal Register**, and a notice of proposed rulemaking may be published with a new comment period.

Comments Invited

Interested parties are invited to participate in this rulemaking by submitting such written date, views, or arguments, as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposal. Comments are specifically invited on the overall regulatory, aeronautical, economic,

environmental, and energy-related aspects of the proposal.

Communications should identify both docket numbers and be submitted in triplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. FAA-2003-14461/Airspace Docket No. 03-ACE-14." The postcard will be date/time stamped and returned to the commenter.

Agency Findings

The regulations adopted herein will 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is noncontroversial and unlikely to result in adverse or negative comments. For the reasons discussed in the preamble, I certify that this regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under Department of Transportation (DOT) Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

Accordingly, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, CLASS B, CLASS C, CLASS D, AND CLASS E AIRSPACE AREAS; AIRWAYS; ROUTES; AND REPORTING POINTS

1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959-1963 Comp., p. 389.

§ 71.1 [Amended]

2. The incorporation by reference in 14 CFR 71.1 of Federal Aviation

Administration Order 7400.9K, dated August 30, 2002, and effective September 16, 2002, is amended as follows:

Paragraph 6002 Class E Airspace Designated as Surface Areas

* * * * *

ACE IA E2 Davenport, IA

Davenport Municipal Airport, IA
(Lat. 41°36'37" N., long. 90°35'18" W.)

Within a 4.1-mile radius of Davenport Municipal Airport. This Class E airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Airport/Facility Directory.

* * * * *

Issued in Kansas City, MO, on February 13, 2003.

Paul J. Sheridan,

Acting Manager, Air Traffic Division, Central Region.

[FR Doc. 03-4641 Filed 2-26-03; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA-2003-14460; Airspace Docket No. 03-ACE-13]

Modification of Class E Airspace; Clinton, IA

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Direct final rule; request for comments.

SUMMARY: This action modifies Class E airspace at Clinton, IA. An examination of controlled airspace for Clinton, IA, initiated by National Geodetic Surveys (NGS), of Clinton Municipal Airport, IA and associated navigational aids, revealed discrepancies in the location of these navigational aids. This action corrects the discrepancies by modifying the Clinton, IA Class E2 and Class E5 airspace areas. It also incorporates the revised locations of the Davenport collocated very high frequency omnidirectional radio range and tactical air navigational aid (VORTAC) and the Clinton nondirectional radio beacon (NDB) in the Class E2 and E5 airspace legal descriptions.

DATES: This direct final rule is effective on 0901 UTC, July 10, 2003.

Comments for inclusion in the Rules Docket must be received on or before May 1, 2003.

ADDRESSES: Send comments on this proposal to the Docket Management

System, U.S. Department of Transportation, Room Plaza 401, 400 Seventh Street, SW., Washington, DC 20590-0001. You must identify the docket number FAA-2003-14460/Airspace Docket No. 03-ACE-13, at the beginning of your comments. You may also submit comments on the Internet at <http://dms.dot.gov>. You may review the public docket containing the proposal, any comments received, and any final disposition in person in the Dockets Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone 1-800-647-5527) is on the plaza level of the Department of Transportation NASSIF Building at the above address.

FOR FURTHER INFORMATION CONTACT:

Kathy Randolph, Air Traffic Division, Airspace Branch, ACE-520C, DOT Regional Headquarters Building, Federal Aviation Administration, 901 Locust, Kansas City, MO 64106; telephone: (816) 329-2525.

SUPPLEMENTARY INFORMATION: This amendment to 14 CFR 71 modifies the Class E airspace designated as a surface area and the Class E airspace area extending upward from 700 feet or more above the surface at Clinton, IA. It incorporates the revised locations of Davenport VORTAC and Clinton NDB and brings the legal descriptions of these airspace areas into compliance with FAA Order 7400.2E, Procedures for Handling Airspace Matters. The areas will be depicted on appropriate aeronautical charts. Class E airspace areas designated as surface areas are published in Paragraph 6002 of FAA Order 7400.9K, dated August 30, 2002, and effective September 16, 2002, which is incorporated by reference in 14 CFR 71.1. Class E airspace areas extending upward from 700 feet or more above the surface of the earth are published in paragraph 6005 of the same FAA Order. The Class E designations listed in this document will be published subsequently in the Order.

The Direct Final Rule Procedure

The FAA anticipates that this regulation will not result in adverse or negative comment and, therefore, is issuing it as a direct final rule. Previous actions of this nature have not been controversial and have not resulted in adverse comments or objection. Unless a written adverse or negative comment, or a written notice of intent to submit an adverse or negative comment is received within the comment period, the regulation will become effective on the date specified above. After the close of the comment period, the FAA will publish a document in the **Federal**

Register indicating that no adverse or negative comments were received and confirming the date on which the final rule will become effective. If the FAA does receive, within the comment period, an adverse or negative comment, or written notice of intent to submit such a comment, a document withdrawing the direct final rule will be published in the **Federal Register**, and a notice of proposed rulemaking may be published with a new comment period.

Comments Invited

Interested parties are invited to participate in this rulemaking by submitting such written data, views, or arguments, as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposal. Comments are specifically invited on the overall regulatory, aeronautical, economic, environmental, and energy-related aspects of the proposal. Communications should identify both docket numbers and be submitted in triplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. FAA-2003-14460/Airspace Docket No. 03-ACE-13." The postcard will be date/time stamped and returned to the commenter.

Agency Findings

The regulations adopted herein will 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is noncontroversial and unlikely to result in adverse or negative comments. For the reasons discussed in the preamble, I certify that this regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under Department of Transportation (DOT) Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference,
Navigation (air).

Adoption of the Amendment

Accordingly, the Federal Aviation
Administration amends 14 CFR part 71
as follows:

**PART 71—DESIGNATION OF CLASS A,
CLASS B, CLASS C, CLASS D, AND
CLASS E AIRSPACE AREAS;
AIRWAYS; ROUTES; AND REPORTING
POINTS**

1. The authority citation for part 71
continues to read as follows:

Authority: 49 U.S.C. 106(g), 40103, 40113,
40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–
1963 Comp., p. 389.

§ 71.1 [Amended]

2. The incorporation by reference in
14 CFR 71.1 of Federal Aviation
Administration Order 7400.9K, dated
August 30, 2002, and effective
September 16, 2002, is amended as
follows:

*Paragraph 6002 Class E Airspace
Designated as Surface Areas*

* * * * *

ACE IA E2 Clinton, IA

Clinton Municipal Airport, IA
(Lat. 41°49'52" N., long. 90°19'45" W.)
Davenport VORTAC
(Lat. 41°42'31" N., long. 90°29'00" W.)
Clinton NDB

(Lat. 41°49'44" N., long. 90°19'39" W.)
Within a 4.1-mile radius of Clinton
Municipal Airport and within 2.6 miles each
side of the 044° radial of the Davenport
VORTAC extending from the 4.1-mile radius
to the VORTAC and within 2.6 miles each
side of the 316° bearing from the Clinton
NDB extending from the 4.1-mile radius to
7.4 miles northwest of the airport and within
2.2 miles each side of the 030° bearing from
the Clinton NDB extending from the 4.1-mile
radius to 5.3 miles northeast of the airport.
This Class E airspace area is effective during
the specific dates and times established in
advance by a Notice to Airmen. The effective
date and time will thereafter be continuously
published in the Airport/Facility Directory.

* * * * *

*Paragraph 6005 Class E airspace areas
extending upward from 700 feet or more
above the surface of the earth.*

* * * * *

ACE IA E5 Clinton, IA

Clinton Municipal Airport, IA
(Lat. 41°49'52" N., long. 90°19'45" W.)
Davenport VORTAC

(Lat. 41°42'31" N., long. 90°29'00" W.)

Clinton NDB

(Lat. 41°49'44" N., long. 90°19'39" W.)

That airspace extending upward from 700
feet above the surface within a 6.6-mile
radius of Clinton Municipal Airport and
within 1.8 miles each side of the 044° radial
of the Davenport VORTAC extending from
the 6.6-mile radius to the VORTAC and
within 4.5 miles each side of the 316° bearing
from the Clinton NDB extending to 10.5
miles northwest of the airport and within 1
mile each side of the 146° bearing from the
airport extending from the 6.6-mile radius to
9.5 miles southeast of the airport.

* * * * *

Issued in Kansas City, MO, on February 13,
2003.

Paul J. Sheridan,

*Acting Manager, Air Traffic Division, Central
Region.*

[FR Doc. 03–4642 Filed 2–26–03; 8:45 am]

BILLING CODE 4910–13–M

**DEPARTMENT OF HEALTH AND
HUMAN SERVICES**

Food and Drug Administration**21 CFR Part 172**

[Docket No. 02F–0160]

**Food Additives Permitted for Direct
Addition to Food for Human
Consumption; Vitamin D₃**

AGENCY: Food and Drug Administration,
HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug
Administration (FDA) is amending the
food additive regulations to provide for
the safe use of vitamin D₃ as a nutrient
supplement in calcium-fortified fruit
juices and juice drinks, excluding fruit
juices and juice drinks specially
formulated or processed for infants, at
levels not to exceed 100 International
Units (IU) per reference amount
customarily consumed (RACC). This
action is in response to a petition filed
by The Minute Maid Co.

DATES: This rule is effective February
27, 2003. Submit written objections and
requests for a hearing by March 31,
2003. The Director of the Office of the
Federal Register approves the
incorporation by reference of certain
publications in § 172.380 (21 CFR
172.380) as of February 27, 2003.

ADDRESSES: Submit written objections
and requests for a hearing to the Dockets

Management Branch (HFA–305), Food
and Drug Administration, 5630 Fishers
Lane, rm. 1061, Rockville, MD 20852.
Submit electronic objections to [http://
www.fda.gov/dockets/ecomments](http://www.fda.gov/dockets/ecomments).

FOR FURTHER INFORMATION CONTACT:

Judith L. Kidwell, Center for Food
Safety and Applied Nutrition (HFS–
265), Food and Drug Administration,
5100 Paint Branch Pkwy., College Park,
MD 20740, 202–418–3354.

SUPPLEMENTARY INFORMATION:

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VII. Objections

I. Introduction

In a notice published in the **Federal
Register** of April 25, 2002 (67 FR
20533), FDA announced that a food
additive petition (FAP 2A4734) had
been filed by The Minute Maid Co., c/
o King and Spalding, 1700 Pennsylvania
Ave. NW., Washington, DC 20006. The
petition proposed that the food additive
regulations be amended in 21 CFR part
172 to provide for the safe use of
vitamin D₃ in calcium-fortified fruit
juices and juice drinks at levels not to
exceed 100 IU per RACC¹.

Vitamin D² is affirmed as generally
recognized as safe (GRAS) in
§ 184.1950(c)(1) (21 CFR 184.1950(c)(1)),
in accordance with 21 CFR 184.1(b)(2),
for use as a nutrient supplement, as
defined in 21 CFR 170.3(o)(20), as the
sole source of added Vitamin D in foods
within the limitations specified in the
following table:

¹RACC values represent the amount of food
typically consumed per eating occasion. The RACC
for fruit juices and juice drinks intended for the
general population is 240 milliliters (mL) (21 CFR
101.12).

²Vitamin D comprises a group of fat soluble seco-
sterols and comes in many forms. The two major
physiologically relevant forms are vitamin D₂ and
vitamin D₃. Vitamin D without a subscript
represents either D₂ or D₃. As used in § 184.1950,
the meaning of the term vitamin D includes
crystalline vitamin D₂, crystalline vitamin D₃ and
vitamin D₂ resin, and vitamin D₃ resin.

TABLE 1.

Category of Food	Maximum Levels in Food (As Served)
Breakfast cereals	350 IU/100 grams (g)
Grain products and pastas	90 IU/100 g
Milk	42 IU/100 g
Milk products	89 IU/100 g

Additionally, vitamin D is affirmed as GRAS for use in infant formula (§ 184.1950(c)(2)) and as an optional ingredient in margarine (§ 184.1950(c)(3)).

Vitamin D is essential for human health. Humans can synthesize significant amounts of vitamin D₃ in skin from its precursor, 7-dehydrocholesterol, under exposure to ultraviolet B radiation in sunlight. Other sources of naturally occurring vitamin D are foods such as butter, buttermilk, cheese, cream, eggs, fish, goat milk, meat fats and organ meats, mushrooms, and sour cream.

The major function of vitamin D is the maintenance of blood serum concentrations of calcium and phosphorus by enhancing the absorption of these minerals in the small intestine. Vitamin D deficiency can lead to abnormalities in calcium and bone metabolism such as rickets in children or osteomalacia in adults. The elderly, who have significantly decreased capacity for the production of vitamin D₃ in skin, and patients with intestinal malabsorption syndromes are especially prone to vitamin D deficiency. At high levels, vitamin D may be toxic. Because it is metabolized to inactive forms in the skin, vitamin D does not accumulate significantly in the body as a result of sun exposure. Excessive dietary intake of vitamin D elevates blood plasma calcium levels by increased intestinal absorption and/or mobilization from the bone.

Vitamin D₃, also known as cholecalciferol, is the chemical 9,10-seco(5Z,7E)-5,7,10(19)-cholestatrien-3-ol. Vitamin D₃ occurs in, and is isolated from fish liver oils. It also is manufactured by ultraviolet irradiation of 7-dehydrocholesterol that is derived synthetically from natural cholesterol. In both methods, vitamin D₃ is purified by crystallization.

To support the safety of the proposed use of vitamin D₃, The Minute Maid Co. submitted a summary of the metabolism of vitamin D, a number of publications pertaining to human clinical studies, bioavailability studies, and dietary intake estimates. Based on these data, the petitioner concludes that the proposed use of vitamin D₃ in calcium-

fortified fruit juices and juice drinks is safe.

II. Evaluation of Safety

In order to establish, with reasonable certainty, that a new food additive is not harmful under its intended conditions of use, FDA considers the projected human dietary exposure to the additive, the additive's toxicological data, and other relevant information (such as published literature) available to the agency.

In determining whether the proposed use of an additive is safe, FDA compares an individual's estimated daily intake (EDI) of the additive to an acceptable intake level established by toxicological data. The EDI is determined by projections based on the amount of the additive proposed for use in particular foods and on data regarding the consumption levels of these particular foods. The agency commonly uses the EDI for the 90th percentile consumer of a food additive as a measure of high chronic dietary exposure.

A. Acceptable Daily Intake for Vitamin D for Adults, Children, and Infants

In 1997, the Standing Committee on the Scientific Evaluation of Dietary Reference Intakes of the Food and Nutrition Board at the National Academy of Sciences Institute of Medicine (IOM) conducted an extensive review of toxicology and metabolism studies on vitamin D published through 1996. The IOM published a detailed report that included a tolerable upper intake level (UL) for vitamin D (both D₂ and D₃) for infants, children and adults (Ref. 1). The IOM UL for vitamin D for children 1 to 18 years of age and adults is 2,000 IU/day and for infants is 1,000 IU/day.

The IOM considers the UL as the highest usual intake level of a nutrient that poses no risk of adverse effects when the nutrient is consumed over long periods of time. The UL is determined using a risk assessment model developed specifically for nutrients and considers intake from all sources: Food, water, nutrient supplements, and pharmacological agents. The dose-response assessment, which concludes with an estimate of the UL, is built upon three toxicological

concepts commonly used in assessing the risk of exposures to chemical substances: No observed adverse effect level, lowest observed effect level and an uncertainty factor.

B. Estimated Daily Intake for Vitamin D

The petitioner provided average and 90th percentile vitamin D intake estimates for consumers of fruit juices and juice drinks from: (1) The proposed use in calcium-fortified fruit juices and juice drinks, (2) current uses in conventional foods (including naturally occurring sources of vitamin D), (3) current and proposed uses in conventional foods, and (4) current and proposed uses in both conventional foods and dietary supplements. The petitioner presented intake estimates for the general population, 2 years of age and older, and for 15 population subgroups (including estimates for infants less than 1 year old; children 1 year to 3 years old; and adults). The agency has determined that the methodology used to calculate these estimates is appropriate (Ref. 2).

For the proposed food use, dietary intake of vitamin D₃ for 90th percentile consumers of fruit juices and juice drinks, 2 years of age and older, was estimated to be 211 IU per person per day (IU/p/d). The corresponding mean intake was estimated to be 110 IU/p/d.

For currently regulated uses in conventional foods (including naturally occurring sources), mean dietary exposure to vitamin D for consumers of fruit juices and juice drinks was estimated to be 197 IU/p/d for consumers 2 years of age and older. Intake at the 90th percentile was estimated to be 368 IU/p/day. For consumers of fruit juices and juice drinks 2 years of age and older, average and 90th percentile dietary intakes from current (including naturally occurring sources) and proposed food uses of vitamin D were estimated to be 306 IU/p/d and 519 IU/p/d, respectively.

The petitioner also considered the intake of vitamin D from dietary supplements. The National Health and Nutrition Examination Survey III (NHANES III) data indicate that approximately 40 percent of the U.S. population 2 months of age and older take dietary supplements. The NHANES

III data also show that, when vitamin D is taken as a dietary supplement, the most frequent level is 400 IU/day. The petitioner provided results from two Gallup polls that concluded that consumers of vitamin D₃-fortified fruit juices and fruit drinks also are likely to take supplemental sources of vitamin D. As a conservative estimate of intake of vitamin D from dietary supplements and food uses, the petitioner assumed that all consumers of fruit juices and juice drinks would take dietary supplements containing 400 IU of vitamin D. They then added this value to the mean and 90th percentile intake estimates from current and proposed food uses. For consumers of fruit juices and juice drinks 2 years of age and older, mean and 90th percentile dietary intake estimates from current and proposed food uses and dietary supplements were 706 IU/p/d and 919 IU/p/d, respectively.

Although the petitioner has notified FDA that it does not intend to fortify fruit juices and juice drinks specially formulated or processed for infants with vitamin D₃, the petitioner provided intake estimates for breastfed and non-breastfed infants, 0 to 6 months of age and 7 to 12 months of age. These estimates assumed that all fruit juices and juice drinks, including those specially formulated or processed for infants, would be fortified with vitamin D₃. Of these four infant population groups, intake estimates were the highest for non-breastfed infants, 0 to 6 months of age. For non-breastfed infants, 0 to 6 months of age, mean and 90th percentile dietary intake from current and proposed food uses were 443 IU/p/d and 663 IU/p/d, respectively. When dietary supplements were considered in the estimates for these consumers, mean and 90th percentile intakes were 843 IU/p/d and 1,063 IU/p/d, respectively. Intake estimates for the other infant population groups were below the UL for infants of 1,000 IU/day.

Due to the relatively small sample size of infants consuming fruit juices and juice drinks, the agency does not consider the intake estimates presented by the petitioner to be statistically robust enough to make a quantitative safety assessment. For example, for infants 0 to 6 months of age, non-breastfed, intake estimates were based on data from 49 consumers of fruit juice or juice drinks; for infants, 0 to 6 months, breastfed, 16 consumers; infants, 7 to 12 months, non-breastfed, 75 consumers; and infants, 7 to 12 months, breastfed, 9 consumers. Intake estimates from these populations are not considered to be statistically robust

when compared, for example, to the numbers of consumers in the sample populations for children 4 to 8 years of age (1,194 consumers) and 9 to 13 years of age (717 consumers).

Because a quantitative safety assessment cannot be made with the available data, we consider it appropriate to exclude fruit juices and juice drinks specially formulated or processed for infants (ages 0 to 12 months) from the proposed use of vitamin D₃. The agency recognizes that some infants may consume fruit juices and juice drinks that are not specially formulated or processed for infants (Ref. 3); however, fruit juices and juice drinks are not major components of the diets of infants. Further, in a May 2001 policy statement, the American Academy of Pediatrics recommended that fruit juice should not be given to infants before 6 months of age (Ref. 4).

C. Safety Assessment

The petitioner submitted over 80 published articles to support the safety of the proposed use of vitamin D₃ in calcium-fortified fruit juices and juice drinks. These articles included most of the references considered by IOM in its evaluation and all of the critical references that were the basis for the UL. The petitioner also submitted publications on vitamin D that appeared in the literature subsequent to the 1997 IOM report. New information since 1997 supports that vitamin D intake is without adverse effects at the IOM UL for adults (Ref. 5). No new studies in children on the effects of vitamin D intake have been published since 1997.

We considered the UL established by IOM for children (ages 1 year and older) and adults relative to the intake estimates provided by the petitioner as the primary basis for assessing the safety of the proposed use of vitamin D₃ in calcium-fortified fruit juices and juice drinks. For all population groups of children and adults evaluated, mean and 90th percentile intake estimates from current and proposed food uses of vitamin D are well below the IOM UL of 2,000 IU/p/day. Additionally, when dietary supplements are included in the calculations, intake estimates remain below the UL. Because the EDI of vitamin D from all sources is less than the UL, the agency believes that dietary exposure of vitamin D₃ from its use as a nutrient supplement in calcium-fortified fruit juices and juice drinks, excluding juices and juice drinks specially formulated or processed for infants, will not pose a safety concern (Ref. 5).

III. Conclusion

Based on all data relevant to vitamin D reviewed by the agency, FDA concludes that there is a reasonable certainty that no harm will result from the use of vitamin D₃ as a nutrient supplement at the levels specified in calcium-fortified fruit juices and juice drinks, excluding fruit juices and juice drinks specially formulated or processed for infants. Thus, vitamin D₃ is safe for its proposed use and the agency concludes that the food additive regulations should be amended as set forth in this document. To ensure that only food grade vitamin D₃ is used in food, the additive must meet the specifications of the *Food Chemicals Codex*, 4th ed.

In accordance with § 171.1(h) (21 CFR 171.1(h)), the petition and the documents that FDA considered and relied upon in reaching its decision to approve the petition are available for inspection at the Center for Food Safety and Applied Nutrition by appointment with the information contact person listed previously. As provided in § 171.1(h), the agency will delete from the documents any materials that are not available for public disclosure before making the documents available for inspection.

IV. Environmental Effects

The agency has previously considered the environmental effects of this rule as announced in the notice of filing for FAP 2A4734 (67 FR 20533). No new information or comments have been received that would affect the agency's previous determination that there is no significant impact on the human environment and that an environmental impact statement is not required.

V. Paperwork Reduction Act of 1995

This final rule contains no collection of information. Therefore, clearance by the Office of Management and Budget under the Paperwork Reduction Act of 1995 is not required.

VI. References

The following references have been placed on display in the Dockets Management Branch (see ADDRESSES) and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday.

1. Standing Committee on the Scientific Evaluation of Dietary Reference Intakes, Food and Nutrition Board, Institute of Medicine, "Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride," National Academy Press, Washington, DC, 1997.

2. Memorandum from Folmer, Division of Petition Review, Chemistry Review Group, to

Kidwell, Division of Petition Review, May 21, 2002.

3. Meeting minutes from August 2 and August 28, 2002, Internal meetings, Division of Petition Review.

4. American Academy of Pediatrics Policy Statement "The Use and Misuse of Fruit Juice in Pediatrics (RE0047)," *Pediatrics*, 107(5): 1210–1213, 2001.

5. Memorandum from Park, Division of Petition Review, Toxicology Review Group, to Kidwell, Division of Petition Review, September 17, 2002.

VII. Objections

Any person who will be adversely affected by this regulation may at any time file with the Dockets Management Branch (see **ADDRESSES**) written or electronic objections. Each objection shall be separately numbered, and each numbered objection shall specify with particularity the provisions of the regulation to which objection is made and the grounds for the objection. Each numbered objection on which a hearing is requested shall specifically so state. Failure to request a hearing for any particular objection shall constitute a waiver of the right to a hearing on that objection. Each numbered objection for which a hearing is requested shall include a detailed description and analysis of the specific factual information intended to be presented in support of the objection in the event that a hearing is held. Failure to include such a description and analysis for any particular objection shall constitute a waiver of the right to a hearing on the objection. Three copies of all documents are to be submitted and are to be identified with the docket number found in brackets in the heading of this document. Any objections received in response to the regulation may be seen in the Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday.

List of Subjects in 21 CFR Part 172

Food additives, Incorporation by reference, Reporting and recordkeeping requirements.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 172 is amended as follows:

PART 172—FOOD ADDITIVES PERMITTED FOR DIRECT ADDITION TO FOOD FOR HUMAN CONSUMPTION

1. The authority citation for 21 CFR part 172 continues to read as follows:

Authority: 21 U.S.C. 321, 341, 342, 348, 371, 379e.

2. Section 172.380 is added to subpart D to read as follows:

§ 172.380 Vitamin D₃.

The food additive may be used safely in foods as a nutrient supplement defined under § 170.3(o)(20) of this chapter in accordance with the following prescribed conditions:

(a) Vitamin D₃, also known as cholecalciferol, is the chemical 9,10-seco(5Z,7E)-5,7,10(19)-cholestatrien-3-ol. Vitamin D₃ occurs in and is isolated from fish liver oils. It also is manufactured by ultraviolet irradiation of 7-dehydrocholesterol produced from cholesterol and is purified by crystallization.

(b) Vitamin D₃ meets the specifications of the *Food Chemicals Codex*, 4th ed. (1996), p. 434, which is incorporated by reference. The Director of the Office of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain copies from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418 (Internet address <http://www.nap.edu>). Copies may be examined at the Center for Food Safety and Applied Nutrition's Library, Food and Drug Administration, 5100 Paint Branch Pkwy., College Park, MD 20740, or the Office of the Federal Register, 800 North Capitol St. NW., suite 700, Washington, DC.

(c) Vitamin D₃ may be added, at levels not to exceed 100 International Units (IU) per serving, to 100 percent fruit juices, as defined under § 170.3(n)(35) of this chapter, excluding fruit juices that are specially formulated or processed for infants, that are fortified with greater than 33 percent of the Recommended Daily Intake (RDI) of calcium per Reference Amount Customarily Consumed (RACC).

(d) Vitamin D₃ may be added, at levels not to exceed 100 IU per serving, to fruit drinks, as defined under § 170.3(n)(35) of this chapter, excluding fruit drinks that are specially formulated or processed for infants, that are fortified with greater than 10 percent of the RDI of calcium per RACC.

Dated: February 21, 2003.

William K. Hubbard,

Associate Commissioner for Policy and Planning.

[FR Doc. 03–4604 Filed 2–24–03; 11:58 am]

BILLING CODE 4160–01–S

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Part 165

[COTP San Francisco Bay 03–002]

RIN 2115–AA97

Security Zones; San Francisco Bay, CA

AGENCY: Coast Guard, DOT.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing moving and fixed security zones extending 100 yards around and under all High Interest Vessels (HIVs) that enter, are moored in, anchored in or depart from the San Francisco Bay and Delta ports, California. These security zones are needed for national security reasons to protect the public and ports from potential subversive acts. Entry into these security zones is prohibited, unless specifically authorized by the Captain of the Port San Francisco Bay, or his designated representative.

DATES: This regulation is effective from 11:59 p.m. PST on February 10, 2003 to 11:59 p.m. PST on May 31, 2003.

ADDRESSES: Documents indicated in this preamble as being available in the docket are part of docket [COTP San Francisco Bay 03–002] and are available for inspection or copying at Coast Guard Marine Safety Office San Francisco Bay, Coast Guard Island, Alameda, California, 94501, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Lieutenant Diana Cranston, U.S. Coast Guard Marine Safety Office San Francisco Bay, at (510) 437–3073.

SUPPLEMENTARY INFORMATION:

Regulatory Information

In addition to this temporary final rule (TFR), we plan to publish a notice of proposed rulemaking (NPRM) for a permanent HIV security zone rule [COTP San Francisco Bay 03–003], in which we will propose to amend 33 CFR 165.1183, which was added by the Final rule [COTP San Francisco Bay 02–019] published in the **Federal Register** (67 FR 79854) on December 31, 2002. 33 CFR § 165.1183, "Security Zones; Cruise Ships and Tank Vessels, San Francisco Bay and Delta ports, California", establishes security zones around cruise ships and tank vessels, but does not address HIVs. The forthcoming NPRM will clarify the classes of vessels sought to be encompassed in the section and

will allow for a public comment period and for a final rule to be put into effect without an interruption in the protection provided by this temporary rule establishing HIV security zones. Section 165.1183 will remain in effect until amended by a future rule. Under 5 U.S.C. 553(b)(B), for reasons discussed below, the Coast Guard finds that good cause exists for not publishing an NPRM before issuing this temporary rule. Also, under 5 U.S.C. 553(d)(3), the Coast Guard finds that good cause exists for making this rule effective less than 30 days after publication in the **Federal Register** because the threat of maritime attacks is real as evidenced by the October 2002 attack of a tank vessel off the coast of Yemen and the continuing threat to U.S. assets as described in the President's finding in Executive Order 13273 of August 21, 2002 (67 FR 56215, September 3, 2002) that the security of the U.S. is endangered by the September, 11, 2001 attacks and that such disturbances continue to endanger the international relations of the United States. See also Continuation of the National Emergency with Respect to Certain Terrorist Attacks, (67 FR 58317, September 13, 2002); Continuation of the National Emergency With Respect To Persons Who Commit, Threaten To Commit, Or Support Terrorism, (67 FR 59447, September 20, 2002). Additionally, a Maritime Advisory was issued to: Operators of U.S. Flag and Effective U.S. controlled Vessels and other Maritime Interests, detailing the current threat of attack, MARAD 02-07 (October 10, 2002). As a result, a heightened level of security has been established around all HIVs in San Francisco Bay and Delta ports. Additionally, the measures contemplated by this rule are intended to prevent future terrorist attacks against individuals and facilities within or adjacent to HIVs. Any delay in the effective date of this TFR is impractical and contrary to the public interest.

Background and Purpose

Since the September 11, 2001 terrorist attacks on the World Trade Center in New York, the Pentagon in Arlington, Virginia and Flight 93, the Federal Bureau of Investigation (FBI) has issued several warnings concerning the potential for additional terrorist attacks within the United States. In addition, the ongoing hostilities in Afghanistan and growing tensions in Iraq have made it prudent to U.S. ports to be on a higher state of alert because the Al-Qaeda organization and other similar organizations have declared an ongoing intention to conduct armed attacks on U.S. interests worldwide.

In its effort to thwart terrorist activity, the Coast Guard has increased safety and security measures on U.S. ports and waterways. As part of the Diplomatic Security and Antiterrorism Act of 1986 (Pub. L. 99-399), Congress amended section 7 of the Ports and Waterways Safety Act (PWSA), 33 U.S.C. 1226, to allow the Coast Guard to take actions, including the establishment of security and safety zones, to prevent or respond to acts of terrorism against individuals, vessels, or public or commercial structures. The Coast Guard also has authority to establish security zones pursuant to the Act of June 15, 1917, as amended by the Magnuson Act of August 9, 1950 (50 U.S.C. 191 *et seq.*) and implementing regulations promulgated by the President in subparts 6.01 and 6.04 of part 6 of title 33 of the Code of Federal Regulations.

In this particular rulemaking, to address the aforementioned security concerns, and to take steps to prevent the catastrophic impact that a terrorist attack against an HIV would have on the public interest, the Coast Guard is establishing security zones around and under HIVs entering, departing, moored or anchored within the San Francisco Bay and Delta ports. These security zones help the Coast Guard to prevent vessels or persons from engaging in terrorist actions against HIVs. Due to these heightened security concerns, and the catastrophic impact a terrorist attack on an HIV would have on the crew and passengers on board, and surrounding area and communities, security zones are prudent for these types of vessels.

Discussion of Rule

On December 31, 2002, we published the final rule [COTP San Francisco Bay 02-019] adding § 165.1183, "Security Zones; Cruise Ships and Tank Vessels, San Francisco Bay and Delta ports, California" in the **Federal Register** (67 FR 79854). That section set forth security zones for cruise ships and tank vessels. A forthcoming NPRM (COTP San Francisco Bay 03-003) will propose to amend § 165.1183 to include HIVs as protected vessels in that section, along with cruise ships and tank vessels. The Coast Guard will utilize the extended effective period of the NPRM to engage in notice and comment rulemaking to develop permanent regulations tailored to the present and foreseeable security environment with the Captain of the Port (COTP) San Francisco Bay.

In this temporary rule, the Coast Guard is establishing moving and fixed security zones around all HIVs that are anchored, moored or underway within the San Francisco Bay and Delta ports. These security zones are activated when

any HIV passes shoreward of the line drawn between San Francisco Main Ship Channel buoys 7 and 8 (LLNR 4190 & 4195, positions 37°46.9'N, 122°35.4'W & 37°46.5'N, 122°35.2'W, respectively) and remains in effect while the vessel is underway, anchored or moored within the San Francisco Bay and Delta ports. When activated, this security zone will encompass all waters, extending from the surface to the sea floor, within 100 yards ahead, astern and extending 100 yards along either side of any HIV in the San Francisco Bay and Delta ports. This security zone is automatically deactivated when the HIV passes seaward of the line drawn between San Francisco Main Ship Channel buoys 7 and 8 (LLNR 4190 & 4195, positions 37°46.9'N, 122°35.4'W & 37°46.5'N, 122°35.2'W, respectively) on its departure from port. Vessels and people may be allowed to enter an established security zone on a case-by-case basis with authorization from the Captain of the Port.

Vessels or persons violating this section will be subject to the penalties set forth in 33 U.S.C. 1232 and 50 U.S.C. 192. Pursuant to 33 U.S.C. 1232, any violation of the security zone described herein, is punishable by civil penalties (not to exceed \$27,500 per violation, where each day of a continuing violation is a separate violation), criminal penalties (imprisonment up to 6 years and a maximum fine of \$250,000), and in rem liability against the offending vessel. Any person who violates this section, using a dangerous weapon, or who engages in conduct that causes bodily injury or fear of imminent bodily injury to any officer authorized to enforce this regulation, also faces imprisonment up to 12 years. Vessels or persons violating this section are also subject to the penalties set forth in 50 U.S.C. 192: seizure and forfeiture of the vessel to the United States, a maximum criminal fine of \$10,000, and imprisonment up to 10 years, and a civil penalty of not more than \$25,000 for each day of a continuing violation.

The Captain of the Port will enforce these zones and may enlist the aid and cooperation of any Federal, State, county, municipal, and private agency to assist in the enforcement of the regulation. This regulation is proposed under the authority of 33 U.S.C. 1226 in addition to the authority contained in 50 U.S.C. 191 and 33 U.S.C. 1231.

Regulatory Evaluation

This 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 has not reviewed it under that Order. It is not "significant" under the regulatory policies and procedures of the Department of Transportation (DOT) (44 FR 11040, February 26, 1979).

Although this regulation restricts access to the zones, the effect of this regulation will not be significant because: (i) The zones will encompass only a small portion of the waterway; (ii) vessels will be able to pass safely around the zones; (iii) vessels may be allowed to enter these zones on a case-by-case basis with permission of the Captain of the Port, or his designated representative; and (iv) vessels are able to safely transit around the zones while a vessel is moored or at anchor in the San Francisco Bay and Delta ports.

The sizes of the zones are the minimum necessary to provide adequate protection for HIVs, their crews and passengers, other vessels operating in the vicinity of HIVs, their crews and passengers, adjoining areas, and the public. The entities most likely to be affected are commercial vessels transiting the main ship channel en route the San Francisco Bay and Delta ports and pleasure craft engaged in recreational activities and sightseeing. The security zones will prohibit any commercial vessels from meeting or overtaking an HIV in the main ship channels, effectively prohibiting use of the channels. However, the moving security zones will only be effective during HIV transits, which will last for approximately 30 minutes.

Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601–612), we have considered whether this rule would 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.

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. The security zones will not have a significant economic impact on a substantial number of small entities for several reasons: Small vessel traffic can pass safely around the area and vessels engaged in recreational activities, sightseeing and commercial fishing have ample space outside of the security zones to engage in these activities. When a HIV is at anchor, vessel traffic

will have ample room to maneuver around the security zones. Small entities and the maritime public will be advised of these security zones via public notice to mariners.

Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we offer to assist small entities in understanding the rule so that they could better evaluate its effects on them and participate in the rulemaking process. If the rule will affect your small business, organization, or government jurisdiction and you have questions concerning its provisions or options for compliance, please contact the person listed under **FOR FURTHER INFORMATION CONTACT** for assistance in understanding this rule.

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

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 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 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 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.

Civil Justice Reform

This 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 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 create an environmental risk to health or risk to safety that may disproportionately affect children.

Indian Tribal Governments

This rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it 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.

Energy Effects

We have analyzed this 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 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 rule and concluded that under figure 2–1, paragraph (34)(g), of Commandant Instruction M16475.ID, this rule is categorically excluded from further environmental documentation because we are establishing a security zone. A "Categorical Exclusion Determination" is available in the docket for inspection

or copying where indicated under **ADDRESSES**.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reports and record keeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1231; 50 U.S.C. 191, 33 CFR 1.05–1(g), 6.04–1, 6.04–6, and 160.5; 49 CFR 1.46.

2. Add § 165.T11–077 to read as follows:

§ 165.T11–077 Security Zones; High Interest Vessels, San Francisco Bay and Delta ports, California.

(a) *Definition*. “High Interest Vessel” or “HIV” as used in this section, means any vessel deemed by the Captain of the Port or higher authority as a vessel requiring protection based upon risk assessment analysis of the vessel and is therefore escorted by a Coast Guard or other law enforcement vessel with an embarked Coast Guard commissioned, warrant, or petty officer.

(b) *Location*. The following areas are security zones:

(1) All waters, extending from the surface to the sea floor, within 100 yards ahead, astern and extending 100 yards along either side of any HIV that is anchored at a designated anchorage within the San Francisco Bay and Delta port areas shoreward of the line drawn between San Francisco Main Ship Channel buoys 7 and 8 (LLNR 4190 & 4195, positions 37°46.9' N, 122°35.4' W and 37°46.5' N, 122°35.2' W, respectively);

(2) The shore area and all waters, extending from the surface to the sea floor, within 100 yards ahead, astern and extending 100 yards along either side of any HIV that is moored, or in the process of mooring, at any berth within the San Francisco Bay and Delta port areas shoreward of the line drawn between San Francisco Main Ship Channel buoys 7 and 8 (LLNR 4190 & 4195, positions 37°46.9' N, 122°35.4' W and 37°46.5' N, 122°35.2' W, respectively); and

(3) All waters, extending from the surface to the sea floor, within 100 yards ahead, astern and extending 100 yards along either side of any HIV that is underway shoreward of the line drawn between San Francisco Main Ship

Channel buoys 7 and 8 (LLNR 4190 & 4195, positions 37°46.9' N, 122°35.4' W and 37°46.5' N, 122°35.2' W, respectively).

(c) *Regulations*. (1) In accordance with the general regulations in § 165.33 of this part, entry into or remaining in this zone is prohibited unless authorized by the Coast Guard Captain of the Port, San Francisco Bay, or his designated representative.

(2) Persons desiring to transit the area of the security zone may contact the Captain of the Port at telephone number 510–437–3073 or on VHF–FM channel 16 (156.8 MHz) to seek permission to transit the area. If permission is granted, all persons and vessels must comply with the instructions of the Captain of the Port or his or her designated representative.

(3) When an HIV approaches within 100 yards of a vessel that is moored, or anchored, the stationary vessel must stay moored or anchored while it remains within the HIV's security zone unless it is either ordered by, or given permission from, the COTP San Francisco Bay to do otherwise.

(d) *Authority*. In addition to 33 U.S.C. 1231 and 50 U.S.C. 191, the authority for this section includes 33 U.S.C. 1226.

(e) *Enforcement*. The U.S. Coast Guard may be assisted in the patrol and enforcement of the security zone by local law enforcement as necessary.

(f) *Effective Dates*. This section becomes effective at 11:59 p.m. PST on February 10, 2003, and will terminate at 11:59 p.m. PST on May 31, 2003.

Dated: February 10, 2003.

Gerald M. Swanson,

Captain, U.S. Coast Guard, Captain of the Port, San Francisco Bay, California.

[FR Doc. 03–4634 Filed 2–26–03; 8:45 am]

BILLING CODE 4910–15–P

POSTAL SERVICE

39 CFR Part 111

Label Standards for Combined or Copalletized Periodicals Mailings

AGENCY: Postal Service.

ACTION: Final rule.

SUMMARY: This final rule clarifies when it is permissible to use the designation “NEWS” rather than the designation “PER” on Line 2 (the content line) of labels that identify sacks, trays, and pallets containing copies of Periodicals publications prepared in combined mailings or in copalletized mailings.

Combined mailings and copalletized mailings often consist of copies that would be eligible for the designation

“NEWS” on the container label and other copies that would be eligible only for the designation “PER” on the container label. This final rule allows mailers to prepare and consolidate more than one Periodicals publication or edition of a publication into a single production mailstream.

This final rule also clarifies mailing standards for identifying the two different methods under which a Periodicals combined mailing may be prepared and to note the requirements for submitting postage statements under each method.

EFFECTIVE DATE: March 6, 2003.

FOR FURTHER INFORMATION CONTACT: Neil Berger at (703) 292–3645, Jane Stefaniak at (703) 292–3548, or Marc McCrery at (202) 268–2704.

SUPPLEMENTARY INFORMATION: In this rulemaking, the Postal Service announces the adoption of standards initially proposed on October 30, 2002 in the **Federal Register** (67 FR 66094–66096) for determining when to use “NEWS”—a designation for “newspaper”—and “PER”—a designation for the class name “Periodicals”—as part of the information on Line 2 (the content line) of sack, tray, and pallet labels used for combined mailings and copalletized mailings.

This final rule allows mailers to prepare and consolidate more than one Periodicals publication or edition of a publication into a single production mailstream by providing the following standards for the application of the “NEWS” and “PER” designations in such cases:

(1) If at least 51% of the total number of copies (not number of addressed pieces) in the combined mailing or in the copalletized mailing can qualify for “NEWS” treatment, then all containers or pallets in such a mailing are labeled “NEWS” on Line 2, unless the mailer chooses to use “PER.”

(2) If less than 51% of the total number of copies in the combined mailing or in the copalletized mailing can qualify for “NEWS” treatment, then all containers or pallets in such a mailing are labeled “PER” on Line 2.

“NEWS” and “PER” Designations

Domestic Mail Manual (DMM) D210 states that the Postal Service does not guarantee the delivery of Periodicals publications within a specified time. Where practicable, Periodicals publications, whether designated “NEWS” or “PER,” receive expeditious handling in distribution, dispatch, transportation, and delivery.

Publications labeled “NEWS” receive newspaper treatment if published

weekly or more often or if authorized such treatment as of March 1, 1984. In general, such publications include daily or weekly newspapers and newsmagazines published and distributed locally or nationally.

The "NEWS" designation helps the Postal Service ensure consistent service and handling for such Periodicals publications from entry into the mailstream, through successive operations in mail processing, to delivery to the intended recipient.

Current label standards for containers, as specified in DMM M031.1.7, M031.4.11, and M032.1.3 stipulate that the "NEWS" designation may be used on labels for sacks, trays, and pallets for a Periodicals publication only if either one of the following two conditions is met:

(1) The Periodicals publication is published weekly or more frequently.

(2) The Periodicals publication has been continuously authorized such newspaper treatment since March 1, 1984, or earlier, regardless of publication frequency.

All other publications use "PER"—designation for the class name "Periodicals"—as part of the information on Line 2 (the content line) of mail processing labels. These labels are affixed by the mailer to pallets or inserted into label holders attached to sacks and trays to identify Periodicals publications that do not meet either of the conditions required for the "NEWS" designation.

The use of these two distinct designations is carried forward for all container labeling, with two separate but parallel series of three-digit content identifier numbers (CINs). One CIN series is for those publications that are eligible to use "NEWS," and the second series is for those publications that are not eligible to use "NEWS" and must use "PER." Each series contains nearly 50 different CINs to meet all possible rate combinations available and all permitted containers.

It should be pointed out, however, that the use of "NEWS" is optional for those publications eligible to use that designation. A publisher, for example, who issues and distributes publications eligible for the "NEWS" designation and other publications not eligible for "NEWS" has the flexibility to label all containers as "PER" in order to achieve greater production efficiencies (and greater postage savings) if combined mailings or copalletized mailings are prepared.

On the other hand, the same publisher following mailing standards before this final rule did not have the flexibility of using the "NEWS" designation for all

containers in a combined mailing or copalletized mailing under any condition. This final rule provides limited conditions that permit the use of "NEWS" for combined mailings and copalletized mailings consisting of publications eligible for "NEWS" and those not eligible for that designation.

Combined and Copalletized Mailings

Mailing standards have been introduced over the years to promote the consolidation of different Periodicals publications or different editions of the same publication into larger volume mailings. These standards, however, have not prevented customers from combining copies in containers labeled as "PER" with copies labeled as "NEWS" as a way to improve the depth of sort and to reduce the overall number of containers prepared.

These consolidations represent an effective means for Periodicals mailers and the Postal Service to improve customer service, promote greater production efficiencies, reduce the number of containers used to prepare mailings, and stabilize rates by eliminating additional mail processing steps. For Periodicals mailers, the primary benefit is greater postage savings.

Comments

The Postal Service requested in its proposed rule published on October 30, 2002, in the **Federal Register** (67 FR 66094–66096) that comments on the proposed labeling standards for Periodicals combined mailings and copalletized mailings be submitted by November 29, 2002. Comments were received from only one interested party: a publisher of a biweekly publication.

The publisher, whose publication is issued every two weeks, expressed concern about the extension of newspaper or "NEWS" treatment to publications that are not eligible for such treatment under the long-standing standards presented in the DMM if those publications were mailed separately and not included as part of a combined mailing or a copalletized mailing. The commenter also inquired about the number of publications permitted to use "NEWS" on container labels. Furthermore, the publisher wanted to know how many publications that enjoyed "NEWS" treatment were published less frequently than once a week and received such treatment as a result of an authorization issued on March 1, 1984, or earlier, as provided in the DMM.

Postal Service records show, as of December 13, 2002, that 35,695 publications were authorized

Periodicals mailing privileges. Of this total, 10,259 or nearly 29 percent are published weekly or more frequently. The Postal Service maintains no centralized records, however, that indicate whether a publication that is eligible to use "NEWS" actually uses that designation or "PER." Moreover, there is no national system of records that indicates which publications are eligible to use "NEWS" based on authorizations permitted on or before March 1, 1984. Postmasters of the various authorized original offices would have access to that specific information, which is outside the scope of this rulemaking.

Most of the weekly or more frequently published publications fall into two categories: small and large local newspapers and large national newsmagazines and similar news publications. In both categories, the use of combined mailings or copalletized mailings is limited in potential scope. For example, local newspapers often have sufficient volumes and densities to achieve lower postage rates and destination discounts without being combined or copalletized with other publications. As a consequence, only a small percentage of those publications authorized "NEWS" treatment are likely to be combined with those publications not authorized such treatment.

This final rule, however, affords publishers the additional flexibility of combining and copalletizing Periodicals mailings whenever warranted by production efficiencies, postage savings, and improved service. Publishers of Periodicals publications that are generally not eligible for "NEWS" treatment can now determine whether it is advantageous to be combined or copalletized with other publications eligible for such treatment. This is an option for which publications such as the one issued by the commenter previously could not be considered.

The publisher commenting on the proposed rule also believed that the reasoning behind the use of the "NEWS" designation was to ensure that time-sensitive publications were processed and delivered in a consistent and timely manner. He believed that factors other than the frequency of publication should be considered when determining whether a publication is time-sensitive and eligible for the "NEWS" designation for mail processing and delivery. The publisher noted that the adoption of the proposed standards would extend that privilege to publications that were perhaps not time-sensitive whereas publications such as his publication, which he stated was issued 26 times a year and which he

maintained was time-sensitive in content, would not benefit from the proposed standard.

Although the Postal Service does not guarantee the delivery of Periodicals publications within a specified time, it handles all such publications, whether designated "NEWS" or "PER," as expeditiously as possible in distribution, dispatch, transportation, and delivery. There are few differences between the ways in which the Postal Service handles publications designated "NEWS" and "PER." In general, those designated "NEWS" are handled first to ensure timely processing and dispatch. Despite that difference, the Postal Service fully supports the invaluable role Periodicals publications play in keeping the American public informed and enlightened. As a consequence, the Postal Service makes every possible attempt to provide similar handling for publications designated "PER" to ensure timely and consistent delivery. The final rule does provide publishers of publications not authorized newspaper treatment, including the publication issued by the commenter, the option of being combined or copalletized with those publications that are authorized "NEWS" treatment.

As a clarification about what constitutes time-sensitive publications, the proposed rule did not address that issue or attempt to discuss or consider criteria other than frequency of publication that would need to be applied for determining the use of "NEWS" and "PER." Since this issue is outside the scope of this rulemaking, the changes discussed in the proposed rule were based on practical operational reasons stemming from mail production that combines publications eligible for "NEWS" with those eligible only for "PER." In view of that situation, mailers and publishers requested standards that specified the criteria under which those two designations could be used.

After full consideration of the comments received and for the reasons cited above, the Postal Service believes it appropriate to adopt the proposed rule for the use of the "NEWS" and "PER" designations for combined mailings and copalletized mailings.

List of Subjects in 39 CFR Part 111

Postal Service.

PART 111—[AMENDED]

1. The authority citation for 39 CFR part 111 continues to read as follows:

Authority: 5 U.S.C. 552(a); 39 U.S.C. 101, 401, 403, 404, 414, 416, 3001–3011, 3201–3219, 3403–3406, 3621, 3626, 5001.

2. Amend the following sections of the *Domestic Mail Manual* (DMM) as set forth below:

E Eligibility

* * * * *

E200 Periodicals

* * * * *

E230 Carrier Route Rates

[Remove 4.0.]

* * * * *

M Mail Preparation and Sortation

M000 General Preparation Standards

* * * * *

M030 Containers

M031 Labels

* * * * *

1.0 SACK AND TRAY LABELS

* * * * *

[Revise 1.7 to read as follows:]

1.7 Periodicals Publications

Except as provided in M230.2.0 for combined mailings, Periodicals publications must use one of the following for Line 2 class information:

a. "PER."

b. "NEWS" if published weekly or more often or if authorized newspaper treatment as of March 1, 1984.

* * * * *

4.0 PALLET LABELS

* * * * *

[Revise 4.11 to read as follows:]

4.11 Periodicals Publications

Except as provided in M045.8.0 for copalletized mailings, Periodicals publications must use one of the following for Line 2 class information:

a. "PER."

b. "NEWS" if published weekly or more often or if authorized newspaper treatment as of March 1, 1984.

* * * * *

M032 Barcoded Labels

1.0 BASIC STANDARDS—TRAY AND SACK LABELS

* * * * *

[Revise 1.3b to read as follows:]

1.3 Content Line (Line 2)

The content line must meet these standards:

* * * * *

b. *Periodicals.* Except as provided in M045.8.0 for copalletized mailings and in M230.2.0 for combined mailings, Periodicals publications must use one of

the following for Line 2 class information:

(1) "PER."

(2) "NEWS" if published weekly or more often or if authorized newspaper treatment as of March 1, 1984.

* * * * *

M040 Pallets

* * * * *

M045 Palletized Mailings

* * * * *

[Revise heading of 8.0 to read as follows:]

8.0 COPALLETIZED FLAT-SIZE PIECES—PERIODICALS OR STANDARD MAIL

* * * * *

[Amend 8.2 by revising 8.2a, adding new 8.2b, and redesignating current 8.2b as 8.2c to read as follows:]

8.2 Periodicals

Additional standards are as follows:

a. Periodicals eligible for preferred rates (In-County, Nonprofit, Classroom, and Science-of-Agriculture) may be combined with Periodicals eligible for Outside-County rates.

b. All pallets in a copalletized mailing are identified on the content line (Line 2) of the label with only "NEWS" (see M031) or "PER" as the class designation under these conditions:

(1) If at least 51% of the total number of copies in the copalletized mailing can qualify for "NEWS" treatment, then all pallets in such a mailing are labeled "NEWS," unless the mailer chooses to use "PER."

(2) If less than 51% of the total number of copies in a copalletized mailing can qualify for "NEWS" treatment, then all pallets in such a mailing are labeled "PER."

* * * * *

[Revise M230 by amending heading of M230; by amending 1.0; and by redesignating and amending current 2.0 as 2.2, current 3.0 as 2.1, current 4.0 as 2.4, and current 5.0 as 2.5 to read as follows:]

M230 Combining Multiple Editions or Publications

1.0 DESCRIPTION

1.1 Purpose

Periodicals publications may be prepared as a combined mailing by merging copies either during production or after finished copies are produced to achieve the finest presort level possible or to reduce the per piece charge.

1.2 Methods

A Periodicals combined mailing may be prepared using either one of these methods:

a. Individually addressed copies of different editions of a Periodicals publication (one title) or individually addressed copies of different Periodicals publications (more than one title) are merged and sorted together to obtain a finer presort level.

b. Two or more copies of different Periodicals publications (two or more titles) are placed within the same mailing wrapper and presented as one addressed piece to a single recipient to reduce the per piece charge.

2.0 BASIC STANDARDS

2.1 Eligibility and Mail Preparation

Each publication in a combined mailing must meet the basic eligibility standards in E211 and the specific standards for the rate claimed. In addition, the combined mailing must meet the eligibility and mail preparation standards for the rate claimed.

2.2 Minimum Volume

For combined mailings prepared under 1.2a, more than one Periodicals publication, or edition of a publication, may be combined to meet the required minimum volume per package, sack, or tray for the rate claimed. For combined mailings prepared under 1.2b, the appropriate minimum volume requirements in M210, M220, M810, or M820 apply for the rate claimed.

2.3 Labeling

All sacks or trays in a combined mailing are labeled the same, as either "NEWS" (see M031) or as "PER," depending on which of the following conditions is met:

a. If at least 51% of the total number of copies in the combined mailing can qualify for "NEWS" treatment, then all sacks or trays in such a mailing are labeled "NEWS," unless the mailer chooses to use "PER."

b. If less than 51% of the total number of copies in a combined mailing can qualify for "NEWS" treatment, then all sacks or trays in such a mailing are labeled "PER."

2.4 Documentation

Presort documentation required under P012 must show the total number of addressed pieces and total number of copies for each publication and each edition, if applicable, in the combined mailing claimed at the carrier route, 5-digit, 3-digit, and basic rates. The publisher must also provide a list, by 3-digit ZIP Code prefix, of the number of addressed pieces for each publication and each edition, if applicable, claimed at any destination entry and pallet discounts.

2.5 Postage Statements

Postage statements for a combined mailing must be prepared as follows:

a. Copy weight and advertising percentage determine whether separate postage statements are required for editions of the same publication:

(1) If the copy weight and advertising percentage for all editions of a publication are the same, all the editions may be reported on the same postage statement or each edition may be reported on a separate postage statement.

(2) If either the copy weight or the advertising percentage is different for each edition of a publication, each edition must be reported on a separate postage statement.

b. For a combined mailing prepared under 1.2a, a separate postage statement that claims all applicable per piece and per pound charges must be prepared for each publication or edition except as provided in 2.5a. The mailer must annotate on, or attach to, each postage statement, the title and issue date of each publication or edition included in the combined mailing and indicate that the pieces were prepared as part of a combined mailing under 1.2a.

c. For mailings prepared under 1.2b, a separate postage statement claiming the applicable per pound charges must be prepared for each publication or edition in the combined mailing except as provided in 2.5a. The mailer must annotate on, or attach to, each postage statement, the title and issue date of each publication or edition included in the combined mailing and indicate that the copies were prepared as part of a combined mailing under 1.2b. The per piece charges must be claimed as follows:

(1) If all copies in a combined mailing prepared under 1.2b are eligible for the Classroom or Nonprofit discount, the per piece charges must be claimed only on the postage statement for the publication that contains the highest amount of advertising.

(2) If all copies in a combined mailing prepared under 1.2b are not eligible for the Classroom or Nonprofit discount, the per piece charges must be claimed only on the postage statement for the publication that contains the highest amount of advertising.

(3) If a portion of the copies in a combined mailing prepared under 1.2b are eligible for the Classroom or Nonprofit discount and a portion are not eligible for those discounts, the per piece charges must be claimed only on the postage statement for the publication that contains the highest amount of advertising and is not eligible

for the Classroom or Nonprofit discount. The Classroom or Nonprofit per piece discount must not be claimed.

* * * * *

An appropriate amendment to 39 CFR 111 to reflect the changes will be published.

Neva R. Watson,

Attorney, Legislative.

[FR Doc. 03-4418 Filed 2-26-03; 8:45 am]

BILLING CODE 7710-12-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[CT-068-7225a; A-1-FRL-7445-9]

Approval and Promulgation of Air Quality Implementation Plans; Connecticut; New Source Review/Prevention of Significant Deterioration Revision

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is approving a State Implementation Plan (SIP) revisions submitted by the Connecticut Department of Environmental Protection (DEP). The revisions include new provisions that implement the core requirements of 1990 Clean Air Act Amendments (CAAA) regarding nonattainment New Source Review (NSR) in areas that have not attained the National Ambient Air Quality Standards (NAAQS). In addition, the changes amend the applicability requirements and certain other requirements of the Prevention of Significant Protection (PSD) program and NSR rules. Finally, the changes provide a definition for "Practicably Enforceable" that would allow sources a streamlined approach to limit potential to emit for PSD/NSR applicability purposes. In aggregate, these revisions will substantially strengthen the DEP's air permitting rules.

This action is to approve the revisions to section 22a-174-1, "Definitions," section 22a-174-2a, "Procedural Requirements for New Source Review and Title V Permitting," and section 22a-174-3a, "Permit to Construct and Operate Stationary Sources." This action is being taken in accordance with the Clean Air Act (CAA or Act).

DATES: This rule will become effective on March 31, 2003.

ADDRESSES: Copies of the documents relevant to this action are available for inspection during normal business

hours at the Office of Ecosystem Protection, U.S. Environmental Protection Agency, Region I, One Congress Street, 11th floor, Boston, MA; Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, Room B-108 West, 1301 Constitution Avenue, NW., Washington DC; and the Bureau of Air Management, Department of Environmental Protection, State Office Building, 79 Elm Street, Hartford, CT 06106-1630.

FOR FURTHER INFORMATION CONTACT: Brendan McCahill, (617) 918-1652; e-mail at McCahill.Brendan@EPA.GOV.

SUPPLEMENTARY INFORMATION:

I. Background

On January 21, 2003 (68 FR 2722), EPA published a notice of proposed rulemaking (NPR) for the state of Connecticut. The NPR proposes approval of the revisions to section 22a-174-1, "Definitions," section 22a-174-2a, "Procedural Requirements for New Source Review and Title V Permitting," and section 22a-174-3a, "Permit to Construct and Operate Stationary Sources." The formal SIP revision was submitted on June 14, 2002.

Provisions in these rules that only affect programs other than PSD and NSR have not been incorporated into the SIP by today's action. For details, please contact the EPA regional office at the address given above. Furthermore, EPA is not taking action on portions of DEP's submittal that address NO_x increments. This aspect of the PSD Federal implementation plan remains in effect (see 40 CFR 52.382). The DEP has submitted other changes to the increment provisions of its SIP. EPA anticipates taking action on the NO_x increments and these other changes in a future action.

EPA has recently promulgated revisions to certain portions of the Federal PSD and nonattainment NSR regulations (67 FR 80244 (Dec. 31, 2002)). These rules have an effective date of March 3, 2003. With respect to Connecticut's rules relating to new source review, EPA has determined that Connecticut's rules meet the requirements of 40 CFR part 51, subpart I, as currently in effect, and is taking no position on whether Connecticut will need to make changes to its new source review rules to meet requirements that EPA has promulgated, but are not yet effective, as part of new source review reform.

In addition, while EPA is approving Connecticut's PSD SIP, EPA recognizes that it has a responsibility to insure that all States properly implement their

preconstruction permitting programs. EPA's approval of Connecticut's PSD program does not divest the Agency of the duty to continue appropriate oversight to insure that PSD determinations made by Connecticut are consistent with the requirements of the CAA, EPA regulations, and the SIP. EPA's authority to oversee PSD program implementation is set forth in sections 113, 167, and 505(b) of the Act. For example, section 167 provides that EPA shall issue administrative orders, initiate civil actions, or take whatever other enforcement action may be necessary to prevent construction of a major stationary source that does not "conform to the requirements of" the PSD program. Similarly, section 113(a)(5) provides for administrative orders and civil actions whenever EPA finds that a State "is not acting in compliance with" any requirement or prohibition of the Act regarding construction of new or modified sources. Likewise, section 113(a)(1) provides for a range of enforcement remedies whenever EPA finds that a person is in violation of an applicable implementation plan.

The specific requirements of Connecticut's SIP revision and the rationale for EPA's proposed action are explained in the NPR and will not be restated here.

II. Response to Comments

EPA did not receive any comments during the comment period.

III. Final Action

EPA is approving the SIP revision submitted by Connecticut on June 14, 2002 as a revision to the SIP.

IV. Regulatory Assessment Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001). This action merely approves State law as meeting Federal requirements and imposes no additional requirements beyond those imposed by State law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under State law and does not impose

any additional enforceable duty beyond that required by State law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4).

This rule also does not have tribal implications because it will 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). This action also does not have federalism implications because it does 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 (64 FR 43255, August 10, 1999). This action merely approves a State rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve State choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. 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. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. section 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. 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**. 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. section 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by April 28, 2003. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(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, and Volatile organic compounds.

Dated: February 19, 2003.

Robert W. Varney,

Regional Administrator, EPA New England.

Part 52 of chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

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

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

Subpart H—Connecticut

2. Section 52.370 is amended by adding paragraph (c)(91) to read as follows:

§ 52.370 Identification of plan.

* * * * *

(c) * * *

(91) Revisions to the State Implementation Plan submitted by the Connecticut Department of Environmental Protection on June 14, 2002.

(i) Incorporation by reference.

(A) Connecticut's amendments to Section 22a-174-1, *Definitions* except for the following sections: (4), (18), (20), (29), (44), (45), (60), (111), (112) and, (117). These regulations are effective in the state of Connecticut on March 15, 2002.

(B) Connecticut's new Section 22a-174-2a, *Procedural Requirements for New Source Review and Title V Permitting* except for the following sections: (a)(1) through (6); (b)(1) through (4); introduction to (b)(5); (b)(5)(D), (F) and, the last sentence of (G); (b)(9); (c)(2); clause after first comma " * * * or order pursuant to section 22a-174-33(d) of regulations of Connecticut State Agency * * * " in the introduction to (c)(6); (c)(6)(B) and (C); clause after first comma " * * * or order pursuant to section 22a-174-33(d) of Regulations of Connecticut State Agencies * * * " in (c)(9); reference to "Title V" in title of (d); (d)(4)(A)

through (D); (d)(7)(A) through (D); (d)(8)(A) and (B); reference to "Title V" in title of (e); (e)(2)(A) and (B); (e)(3)(D); (e)(5)(A) through (F); reference to "Title V permit" in (e)(6); reference to "22a-174-33" in first clause of introduction to (f)(2); (f)(2)(F); (f)(5); (f)(6); (g)(1) and (2); (h)(1) through (3) and; (i)(1) through (3). These regulations are effective in the state of Connecticut on March 15, 2002.

(C) Connecticut's new Section 22a-174-3a, *Permit to Construct and Operate Stationary Sources* except for the following sections: (a)(1)(C); (c)(1)(H); (d)(3)(J) and (M); references to "Dioxin," "PCDDs" and, "PCDFs" in Table 3a(i)-1 of (i)(1) and; (m)(1) through (8). These regulations are effective in the state of Connecticut on March 15, 2002.

(ii) Additional materials.

(A) Letter from the Connecticut Department of Environmental Protection dated June 14, 2002 submitting a revision to the Connecticut State Implementation Plan.

For the State of Connecticut:

3. In § 52.385, Table 52.385 is amended by revising existing entry in state citations for 22a-174-1, *Definitions*, and adding new entries in state citation for 22a-174-2a, *Procedural Requirements for New Source Review and Title V Permitting* and, 22a-174-3a, *Permit to Construct and Operate Stationary Sources*, to read as follows:

§ 52.385 EPA-approved Connecticut Regulations.

* * * * *

TABLE 52.385.—EPA-APPROVED REGULATIONS

Connecticut State citation	Title/subject	Dates		Federal Register citation	52.370	Explanations/description
		Date adopted by State	Date approved by EPA			
* 22a-174-1	* Definitions	* 03/15/02	* February 27, 2003.	* [Insert <i>FR</i> citation from published date].	*	* Adopting definitions applicable to PSD/NSR program.
* 22a-174-2a	* Procedural Requirements for New Source Review and Title V Permitting.	* 03/15/02	* February 27, 2003.	* [Insert <i>FR</i> citation from published date].	*	* Provisions applicable to PSD/NSR in consolidated permit procedural requirements.
* 22a-174-3a	* Permit to Construct and Operate Stationary Sources.	* 03/15/02	* February 27, 2003.	* [Insert <i>FR</i> citation from published date].	*	* PSD/NSR program requirements as revised by the CAAA.

[FR Doc. 03-4508 Filed 2-26-03; 8:45 am]

BILLING CODE 6560-50-P

**ENVIRONMENTAL PROTECTION
AGENCY****40 CFR Part 52**

[MD 128-3097a; FRL-7450-4]

**Approval and Promulgation of Air
Quality Implementation Plans;
Maryland; Revisions to Regulations for
Permits, Approvals and Registration
and Related Regulations****AGENCY:** Environmental Protection
Agency (EPA).**ACTION:** Direct final rule.

SUMMARY: EPA is taking direct final action to approve revisions to the Maryland State Implementation Plan (SIP). The revisions amend provisions to Maryland's regulations for Permits, Approvals, and Registration and related changes to its regulations for General Emission Standards, Prohibitions, and Restrictions, and Volatile Organic Compounds from Specific Processes. EPA is approving these revisions in accordance with the requirements of the Clean Air Act.

DATES: This rule is effective on April 28, 2003 without further notice, unless EPA receives adverse written comment by March 31, 2003. If EPA receives such comments, it will publish a timely withdrawal of the direct final rule in the **Federal Register** and inform the public that the rule will not take effect.

ADDRESSES: Comments should be mailed to Harold A. Frankford, Office of Air Programs, Air Protection Division, Mailcode 3AP20, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; the Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, 1301 Constitution Avenue, NW., Room B108, Washington, DC 20460; and the Maryland Department of the Environment, 1800 Washington Boulevard, Suite 705, Baltimore, Maryland 21230.

FOR FURTHER INFORMATION CONTACT: Harold A. Frankford, (215) 814-2108, or by e-mail at frankford.harold@epa.gov.

SUPPLEMENTARY INFORMATION:**I. Background**

On November 1, 2001, the Maryland Department of the Environment (MDE) submitted formal revisions to its State Implementation Plan (SIP). The SIP revision consists of amendments to the Code of Maryland (COMAR) Regulations 26.11.02, Permits, Approvals, and Registration that were adopted from 1995 through 1999 and related amendments under COMAR 26.11.06, General Emission Standards, Prohibitions, and Restrictions, and COMAR 26.11.19, Volatile Organic Compounds from Specific Processes.

The MDE has submitted all regulations under COMAR 26.11.02 for SIP approval except those relating to part 70 permits and those relating to fees. The MDE's November 1, 2001 submittal includes a table (Table 1 of the submittal) which clearly indicates those regulations under COMAR 26.11.02 that are not to be considered as part of the SIP revision request. COMAR 26.11.02 was amended in its entirety in 1995 to include part 70 requirements. The non-part 70 requirements of COMAR 26.11.02 are substantially the same as those already approved by EPA as SIP revisions. This rulemaking action approving the November 1, 2001 SIP revision request by MDE does not make substantial amendments to the SIP's provisions of COMAR 26.11.02 already approved by EPA. Similarly, the related amendments made to COMAR 26.11.06, General Emission Standards, Prohibitions, and Restrictions, and COMAR 26.11.19, Volatile Organic Compounds from Specific Processes that are the subject of this rulemaking action do not change the substantive SIP requirements of those regulations previously approved by EPA. The specific amendments being approved by this rulemaking action are discussed in the next section of this document.

II. Summary of the SIP Revisions

EPA is approving the SIP revisions submitted by the MDE on November 1, 2001. A description of each revision is provided in A-E of this section.

A. The May 1995 Amendments

On April 11, 1995, the MDE adopted several amendments to its Code including the repeal of Regulations .01-.21 and the adoption of new Regulations .01-.19 under COMAR 26.11.02 Permits, Approvals, and Registration, an amendment to Regulation .06, Volatile Organic Compounds under COMAR 26.11.06, General Emission Standards, Prohibitions, and Restrictions, and an amendment to Regulation .02 Applicability, Determining Compliance,

Reporting and General Requirements under COMAR 26.11.19, Volatile Organic Compounds from Specific Processes. All of these amendments were effective on May 8, 1995.

The repeal of Regulations .01-.21 and the adoption of new Regulations .01-.19 under COMAR 26.11.02 Permits, Approvals, and Registration did not substantially change the requirements of COMAR 26.11.02. Rather, when it re-codified and reformatted these regulations, the MDE made several simple wording changes to clarify the text, correct typographical errors, and make wording changes to the text of these SIP regulations to clarify their requirements in light of the adoption of non-SIP permitting regulations to satisfy the requirements of 40 CFR part 70. The MDE's November 1, 2001 submittal specifically indicates that Regulations .01B., .02D., .04C.(2), .11C., and .15 regarding definitions and requirements related to part 70 Permits are not being requested for approval and incorporation into the SIP.

The amendment to Regulation .06, Volatile Organic Compounds under COMAR 26.11.06, General Emission Standards, Prohibitions, and Restrictions clarifies that the hearing required by 26.11.06.06 E(4)e satisfies the requirement for public comment or hearing under COMAR 26.11.02-.14.

The amendment to Regulation .02 Applicability, Determining Compliance, Reporting and General Requirements under COMAR 26.11.19, Volatile Organic Compounds from Specific Processes clarifies that upon approval of a reasonably available control technology (RACT) standard for a major stationary source of volatile organic compounds (VOCs) that does not have a permit to operate, the MDE will require the source to apply for a permit under COMAR 26.11.02.13 and will issue a permit to operate that includes the RACT requirements.

B. The June 1997 Amendments

On May 20, 1997, the MDE adopted revisions to Regulations .01, .06, .10, .11, .12, .14, .16 and .19 under COMAR 26.11.02 Permits, Approvals, and Registration. These amendments were effective June 16, 1997. The MDE's November 1, 2001 submittal specifically states that the amendments to Regulations .16 and .19 of COMAR 26.11.02 are not being requested for approval and incorporation into the SIP. The MDE's November 1, 2001 submittal also specifically states that the definition of the term "acid rain source" found at COMAR 26.11.02.01B(1) is not being requested for SIP approval.

The amendment to .01, Definitions clarifies the definition of the term "complete application" at paragraph .01B(13). The amendment to Regulation .06, Denial of Applications for State Permits and Approvals corrects typographical errors and omissions that occurred when COMAR 26.11.02 was reorganized.

The amendments to Regulation .10, Sources Exempt for Permits to Construct and Approvals provide that the following sources may construct or modify without first obtaining, and having in current effect, a permit to construct:

(1) Commercial bakery ovens with a rated heat input capacity of less than 2 MMBtu/hour;

(2) Breweries with an annual beer production less than 60,000 barrels;

(3) Municipal solid waste landfills that have a design capacity of less than 500,000 tons of municipal solid waste and that are not major sources;

(4) Gasoline storage tanks with a capacity of 2000 gallons or less; and

(5) Sheet-fed letter or lithographic printers with a cylinder width less than 18 inches.

The amendments to Regulation .11, Procedures for Obtaining Permits to Construct Certain Significant Sources clarify application procedures for sources subject to COMAR 26.11.02. The amendments to Regulation .12, Procedures for Obtaining Approvals of PSD Sources and NSR Sources and Permits to Certain 100-Ton Sources clarify those provisions of COMAR 26.11.02 that apply to these sources and state that a permit to construct a lead source is required for sources that will discharge 5 tons per year or more of lead or lead compounds measured in elemental lead. The amendments to Regulation .14, Procedures for Obtaining State Permit to Operate and Permits to Construct Certain Sources and Permits to Construct Control Equipment on Existing Sources clarify the applicability of COMAR 26.11.02 for any source or activity not listed in Regulations .11A. or .12.

C. The September 1997 Amendments

On August 18, 1997, the MDE adopted amendments to Regulation .10, Sources Exempt for Permits to Construct and Approvals under COMAR 26.11.02 Permits, Approvals, and Registration. These amendments were effective September 22, 1997. The amendments to Regulation .10, Sources Exempt for Permits to Construct and Approvals lowers the size of the stationary internal combustion engine (ICE) exempted from permit to construct requirements for sources that operate more than 2000

hours/year. The old version of the regulation exempted a stationary ICE of less than 1000 brake horsepower (HP) from the permit to construct requirements. Under the revised regulation, a stationary ICE of less than 500 HP and those between 500 and 1000 HP that operate less than 2,000 hours/year are exempted from the permit to construct requirements. For sources that install more than one ICE over a five-year period, the exemptions do not apply if the total potential to emit emissions from the engines installed over the five-year period meets or exceeds the major source threshold as defined in COMAR 26.11.02.01.C.

D. The May 4, 1998 Amendments

On April 9, 1998, the MDE adopted amendments to Regulation .09 Sources Subject to Permits to Construct and Operate under COMAR 26.11.02, Permits, Approvals, and Registration; and to Regulations .02, Applicability, Determining Compliance, Reporting and General Requirements and Regulation .15 Paint, Resin and Adhesive Manufacturing and Adhesive Application under COMAR 26.11.19, Volatile Organic Compounds from Specific Processes. These amendments were effective May 4, 1998.

The amendments to Regulation .09, Sources Subject to Permits to Construct and Operate under COMAR 26.11.02, Permits, Approvals, and Registration corrects a mis-reference that occurred when COMAR 26.11.02 was restructured. The amendment clarifies that obtaining a Prevention of Significant Deterioration (PSD) permit or New Source Review (NSR) permit is separate from obtaining a general construction permit. Obtaining approval of a PSD or NSR permit does not relieve a person from also obtaining all permits to construct required under COMAR 26.11.02.

Although they were included in Maryland's November 1, 2001 SIP revision submittal, the MDE had also formally submitted the very same amendments to COMAR 26.11.19, Volatile Organic Compounds from Specific Processes, Regulations .02, Applicability, Determining Compliance, Reporting and General Requirements and .15, Paint, Resin and Adhesive Manufacturing and Adhesive Application, as separate formal SIP revision requests. EPA has already approved the revision to Regulation .02 on February 3, 2003 (68 FR 5228) and the revision to Regulation .15 on October 28, 1999 (64 FR 57989).

E. The March 22, 1999 Amendments

On March 2, 1999, the MDE adopted amendments to Regulation .10, Sources Exempt for Permits to Construct and Approvals under COMAR 26.11.02, Permits, Approvals, and Registration. These amendments were effective March 22, 1999. The amendments establish a de minimus level for construction permits so that sources which emit very small amounts of air pollution do not have to obtain air quality permits to construct. In addition, the amendments clarify the exemption list of Regulation .10, Sources Exempt for Permits to Construct and Approvals under COMAR 26.11.02 to exempt space heaters below a certain size from the requirement to obtain a permit to construct.

The amended version of Regulation .10C exempts space heaters using gaseous fuels or No. 1 or No. 2 fuel oil with a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour from first obtaining, and having in current effect, a permit to construct prior to construction or modification. The amended version of Regulation .10 includes a new paragraph .10X., Other Installations, which allows an installation to construct or modify or cause to be constructed or modified without first having to obtain, and having in current effect, a permit to construct if:

(1) The installation is not subject to any source-specific State or Federal emission standard;

(2) The expected uncontrolled emissions are less than 1 ton per calendar year of each pollutant for which there is a Federal ambient air quality standard or which is a Class II toxic air pollutant, as defined in COMAR 26.11.15.01B(5); and

(3) The emissions contain not more than 1 pound per day of a Class I toxic air pollutant, as defined in COMAR 26.11.15.01B(4).

III. Final Action

EPA is approving the amendments to COMAR 26.11.02, Permits, Approvals, and Registration that were adopted from 1995 through 1999 and related amendments under COMAR 26.11.06, General Emission Standards, Prohibitions, and Restrictions, and COMAR 26.11.19, Volatile Organic Compounds from Specific Processes as submitted by MDE on November 1, 2001 as formal revisions to the Maryland SIP.

EPA is publishing this rule without prior proposal because the Agency views this as a noncontroversial amendment and anticipates no adverse comment given that these revisions

became effective in Maryland from 1995 through 1999 and do not substantially revise the already SIP-approved provisions of these regulations. However, in the "Proposed Rules" section of today's **Federal Register**, EPA is publishing a separate document that will serve as the proposal to approve the amendments to COMAR 26.11.02, Permits, Approvals, and Registration that were adopted from 1995 through 1999 and related amendments under COMAR 26.11.06, General Emission Standards, Prohibitions, and Restrictions, and COMAR 26.11.19, Volatile Organic Compounds from Specific Processes submitted by MDE on November 1, 2001, if adverse comments are filed. This rule will be effective on April 28, 2003 without further notice unless EPA receives adverse comment by March 31, 2003. If EPA receives adverse comment, EPA will publish a timely withdrawal in the **Federal Register** informing the public that the rule will not take effect. EPA will address all public comments in a subsequent final rule based on the proposed rule. EPA will not institute a second comment period on this action. Any parties interested in commenting must do so at this time. Please note that if EPA receives adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment.

IV. Statutory and Executive Order Reviews

A. General Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or

significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4). This rule also does not have tribal implications because it will 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). This action also does not have Federalism implications because it does 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 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. 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. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

B. Submission to Congress and the Comptroller General

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. 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**. This rule is not a "major rule" as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by April 28, 2003. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action approving amendments to COMAR 26.11.02, Permits, Approvals, and Registration that were adopted from 1995 through 1999 and related amendments under COMAR 26.11.06, General Emission Standards, Prohibitions, and Restrictions, and COMAR 26.11.19, Volatile Organic Compounds from Specific Processes as submitted by Maryland on November 1, 2001 may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: February 4, 2003.

Thomas C. Voltaggio,

Acting Regional Administrator, Region III.

40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

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

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

Subpart V—Maryland

2. Section 52.1070 is amended by adding paragraphs (c)(182) to read as follows:

§ 52.1070 Identification of plan.

* * * * *

(c) * * *

(182) Revisions to the Code of Maryland Administrative Regulations (COMAR) under COMAR 26.11.02, Permits, Approvals, and Registration

that were adopted from 1995 through 1999 and related amendments under COMAR 26.11.06, General Emission Standards, Prohibitions, and Restrictions, and COMAR 26.11.19, Volatile Organic Compounds from Specific Processes on November 1, 2001 by the Maryland Department of the Environment:

(i) Incorporation by reference.

(A) Letter of November 1, 2002 from the Maryland Department of the Environment (MDE) transmitting revisions to COMAR 26.11.02, 26.11.06 and 26.11.19.

(B) The following new provisions of COMAR 26.11.02 (Permits, Approvals and Registration), effective May 8, 1995, replacing COMAR 26.11.02.01 through 26.11.02.16, as amended effective through April 26, 1993:

(1) COMAR 26.11.02.01A; 26.11.02.01B(2), (3), (7) through (9), (11) through (14), (17) through (21), (23) through (28), (34) through (36), (38), (40), (41), (43) through (45), (47), (48), (51) through (53), and (55); and 26.11.02.01C.

(2) COMAR 26.11.02.02 (except .02D), .03, .04 (except .04C(2)), .05 through .10, .11 (except .11C), and .12 through 14.

(C) Revision to COMAR 26.11.06.06E(4)(g), effective May 8, 1995.

(D) Revision to COMAR 26.11.19.02G(3)(b), effective May 8, 1995.

(E) Revisions to COMAR 26.11.02.01B(13), .06B (introductory paragraph) and .06B(5), .10O(2), .10Q(7), .10U, .10V, .11A(1), .12A(1) and (2), .14A(1); addition of 26.11.02.10O(13) and (14), .10W, .11A(2) and .12A(3); removal of 26.11.02.14A(2)—existing .14A(3) is renumbered as .14A(2), effective June 16, 1997.

(F) Revision to COMAR 26.11.02.10E, effective September 22, 1997.

(G) Revision to COMAR 26.11.02.09C, effective May 4, 1998.

(H) Revisions to COMAR 26.11.02.10C, .10V and .10W; addition

of COMAR 26.11.02.10X, effective March 22, 1999.

(ii) Additional Material.—Remainder of the State submittal pertaining to the revisions listed in paragraph (c)(182)(i) of this section.

§ 52.1113 [Reserved]

3. Section 52.1113 is reserved.

[FR Doc. 03-4510 Filed 2-26-03; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[CA 269-0382a; FRL-7451-6]

Revisions to the California State Implementation Plan, Mojave Desert Air Quality Management District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: EPA is taking direct final action to approve revisions to the Mojave Desert Air Quality Management District (MDAQMD) portion of the California State Implementation Plan (SIP). These revisions concern Oxides of Nitrogen (NO_x) emissions from Portland cement kilns. We are approving a local rule that regulates these emission sources under the Clean Air Act as amended in 1990 (CAA or the Act).

DATES: This rule is effective on April 28, 2003 without further notice, unless EPA receives adverse comments by March 31, 2003. If we receive such comment, we will publish a timely withdrawal in the **Federal Register** to notify the public that this rule will not take effect.

ADDRESSES: Mail comments to Andy Steckel, Rulemaking Office Chief (AIR-4), U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901.

You can inspect copies of the submitted SIP revisions and EPA's technical support document (TSD) at

our Region IX office during normal business hours. You may also see copies of the submitted SIP revisions at the following locations:

Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, Room B-102, 1301 Constitution Avenue, NW., (Mail Code 6102T), Washington, DC 20460.

California Air Resources Board, Stationary Source Division, Rule Evaluation Section, 1001 "I" Street, Sacramento, CA 95814.

Mojave Desert Air Quality Management District, 14306 Park Avenue, Victorville, California 92392.

A copy of the rule may also be available via the Internet at <http://www.arb.ca.gov/drdb/drdbtxt.htm>. Please be advised that this is not an EPA website and may not contain the same version of the rule that was submitted to EPA.

FOR FURTHER INFORMATION CONTACT: Charnjit Bhullar, EPA Region IX, (415) 972-3960.

SUPPLEMENTARY INFORMATION: Throughout this document, "we," "us" and "our" refer to EPA.

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I. The State's Submittal

A. What Rule Did the State Submit?

Table 1 lists the rule we are approving with the date that it was adopted by the local air agency and submitted by the California Air Resources Board (CARB).

TABLE 1.—SUBMITTED RULES

Local agency	Rule #	Rule title	Adopted	Submitted
MDAQMD	1161	Portland Cement Kilns	3/25/02	6/18/02

On July 23, 2002, this rule submittal was found to meet the completeness criteria in 40 CFR part 51, appendix V, which must be met before formal EPA review.

B. Are There Other Versions of This Rule?

MDAQMD adopted an earlier version of this rule on October 22, 2001, and CARB submitted it to us on November 8, 2001. We published approval of this

previous version of Rule 1161 into the SIP on January 2, 2002 (67 FR 19).

C. What Is the Purpose of the Submitted Rule Revisions?

Rule 1161 applies to cement manufacturing operations within the Federal ozone non-attainment area

regulated by the MDAQMD. This rule controls emission of NO_x from Portland cement kilns. On January 2, 2002, the EPA finalized approval of a previous version of this rule. CARB submitted comments on the previous version of proposed rule 1161 a few days prior to its scheduled adoption in October 2001. Because delaying adoption could have resulted in offset and highway sanctions for the region, MDAQMD committed to CARB that it would address CARB's comments no later than May 2002.

On March 25, 2002, MDAQMD adopted the amended rule 1161. On June 18, 2002, CARB submitted the revised version of rule 1161 for approval into the SIP. Rule 1161, as revised, addresses CARB's comments.

The TSD has more information about this rule.

II. EPA's Evaluation and Action

A. How Is EPA Evaluating This Rule?

Generally, SIP rules must be enforceable (see section 110(a) of the Act), must require Reasonably Available Control Technology (RACT) for major sources in nonattainment areas (see sections 182(a)(2)(A) and 182(f)), and must not relax existing requirements (see sections 110(l) and 193). The MDAQMD regulates an ozone nonattainment area (see 40 CFR part 81), so Rule 1161 must fulfill RACT.

Guidance and policy documents that we used to help evaluate enforceability and RACT requirements consistently include the following:

1. Issue Relating to VOC Regulation, Cut points, Deficiencies, and Deviations

(the Blue Book), U.S. EPA, May 25, 1988.

2. "Guidance Document for Correcting VOC Rule Deficiencies", U.S. EPA Region 9, August 21, 2001 (the little bluebook).

3. State Implementation Plans; Nitrogen Oxides Supplement to the General Preamble for the Implementation of Title I of the Clean Air Act Amendment of 1990 (the "NO_x Supplement to the General Preamble"), U.S. EPA, 57 FR 55620, November 25, 1992.

4. Nitrogen Oxides (NO_x) Reasonably Available Control Technology (RACT) for the Repowering of Utility Boilers, U.S. EPA Office of Air Quality Planning and Standards, March 9, 1994.

5. Alternative Control Techniques (ACT) Document, NO_x Emission from Cement Manufacturing, U.S. EPA, March 1994, EPA 453/R-94-004.

6. State Implementation Plans (SIPS): Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown, dated September 20, 1999.

B. Does This Rule Meet the Evaluation Criteria?

We believe this rule is consistent with the relevant policy and guidance regarding enforceability, RACT, and SIP relaxations.

The TSD has more information on our evaluation.

C. Public Comment and Final Action

As authorized in section 110(k)(3) of the Act, EPA is fully approving the submitted rule because we believe it

fulfills all relevant requirements. We do not think anyone will object to this approval, so we are finalizing it without proposing it in advance. However, in the Proposed Rules section of this **Federal Register**, we are simultaneously proposing approval of the same submitted rule. If we receive adverse comments by March 31, 2003, we will publish a timely withdrawal in the **Federal Register** to notify the public that the direct final approval will not take effect and we will address the comments in a subsequent final action based on the proposal. If we do not receive timely adverse comments, the direct final approval will be effective without further notice on April 28, 2003. This will incorporate this rule into the federally enforceable SIP.

Please note that if EPA receives adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment.

III. Background Information

Why Was This Rule Submitted?

NO_x helps produce ground-level ozone, smog and particulate matter, which harm human health and the environment. Section 110(a) of the CAA requires states to submit regulations that control NO_x emissions. Table 2 lists some of the national milestones leading to the submittal of this local agency NO_x rule.

TABLE 2.—OZONE NONATTAINMENT MILESTONES

Date	Event
March 3, 1978	EPA promulgated a list of ozone nonattainment areas under the Clean Air Act as amended in 1977. 43 FR 8964; 40 CFR 81.305.
May 26, 1988	EPA notified Governors that parts of their SIPs were inadequate to attain and maintain the ozone standard and requested that they correct the deficiencies (EPA's SIP-Call). See section 110(a)(2)(H) of the pre-amended Act.
November 15, 1990	Clean Air Act Amendments of 1990 were enacted. Pub. L. 101-549, 104 Stat. 2399, codified at 42 U.S.C. 7401-7671q.
May 15, 1991	Section 182(a)(2)(A) requires that ozone nonattainment areas correct deficient RACT rules by this date.

IV. Statutory and Executive Order Reviews

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001). This action merely approves

state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not

contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4).

This rule also does not have tribal implications because it will 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). This action also does not have Federalism implications because it does 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 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. 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. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

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. 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**. 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).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the

appropriate circuit by April 28, 2003. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements.

Dated: January 31, 2003.

Alexis Strauss,

Acting Regional Administrator, Region IX.

Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

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

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

Subpart F—California

2. Section 52.220 is amended by adding paragraph (c)(300) to read as follows:

§ 52.220 Identification of plan.

* * * * *

(c) * * *

(300) Amended regulations for the following APCDs were submitted on June 18, 2002, by the Governor's designee.

(i) Incorporation by reference.

(A) Mojave Desert Air Quality Management District.

(1) Rule 1161 amended on March 25, 2002.

* * * * *

[FR Doc. 03-4513 Filed 2-26-03; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[MD141/142-3095a; FRL-7450-2]

Approval and Promulgation of Air Quality Implementation Plans; Maryland; Miscellaneous Revisions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: EPA is taking direct final action to approve revisions to the Maryland State Implementation Plan (SIP). One revision removes from the SIP the state ambient air quality standard for hydrocarbons. The other revision removes an outdated citation of a current SIP provision regarding the granting of visible emissions exceptions by control officers. EPA is approving these revisions in accordance with the requirements of the Clean Air Act.

DATES: This rule is effective on April 28, 2003 without further notice, unless EPA receives adverse written comment by March 31, 2003. If EPA receives such comments, it will publish a timely withdrawal of the direct final rule in the **Federal Register** and inform the public that the rule will not take effect.

ADDRESSES: Written comments should be addressed to Harold A. Frankford, Office of Air Programs, Mailcode 3AP20, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; the Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, 1301 Constitution Avenue, NW., Room B108, Washington, DC 20460; and Maryland Department of the Environment, 1800 Washington Boulevard, Suite 705, Baltimore, Maryland 21230.

FOR FURTHER INFORMATION CONTACT: Harold A. Frankford, (215) 814-2108, or by e-mail at frankford.harold@epa.gov.

SUPPLEMENTARY INFORMATION:

I. Background

On November 18, 2002 and November 26, 2002, the State of Maryland submitted formal revisions to its State Implementation Plan (SIP). These revisions consists of the removal of outdated and redundant provisions from the Maryland SIP. The November 18, 2002 revision (#85-03) removes the ambient air quality standard for hydrocarbons. The November 26, 2002 revision (#84-06) removes a provision from Maryland's regulations governing control of fuel burning equipment and internal stationary sources.

II. Summary of SIP Revisions

The fuel burning equipment provision being reviewed in this action allows control officers to grant visible emissions exceptions for small residential units and small heating

equipment in State Air Quality Regions I, II, V, and VI, which comprises the following counties: Allegany, Calvert, Cecil, Charles, Dorchester, Frederick, Garrett, Kent, Queen Anne's, Saint Mary's, Somerset, Talbot, Washington, Wicomico, and Worcester. Before December 3, 1984, this rule had been cited in the Code of Maryland Administrative Regulations (COMAR) at COMAR 10.18.09.05A(3)(b) (i) and (ii). In a State action which became effective on December 3, 1984, Maryland removed these provisions from COMAR 10.18.09.05A and merged them with its general visible emissions exceptions regulation, currently cited in the Maryland SIP as COMAR 26.11.06.02B. In a letter dated January 9, 2003 to EPA, Maryland reiterated that the intent of Revision 84-06 was to move the provisions which allows control officers to grant visible emissions exceptions from COMAR 10.18.09.05 A(3)(b) (i) and (ii) to COMAR 26.11.06.02B(5) (a) and (b). On February 12, 2001 (66 FR 9764), EPA had approved the provisions to COMAR 26.11.06.02B(5) (a) and (b) as revisions of the Maryland SIP, but had not indicated in this action that these provisions represented a merger with an existing SIP-approved rule. See, 40 CFR 52.1070(c)(153)(i)(E)(1). In this action, EPA is formally removing COMAR 10.18.09.05A(3)(b)(i) and (ii) from the Maryland SIP, in accordance with the intent of Maryland's 1984 rulemaking action.

With regard to the ambient air quality standard for hydrocarbons, EPA had removed this pollutant from the list of national ambient air quality standards (NAAQS) cited in 40 CFR part 50 on January 5, 1983 (48 FR 629). In response to EPA's action, Maryland removed the state hydrocarbons standard from COMAR 10.18.03, effective October 14, 1985. After EPA reviewed the history of Maryland's formal SIP actions taken since 1985, it was not clear whether EPA had received a formal request from Maryland to remove the State's ambient hydrocarbons standard from the SIP. Therefore, on November 18, 2002, Maryland submitted a formal SIP revision request reaffirming its intent to remove this provision from the SIP.

Given the history of the State and EPA rulemaking actions associated with these two provisions, EPA regards these revisions as "housekeeping" actions with no impact on Agency policy, ambient air quality, or enforceability.

III. Final Action

EPA is approving the removal of the visible emissions exceptions provision cited at COMAR 10.18.09.05A(3)(b)(i) and (ii). As explained earlier in this

action, the actual provision remains in the SIP, but in a different location within Maryland's air pollution control regulations. EPA is also approving the removal of Maryland's ambient air quality standard for hydrocarbons from the Maryland SIP.

EPA is publishing this rule without prior proposal because the Agency views this as a noncontroversial amendment and anticipates no adverse comment. However, in the "Proposed Rules" section of today's **Federal Register**, EPA is publishing a separate document that will serve as the proposal to approve the SIP revision if adverse comments are filed. This rule will be effective on April 28, 2003 without further notice unless EPA receives adverse comment by March 31, 2003. If EPA receives adverse comment, EPA will publish a timely withdrawal in the **Federal Register** informing the public that the rule will not take effect. EPA will address all public comments in a subsequent final rule based on the proposed rule. EPA will not institute a second comment period on this action. Any parties interested in commenting must do so at this time. Please note that if EPA receives adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment.

IV. Statutory and Executive Order Reviews

A. General Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the

Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4). This rule also does not have tribal implications because it will 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). This action also does not have Federalism implications because it does 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 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. 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. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

B. Submission to Congress and the Comptroller General

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. 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**. This rule is not a "major rule" as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by April 28, 2003. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action to approve miscellaneous Maryland SIP revisions may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Ozone, Particulate matter.

Dated: February 4, 2003.

Thomas Valtaggio,

Acting Regional Administrator, Region III.

40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

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

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

Subpart V—Maryland

2. Section 52.1070 is amended by adding paragraphs (c)(180) to read as follows:

§ 52.1070 Identification of plan.

* * * * *

(c) * * *

(180) Revisions to the Code of Maryland Administrative Regulations (COMAR) submitted on November 18, 2002 and November 26, 2002 by the Maryland Department of the Environment:

(i) Incorporation by reference.

(A) Letter of November 18, 2002 from the Maryland Department of the Environment transmitting the removal of Code of Maryland Administrative Regulation (COMAR) 10.18.03.08—the State ambient air quality standard for hydrocarbons.

(B) Removal of COMAR 10.18.03.08, effective October 14, 1985.

(C) Letter of November 26, 2002 from the Maryland Department of the Environment transmitting revisions to COMAR 10.18.09.05 regarding the removal of provisions granting visible emissions exceptions by control officers in Maryland Areas I, II, V, and VI.

(D) Removal of COMAR 10.18.09.05A(3)(b)(i) and .05A(3)(b)(ii), effective December 3, 1984.

(ii) Additional Material.

(A) Remainder of the State submittals pertaining to the revisions listed in paragraph (c)(180)(i) of this section.

(B) Letter dated January 9, 2003 from the Maryland Air and Radiation Management Administration to the Environmental Protection Agency, Region III, clarifying the reasons for removing the provisions of COMAR 10.18.09.05B(3)(i) and (ii).

[FR Doc. 03–4516 Filed 2–26–03; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 62

[Region II Docket No. VI4–249a, FRL–7455–3]

Approval and Promulgation of State Plans for Designated Facilities; Virgin Islands

AGENCY: Environmental Protection Agency.

ACTION: Direct final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving a negative declaration submitted by the Government of the United States (US) Virgin Islands. The negative declaration satisfies EPA's promulgated Emission Guidelines (EG) for existing commercial and industrial solid waste incineration (CISWI) units. In accordance with the EG, states are not required to submit a plan to implement and enforce the EG if there are no existing CISWI units in the state and if it submits a negative declaration letter in place of the State Plan.

DATES: This direct final rule is effective on April 28, 2003 without further notice, unless EPA receives adverse comment by March 30, 2003.

If an adverse comment is received, EPA will publish a timely withdrawal in the **Federal Register** informing the public that this rule will not take effect.

ADDRESSES: All comments should be addressed to: Raymond Werner, Chief, Air Programs Branch, Environmental Protection Agency, Region II Office, 290 Broadway, New York, New York 10007–1866.

A copy of the Virgin Islands submittal is available for inspection at the Region 2 Office in New York City. Those interested in inspecting the submittal must arrange an appointment in advance by calling (212) 637–4249. Alternatively, appointments may be arranged via e-mail by sending a message to Demian P. Ellis at ellis.demian@epa.gov. The office address is 290 Broadway, Air Programs Branch, 25th Floor, New York, New York 10007–1866.

A copy of the Virgin Islands submittal is also available for inspection at the following locations:

Virgin Islands Department of Planning and Natural Resources, Division of Environmental Protection, Cyril E. King Airport, Terminal Building, 2nd Floor, St. Thomas, USVI, 00802.

FOR FURTHER INFORMATION CONTACT:

Demian P. Ellis, Air Programs Branch, Environmental Protection Agency, 290 Broadway, 25th Floor, New York, New York 10007–1866, Telephone, (212) 637–4249.

SUPPLEMENTARY INFORMATION: The following table of contents describes the format for the **SUPPLEMENTARY INFORMATION** section:

Table of Contents

- A. What action is EPA taking today?
- B. Why is EPA approving the Virgin Islands' negative declaration?
- C. What if an existing CISWI unit is discovered in the Virgin Islands after today's action becomes effective?
- D. What is the background for Emission Guidelines and State Plans?
- E. Where can you find the EG requirements for CISWI units?
- F. Who must comply with the EG requirements?
- G. What are EPA's conclusions?
- H. Statutory and Executive Order Reviews

A. What Action Is EPA Taking Today?

The Environmental Protection Agency (EPA) is approving a negative declaration submitted by the Government of the United States Virgin Islands (Virgin Islands) dated October 25, 2002. This negative declaration finds that there are no existing commercial and industrial solid waste incineration (CISWI) units throughout the Territory of the Virgin Islands. The negative declaration satisfies the federal Emission Guidelines (EG) requirements of EPA's promulgated regulation entitled "Emission Guidelines for Existing Commercial and Industrial Solid Waste Incineration Units" (65 FR 75338, December 1, 2000). The negative declaration officially certifies to EPA that, to the best of the Virgin Islands' knowledge, there are no CISWI units in operation within the Territory.

B. Why Is EPA Approving the Virgin Islands' Negative Declaration?

EPA has evaluated the negative declaration submitted by the Virgin Islands for consistency with the Clean Air Act (Act), EPA guidelines and policy. EPA has determined that the Virgin Islands' negative declaration meets all applicable requirements and, therefore, EPA is approving the Virgin Islands' certification that there are no existing CISWI units in operation throughout the Territory. The Virgin Islands has certified in its negative declaration that there are no CISWI units that meet the EG criteria based on file review, inspections, and a territory-wide search.

EPA's approval of the Virgin Islands' negative declaration is based on the following:

(1) The Virgin Islands has met the requirements of § 60.23(b) in Title 40, part 60, subpart B of the Code of Federal Regulations (40 CFR part 60) for submittal of a letter of negative declaration that certifies there are no existing facilities within the Territory. Such certification exempts the Virgin Islands from the requirements to submit a plan.

(2) EPA's own source inventory files indicate there are no existing CISWI units operating within the Territory of the Virgin Islands.

C. What if an Existing CISWI Unit Is Discovered in the Virgin Islands After Today's Action Becomes Effective?

Section 60.2530 of 40 CFR part 60, subpart DDDD (65 FR 75364, December 1, 2000) requires that if, after the effective date of today's action, an existing CISWI unit is found within the Virgin Islands, the Federal Plan implementing the EG would automatically apply to that CISWI unit until a State Plan is approved by EPA.

The Federal Plan was proposed on November 25, 2002 (67 FR 70640) and is expected to be promulgated in the near future. The Federal Plan will apply to CISWI units in states, commonwealths, and territories (1) where the EPA inventory identifies CISWI units and a plan is required and has not been submitted and approved by EPA and (2) where the EPA inventory did not identify any CISWI unit and a negative declaration has been received and approved by EPA (such as the Virgin Islands) and a CISWI unit is subsequently identified in the State or territory. If and when a State Plan, or in this case a Territorial Plan, for CISWI units is submitted and approved, the Federal Plan would no longer apply.

D. What Is the Background for Emission Guidelines and State Plans?

Section 111(d) of the Act requires that pollutants controlled under New Source Performance Standards (NSPS) must also be controlled at existing sources in the same source category. Once an NSPS is issued, EPA then publishes an EG applicable to the control of the same pollutant from existing (designated) facilities. States with designated facilities must then develop State Plans to adopt the EG into their body of regulations.

Under section 129 of the Act, the EG is not federally enforceable. Section 129(b)(2) of the Act requires states to submit State Plans to EPA for approval. State Plans must be at least as protective as the EG, and they become Federally enforceable upon EPA approval. The procedures for adopting and submitting State Plans, as well as state requirements for a negative declaration, are in 40 CFR part 60, subpart B.

EPA originally issued the subpart B provisions on November 17, 1975. EPA amended subpart B on December 19, 1995, to allow the subparts developed under section 129 to include specifications that supersede the general provisions in subpart B regarding the schedule for submittal of State Plans, the stringency of the emission limitations, and the compliance schedules (60 FR 65414).

E. Where Can You Find the EG Requirements for CISWI Units?

On December 1, 2000, under sections 111 and 129 of the Act, EPA issued the NSPS applicable to new CISWI units and the EG applicable to existing CISWI units. The NSPS and EG are codified at 40 CFR part 60, subparts CCCC (65 FR 75350 December 1, 2000) and DDDD (65 FR 75362 December 1, 2000), respectively.

F. Who Must Comply With the EG Requirements?

If you own or operate a combustion device that combusts commercial and industrial waste and you (1) began the construction of your CISWI unit on or before November 30, 1999 or (2) began reconstruction or modification of your CISWI unit prior to June 1, 2001, you must comply with these requirements. See § 60.2555 of 40 CFR part 60, subpart DDDD for a list of CISWI units exempt from the Federal requirements.

G. What Are EPA's Conclusions?

EPA has determined that the Virgin Islands' negative declaration meets all federal requirements and, therefore, EPA is approving the Virgin Islands' certification that no applicable CISWI

units are in operation within the Territory of the U.S. Virgin Islands. If any existing CISWI units are discovered in the future, the Federal Plan implementing the EG would automatically apply to that CISWI unit until the State Plan is approved by EPA.

The EPA is publishing this rule without prior proposal because the Agency views this as a noncontroversial submittal and anticipates no adverse comments. However, in the proposed rules section of this **Federal Register** publication, EPA is publishing a separate document that will serve as the proposal to approve the Territory's submittal should adverse comments be filed. This rule will be effective April 28, 2003 without further notice unless the Agency receives adverse comments by March 31, 2003.

If the EPA receives adverse comments, then EPA will publish a timely withdrawal in the **Federal Register** informing the public that the rule will not take effect. EPA will address all public comments in a subsequent final rule based on the proposed rule. The EPA will not institute a second comment period on this action. Any parties interested in commenting must do so at this time.

H. Statutory and Executive Order Reviews

Executive Order 12866

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled "Regulatory Planning and Review."

Executive Order 13045

Executive Order 13045 entitled, "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 EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must 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 the Agency.

This rule is not subject to Executive Order 13045 because it does not involve decisions intended to mitigate environmental health or safety risks.

Executive Order 13132

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA 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(b) of Executive Order 13132, EPA 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 EPA consults with state and local officials early in the process of developing the proposed regulation. Under section 6(c) of Executive Order 13132, EPA 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.

EPA has concluded that this rule may have federalism implications. The only reason why this rule may have federalism implications is if in the future a CISWI unit is found within the Territory of the U.S. Virgin Islands the unit will become subject to the Federal Plan until a State Plan is approved by EPA. However, it will not impose substantial direct compliance costs on state or local governments, nor will it preempt state law. Thus, the requirements of sections 6(b) and 6(c) of the Executive Order do not apply to this rule.

Executive Order 13175

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." "Policies that have tribal implications" is defined in the Executive Order to include regulations that have "substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on

the distribution of power and responsibilities between the Federal government and Indian tribes."

This rule does not have tribal implications. It will not have substantial direct effects on tribal governments, 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 in Executive Order 13175. Thus, Executive Order 13175 does not apply to this rule.

Regulatory Flexibility

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements 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 not-for-profit enterprises, and small governmental jurisdictions.

This rule will not have a significant impact on a substantial number of small entities because as a negative declaration it is not subject to the CISWI EG requirements. Therefore, because the Federal approval does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities.

Unfunded Mandates

Under sections 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate; or to the private sector, of \$100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that the approval action promulgated does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, commonwealth, territorial, local, or tribal governments in the aggregate, or to the private sector. This Federal action approves pre-existing requirements under State or local law, and imposes no new

requirements. Accordingly, no additional costs to State, commonwealth, territorial, local, or tribal governments, or to the private sector, result from this action.

Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. section 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. 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**. 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. section 804(2). This rule will be effective April 28, 2003 unless EPA receives material adverse written comments by March 31, 2003.

National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use "voluntary consensus standards" (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

The EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by April 28, 2003. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to

enforce its requirements. (*See* section 307(b)(2).)

List of Subjects in 40 CFR Part 62

Environmental protection, Air pollution control, Commercial and industrial solid waste incineration units, Intergovernmental relations, Lead, Reporting and recordkeeping requirements.

Dated: February 11, 2003.

Jane M. Kenny,

Regional Administrator, Region 2.

Part 62, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 62—[AMENDED]

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

Authority: 42 U.S.C. 7401–7671q.

Subpart CCC—Virgin Islands

2. Part 62 is amended by adding new § 62.13356 and an undesignated heading to subpart CCC to read as follows:

Air Emissions From Existing Commercial and Industrial Solid Waste Incineration Units Constructed on or Before November 30, 1999 or Reconstructed or Modified prior to June 1, 2001.

§ 62.13356 Identification of plan—negative declaration.

Letter from the Virgin Islands Department of Planning and Natural Resources, submitted October 25, 2002, certifying that there are no existing commercial and industrial solid waste incineration units in the Territory of the United States Virgin Islands subject to part 60, subpart DDDD of this chapter.

[FR Doc. 03–4518 Filed 2–26–03; 8:45 am]

BILLING CODE 6560–50–P

Proposed Rules

Federal Register

Vol. 68, No. 39

Thursday, February 27, 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.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 63

[Docket No. PRM-63-1]

State of Nevada; Denial of a Petition for Rulemaking

AGENCY: Nuclear Regulatory Commission.

ACTION: Petition for rulemaking: denial.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking submitted by the State of Nevada. The petitioner requests that the NRC amend its regulations governing the disposal of high-level radioactive waste in a proposed geologic repository at Yucca Mountain, Nevada. The petitioner believes that the present regulations are deficient because, in petitioner's view, they do not provide the regulatory framework to ensure that the repository isolates high-level radioactive waste over the long term primarily by geologic means and they do not demand that the applicant provide an "affirmative safety case" for the repository. These deficiencies, in petitioner's view, indicate that the regulations are not in full compliance with the Nuclear Waste Policy Act of 1982, as amended (NWPAA), and/or the Atomic Energy Act of 1954, as amended (AEA). The NRC is denying the petition because: petitioner's assertion that Part 63 is not in full compliance with NWPAA or AEA is without substance; the petition does not appear to present significant new factual information or policy recommendations that the Commission did not consider in the rulemaking which established Part 63, and it would be an unwise expenditure of resources to reconsider issues resolved in that rulemaking.

ADDRESSES: Copies of the petition for rulemaking and the NRC's letter to the petitioner are available on NRC's rulemaking Web site at <http://ruleforum.llnl.gov>. For information about the interactive rulemaking Web

site, contact Carol Gallagher (301) 415-5905 or Toll Free: 1-800-368-5642; e-mail: cag@nrc.gov. The documents may also be examined at the NRC Public Document Room (PDR), Room O-1F23, 11555 Rockville Pike, Rockville, MD.

The NRC maintains an Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. These documents may be accessed through NRC's Public Electronic Reading Room on the Internet at <http://www.nrc.gov/reading-rm/adams.html>. If you do not have access to ADAMS, or if there are problems in accessing the documents located in ADAMS, contact the NRC PDR Reference staff at 1-800-397-4209, or 301-415-4737; or by e-mail to: pdr@nrc.gov.

FOR FURTHER INFORMATION CONTACT:

Timothy McCartin, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-7285 or Toll Free: 1-800-368-5642, e-mail: tjm3@nrc.gov; or Clark Prichard, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-6203 or Toll Free: 1-800-368-5642, e-mail: cwp@nrc.gov.

SUPPLEMENTARY INFORMATION:

The Petition

On July 12, 2002, the State of Nevada submitted a "Petition to Institute Rulemaking: Part 63" (petition) which was docketed as a petition for rulemaking under 10 CFR 2.802 of the Commission's regulations (PRM-63-1). The petition requests amendments to 10 CFR Part 63, NRC's regulations governing the disposal of high-level radioactive waste (HLW) in a proposed geologic repository at Yucca Mountain, Nevada (YM). Petitioner believes that its proposed amendments are needed to bring Part 63 into full compliance with the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. 10101 *et seq.* (NWPAA), and to ensure that the Part 63 regulations, if met by the Department of Energy (DOE or Applicant), will provide reasonable assurance of the safety of the repository. Petition at 3.

Specifically, the petition requests amendments to Part 63 as discussed below.

1. Section 63.15 Site Characterization

At present, § 63.15(a) provides:

(a) DOE shall conduct a program of site characterization with respect to the Yucca Mountain site before it submits an application for a license to be issued under this part.

Petitioner requests that the following two sentences be added:

DOE's site characterization shall include criteria, developed pursuant to section 112(a) of the NWPAA, to be used to determine the suitability of the Yucca Mountain site for the location of a geologic repository. Such criteria shall ensure that the geologic setting of the Yucca Mountain site is the primary barrier against the release of radionuclides to the biosphere from the multi-barrier repository system.

Petition at 40.

2. Section 63.21 Content of Application

Petitioner requests that the first sentence of paragraph (a) be modified, and new paragraphs (c) and (d) be added, as follows:

(a) An application consists of general information, a Safety Analysis Report, documentation propounding an affirmative safety case for the Yucca Mountain repository, and documentation that the site does not have any material disqualifying conditions. * * *

* * * * *

(c) The affirmative safety case must include:

(1) A realistic assessment of system evolution and radionuclide migration, drawing on natural and historical analogs.

(2) Documentation evidencing an overall understanding by the applicant of the key safety-relevant factors in the repository system, communicated in a manner that aids in public understanding.

(3) Disaggregated dose projections with documentation of which particular factors or sub-scenarios can lead to large potential doses, explaining as well the likelihood of occurrence of such scenarios.

(4) Use of multiple performance measures showing, at a minimum, the effects of each isolation barrier and the spatial and temporal distribution of radionuclides within each component of the repository system.

(5) A simplified interpretative or insight model containing only the key processes affecting safety, for use by the Commission and the public to assess the safety of the repository.

(6) Documentation of the major conservatisms and optimisms in the total system performance analysis, and quantification of their impacts with respect to realistic post-closure assumptions.

(7) Documentation of extreme conditions which might give rise to doses above

prescribed regulatory criteria, and a description of the factors that make these situations unlikely.

(8) A description and prioritization of the isolation features that are considered important to keep releases and doses within regulatory limits and as low as is reasonably achievable.

(9) Documentation of where the major uncertainties lie in the total system performance assessment and how the applicant will mitigate such uncertainties.

(10) Documentation of a sensitivity case where engineered barriers are rendered ineffective, individually and collectively.

(11) Presentation of the key features and results for each material subscenario in the repository system.

(12) A comparison of and rebuttal to results of any scientific peer review of the applicant's total system performance assessment and/or its underlying science performed by the Nuclear Waste Technical Review Board, the International Atomic Energy Agency, or other peer reviewer designated by the applicant or the Commission.

(d) *Potentially disqualifying conditions.* The following conditions are to be considered adverse and potentially disqualifying if they are characteristic of the post-closure controlled area at Yucca Mountain or may materially affect isolation within the controlled area. The application shall demonstrate that these disqualifying conditions do not exist or, if they do exist, that they are not materially adverse to the long-term safety of the repository.

(1) Potential for flooding of the underground facility.

(2) Potential for natural phenomena such as subsidence or volcanic activity of such a magnitude that large-scale surface water impoundments could be created that could change the regional groundwater flow system and thereby adversely affect the performance of the repository.

(3) Structural deformation, such as uplift, subsidence, folding, or faulting that may adversely affect the regional groundwater flow system.

(4) Potential for changes in hydrogeologic conditions that would affect the migration of radionuclides to the accessible environment, such as changes in hydraulic gradient, average interstitial velocity, storage coefficient, hydraulic conductivity, natural recharge, potentiometric levels, and discharge points.

(5) Potential for changes in hydrologic conditions resulting from reasonably foreseeable climatic changes.

(6) Groundwater conditions in the host rock, including chemical composition, high ionic strength or ranges of Eh-pH, that could increase the solubility or chemical reactivity of the engineered barrier system.

(7) Geochemical processes that would reduce sorption of radionuclides, result in degradation of the rock strength, or adversely affect the performance of the engineered barrier system.

(8) Groundwater conditions in the host rock that are not reducing.

(9) Evidence of dissolution such as breccia pipes, dissolution cavities, or brine pockets.

(10) Structural deformation such as uplift, subsidence, folding, and faulting during the Quaternary Period.

(11) Earthquakes that have occurred historically that if they were to be repeated could affect the site significantly.

(12) Indications, based on correlations of earthquakes with tectonic processes and features, that either the frequency of occurrence or magnitude of earthquakes may increase.

(13) More frequent occurrence of earthquakes or earthquakes of higher magnitude than is typical of the area in which the geologic setting is located.

(14) Evidence of igneous activity since the start of the Quaternary Period.

(15) Evidence of extreme erosion during the Quaternary Period.

(16) The presence of naturally occurring materials, whether identified or undiscovered, within the site, in such form that:

(i) Economic extraction is currently feasible or potentially feasible during the foreseeable future; or

(ii) Such materials have greater gross value or net value than the average for other areas or similar size that are representative of and located within the geologic setting.

(17) Rock or groundwater conditions that would require complex engineering measures in the design and construction of the underground facility or in the sealing of boreholes and shafts.

(18) Geomechanical properties that do not permit design of underground opening that will remain stable through permanent closure.

(19) Potential for the water table to rise sufficiently so as to cause saturation of an underground facility located in the unsaturated zone.

(20) Potential for existing or future perched water bodies that may saturate portions of the underground facility or provide a faster flow path from an underground facility located in the unsaturated zone to the accessible environment.

(21) Potential for the movement of radionuclides in a gaseous state through air-filled pore spaces of an unsaturated geologic medium to the accessible environment.

Petition at 40–43.

3. Section 63.113 *Performance Objectives for the Geologic Repository After Permanent Closure*

Petitioner requests that new paragraphs (e) and (f) be added to this section, as follows:

(e) *Geologic Setting.* The geologic setting for the Yucca Mountain repository shall evidence a pre-waste-emplacement groundwater travel time along the fastest path of likely radionuclide travel from the disturbed zone to the accessible environment of at least 1,000 years.

(f) *Peak Dose.* The geologic setting for the Yucca Mountain repository shall evidence sufficient geologic suitability to provide reasonable assurance that peak radiation doses to the accessible environment will not occur subsequent to the regulatory monitoring period established by the

Environmental Protection Agency in 40 CFR Part 197.

Petition at 43.

4. Section 63.115 *Requirements for Multiple Barriers*

Petitioner requests that a new paragraph (d) be added to this section, as follows:

(d) The natural features of the geologic setting shall constitute the primary barrier for assuring the long-term isolation of high-level radioactive waste and spent nuclear fuel at the proposed geologic repository at Yucca Mountain.

Petition at 44.

5. Section 63.311 *Individual Protection Standard After Permanent Closure*

Petitioner requests that the words “a reasonable expectation” in this section be replaced with the words “reasonable assurance” so that it reads as follows:

DOE must demonstrate, using performance assessment, that there is reasonable assurance that, for 10,000 years following disposal, the reasonably maximally exposed individual receives no more than an annual dose of 0.15 mSv (15 mrem) from releases from the undisturbed Yucca Mountain disposal system. DOE's analysis must include all potential pathways of radionuclide transport and exposure.

In addition, petitioner requests that § 63.304, providing a definition of “reasonable expectation,” be deleted in its entirety.

Supporting Information

Petitioner believes that the present Part 63 rule is “materially deficient” for two reasons: (1) it “does not now provide the regulatory framework to assure that the repository isolates [HLW] over the long term primarily by geologic means;” and (2) it “does not demand of the applicant that it provide an affirmative safety case for the repository.” Petition at 4. Lacking these two “fundamental prerequisites,” Part 63, in petitioner's view, “fails to assure the long-term safety of the repository or its compliance with the statutory requirements of the NWP.” *Id.* Petitioner identifies five basic elements to be added to Part 63: (1) Provisions ensuring that geologic isolation is the primary barrier against the release of radiological contamination to the environment, (2) provisions requiring the submission of an affirmative safety case, (3) provisions requiring the verification of the lack of materially adverse or potentially disqualifying conditions for Yucca Mountain following closure of the repository, and (4) provisions relating to the provision of “reasonable assurance” of the safety of the repository. Petition at 39.

The Primacy of Geologic Criteria for HLW Isolation

Petitioner asserts that 10 CFR Part 63 must be revised such that it assures that the repository will isolate HLW primarily by geologic means both as a matter of law and as a matter of sound science. To support its "law" position, petitioner argues that the plain language of sections 112(a) and 113(b)(1) of NWPA, together with the legislative history of these sections, requires that geologic isolation be the primary form of containment for waste at the YM repository. Petition at 11–18. Section 112(a) requires DOE to issue guidelines for the recommendation of sites for repositories which, *inter alia*, must "specify detailed geologic considerations that shall be primary criteria for the selection of sites in various geologic media" and which "shall specify factors that qualify or disqualify any site from development as a repository, including factors pertaining to * * * hydrology, geophysics [and] seismic activity * * *." Petitioner claims that this section obligates the NRC to set the same requirements for the YM repository. Petition at 11–12.

To support its "sound science" position, petitioner provides a detailed history of scientific studies that petitioner says underlie "the requirement of Section 112(a) of the NWPA that any repository in this nation must isolate radioactive waste primarily by geologic means." Petition at 6; see Petition at 6–11. Petitioner also points to the Affidavit of Dr. John W. Bartlett, a former Director of DOE's HLW program at YM. Petition, Attachment 1. Dr. Bartlett questions DOE's finding that YM is a site suitable for a repository. He does not comment on NRC's regulations except to observe the different functions of the two agencies in Congress' scheme for a repository: "Congress made it clear that DOE was to determine the *suitability* of the *site*, while the NRC was to determine the *licenseability* of the *repository system* (i.e., the site plus its engineered features)." *Id.* at 9 (emphasis in original).

Petitioner states that, initially, NRC, DOE and EPA each published rules which "individually and collectively conformed generally to the requirements of NWPA Section 112," i.e., 10 CFR Part 60, 10 CFR Part 960 and 40 CFR Part 191, respectively. Petition at 18. Petitioner notes that, with respect to Part 60, the Commission decided to set subsystem performance requirements that serve the function of qualifying and disqualifying criteria for site variables, such as groundwater travel time,

radionuclide travel times and margin of safety (assuming failure of the engineered barriers) but that the Commission "abandoned" these requirements in Part 63. Petition at 21–22. Petitioner believes that this abandonment not only violates NWPA but also violates "NRC's legal obligation [under section 161b. of the Atomic Energy Act] to apply these basic scientific prerequisites in providing for reasonable assurance of the safety of the repository * * *." *Id.*

The Need for an Affirmative Safety Case

Petitioner also contends that 10 CFR Part 63 must be revised so that it requires DOE, as the applicant for a license, to present "an affirmative safety case" for the repository. Petitioner admits that "[a]s written, Part 63 arguably provides the regulatory framework to establish whether the Yucca Mountain repository will satisfy the radiological release criteria set by [EPA]," Petition at 4, but believes that this is insufficient to demonstrate that the repository is safe. According to petitioner, to demonstrate that the repository is safe, NRC must require demonstration of an understanding of repository performance, including that the geologic setting of the repository will, in fact, protect the public from the danger of radioactive releases whenever such releases might occur. Petition at 33–34. At present, petitioner asserts, the repository will become most dangerous to humans and the environment after the 10,000 year regulatory time period, a "blatantly unsafe condition" which should prevent the licensing of the repository. Petition at 33; see Attachment 2. Petitioner supports its view that an affirmative safety case is needed by incorporating criticisms of DOE's Total System Performance Assessment for the site recommendation process (TSPA–SR) made in a report by an international peer review, *An International Peer Review of the Yucca Mountain Project TSPA–SR*, March 2002 (*Peer Review*).¹ Petition at 34–38. Petitioner also cites criticisms of DOE's scientific work in preparation for a site recommendation made by the Nuclear Waste Technical Review Board and NRC's Advisory Committee on Nuclear Waste. Petition, Attachment 3.

Reasons for Denial

NRC is denying the petition because:

¹ DOE issued its TSPA–SR in December 2000. DOE subsequently requested a peer review which was carried out by a review team selected by the Nuclear Energy Agency of the Organization for Economic Co-Operation and Development and the International Atomic Energy Agency.

(1) Petitioner's assertion that 10 CFR part 63 is not in full compliance with NWPA or AEA is without substance.

(2) The Commission promulgated 10 CFR part 63 little over a year ago after an extensive rulemaking process that provided an enhanced level of stakeholder participation. The petition does not appear to present any significant new factual information or policy recommendations that the Commission has not already considered and it would be an unwise expenditure of resources to reconsider issues already resolved in the part 63 rulemaking.

1. 10 CFR part 63 Is in Full Compliance With Statutory Requirements

Petitioner asserts that current part 63 regulations are not in full compliance with NWPA. Petition at 3. This is because, in petitioner's view, the current rule does not "provide the regulatory framework to assure that the repository isolates high-level radioactive waste over the long term primarily by geologic means." Petition at 4. Petitioner further asserts that the rule is deficient, under section 161b. of the Atomic Energy Act of 1954, as amended (AEA), 42 U.S.C. 2201(b), because the rule does not require the applicant to provide "an affirmative safety case" for the repository. Petition at 4, 22. Petitioner misreads the Commission's duty under both of these statutes. As explained below, the Commission finds no legal infirmity in the current Part 63 regulations and thus there is no reason to amend Part 63 to cure any supposed lack of conformity with NWPA or AEA.

a. 10 CFR Part 63 Is in Accord With NWPA Requirements

Congress first spelled out directions for rulemakings to be undertaken to set requirements for a repository in section 121 of NWPA as enacted in 1982, 42 U.S.C. 10141. The Environmental Protection Agency (EPA) was to "promulgate generally applicable standards for protection of the general environment from offsite releases from radioactive material in repositories" (sec. 121(a)), and NRC, "pursuant to authority under other provisions of law," was "by rule, [to] promulgate technical requirements and criteria that it will apply * * * in approving or disapproving * * * applications for authorization to construct repositories [and] applications for licenses to receive and possess spent nuclear fuel and [HLW] in such repositories * * *" (sec. 121(b)(1)(A)). Congress placed only three restrictions on the substance of the regulations NRC was to promulgate:

(1) NRC's criteria "shall provide for the use of a system of multiple barriers

in the design of the repository" (sec. 121(b)(1)(B));

(2) NRC's criteria "shall include such restrictions on the retrievability of the solidified [HLW] and spent fuel emplaced in the repository as the Commission deems appropriate" (sec. 121(b)(1)(B)); and

(3) NRC's criteria "shall not be inconsistent with any comparable standards promulgated by the Administrator under subsection (a)" (sec. 121(b)(1)(C)).

The first of these restrictions shows that although Congress did require NRC to provide for "multiple barriers" for waste isolation, it did not specify that geologic barriers must be primary or qualify the "multiple barriers" requirement in any other way.

Congress amended NWPA in 1987 to focus the national waste program exclusively on the characterization of the YM site as a potential geologic repository, but did not alter section 121 or otherwise place a requirement on NRC to make geologic barriers the primary means of waste isolation in its rules. Pub. L. 100-203 (101 Stat. 1330). Congress again revised the national waste program in the Energy Policy Act of 1992 (EnPA), Pub. L. 102-486, October 24, 1992. In the EnPA, Congress directed EPA to promulgate standards applicable solely to the Yucca Mountain site and directed NRC to modify its technical requirements and criteria under section 121(b) of NWPA, as necessary, to be consistent with EPA's standards. Section 801 of EnPA. EnPA did not direct either EPA or NRC to require that geologic barriers be the primary form of waste isolation.²

NRC initially established its procedural rules for a repository in 1981 in a new 10 CFR Part 60. (46 FR 13971; February 25, 1981). In 1983, NRC incorporated technical requirements into Part 60, as directed by NWPA. (48 FR 28194; June 21, 1983). The Commission explained that the purpose of the technical criteria was "to define more clearly the bases upon which licensing determinations will be made * * * ." (48 FR 28195). The Commission acknowledged that licensing decisions

would be complicated by the uncertainties that are associated with predicting the behavior of a geologic repository over thousands of years and stated that it intended to address this difficulty by requiring that a DOE proposal be based upon a multiple barrier approach:

An engineered barrier system is required to compensate for uncertainties in predicting the performance of the geologic setting, especially during the period of high radioactivity. Similarly, because the performance of the engineered barrier system is also subject to considerable uncertainty, the geologic setting must be able to contribute significantly to isolation.

Id. The Commission did not specify that either the engineered or the geologic barriers be primary. However, the Commission did elect to implement this approach by establishing a number of performance objectives and detailed siting and design criteria that it "deemed appropriate" for a multi-barrier system. *Id.*, fn 2. The Commission identified "two potentially viable approaches" to achieving the goal of waste isolation: (a) An approach "that would prescribe minimum performance standards for each of the major elements of the geologic repository, in addition to prescribing the EPA standard as a single overall performance standard;" and (b) an approach "that would specify the EPA standard as the sole measure of isolation performance." (48 FR 28196). In short, the Commission believed it was legally free to adopt either approach. The Commission adopted the first approach in order to convey "in [a] meaningful way the degree of confidence which it expects must be achieved in order for it to be able to make the required licensing decisions." *Id.* It, therefore, adopted a regulation setting sub-system performance standards, although with a provision allowing modifications on a case-by-case basis.³ See 10 CFR 60.113.

As explained above, EnPA required NRC to modify its technical requirements to assure consistency with EPA's standards for a repository at YM. In response to this mandate, NRC published a proposed rule to establish a new, separate part of its regulations at 10 CFR Part 63. (64 FR 8640; February 22, 1999). The proposed rule was designed to do more than simply conform NRC's technical requirements

to an EPA standard. The Commission recognized that in the 15 years since the Part 60 technical criteria had been put in place, there had been "considerable evolution in the capability of technical methods for assessing the performance of a geologic repository at Yucca Mountain [and that] * * * their implementation for Yucca Mountain [would] avoid the imposition of unnecessary, ambiguous, or potentially conflicting criteria that could result from the application of some of the Commission's generic requirements at 10 CFR Part 60." (64 FR 8641). In addition, the Commission recognized an opportunity to establish criteria compatible with the Commission's overall philosophy of risk-informed and performance-based regulation:

[T]he creation of a new part of its regulations to [achieve risk-informed, performance-based regulations] is preferable to modifying its generic requirements, given the fundamentally different approach laid out for Yucca Mountain by EnPA and NAS than was contemplated when the generic criteria were promulgated. More specifically, EnPA and NAS have specified an approach that would require the performance of a Yucca Mountain repository to comply with a health-based standard established in consideration of risk to a hypothetical critical group, and, further, that this would be the only quantitative standard for the post-closure performance of the repository. This approach is incompatible with the approach taken in the existing generic criteria which relies on quantitative, subsystem performance standards.

(64 FR 8643). The Commission decided to reexamine its implementation of a multiple barrier approach and propose a regulation which required a system of multiple barriers, but which did set numerical goals for the performance of individual barriers. See 64 FR 8647-50. Instead, DOE was required to demonstrate that the natural barriers and the engineered barrier system would work in combination to enhance overall performance of the geologic repository.⁴

⁴ In this reexamination, the Commission noted that the § 60.113 subsystem criteria "[had] not gained broad acceptance in the technical community" and had been "criticized as overly prescriptive, lacking in both a strong technical basis and a clear technical nexus to the overall performance objective * * * ." (64 FR 8649). Further, the Commission noted that NAS had found, in 1995, that "the physical and geologic processes relevant to a Yucca Mountain repository * * * are sufficiently quantifiable and the related uncertainties sufficiently boundable that the performance of a repository can be assessed over timeframes during which the geological system is relatively stable or varies in a boundable manner." *Id.* (quotations omitted). Moreover, "experience and improvements in the technology of performance assessment, acquired over more than 15 years, now provide significantly greater confidence in the technical ability to assess comprehensively overall

² Section 801(b)(2) of EnPA did place a further restriction on NRC's rules for a repository by requiring NRC to incorporate into its rules assumptions, consistent with the findings and recommendations of the National Academy of Sciences (NAS), pertaining to the sufficiency of engineered barriers and DOE's post-closure oversight to prevent human activity causing a breach of the repository and to prevent any increase in the exposure of individual members of the public to radiation beyond allowable limits. However, NAS concluded that these assumptions were not scientifically justified and Part 63 is not based on these assumptions.

³ Contrary to petitioner's assertions, the Commission did not view the sub-system requirements as the "essential prerequisites to establishing a safe repository." Petition at 22, but rather as a means of increasing confidence in its licensing decisions, given the uncertainties and technical methods for evaluating repository performance available in 1983.

In the final rule (66 FR 55732; November 2, 2001), the Commission clarified the intent of NWPA's multi-barrier provision:

Section 63.113(a) requires that the geologic repository include multiple barriers, both natural and engineered. Geologic disposal of HLW is predicated on the expectation that one or more aspects of the geologic setting will be capable of contributing to the isolation of radioactive waste and thus be a barrier important to waste isolation. * * * The performance assessment provides an evaluation of the repository performance based on credible methods and parameters including the consideration of uncertainty in the behavior of the repository system. Thus the performance assessment results reflect the capability of each of the barriers to cope with a variety of challenges. * * * A description of each barrier's capability * * * as reflected in the performance assessment, provides an understanding of how the natural barriers and the engineered barrier system work in combination to enhance the resiliency of the geologic repository. The Commission believes that this understanding can increase confidence that the postclosure performance objectives specified at § 63.113(b) and (c) will be achieved and that DOE's design includes a system of multiple barriers.

10 CFR 63.102(h); see 66 FR 55758. The Commission placed the requirements for multiple barriers in § 63.115.

In sum, the NWPA as enacted in 1982 requires that NRC's regulations for a repository must specify the use of a system of multiple barriers. Neither Congress' amendment of NWPA in 1987 nor its enactment of EnPA in 1992 altered that direction. None of this legislation required that geologic considerations were to be the primary criteria for licensing a repository. NRC's technical criteria in Part 60, issued in 1983 in response to NWPA's direction, did not make geologic barriers the primary criteria but did, in implementing the multi-barrier requirement, set separate numerical criteria for both the engineered and the geologic barriers to meet. NRC reconsidered this approach in 2001 when it issued regulations governing DOE's license application for a repository at YM and decided not to include subsystem requirements. NRC provided a detailed explanation of its reasons for altering its approach for implementing NWPA's multi-barrier requirement. We have no doubt that Part 63 fully complies with Congress' statutory directions to NRC.

Petitioner ignores section 121 of NWPA—which speaks directly to NRC's duty with respect to issuing regulations for the repository—and, instead, locates

repository performance, and to address and quantify the corresponding uncertainty.” *Id.*

the asserted duty of the Commission to establish regulations requiring that geologic isolation be the primary form of containment for HLW in sections 112(a) and 113(b)(1) of the NWPA, 42 U.S.C. 10132(a) and 10133(b)(1).⁵ Petition at 11–18. Because these provisions of NWPA place obligations on DOE, rather than NRC, they do not govern NRC's rulemakings for a geologic repository.

As relevant here, section 112(a) provides:

SEC. 112. (a) GUIDELINES.—Not later than 180 days after the date of enactment of this Act, the Secretary, following consultation with the Council on Environmental Quality, the Administrator of the Environmental Protection Agency, the Director of the Geological Survey, and interested Governors, and the concurrence of the Commission shall issue general guidelines for the recommendation of sites for repositories. Such guidelines shall specify detailed geologic considerations that shall be primary criteria for the selection of sites in various geologic media. Such guidelines shall specify factors that qualify or disqualify any site from development as a repository. * * * Such guidelines shall require the Secretary to consider the various geologic media in which sites for repositories may be located and, to the extent practicable, to recommend sites in different geologic media. The Secretary shall use guidelines established under this subsection in considering candidate sites for recommendation under subsection (b). The Secretary may revise such guidelines from time to time, consistent with the provisions of this subsection.

42 U.S.C. 10132(a). Under section 112(b), the Secretary is to nominate at least 5 sites determined to be suitable for site characterization and, subsequent to such nomination, to recommend to the President 3 of the nominated sites for characterization as candidate sites. Each nomination of a site is to be accompanied by an environmental assessment which includes, *inter alia*, “an evaluation by the Secretary as to whether such site is suitable for site characterization under the guidelines established under subsection (a).” Section 112(b)(1)(D)(i).

The most obvious reason why these provisions of NWPA do not demand that NRC issue regulations requiring that geologic barriers be primary is that these provisions give direction to the Secretary of DOE, not to NRC. Petitioner assumes that the mandate given to DOE to formulate guidelines for the nomination, and then selection, of sites for characterization applies equally to NRC in promulgating its regulations.

⁵ The 1987 amendments to NWPA did not revise section 112(a) but did revise section 113(b) to make its provisions applicable solely to the characterization of the YM site, rather than any candidate site.

But there is no statutory language to support this. Petitioner may believe that although the statute itself is silent on any NRC duty to make geologic barriers primary, this result must necessarily follow from the duty placed on DOE to issue guidelines specifying “detailed geologic considerations that shall be primary criteria for the selection of sites in various geologic media.” Section 112(a). It may be readily acknowledged that it would make little sense for Congress to establish a system for selecting a repository where DOE guidelines for selection of sites and NRC regulations for licensing a repository would contradict each other.⁶ But there is no such contradiction. DOE's guidelines are for the purpose of comparing a multitude of alternate site possibilities, an inquiry for which it makes obvious good sense for geologic considerations to be paramount.⁷ NRC's licensing regulations are for the purpose of examining DOE's application for a repository at an already-chosen site—*i.e.*, one that has gone through the section 112 screening process. Such a site would have already passed the section 112 tests for geologic considerations in the DOE guidelines. Congress thus had no need to require, and did not require, NRC to issue regulations making geologic considerations the “primary” criteria for approval of DOE's license application for the repository.

Petitioner seeks to bootstrap the section 112(a) site selection guidelines into the requirement in section 113 that DOE prepare a site characterization plan which shall include “criteria to be used to determine the suitability of such candidate site for the location of a repository, developed pursuant to section 112(a).” Section 113(b)(1)(A)(iv). See Petition at 11–12. If the criteria for site characterization for determination of suitability for a repository required by section 113 are the same as the guidelines required by section 112, then, petitioner assumes, DOE may not recommend a site to the President for approval under section 114 unless the site has been shown to meet the guidelines, including the guideline that geologic considerations be the primary criteria for selection. On the same theory, petitioner also claims the NRC

⁶ In fact, DOE's need to seek NRC's concurrence on its guidelines assures that there will be no such conflict.

⁷ As enacted in 1982, the section 112(a) guidelines were intended for use in the nomination and selection of candidate sites for a second repository as well as for the identification and study of further sites after the approval of candidate sites for characterization for two repositories. See sections 112(b)(1)(C) and 112(d) of the 1982 NWPA.

must promulgate regulations requiring that geologic considerations be the primary criteria for approval of a license application.

Petitioner makes several unwarranted leaps in arriving at these conclusions. The first is that Congress intended that the criteria required under section 113 be the same as the guidelines required under section 112. DOE considered this question at considerable length when it issued its criteria for consideration of the YM site. (66 FR 57298, 57311–12; November 14, 2001). DOE concluded that Congress' directive in section 113(b)(1)(A)(iv) that the criteria to be used to determine the suitability of a candidate site for the location of a repository be "developed pursuant to section 112(a)" is best understood as "mandating observance of the special procedural requirements of section 112(a) in formulating or altering the section 113(b) 'criteria,'" *i.e.*, the requirements to consult with specific agencies and to get concurrence from NRC, and not as requiring that the "criteria" be the guidelines themselves. (66 FR 57312). Second, even assuming, *arguendo*, that the criteria were intended to be the guidelines—and we have no reason to quarrel with DOE's interpretation of its own statutory mandate—that still would not oblige NRC to craft its regulations under DOE's criteria. There would be no contradiction between DOE's recommending a site as suitable for a repository, based primarily on geologic considerations, and NRC's issuing regulations under which a repository would be approved, based upon the existence of multiple barriers, but not necessarily on geologic "primacy."

In sum, because sections 112 and 113 of NWSA place no obligations on NRC with respect to rulemakings for a geologic repository, and because part 63 is in full conformance with section 121 of NWSA which does spell out NRC's rulemaking obligations, we reject petitioner's claim that part 63 is not in full conformance with NWSA and deny the petition.

b. 10 CFR Part 63 is in Accord With AEA Requirements

Petitioner asserts that because part 63 does not demand that the applicant provide "an affirmative safety case" for the repository, "the rule is materially deficient." Petition at 4. In petitioner's view, a requirement that DOE conduct a total system performance assessment "to determine whether a primary radiological standard set by the EPA can be met by the overall repository system, and not by any particular subsystem or any particular isolation barrier" is not

adequate. Petition at 22. Rather, "under NRC's plenary safety jurisdiction (Atomic Energy Act Section 161b) * * * it would remain NRC's legal obligation to apply these basic scientific prerequisites [found in section 112(a) of NWSA] in providing for reasonable assurance of the safety of the repository. * * *⁸ *Id.*; see also petition at 32.

Section 161b. of the AEA provides, in relevant part:

Sec. 161. General Provisions.

In the performance of its functions the Commission is authorized to—

* * *

b. establish by rule, regulation, or order, such standards and instructions to govern the possession and use of special nuclear material, source material, and byproduct material as the Commission may deem necessary or desirable to promote the common defense and security or to protect health or to minimize danger to life and property. * * *

We agree with petitioner that "[t]his is clearly an extremely broad grant of authority." Petition at 6 n.2. The Commission is granted wide discretion to determine what standards are necessary or desirable to protect health and minimize danger to life and property. Through an extensive and open public process, the Commission set forth its post-closure public health and environmental standards in subpart L of part 63. Petitioner, however, is dissatisfied with these standards and would require inclusion of the DOE guidelines listed in section 112(a) of NWSA and/or the requirements preferred by the *Peer Review*. However, there is no statute requiring the Commission to make these choices rather than the standards the

⁸ Petitioner erroneously believes that DOE was exempt from regulation by NRC under section 161b. of the AEA until passage of NWSA in 1982. In fact, NRC's authority over DOE, with respect to an application for a license for a geologic repository, stems from section 202(3) of the Energy Reorganization Act of 1974 (ERA), 42 U.S.C. 5842(3), which provides that NRC shall have licensing and related regulatory authority pursuant to chapters 6, 7, 8, and 10 of the AEA with respect to DOE "facilities used primarily for the receipt and storage of [HLW] resulting from activities licensed under [the AEA]." Thus, in 1981, when NRC issued its original rule governing a DOE license application for a repository at 10 CFR Part 60, the Commission cited section 202 as the authority for the rule, noting that it interpreted "storage" as used in this section to include disposal. (46 FR 13971 n.1; February 25, 1981). Neither NWSA nor EnPA provided NRC with rulemaking authority; rather NWSA directed NRC, "pursuant to authority under other provisions of law," to promulgate the technical requirements and criteria it would employ to consider a DOE license application for a repository (sec. 121(b) of NWSA) and EnPA required NRC to modify its technical requirements to be consistent with standards to be promulgated by EPA. Section 801(b)(1) of EnPA. For these reasons, we agree with petitioner that part 63 must be consistent with section 161b. of the AEA.

Commission, in fact, deemed sufficient for a determination that the repository will not pose an unreasonable risk to the health and safety of the public. See 10 CFR 63.31(a)(2); 63.41(c). Petitioner has not presented any new information that causes the Commission to reconsider choices already made in an extensive and recent rulemaking proceeding. See *infra*. Thus, we remain satisfied that the part 63 rules fully comply with the Commission's duty, under section 161b. of the AEA to establish standards to protect health and minimize danger to life and property.

2. Reopening the Final 10 CFR Part 63 Rule Would Be an Unwise Expenditure of Resources Because the Petition Does Not Appear To Present Any Significant New Factual Information Not Previously Considered During the Rulemaking Proceeding

On February 22, 1999 (64 FR 8640), the Commission published its proposed rule to establish licensing criteria for the disposal of HLW in the proposed geologic repository at YM. The public comment period, originally ending on May 10, 1999, was extended to June 30, 1999, in response to many requests for extension. During the public comment period, the NRC staff held a series of public meetings in Nevada to discuss the proposed rule and solicit public comment. The final rule was published on November 2, 2001 (66 FR 55732). Petitioner had multiple opportunities to file, and did file, extensive comments on the proposed rule, all of which were carefully considered by the Commission before issuing the final rule. We do not find in the petition significant new factual or policy information not already considered in the rulemaking that established part 63. Given this, and our recent consideration (in the part 63 rulemaking) of essentially the same questions petitioner now raises, it would not be a wise expenditure of resources to reopen these issues.

We briefly recount below the concerns that petitioner now raises as "material deficiencies," but were in actuality resolved in the part 63 rulemaking.

Reasonable Expectation

Petitioner objects to the Commission's use of "reasonable expectation," rather than "reasonable assurance," to describe the degree of certainty to be obtained for the compliance of the repository with the post-closure performance standards. Petition at 3, n.1. The Commission has fully explained why it incorporated "reasonable expectation," rather than "reasonable assurance," into its implementing regulations for YM. See

66 FR 55739—40. The Commission stated that “irrespective of the term used, the Commission will consider the full record before it [and] [t]hat record will include many factors in addition to whether the site and design comply with the performance objectives (both preclosure and postclosure performance standards) contained in Subparts E, K and L.”⁹ (66 FR 55740). Petitioner has not raised any objection to this standard that was not already fully considered. Thus, we decline to amend part 63 to reverse the decision made in the rulemaking for part 63.

Primacy of the Geologic Barrier

Petitioner requests that part 63 be revised to require that the geologic setting of the YM site be the primary barrier against release of radionuclides to the biosphere and a separate criterion be specified for the geologic setting (pre-waste-emplacement groundwater travel time along the fastest path of likely radionuclide travel from the disturbed zone to the accessible environment of at least 1,000 years). The role of the geologic setting, including the imposition of separate criteria for individual barriers (or sub-system requirements) was an important consideration during the development of part 63. NRC’s generic regulations for HLW disposal at 10 CFR part 60 prescribe criteria for individual barriers. Petitioner’s request would serve to continue the part 60 sub-system approach. See 10 CFR 60.113(a)(2).

The Commission carefully considered the merits of including these types of barrier criteria when it proposed part 63, but decided against doing so:

Upon review * * * the Commission is persuaded that much of the basis for NRC’s initial development of the specific numerical values for the subsystem criteria was generic judgment with regard to what was (and was not) feasible with regard to the quantitative assessment of long-term repository performance. Because the stated goal was to compensate for uncertainty, there was never any attempt to derive the subsystem performance criteria from a specified dose or risk level or from some projected dose or risk reduction expected to be achieved by their application. Furthermore, after 15 years of experience in working with the requirements of part 60, the Commission is concerned that, for the Yucca Mountain site, the application of the subsystem performance criteria at § 60.113 may impose significant additional expenditure of resources on the nation’s HLW program, without producing any

commensurate increase in the protection of public health and safety.

(64 FR 8649; February 22, 1999). Nevertheless, the Commission acknowledged the importance of the geologic setting:

[D]espite its reconsideration of the merits of establishing quantitative criteria for the performance of repository subsystems, the Commission continues to believe that multiple barriers, as required by NWPA, must each make a definite contribution to the isolation of waste at Yucca Mountain, so that the Commission may find, with reasonable assurance, that the repository system will be able to achieve the overall safety objective over timeframes of thousands of years. Geologic disposal of HLW is predicated on the expectation that a portion of the geologic setting will act as a barrier, both to water reaching the waste, and to dissolved radionuclides migrating away from the repository, and thus, contribute to the isolation of radioactive waste.

Id. The proposed rule required DOE to provide an analysis that (1) identifies those design features of the engineered barrier system, and natural features of the geologic setting, that are considered barriers important to waste isolation; (2) describes the capability of these barriers to isolate waste, taking into account uncertainties in characterizing and modeling the barriers; and (3) provides the technical basis for the description of the capability of these barriers. The Commission stated that this approach would “provide for a system of multiple barriers and an understanding of the resiliency of the geologic repository provided by the barriers important to waste isolation to ensure defense in depth and increase confidence that the postclosure performance objective will be achieved.”

(64 FR 8650; February 22, 1999).

NRC received comments both supporting and opposing its proposed approach for evaluating individual barriers, including a comment from petitioner requesting that the part 60 approach be retained. After careful consideration of these comments, the Commission decided to retain the proposed approach because:

1. It provides the Commission with information to be considered in its decisions without constraining its considerations to a specific limit for a particular barrier, which could result in less favorable overall system performance.

2. It gives the Commission the flexibility to consider the nature and extent of conservatism in the evaluations used for compliance demonstration, and to decide whether there is a need to require DOE to reduce uncertainties in its assessment (*e.g.*, collecting more site data) or to include further mitigative measures.

3. Quantitative evidence of the capability of individual barriers to contribute to waste

isolation is an integral part of the performance assessment. Therefore, an additional quantitative limit is not necessary to show that overall performance reflects a system of multiple barriers.

The Commission understands that establishment of explicit, quantitative limits for individual barriers might be considered a desirable and more easily explained approach. That being said, however, the Commission knows of no scientific basis for setting such limits for particular barriers at Yucca Mountain, or at any other site, independent of the complex repository system in which they must perform. The Commission is confident that evidence for the resilience, or lack of resilience, of a multiple-barrier system will be found by examining a comprehensive and properly documented performance assessment of the behavior of the overall repository system. Such an assessment must consider credible and supportable ranges of individual parameters and modeling assumptions, and must include multiple evaluations of a wide range of combinations of resulting barrier performance.

(66 FR 55759; November 2, 2001).

In sum, the Commission devoted considerable attention in its rulemaking proceeding to the question whether it should retain the subsystem requirements of part 60 which would establish quantitative performance criteria for the geologic barriers but decided against this approach. Petitioner is dissatisfied with this outcome and essentially seeks reconsideration of this decision. However, petitioner has presented no significant new information to support this request and it would be an unwise expenditure of resources to cover this same ground again in a new rulemaking.¹⁰

Potentially Disqualifying Conditions

NRC’s generic Part 60 regulations contain siting criteria which include “potentially adverse conditions” which must be shown not to compromise the ability of the repository to meet the performance objectives for isolation of the wastes. See 10 CFR 60.122. Petitioner seeks to amend part 63 to include many of these potentially adverse conditions as “potentially disqualifying conditions” and to require the applicant to show that they do not exist or, if they do exist, “that they are

¹⁰ Petitioner cites a 1999 DOE analysis of the independent capabilities of the multiple waste isolation barriers which indicated that the engineered barriers contribute over 99.7 percent of the waste isolation capabilities of the repository system, implying that NRC will not really apply a “multiple barrier” approach because the geologic contributions of YM are minuscule. Petition at 27, n.16. But our rules on their face unequivocally require “multiple barriers,” as called for by NWPA. See discussion, *supra*. Our consideration of the nature of DOE’s proposed facility must await a DOE license application.

⁹ The Commission noted that it “could consider the QA program, personnel training program, emergency plan and operating procedures, among others, in order to determine whether it has confidence that there is no unreasonable risk to the health and safety of the public.” (66 FR 55740; November 2, 2001).

not materially adverse to the long-term safety of the repository.” Petition at 41–43.

In proposing part 63, the Commission specified overall performance objectives for the preclosure and postclosure phases of the repository and requirements that compliance with these overall performance objectives be demonstrated through an integrated safety analysis of preclosure operations, and through a performance assessment for long-term, post-closure performance. The proposal did not specify potentially adverse conditions to be considered but did require that the performance assessment consider unfavorable, as well as favorable, information:

A defensible performance assessment should contain a technical rationale for those features, events, and processes that have been included in the performance calculation, as well as those that have been considered but were excluded. The features, events, and processes (*i.e.*, specific conditions or attributes of the geologic setting; degradation, deterioration, or alteration of the engineered barriers; and interactions between the natural and engineered barriers) conducted for inclusion in the assessment should represent a wide range of beneficial and detrimental effects on performance.

(64 FR 8650; February 22, 1999). Public comments on the proposed rule raised concerns about the impacts of certain features, events, and processes (*e.g.*, that YM lies in an area that is seismically and tectonically active, that there may be potential for fast ground-water pathways to the water table) that prompted many commenters to recommend that YM be disqualified from further consideration. The Commission considered these objections but reaffirmed the approach it had decided to take in the proposed rule:

Consideration of all FEPs, especially those with the potential to have an adverse effect on performance, is an important part of the evaluation of repository performance. Commenters have correctly identified a number of conditions that have been or are being considered by DOE in performance assessments for Yucca Mountain, such as seismic activity, thermal effects, volcanic activity, microbial-induced corrosion of the waste package, and the potential for a significant rise of the water table. Section 63.114 requires DOE to consider all FEPs pertinent to a repository at Yucca Mountain and fully justify how they are treated in the performance assessment. In reviewing DOE's performance assessment, the NRC will evaluate how well DOE has accounted for those FEPs that could have an adverse effect on the repository.

(66 FR 55748; November 2, 2001). Thus, the Commission considered in the part 63 rulemaking whether it should specify disqualifying conditions for the

repository site, but decided that its approach of having the performance assessment present and consider all information relevant to negative conditions was preferable. The Commission finds no reason presented by petitioner to reopen that issue.

Peak Radiation Doses Subsequent to the Regulatory Monitoring Period

Petitioner requests that § 63.113 be amended to add the following provision:

Peak Dose. The geologic setting for the Yucca Mountain repository shall evidence sufficient geologic suitability to provide reasonable assurance that peak radiation doses to the accessible environment will not occur subsequent to the regulatory monitoring period established by the Environmental Protection Agency in 40 CFR part 197.

Petition at 43. This requirement is purportedly needed because, in petitioner's view, “the repository will become most dangerous to humans and the environment after the EPA's prescribed regulatory time period.” Petition at 33 (emphasis in original). Petitioner supports this view with a graphic produced in the July 2002 *National Geographic* using data provided in DOE's *Final Environmental Impact Statement*, DOE/EIS–0250 (February 2002). Petition, Attachment 2. According to petitioner, this graphic illustrates that “DOE's own models predict that radiation doses from Yucca Mountain releases to the accessible environment will not begin to peak until after the 10,000-year regulatory time period that forms the basis for part 63 licensing.” Petition at 33.

Petitioner believes that NRC must have reasonable assurance that the peak radiation doses to the accessible environment will occur within the regulatory compliance period.¹¹ This amounts to a challenge to the 10,000 year compliance period adopted by the Commission in Part 63. The Commission proposed a 10,000 year compliance period for evaluating a YM repository because it:

(1) includes the period when the waste is inherently most hazardous; (2) is sufficiently long, such that a wide range of conditions will occur which will challenge the natural and the engineered barriers, providing a reasonable evaluation of the robustness of the geologic repository; and (3) is consistent with other regulations involving geologic disposal of long-lived hazardous materials, including radionuclides.

¹¹ We interpret petitioner's reference to “the regulatory monitoring period established by the Environmental Protection Agency in 40 CFR 197” to be a reference to the 10,000 year compliance period established in EPA's regulations. Those regulations do not include a monitoring period.

(64 FR 8647; February 22, 1999). The Commission acknowledged that, on this matter, it was not following the recommendation made by NAS that the compliance period should include the time when greatest risk occurs, within the limits imposed by the stability of the geologic system. However, the Commission explained:

In selecting the length of time over which the individual dose limit should be applied, a regulatory agency must take into account technical, policy, and legal considerations. In fact, NAS noted that EPA might elect to establish consistent policies for managing comparable risks from disposal of long-lived hazardous materials. From a technical perspective, for example, the time-dependent variation of the hazard, along with the time required to evaluate adequately the waste isolation capability of both engineered and natural barriers, are of significance. From a policy perspective, on the other hand, the practical utility and relative uncertainty of extremely long projections of health consequences, along with the need to maintain a consistent regulatory approach for like hazards, need to be weighed. Having considered both technical and policy concerns, the Commission is proposing the use of 10,000 years for evaluating compliance with the system performance objective at § 63.113.

Id. The Commission received comments objecting to this proposal, but decided to reaffirm use of a 10,000 year compliance period in the final rule:

The fact that it is feasible to calculate performance of the engineered and geologic barriers making up the repository system for periods much longer than 10,000 years does not mean that it is possible to make realistic or meaningful projections of human exposure and risk, attributable to releases from the repository, over comparable time frames. NAS acknowledged that projecting the behavior of human society over long periods is beyond the limits of scientific analysis and recommended that “cautious, but reasonable” assumptions, based upon current knowledge, be made with regard to the selection of biosphere and critical group parameters for Yucca Mountain. Determining just how far into the future current knowledge can no longer support “reasonable” assumptions about pathways affecting human exposure is clearly a subjective, policy judgment. NRC believes that, for periods approaching 1,000,000 years, as suggested by NAS, during which significant climatic and even human evolution would almost certainly occur, it is all but impossible to make useful and informed assumptions about human behaviors and exposure pathways.

(66 FR 55760; November 2, 2001).

Thus, the Commission has considered the appropriate length of the compliance period and has determined that 10,000 years is an acceptable period for assessing compliance with performance standards. The

Commission also adopted an EPA standard requiring DOE to calculate the peak dose of the reasonably maximally exposed individual that would occur after 10,000 years following disposal, but did not apply a regulatory standard to the results of this analysis. Instead, DOE is to include the results of the analyses and their bases in the environmental impact statement for YM as an indicator of long-term disposal system performance. *See* 10 CFR 63.341; *see also* 40 CFR 197.35. The Commission continues to believe, as articulated in the both the proposed and final regulations, that potential radiation exposures estimated at very long times into the future (e.g., 100,000 years and longer), such as those shown in the *National Geographic* graphic, are too speculative to provide meaningful information to make licensing decisions.

Need for Presentation of an Affirmative Safety Case

Petitioner believes that DOE must be required to present "an affirmative safety case" which demonstrates an understanding of repository performance. To ensure demonstration of an affirmative safety case, petitioner has proposed a new regulation (proposed § 63.21(c), *supra*) which is based on, but not identical to, recommendations made by the *Peer Review* with respect to DOE's TSPA-SR.¹² Although the *Peer Review* focused on DOE's TSPA-SR, it did make a few observations on NRC's proposed part 63:

The regulations require that a risk-informed approach should be adopted in demonstrating compliance with the dose limit, in recognition of the uncertainties inherent in making assessments over long time frames in the future. It is also required that the assessment should reveal an understanding of the relationship between the performance of the repository sub-systems and the total system performance. Nevertheless despite the prescriptive nature of the regulations, the [International] R[evue] T[eam] notes that the proposed licensing regulation 10 CFR 63 states that "consistent with a performance based philosophy, the Commission proposes to permit DOE the flexibility to select the approach for demonstrating this relationship that is most appropriate to its analysis."

The TSPA-SR methodology embodies a comprehensive computational framework for estimating possible doses to future generations using a complex systems-level model accounting for hundreds of features, events and processes and related parameter ranges. A key issue with this approach is the difficulty in understanding the meaning of the numerical results. In particular, it is often

difficult to understand how the system is likely to evolve and which process and parameters are the most important. *Peer Review* at 41.

In its review of the TSPA-SR, the IRT has observed a tendency for more focus to be given to the demonstration of numerical compliance with the proposed regulatory requirements than on developing and presenting an understanding of repository performance. Whilst it is completely understandable that the TSPA-SR should give due attention to demonstrating compliance with the prescribed dose limit, an in-depth understanding of the performance of the repository system is necessary to develop confidence in the overall design and safety of the repository and in the results of the assessment. In this regard, there is an emerging international consensus that building confidence in repository performance is of comparable importance to demonstrating compliance with criteria. *Thus it is recommended that in the future equal attention should be given to system understanding as to numerical compliance with regulatory criteria if the project proceeds to the licensing stage.*

Peer Review at 23–24 (emphasis in original).

Thus, the *Peer Review* acknowledged the importance of DOE presenting, in its TSPA, an in-depth understanding of the performance of the repository system and recognized that demonstration of safety is more than numerical compliance with the proposed regulatory requirements. As a matter of record, a similar concern was raised during the public comment period on the proposed regulation (*i.e.*, can performance assessment be relied on as the sole quantitative technique for evaluating compliance with the postclosure safety requirements). The Commission, in response to this concern, explained that the regulations contained a number of requirements directed at DOE's demonstrating an in-depth understanding of the repository system:

Although repository postclosure performance is evaluated with respect to a single performance measure for individual protection, the NRC considers a broad range of information in arriving at a licensing decision. In the case of the proposed repository at Yucca Mountain, Part 63 contains a number of requirements (e.g., qualitative requirements for data and other information, the consideration and treatment of uncertainties, the demonstration of multiple barriers, performance confirmation program, and QA program) designed to increase confidence that the postclosure performance objective is satisfied. The Commission will rely on the performance assessment as well as DOE's compliance with these other requirements in making a decision, if DOE submits a license application for disposal of HLW at Yucca Mountain.

(66 FR 55746; November 2, 2001).

The current regulations require that DOE provide an adequate and appropriate understanding of the repository system as part of its compliance demonstration. For example, the requirements for the performance assessment, at 10 CFR 63.114, specify that DOE must account for uncertainty in representing the repository system (both in parameters and models); provide a technical basis for either inclusion or exclusion of specific features, events, and processes in the performance assessment including the degradation, deterioration, or alteration processes of engineered and geologic barriers; and provide a technical basis for the models used in the performance assessment such as comparisons made with outputs of detailed process-level models and/or empirical observations (e.g., laboratory testing, field investigations, and natural analogs). Additionally, the requirements for multiple barriers, at 10 CFR 63.115, specify that DOE must identify those design features of the engineered barrier system, and natural features of the geologic setting, that are considered barriers important to waste isolation; describe the capability of barriers identified as important to waste isolation actually to isolate waste, taking into account uncertainties in characterizing and modeling the behavior of the barriers; and provide the technical basis for the description of the capability of barriers.

In summary, the current regulations require that DOE: demonstrate an adequate and appropriate understanding of the repository system, supported by technical and scientific information that includes a range of important technical concerns, such as the features, events, and processes that could affect the performance of the repository; provide an evaluation of how uncertainty in parameters and models affects the estimates of repository performance; and show the capabilities of the engineered and geologic barriers to isolate waste.

Petitioner had full opportunity during the extensive Part 63 rulemaking to suggest additional requirements for DOE's application to provide greater understanding of the repository system, and did so in its comments questioning the appropriateness of the Commission's proposal to establish risk-informed and performance based regulations which would not include the existing sub-system performance requirements of Part 60. The *Peer Review*, although published after NRC's issuance of the final rule, is based on information widely available during NRC's rulemaking proceeding (e.g., U.S. NRC

¹² The *Peer Review* expressed the view that the TSPA-SR could be improved with respect to developing a better understanding of the repository system:

Advisory Committee on Nuclear Waste Letter to Chairman Jackson, dated April 8, 1999, "SR 95 Template for Safety Reports with Descriptive Example," Swedish Nuclear Power Inspectorate, Technical Report 96-05). Thus, the *Peer Review* did not present new information with respect to Part 63; it presented a critique of DOE's TSPA-SR.

Consequently, we do not believe that the *Peer Review*, or other critiques of DOE's activities at YM, justifies expending the resources that would be needed to reopen the issues considered in the recent part 63 rulemaking.

For all the reasons stated above, the NRC denies the petition in its entirety.

Dated at Rockville, Maryland, this 21st day of February, 2003.

For the Nuclear Regulatory Commission.

Annette Vietti-Cook,

Secretary of the Commission.

[FR Doc. 03-4625 Filed 2-26-03; 8:45 am]

BILLING CODE 7590-01-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-285-AD]

RIN 2120-AA64

Airworthiness Directives; BAE Systems (Operations) Limited Model ATP Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to all BAE Systems (Operations) Limited Model ATP airplanes. This proposal would require a one-time inspection of the fuel pipes within the fuel "float switch" test pipelines in the left and right inner wings for evidence of damage, cracks, misalignment, or fuel leakage; follow-on corrective actions, if necessary; and repetitive replacement of the fuel pipes at regular intervals. This action is necessary to prevent fuel vapors from collecting in the dry bay of the wing torsion box and consequent risk of an explosion due to fuel leakage. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by March 31, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport

Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-285-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-nprmcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2001-NM-285-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in the proposed rule may be obtained from British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT:

Todd Thompson, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1175; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this action may be changed in light of the comments received.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the proposed AD is being requested.
- Include justification (*e.g.*, reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments

submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-285-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-285-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

The Civil Aviation Authority (CAA), which is the airworthiness authority for the United Kingdom, notified the FAA that an unsafe condition may exist on all BAE Systems (Operations) Limited Model ATP airplanes. The CAA advises that it has received a report of failures of the fuel pipes within the "fuel float" test pipelines in the left and right inner wings due to fatigue. Leakage from these pipes allows fuel vapors to collect within the dry bay of the wing torsion box, which contains electrical equipment. This condition, if not corrected, could result in ignition of fuel vapors within the dry bay of the wing torsion box and consequent risk of an explosion.

Explanation of Relevant Service Information

BAE Systems (Operations) Limited has issued Service Bulletin ATP-28-019, dated March 16, 2001, which describes procedures for inspection of the fuel pipes within the fuel "float switch" test pipelines in the left and right inner wings for evidence of damage, cracks, misalignment, or fuel leakage; and replacement of any discrepant fuel pipe with a new or serviceable pipe.

BAE Systems (Operations) Limited has also issued Service Bulletin ATP-28-020, dated January 25, 2002, which describes procedures for a records check to determine the accumulation of time on the fuel pipes within the fuel "float switch" test pipelines, and replacement of those pipes upon reaching their maximum safe-life limit. This service bulletin also recommends that operators

submit findings of damaged pipes to BAE Systems (Operations) Limited following replacement of those damaged pipes.

Accomplishment of the actions specified in these service bulletins is intended to adequately address the identified unsafe condition.

The CAA classified these service bulletins as mandatory and issued British airworthiness directives 003-03-2001 and 008-01-2002 in order to assure the continued airworthiness of these airplanes in the United Kingdom.

FAA's Conclusions

This airplane model is manufactured in the United Kingdom and is 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, the CAA has kept the FAA informed of the situation described above. The FAA has examined the findings of the CAA, 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.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would require accomplishment of the actions specified in the service bulletins described previously, except as discussed below.

Differences Between Proposed AD, British AD, and Service Bulletin

Operators should note that, although this proposed AD would require that the actions be accomplished within 90 days after the effective date of this AD, the British AD and BAE Systems (Operations) Limited Service Bulletin ATP-28-020 do not recommend a compliance time for the proposed records check. In developing an appropriate compliance time for this proposed action, we considered the degree of urgency associated with addressing the subject unsafe condition, the average utilization of the affected fleet, and the time necessary to perform the check (less than one hour). In light of all of these factors, we find a 90-day compliance time for completing the proposed records check to be warranted, in that it represents an appropriate interval of time allowable for affected

airplanes to continue to operate without compromising safety.

Although BAE Systems (Operations) Limited Service Bulletin ATP-28-020 recommends operators report findings to the manufacturer after replacement of damaged pipes, this AD does not include such a reporting requirement.

Cost Impact

The FAA estimates that 3 Model ATP airplanes of U.S. registry would be affected by this proposed AD.

It would take approximately 6 work hours per airplane to accomplish the proposed inspection, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the proposed inspection on U.S. operators is estimated to be \$1,080, or \$360 per airplane.

It would take approximately 1 work hour per airplane to accomplish the proposed records check, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the proposed records check on U.S. operators is estimated to be \$180, or \$60 per airplane.

It would take approximately 5 work hours per airplane to accomplish the proposed replacement, at an average labor rate of \$60 per work hour. Required parts would be provided by the manufacturer at no cost to the operators. Based on these figures, the cost impact of the proposed replacement on U.S. operators is estimated to be \$900, or \$300 per airplane, per replacement cycle.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations proposed herein 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. Therefore, it is determined that this proposal would not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this 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) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

BAE Systems (Operations) Limited (Formerly British Aerospace Regional Aircraft): Docket 2001-NM-285-AD.

Applicability: All Model ATP airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fuel vapors from collecting in the dry bay of the wing torsion box and consequent risk of an explosion due to fuel leakage, accomplish the following:

Inspection and Records Check

(a) Within 90 days after the effective date of this AD, do the actions specified in paragraphs (a)(1) and (a)(2) of this AD.

(1) Do a general visual inspection of the fuel pipes within the fuel "float switch" test pipelines in the left and right inner wings for evidence of damage, cracks, misalignment, or fuel leakage; per BAE Systems (Operations) Limited Service Bulletin ATP-28-019, dated March 16, 2001.

Note 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(2) Perform a check of the airplane records to determine the actual time on the fuel pipes within the "float switch" test pipelines, per BAE Systems (Operations) Limited Service Bulletin ATP-28-020, dated January 25, 2002. This records check may be performed either by the cockpit flight crew or by certificated maintenance personnel.

Repetitive Replacement

(b) If no damage, crack, misalignment, or fuel leakage is found during the inspection required by paragraph (a)(1) of this AD, prior to further flight, reinstall the fuel pipes within the "float switch" test pipelines per BAE Systems (Operations) Limited Service Bulletin ATP-28-020, dated January 25, 2002. Thereafter, replace those pipes with new pipes at the applicable times specified in paragraph (b)(1) or (b)(2) of this AD per the service bulletin.

(1) For fuel pipes that, as of the effective date of this AD, have accumulated less than 10,000 total flight hours or 12,000 total landings since the date of installation on the airplane: Do the replacement prior to the accumulation of 10,000 total flight hours or 12,000 total landings on the pipes since the date of installation, or within 10 months after the effective date of this AD, whichever occurs latest. Thereafter, replace the fuel pipes with new pipes at intervals not to exceed 10,000 total flight hours or 12,000 total landings on the pipes, whichever occurs first. Replacement of the fuel pipes with serviceable pipes instead of new pipes is acceptable for compliance with the requirements of this paragraph, provided that: The total number of flight hours or total number of landings on those pipes can be verified, they have not accumulated 10,000 or more total flight hours or 12,000 or more total landings at the time of installation, and they are replaced prior to the accumulation of 10,000 total flight hours or 12,000 total landings (on the pipes).

(2) For fuel pipes that, as of the effective date of this AD, have accumulated 10,000 or more total flight hours or 12,000 or more total

landings since the date of installation on the airplane: Do the replacement within 10 months after the effective date of this AD. Thereafter, replace the fuel pipes at intervals not to exceed 10,000 total flight hours or 12,000 total landings on the pipes, whichever occurs first. Replacement of the fuel pipes with serviceable pipes instead of new pipes is acceptable for compliance with the requirements of this paragraph, provided that: The total number of flight hours or total number of landings on those pipes can be verified, they have not accumulated 10,000 or more total flight hours or 12,000 or more total landings at the time of installation, and they are replaced prior to the accumulation of 10,000 total flight hours or 12,000 total landings (on the pipes).

(c) If any damage, crack, misalignment, or fuel leakage is found during the inspection required by paragraph (a)(1) of this AD, prior to further flight, replace the fuel pipes with new pipes, per BAE Systems (Operations) Limited Service Bulletin ATP-28-020, dated January 25, 2002. Before or upon the accumulation of 10,000 total flight hours or 12,000 total landings on the pipes, whichever occurs first, after the replacement required by this paragraph, replace the fuel pipes with new pipes. Thereafter, replace the fuel pipes at intervals not to exceed the accumulation of 10,000 total flight hours or 12,000 total landings on the pipes, whichever occurs first. Replacement of the fuel pipes with serviceable pipes instead of new pipes is acceptable for compliance with the requirements of this paragraph, provided that: The total number of flight hours or total number of landings on those pipes can be verified, they have not accumulated 10,000 or more total flight hours or 12,000 or more total landings at the time of installation, and they are replaced prior to the accumulation of 10,000 total flight hours or 12,000 total landings (on the pipes).

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Note 4: The subject of this AD is addressed in British airworthiness directives 003-03-2001 and 008-01-2002.

Issued in Renton, Washington, on February 20, 2003.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-4588 Filed 2-26-03; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-125-AD]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model MD-90-30 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to all McDonnell Douglas Model MD-90-30 airplanes. This proposal would require replacing the lanyards on the pressure relief door for the thrust reverser with new, improved lanyards, and doing associated modifications. This action is necessary to ensure that the lanyards on the pressure relief door have adequate strength. Lanyards of inadequate strength could allow the pressure relief door to detach from the thrust reverser in the event that an engine bleed air duct bursts, which could result in the detached door striking and damaging the horizontal stabilizer, and consequent reduced controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by April 14, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-125-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-nprmcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2001-NM-125-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must

be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in the proposed rule may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024); and BF Goodrich, 850 Lagoon Drive, Chula Vista, California 91910-2098. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California.

FOR FURTHER INFORMATION CONTACT:

William S. Bond, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5253; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this action may be changed in light of the comments received.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the proposed AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments

submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-125-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-125-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

The FAA has received a report indicating that, on all McDonnell Douglas Model MD-90-30 airplanes, the lanyards on the pressure relief door for the thrust reversers do not meet the certification requirements for strength. Lanyards of inadequate strength could allow the pressure relief door to detach from the thrust reverser in the event that an engine bleed air duct bursts, which could result in the detached door striking and damaging the horizontal stabilizer.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Service Bulletin MD90-78-048, including Evaluation Form, dated February 15, 2001, which describes procedures for replacing the lanyards on the pressure relief door for the thrust reverser with new, improved lanyards, and doing associated modifications.

Boeing Service Bulletin MD90-78-048 refers to International Aero Engines Service Bulletin V2500-NAC-78-0184, dated February 16, 2001, as the appropriate source of service information for replacing the door lanyards and doing the associated modifications. The procedures in that service bulletin include removing the pressure relief door, replacing the door lanyard assemblies with new, improved assemblies, modifying the pressure relief door (including replacing existing brackets with new brackets and reidentifying the door with a new part number), modifying the lower track beam (including removing terminals, replacing the aft quick-release pin with a new pin, and reidentifying the beam with a new part number), modifying the heat shield on the lanyard assembly attach lugs, and re-installing the pressure relief door.

Accomplishment of the actions specified in the service bulletins is intended to adequately address the identified unsafe condition.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require accomplishment of the actions specified in the service bulletins described previously, except as discussed below.

Clarification of Applicability

Boeing Service Bulletin MD90-78-048 specifies an effectivity of Model MD-90-30 airplanes "equipped with V2500-D5 thrust reversers prior to serial number 0701001." All Model MD-90-30 airplanes are equipped with the subject thrust reversers; thus, all Model MD-90-30 airplanes are subject to this proposed AD.

Differences Between Proposed AD and Service Information

The service bulletins recommend replacing the door lanyards and doing associated modifications at the next scheduled maintenance visit when manpower, materials, and facilities are available. The FAA has determined that such a non-specific compliance time would not ensure that the identified unsafe condition is addressed in a timely manner. In developing an appropriate compliance time for this AD, the FAA considered not only the manufacturer's recommendation, but also the degree of urgency associated with addressing the subject unsafe condition, and the time necessary to perform the proposed actions. In light of all of these factors, the FAA finds that a compliance time of 18 months after the effective date of the AD for completing the proposed actions is warranted, in that it represents an appropriate interval of time allowable for affected airplanes to continue to operate without compromising safety.

Cost Impact

There are approximately 110 airplanes of the affected design in the worldwide fleet. The FAA estimates that 21 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 8 work hours per airplane to accomplish the proposed actions, and that the average labor rate is \$60 per work hour. Required parts would be provided at no cost to the operator. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be \$10,080, or \$480 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD

action, and that no operator would accomplish those actions in the future if this proposed AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations proposed herein 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. Therefore, it is determined that this proposal would not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this 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) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

McDonnell Douglas: Docket 2001–NM–125–AD.

Applicability: All Model MD–90–30 airplanes; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure that the lanyards on the pressure relief door for the thrust reverser have adequate strength so that the door will not detach from the thrust reverser in the event that an engine bleed air duct bursts, which could result in the door striking and damaging the horizontal stabilizer, accomplish the following:

Replacement of Lanyards on the Thrust Reverser Pressure Relief Door

(a) Within 18 months after the effective date of the AD, replace the lanyards on the pressure relief door for the thrust reverser with new, improved lanyards, and accomplish associated modifications, per the Accomplishment Instructions of Boeing Service Bulletin MD90–78–048, excluding Evaluation Form, dated February 15, 2001. The associated modifications include removing the pressure relief door, modifying the pressure relief door (including replacing existing brackets with new brackets and reidentifying the door with a new part number), modifying the lower track beam (including removing terminals, replacing the aft quick-release pin with a new pin, and reidentifying the beam with a new part number), modifying the heat shield on the lanyard assembly attach lugs, and re-installing the pressure relief door.

Note 2: Boeing Service Bulletin MD90–78–048, excluding Evaluation Form, dated February 15, 2001, refers to International Aero Engines Service Bulletin V2500–NAC–78–0184, dated February 16, 2001, for instructions on replacing the lanyards on the pressure relief door for the thrust reverser.

Spares

(b) After the effective date of this AD, no person may install a lanyard having part number (01–250) or (01–255) on the pressure relief door for the thrust reverser on any airplane.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add

comments and then send it to the Manager, Los Angeles ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on February 20, 2003.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. 03–4587 Filed 2–26–03; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Part 1926

[Docket No. S–030]

RIN 1218–AC01

Safety Standards for Cranes and Derricks

AGENCY: Occupational Safety and Health Administration (OSHA), Department of Labor.

ACTION: Notice of proposed Negotiated Rulemaking Committee membership; request for comments.

SUMMARY: The Occupational Safety and Health Administration is planning to establish a Crane and Derrick Negotiated Rulemaking Advisory Committee (C–DAC) under the Negotiated Rulemaking Act (NRA) and the Federal Advisory Committee Act (FACA). The Committee will negotiate issues associated with the development of a proposed revision of the existing construction safety standards for the cranes and derricks portion. The Committee will include representatives of parties who would be significantly affected by the final rule. The public may submit comments on the proposed list of members.

DATES: Comments submitted by mail must be postmarked not later than March 31, 2003. Emailed or faxed comments must be received by March 31, 2003.

ADDRESSES: Written comments may be submitted in any of three ways: by mail, by fax, or by email. Please include "Docket No. S–030" on all submissions.

By mail, the address is: OSHA Docket Office, Docket No. S–030, U.S.

Department of Labor, 200 Constitution Avenue, NW., Room N-2625, Washington, DC 20210, telephone (202) 693-2350. Note that receipt of comments submitted by mail may be delayed by several weeks.

By fax, written comments that are 10 pages or fewer, may be transmitted to the OSHA Docket Office at telephone number (202) 693-1648.

By email, comments may be submitted through OSHA's Homepage at ecomments.osha.gov. Please note that you may not attach materials such as studies or journal articles to your electronic comments. If you wish to include such materials, you must submit three copies to the OSHA Docket Office at the address listed above. When submitting such materials to the OSHA Docket Office, clearly identify your electronic comments by name, date, subject, and Docket Number, so that we can attach the materials to your electronic comments.

FOR FURTHER INFORMATION CONTACT:

Mark Hagemann, Office of Construction Standards and Compliance Assistance, Occupational Safety and Health Administration, U.S. Department of Labor, Room N-3468, 200 Constitution Avenue, NW., Washington, DC 20210; Telephone: (202) 693-2345.

SUPPLEMENTARY INFORMATION: On July 16, 2002, OSHA published a **Federal Register** notice of intent to establish a negotiated rulemaking committee (67 FR 46612). The notice requested nominations for membership on the Committee and comments on the appropriateness of using negotiated rulemaking to develop a crane and derrick proposed rule. In addition, the notice described the negotiated rulemaking process and identified some key issues for negotiation.

Fifty-five nominations for membership on the Committee and several comments were received during the comment period. There was broad support for using negotiated rulemaking to update the standard. OSHA has decided to go forward with the negotiated rulemaking process. The Agency has developed the following proposed list of Committee members:

Manufacturers and Suppliers

Michael Brunet, Manitowoc Cranes, Inc., 2401 S. 30th Street, Manitowoc, WI 54220.

Peter Juhren, Morrow Equipment Company, L.L.C., 3218 Pringle Road, SE., Salem, OR 97302.

Larry Means, Wire Rope Technical Board, 801 North Fairfax Street, Suite 211, Alexandria, VA 22314.

Lessors/Maintenance

William Smith, Maxim Crane Works, 508-C DiGiulian Blvd., Glen Burnie, MD 21061.

Users—Employers

Joseph Collins, Zachry Construction Corporation, P.O. Box 240130, San Antonio, TX 78224.

Brian Murphy, Sundt Corporation, 4101 E Irvington Road, Tucson, AZ 85726.

George R. "Chip" Pocock, C.P. Buckner Steel Erection, P.O. Box 598, Graham, NC 27253.

Craig Steele, Schuck & Sons Construction Company, Inc., 8205 North 67th Avenue, Glendale, AZ 85302.

Darlaine Taylor, Century Steel Erectors, Inc., 210 Washington Avenue, Dravosburg, Pennsylvania 15034.

William J. "Doc" Weaver, 8065 S. Overhill Circle, Salt Lake City, UT 84121.

Robert Weiss, Cranes Inc. and A.J. McNulty & Company, Inc., 53-20 44th Street, Maspeth NY 11378.

Stephen Wiltshire, Shirley Contracting Corporation, 6108 Waterman Drive, Fredericksburg, VA 22407.

Users—Labor Organizations

Frank Migliaccio, International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers, 1750 New York Ave., NW., Suite 400, Washington, DC 20006.

Dale Shoemaker, Carpenters International Training Center, 6801 Placid Street, Las Vegas, NV 89119.

Operators—Labor Organizations

Stephen Brown, International Union of Operating Engineers, 1125 17th Street, NW., Washington, DC 20036.

Emmett Russell, International Union of Operating Engineers, 1125 17th Street, NW., Washington, DC 20036.

Government/Public Entities

Noah Connell, U.S. Department of Labor/OSHA, 200 Constitution Ave., NW., Room N-3467, Washington, DC 20210.

Training and Operator Testing

David Ritchie, The St. Paul Companies, P.O. Box 1419, Bastrop, TX 78602.

Power line Owners

Michael Hyland, American Public Power Association, 2301 m Street, NW., Washington, DC 20037.

Insurance

Charles Yorio, Acordia, Two Gateway Center, 603 Stanwix Street, Suite 1900, Pittsburgh, PA 15222.

After evaluating the comments on the proposed list of Committee members,

OSHA will publish a notice of establishment of the Cranes and Derricks Negotiated Rulemaking Advisory Committee followed by a notice of the first Committee meeting and appointment of members.

Authority: This document was prepared under the direction of John L. Henshaw, Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210, pursuant to section 3 of the Negotiated Rulemaking Act of 1990, (5 U.S.C. 561 *et seq.*), FACA (5 U.S.C. Appendix 2), the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 *et seq.*), and Secretary of Labor's Order No. 3-2000 (65 FR 50017, Aug. 16, 2000).

Signed in Washington, DC, this 19th day of February, 2003.

John L. Henshaw,

Assistant Secretary of Labor for Occupational Safety and Health.

[FR Doc. 03-4560 Filed 2-26-03; 8:45 am]

BILLING CODE 4510-26-P

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Part 100

[CGD05-03-013]

RIN 2115-AE46

Special Local Regulations for Marine Events; Delaware River, Pea Patch Island to Delaware City, DE

AGENCY: Coast Guard, DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes to establish permanent special local regulations for marine events held on the waters of the Delaware River between Pea Patch Island and Delaware City, Delaware. These special local regulations are necessary to provide for the safety of life on navigable waters during the events. This action is intended to restrict vessel traffic in a portion of the Delaware River between Pea Patch Island and Delaware City during the events.

DATES: Comments and related material must reach the Coast Guard on or before April 28, 2003.

ADDRESSES: You may mail comments and related material to Commander (oax), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, Virginia 23704-5004, hand-deliver them to Room 119 at the same address between 9 a.m. and 2 p.m., Monday through Friday, except Federal holidays, or fax them to (757) 398-6203. The Auxiliary and Recreational Boating Safety Section,

Fifth Coast Guard District, maintains the public docket for this rulemaking. Comments and material received from the public, as well as documents indicated in this preamble as being available in the docket, will become part of this docket and will be available for inspection or copying at the above address between 9 a.m. and 2 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: S.L. Phillips, Project Manager, Auxiliary and Recreational Boating Safety Section, at (757) 398-6204.

SUPPLEMENTARY INFORMATION:

Request for Comments

We encourage you to participate in this rulemaking by submitting comments and related material. If you do so, please include your name and address, identify the docket number for this rulemaking (CGD05-03-013), indicate the specific section of this document to which each comment applies, and give the reason for each comment. Please submit all comments and related material in an unbound format, no larger than 8½ by 11 inches, suitable for copying. If you would like to know they reached us, please enclose a stamped, self-addressed postcard or envelope. We will consider all comments and material received during the comment period. We may change this proposed rule in view of them.

Public Meeting

We do not now plan to hold a public meeting. But you may submit a request for a meeting by writing to the address listed under **ADDRESSES** explaining why one would be beneficial. If we determine that one would aid this rulemaking, we will hold one at a time and place announced by a later notice in the **Federal Register**.

Background and Purpose

Each year during the months of June and September, marine events are conducted on a portion of the Delaware River between Pea Patch Island and Delaware City, Delaware. The events consist of 175 to 800 athletes swimming from Fort Delaware on Pea Patch Island to Battery Park in Delaware City. A fleet of spectator vessels gathers nearby to view the swimming events. To provide for the safety of participants, spectators and other transiting vessels, the Coast Guard will temporarily restrict vessel traffic in the event area during the events.

Discussion of Proposed Rule

The Coast Guard proposes to establish permanent special local regulations on

specified waters of the Delaware River between Pea Patch Island and Delaware City, Delaware. The special local regulations will be enforced only during the swimming events; a 2-hour period in June and a 2-hour period in September. The effect will be to restrict general navigation in the regulated area during the events. Except for event participants and persons or vessels authorized by the Coast Guard Patrol Commander, no person or vessel may enter or remain in the regulated area. These regulations are needed to control vessel traffic during the event to enhance the safety of participants, spectators and transiting vessels.

Regulatory Evaluation

This proposed 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 has not reviewed it under that Order. It is not "significant" under the regulatory policies and procedures of the Department of Transportation (DOT) (44 FR 11040, February 26, 1979).

We expect the economic impact of this proposed rule to be so minimal that a full Regulatory Evaluation under paragraph 10e of the regulatory policies and procedures of DOT is unnecessary.

Although this proposed regulation will prevent traffic from transiting a portion of the Delaware River during the event, the effect of this proposed regulation will not be significant due to the limited duration that the regulated area will be in effect and the extensive advance notifications that will be made to the maritime community via the Local Notice to Mariners, marine information broadcasts, and area newspapers, so mariners can adjust their plans accordingly. Additionally, the proposed regulated area has been narrowly tailored to impose the least impact on general navigation yet provide the level of safety deemed necessary.

Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601-612), we have considered whether this proposed rule would 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.

The Coast Guard certifies under 5 U.S.C. 605(b) that this proposed rule would not have a significant economic impact on a substantial number of small entities. This proposed rule would affect the following entities, some of which might be small entities: The owners or operators of vessels intending to transit or anchor in a portion of the Delaware River on the third Saturday of June or September.

This proposed rule would not have a significant economic impact on a substantial number of small entities for the following reasons. This proposed rule would be in effect for only 2 hours on 2 days each year. Vessel traffic could pass safely around the regulated area. Before the enforcement period, we would issue maritime advisories so mariners can adjust their plans accordingly.

If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this proposed rule would have a significant economic impact on it, please submit a comment (*see ADDRESSES*) explaining why you think it qualifies and how and to what degree this proposed rule would economically affect it.

Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104-121), we want to assist small entities in understanding this proposed rule so that they can better evaluate its effects on them and participate in the rulemaking. If the rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact the address listed under **ADDRESSES**.

Collection of Information

This proposed rule would call for no new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501-3520).

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 proposed 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 proposed 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 proposed rule would 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.

Civil Justice Reform

This proposed 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 proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

Indian Tribal Governments

This proposed rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it would 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.

To help the Coast Guard establish regular and meaningful consultation and collaboration with Indian and Alaskan Native tribes, we published a notice in the **Federal Register** (66 FR 36361, July 11, 2001) requesting comments on how to best carry out the Order. We invite your comments on how this proposed rule might impact tribal governments, even if that impact may not constitute a "tribal implication" under the Order.

Energy Effects

We have analyzed this proposed 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 as a significant energy action. Therefore, it does not require a Statement of Energy Effects under Executive Order 13211.

Environment

We considered the environmental impact of this proposed rule and concluded that, under figure 2-1, paragraphs (34)(h) and (35)(a) of Commandant Instruction M16475.1D, this rule is categorically excluded from further environmental documentation. Special local regulations issued in conjunction with a regatta or marine parade permit for an event not located in, proximate to, or above an area designated as environmentally sensitive by an environmental agency of the Federal, state, or local government, are specifically excluded from further analysis and documentation under those sections. A "Categorical Exclusion Determination" is available in the docket where indicated under **ADDRESSES**.

List of Subjects in 33 CFR Part 100

Marine safety, Navigation (water), Reporting and recordkeeping requirements, Waterways.

For the reasons discussed in the preamble, the Coast Guard proposes to amend 33 CFR Part 100 as follows:

PART 100—SAFETY OF LIFE ON NAVIGABLE WATERS

1. The authority citation for part 100 continues to read as follows:

Authority: 33 U.S.C. 1233; 49 CFR 1.46.

2. A new § 100.529 is added to read as follows:

§ 100.529 Delaware River, Pea Patch Island to Delaware City, Delaware.

(a) *Definitions*—(1) *Coast Guard Patrol Commander*. The Coast Guard Patrol Commander is a commissioned, warrant, or petty officer of the Coast Guard who has been designated by the Commander, Coast Guard Group Philadelphia.

(2) *Official Patrol*. The Official Patrol is any vessel assigned or approved by Commander, Coast Guard Group Philadelphia with a commissioned, warrant, or petty officer on board and displaying a Coast Guard ensign.

(3) *Regulated area*. All waters of the Delaware River between Pea Patch Island and Delaware City, Delaware, bounded by a line connecting the following points:

Latitude	Longitude
39°36'35.7" North	075°35'25.6" West, to
39°34'57.3" North	075°33'23.1" West, to
39°34'11.9" North	075°34'28.6" West, to
39°35'52.4" North	075°36'33.9" West.

All coordinates reference Datum NAD 1983.

(b) *Special local regulations*. (1) Except for persons or vessels authorized by the Coast Guard Patrol Commander, no person or vessel may enter or remain in the regulated area.

(2) The operator of any vessel in the regulated area shall:

(i) Stop the vessel immediately when directed to do so by any official patrol, including any commissioned, warrant, or petty officer on board a vessel displaying a Coast Guard ensign.

(ii) Proceed as directed by any official patrol, including any commissioned, warrant, or petty officer on board a vessel displaying a Coast Guard ensign.

(c) *Enforcement period*. This section will be enforced annually for a 2-hour period on the third Saturday in June and for a 2-hour period on the third Saturday in September. Notice of the enforcement period will be given via Marine Safety Radio Broadcast on VHF-FM marine band radio, Channel 22 (157.1 MHz).

Dated: February 18, 2003.

James D. Hull,

*Vice Admiral, U.S. Coast Guard ,
Commander, Fifth Coast Guard District.*

[FR Doc. 03-4636 Filed 2-19-03; 8:45 am]

BILLING CODE 4910-15-U

DEPARTMENT OF TRANSPORTATION

Coast Guard

33 CFR Part 165

[CGD01-03-001]

RIN 2115-AA97

Security Zones; Passenger Vessels, Portland, ME, Captain of the Port Zone

AGENCY: Coast Guard, DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes to establish moving and fixed security zones around high capacity passenger vessels, including international ferries, located in the Portland, Maine, Captain of the Port zone. These proposed security zones are necessary to ensure public safety and prevent sabotage or terrorist acts against these vessels. When

activated, persons and vessels will be prohibited from entering these security zones without the permission of the Captain of the Port, Portland, Maine.

DATES: Comments and related materials much reach the U.S. Coast Guard on or before March 31, 2003.

ADDRESSES: You may mail comments and related material to Marine Safety Office Portland, 103 Commercial Street, Portland, ME 04101. Marine Safety Office Portland maintains the public docket for this rulemaking. Comments and materials received from the public, as well as documents indicated in this preamble as being available in the docket, will become part of this docket and will be available for inspection or copying at Marine Safety Office Portland between the hours of 8 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Lieutenant R. F. Pigeon, Port Operations Department, Marine Safety Office Portland at (207) 780-3092.

SUPPLEMENTARY INFORMATION:

Request for Comments

We encourage you to participate in this rulemaking by submitting comments and related material. If you do so, please include your name and address, identify the docket number for this rulemaking (CGD01-03-001), indicate the specific section of this document to which each comment applies, and give the reason for each comment. Please submit all comments and related material in an unbound format, no larger than 8½ by 11 inches, suitable for copying. If you would like to know that your submission reached us, please enclose a stamped, self-addressed postcard or envelope. We will consider all comments and material received during the comment period. We may change this proposed rule in view of them.

Public Meeting

We do not now plan to hold a public meeting. But you may submit a request for a meeting by writing to Marine Safety Office Portland at the address listed under **ADDRESSES** explaining why one would be beneficial. If we determine that one would aid this rulemaking, we will hold one at a time and place announced by a separate notice in the **Federal Register**.

Background and Purpose

Since the September 11, 2001, terrorist attacks on the World Trade Center in New York, the Pentagon in Arlington, Virginia and Flight 93, the Federal Bureau of Investigation (FBI)

has issued several warnings concerning the potential for additional terrorist attacks within the United States. In addition, the ongoing operation in Afghanistan and growing tensions in Iraq have made it prudent for U.S. ports to be on a higher state of alert because the Al-Qaeda organization and other similar organizations have declared an ongoing intention to conduct armed attacks on U.S. interests worldwide. Due to these concerns, security zones around passenger vessels are prudent to ensure the safety and protection of the passengers aboard. As part of the Diplomatic Security and Antiterrorism Act of 1986 (Pub. L. 99-399), Congress amended section 7 of the Ports and Waterways Safety Act (PWSA), 33 U.S.C. 1226, to allow the Coast Guard to take actions, including the establishment of security zones, to prevent or respond to acts of terrorism against individuals, vessels, or public or commercial structures. Moreover, the Coast Guard has authority to establish security zones pursuant to the Act of June 15, 1917, as amended by the Magnuson Act of August 9, 1950 (50 U.S.C. 191 *et seq.*) (the "Magnuson Act"), and implementing regulations promulgated by the President in subparts 6.01 and 6.04 of part 6 of title 33 of the Code of Federal Regulations.

On October 7, 2002, a temporary final rule (TFR) entitled "Security Zones; Passenger Vessels, Portland, Maine, Captain of the Port Zone" was published in the **Federal Register** (67 FR 62373). That TFR, effective from September 25, 2002, until December 1, 2002, addressed concerns that vessels operating near passenger vessels present possible platforms from which individuals may gain unauthorized access to these vessels or launch terrorist attacks upon these vessels. The TFR was issued to safeguard human life, vessels, and waterfront facilities from sabotage or terrorist acts.

To address the aforementioned concerns, the Coast Guard proposes to establish permanent security zones to prevent vessels or persons from accessing the navigable waters around and under passenger vessels in the Portland, Maine, Captain of the Port zone. Due to the continued heightened security concerns, this proposed rule is necessary to provide for the safety of the port, the vessels, passengers and crew on the vessels, as well as to ensure passenger vessels are not used as possible platforms for terrorist attacks.

Discussion of Proposed Rule

This proposed rule would establish security zones that will be in effect in the navigable waters within a 100-yard

radius around any passenger vessel that is moored, or in the process of mooring, at any berth or anchored within the Portland, Maine, Captain of the Port zone. While underway, the security zones will be 100 yards aside and astern of the passenger vessel and 200 yards ahead which is needed due to the passenger vessel's speed of advance through the water. To clarify the types of passenger vessels this rule applies to, we have adopted a modified version of the definition in 33 CFR 120.100 for this rule by removing the requirement "lasting more than 24 hours" from the phrase "making voyages lasting more than 24 hours, any part of which is on the high seas; and by increasing the requirement for number of passengers from "authorized to carry more than 12 passengers for hire" to "authorized to carry more than 500 passengers for hire". This definition will include high capacity cruise ships and international ferries while excluding smaller vessels.

This proposed rule is needed to protect passenger vessels, persons aboard passenger vessels, the public, waterways, ports and adjacent facilities from sabotage or other subversive acts, accidents, or other events of a similar nature taken upon passenger vessels in the Portland, Maine, Captain of the Port zone. Entry into these zones will be prohibited unless specifically authorized by the Captain of the Port or his designated representative. Vessels already moored or anchored when these security zones take effect are not required to get underway to avoid either the moving or fixed zones unless specifically ordered to do so by the Captain of the Port or his designated representative.

These security zones will not preclude the routine loading and unloading of passengers, vehicles or cargo; or movement of authorized employees and support personnel at any facility or aboard any passenger vessel.

The Captain of the Port will enforce these zones and may enlist the aid and cooperation of any Federal, state, county, municipal, or private agency to assist in the enforcement of the regulation. To the extent that each is applicable, this regulation is issued under the authority contained in 33 U.S.C. 1226 and 1231; 50 U.S.C. 191; 33 CFR 1.05-1(g), 6.04-1, 6.04-6 and 160.5; and 49 CFR 1.46.

Any violation of the security zones described herein is punishable by, among others, civil penalties (not to exceed \$25,000 per violation, where each day of a continuing violation is a separate violation), criminal penalties (imprisonment for not more than 10 years and a fine of not more than

\$250,000), in rem liability against the offending vessel and license sanctions.

Regulatory Evaluation

This proposed 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 has not reviewed it under that Order. It is not “significant” under the regulatory policies and procedures of the Department of Transportation (DOT)(44 FR 11040, February 26, 1979).

The Coast Guard expects the economic impact of this proposal to be so minimal that a full Regulatory Evaluation under paragraph 10e of the regulatory policies and procedures of DOT is unnecessary for the following reasons: (a) The proposed security zones will encompass only relatively small portions of the Captain of the Port, Portland, Maine zone around the transiting passenger vessels, allowing vessels to safely navigate around the zones without delay; (b) Vessels and persons may be allowed to enter these zones on a case-by-case basis with permission of the Captain of the Port.

Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601–612), we have considered whether this proposed rule would 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.

For reasons enumerated in the Regulatory Evaluation section above, the Coast Guard certifies under 5 U.S.C. 605(b) that this proposed rule would not have a significant economic impact on a substantial number of small entities. There is no indication the previous rule was burdensome on the maritime public. No letters commenting on the previous rule were received from the public.

If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this rule would have a significant economic impact on it, please submit a comment (see **ADDRESSES**) explaining why you think it qualifies and how, and to what degree, this rule would economically affect it.

Assistance for Small Entities

Under subsection 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this proposed rule so that they can better evaluate its effects on them and participate in the rulemaking. If the proposed rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please contact Lieutenant R. F. Pigeon, Port Operations Department, Marine Safety Office Portland at (207) 780–3092.

Collection of Information

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

Federalism

A proposed 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 proposed 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 proposed 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 proposed rule would 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.

Civil Justice Reform

This proposed 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 proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This proposed rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

Indian Tribal Governments

This proposed rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments because it would 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.

To help the Coast Guard establish regular and meaningful consultation and collaboration with Indian and Alaskan Native tribes, we published a notice in the **Federal Register** (66 FR 36361, July 11, 2001) requesting comments on how to best carry out the order. We invite your comments on how this proposed rule might impact tribal governments, even if the impact may not constitute a “tribal implication” under the Order.

Energy Effects

We have analyzed this proposed 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 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 proposed rule and concluded that, under figure 2–1, paragraph (34)(g), of Commandant Instruction M16475.ID, this rule is categorically excluded from further environmental documentation. A “Categorical Exclusion Determination” is available in the docket where indicated under **ADDRESSES**.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and record keeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard proposes to amend 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1231; 50 U.S.C. 191; 33 CFR 1.05–1(g), 6.04–1, 6.04–6 and 160.5; 49 CFR 1.46.

2. Add § 165.105 to read as follows:

§ 165.105 Security Zone: Passenger Vessels, Portland, Maine Captain of the Port Zone.

(a) *Definition.* “Passenger vessel” as used in this section means a passenger vessel over 100 gross tons authorized to carry more than 500 passengers for hire making voyages, any part of which is on the high seas, and for which passengers are embarked or disembarked in the Portland, Maine, Captain of the Port zone as delineated in 33 CFR 3.05–15.

(b) *Location.* The following areas are security zones:

(1) All navigable waters within the Portland, Maine, Captain of the Port Zone, extending from the surface to the sea floor, within a 100-yard radius of any passenger vessel that is anchored, moored, or in the process of mooring.

(2) All navigable waters, within the Portland, Maine, Captain of the Port Zone, extending from the surface to the sea floor, extending 200 yards ahead, and 100 yards aside and astern of any passenger vessel that is underway.

(c) *Regulations.* (1) In accordance with the general regulations in § 165.33 of this part, entry into or movement within these zones is prohibited unless previously authorized by the Coast Guard Captain of the Port, Portland, Maine (COTP) or his designated representative.

(2) All persons and vessels must comply with the instructions of the COTP or the designated on-scene Coast Guard patrol personnel. On-scene Coast Guard patrol personnel include commissioned, warrant and petty officers of the Coast Guard on board Coast Guard, Coast Guard Auxiliary, and local, State and Federal law enforcement vessels. Emergency response vessels are authorized to move within the zone, but must abide by restrictions imposed by the COTP or his designated representative.

(3) No person may swim upon or below the surface of the water within

the boundaries of these security zones unless previously authorized by the COTP or his designated representative.

(d) *Enforcement.* The Captain of the Port will enforce these zones and may enlist the aid and cooperation of any Federal, State, county, municipal, or private agency to assist in the enforcement of the regulation.

Dated: February 3, 2003.

Mark P. O'Malley,

Commander, U.S. Coast Guard, Captain of the Port, Portland, Maine.

[FR Doc. 03–4635 Filed 2–26–03; 8:45 am]

BILLING CODE 4910–15–P

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 52**

[MD 128–3097b; FRL–7450–3]

Approval and Promulgation of Air Quality Implementation Plans; Maryland; Revisions to Regulations for Permits, Approvals and Registration and Related Regulations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA proposes to approve State Implementation Plan (SIP) revisions submitted by the State of Maryland. The revisions amend provisions to Maryland's regulations for Permits, Approvals, and Registration and related changes to its regulations for General Emission Standards, Prohibitions, and Restrictions, and Volatile Organic Compounds from Specific Processes. In the Final Rules section of this **Federal Register**, EPA is approving the State's SIP submittal as a direct final rule without prior proposal because the Agency views this as a noncontroversial submittal and anticipates no adverse comments. A detailed rationale for the approval is set forth in the direct final rule. If no adverse comments are received in response to this action, no further activity is contemplated. If EPA receives adverse comments, the direct final rule will be withdrawn and all public comments received will be addressed in a subsequent final rule based on this proposed rule. EPA will not institute a second comment period. Any parties interested in commenting on this action should do so at this time.

DATES: Comments must be received in writing by March 31, 2003.

ADDRESSES: Comments should be addressed to Harold A. Frankford, Mailcode 3AP20, U.S. Environmental

Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; and the Maryland Department of the Environment, 1800 Washington Boulevard, Suite 705, Baltimore, Maryland 21230.

FOR FURTHER INFORMATION CONTACT: Harold A. Frankford, (215) 814–2108 or by e-mail at frankford.harold@epa.gov.

SUPPLEMENTARY INFORMATION: For further information, please see the information provided in the direct final action, with the same title, that is located in the “Rules and Regulations” section of this **Federal Register** publication. Please note that if EPA receives adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment.

Dated: February 4, 2003.

Thomas C. Voltaggio,

Acting Regional Administrator, Region III.

[FR Doc. 03–4511 Filed 2–26–03; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 52**

[CA 269–0382b; FRL–7451–7]

Revisions to the California State Implementation Plan, Mojave Desert Air Quality Management District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to approve revisions to the Mojave Desert Air Quality Management District (MDAQMD) portion of the California State Implementation Plan (SIP). These revisions concern Oxides of Nitrogen (NO_x) emissions from Portland cement kilns. We are proposing to approve a local rule to regulate these emission sources under the Clean Air Act as amended in 1990 (CAA or the Act).

DATES: Any comments on this proposal must arrive by March 31, 2003.

ADDRESSES: Mail comments to Andy Steckel, Rulemaking Office Chief (AIR–4), U.S. Environmental Protection

Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105-3901.

You can inspect copies of the submitted SIP revisions and EPA's technical support document (TSD) at our Region IX office during normal business hours. You may also see copies of the submitted SIP revisions at the following locations:

California Air Resources Board, Stationary Source Division, Rule Evaluation Section, 1001 "I" Street, Sacramento, CA 95814.

Mojave Desert Air Quality Management District, 14306 Park Avenue, Victorville, California 92392.

A copy of the rule may also be available via the Internet at <http://www.arb.ca.gov/drdb/drdbtxt.htm>. Please be advised that this is not an EPA website and may not contain the same version of the rule that was submitted to EPA.

FOR FURTHER INFORMATION CONTACT: Charnjit Bhullar, EPA Region IX, (415) 972-3960.

SUPPLEMENTARY INFORMATION: This proposal addresses the MDAQMD rule 1161. In the Rules and Regulations section of this **Federal Register**, we are approving this local rule in a direct final action without prior proposal because we believe these SIP revisions are not controversial. If we receive adverse comments, however, we will publish a timely withdrawal of the direct final rule and address the comments in subsequent action based on this proposed rule. Please note that if we receive adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, we may adopt as final those provisions of the rule that are not the subject of an adverse comment.

We do not plan to open a second comment period, so anyone interested in commenting should do so at this time. If we do not receive adverse comments, no further activity is planned. For further information, please see the direct final action.

Dated: January 31, 2003.

Alexis Strauss,

Acting Regional Administrator, Region IX.

[FR Doc. 03-4512 Filed 2-26-03; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[MD141/142-3095b; FRL-7450-1]

Approval and Promulgation of Air Quality Implementation Plans; Maryland; Miscellaneous Revisions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA proposes to approve two State Implementation Plan (SIP) revisions submitted by the State of Maryland. One revision removes from the SIP the state ambient air quality standard for hydrocarbons. The other revision removes an outdated citation of a current SIP provision regarding the granting of visible emissions exceptions by control officers. In the Final Rules section of this **Federal Register**, EPA is approving the State's SIP submittal as a direct final rule without prior proposal because the Agency views this as a noncontroversial submittal and anticipates no adverse comments. A detailed rationale for the approval is set forth in the direct final rule. If no adverse comments are received in response to this action, no further activity is contemplated. If EPA receives adverse comments, the direct final rule will be withdrawn and all public comments received will be addressed in a subsequent final rule based on this proposed rule. EPA will not institute a second comment period. Any parties interested in commenting on this action should do so at this time.

DATES: Comments must be received in writing by March 31, 2003.

ADDRESSES: Written comments should be addressed to Harold A. Frankford, Mailcode 3AP20, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; and the Maryland Department of the Environment, 1800 Washington Boulevard, Suite 705, Baltimore, Maryland 21230.

FOR FURTHER INFORMATION CONTACT: Harold A. Frankford, (215) 814-2108, or by e-mail at frankford.harold@epa.gov. Please note that while questions may be posed via telephone and e-mail, formal comments must be submitted in writing, as indicated in the **ADDRESSES** section of this document.

SUPPLEMENTARY INFORMATION: For further information, please see the information provided in the direct final action, with the same title, that is located in the "Rules and Regulations" section of this **Federal Register** publication. Please note that if EPA receives adverse comment on an amendment, paragraph, or section of this rule and if that provision may be severed from the remainder of the rule, EPA may adopt as final those provisions of the rule that are not the subject of an adverse comment.

Dated: February 4, 2003.

Thomas C. Voltaggio,

Acting Regional Administrator, Region III.

[FR Doc. 03-4515 Filed 2-26-03; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 62

[Region II Docket No. VI4-249B; FRL-7455-4]

Approval and Promulgation of State Plans for Designated Facilities; Virgin Islands

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a negative declaration submitted by the Government of the United States Virgin Islands. The negative declaration satisfies EPA's promulgated Emission Guidelines (EG) for existing commercial and industrial solid waste incineration (CISWI) units. In accordance with the EG, states are not required to submit a plan to implement and enforce the EG if there are no existing CISWI units in the state and it submits a negative declaration letter in place of the State Plan. In the "Rules and Regulations" section of this **Federal Register**, EPA is approving the Virgin Islands submittal as a direct final rule without prior proposal because the Agency views this as a noncontroversial submittal and anticipates no adverse comments. A detailed rationale for the approval is set forth in the direct final rule.

If EPA receives no adverse comments, EPA will not take further action on this proposed rule. If EPA receives adverse comments, EPA will withdraw the direct final rule and it will not take effect. EPA will address all public comments in a subsequent final rule based on this proposed rule. The EPA will not institute a second comment period on this action. Any parties

interested in commenting on this action should do so at this time.

DATES: Written comments must be received on or before March 31, 2003.

ADDRESSES: All comments should be addressed to: Raymond Werner, Chief, Air Programs Branch, Environmental Protection Agency, Region II Office, 290 Broadway, New York, New York 10007-1866.

A copy of the Virgin Islands submittal is available for inspection at the Region 2 Office in New York City. Those interested in inspecting the submittal must arrange an appointment in advance by calling (212) 637-4249. Alternatively, appointments may be arranged via e-mail by sending a message to Demian P. Ellis at Ellis.Demian@epa.gov. The office address is 290 Broadway, Air Programs Branch, 25th Floor, New York, New York 10007-1866.

A copy of the Virgin Islands submittal is also available for inspection at the following location: Virgin Islands Department of Planning and Natural Resources, Division of Environmental Protection, Cyril E. King Airport, Terminal Building, 2nd Floor, St. Thomas, USVI, 00802.

FOR FURTHER INFORMATION CONTACT: Demian P. Ellis, Air Programs Branch, Environmental Protection Agency, 290 Broadway, 25th Floor, New York, New York 10007-1866, Telephone, (212) 637-4249.

SUPPLEMENTARY INFORMATION: For additional information see the direct final rule which is located in the Rules Section of this **Federal Register**.

The Environmental Protection Agency (EPA) is proposing to approve a negative declaration submitted by the Government of the United States Virgin Islands (Virgin Islands) on October 25, 2002. The negative declaration officially certifies to EPA that, to the best of the Virgin Islands' knowledge, there are no commercial and industrial solid waste incineration (CISWI) units in operation within the Territory. This negative declaration concerns existing CISWI units throughout the Territory of the U.S. Virgin Islands. The negative declaration satisfies the Federal Emission Guidelines (EG) requirements of EPA's promulgated regulation entitled "Emission Guidelines for Existing Commercial and Industrial Solid Waste Incineration Units" (65 FR 75338, December 1, 2000).

Dated: February 11, 2003.

Jane M. Kenny,

Regional Administrator, Region 2.

[FR Doc. 03-4517 Filed 2-26-03; 8:45 am]

BILLING CODE 6560-50-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 600

[I.D. 021303A]

Magnuson-Stevens Act Provisions; General Provisions for Domestic Fisheries; Application for Exempted Fishing Permits (EFPs)

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

ACTION: Notification of a proposal for EFPs to conduct experimental fishing; request for comments.

SUMMARY: The Administrator, Northeast Region, NMFS (Regional Administrator) has made a preliminary determination that the subject EFP application contains all of the required information and warrants further consideration. The Regional Administrator has also made a preliminary determination that the activities authorized under the EFP are consistent with the goals and objectives of the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP); the Atlantic Mackerel, Squid, and Butterfish FMP; and the Bluefish FMP. However, further review and consultation may be necessary before a final determination is made to issue an EFP. Therefore, NMFS announces that the Regional Administrator proposes to issue EFPs that would allow up to two vessels to conduct a supplemental finfish survey, and up to 15 additional vessels to conduct fishing operations otherwise restricted by the regulations governing the fisheries of the Northeastern United States. In order to fund the survey, the 15 additional vessels would be fishing for specific amounts of named species under the Research Set-Aside (RSA) Program. Regulations under the Magnuson-Stevens Fishery Conservation and Management Act require publication of this notification to provide interested parties the opportunity to comment on applications for proposed EFPs.

DATES: Comments on this document must be received on or before 5 p.m. EST March 14, 2003.

ADDRESSES: Written comments should be sent to Patricia A. Kurkul, Regional Administrator, NMFS, Northeast Regional Office, 1 Blackburn Drive, Gloucester, MA 01930. Mark the outside of the envelope "Comments on NFI Supplemental Survey EFP Proposal."

Comments may also be sent via facsimile (fax) to (978) 281-9135.

FOR FURTHER INFORMATION CONTACT: Paul Perra, Fishery Policy Analyst, 978-281-9153.

SUPPLEMENTARY INFORMATION: The application process for an EFP was completed by the National Fisheries Institute (NFI) on January 30, 2003. The experiment, coordinated by NFI in cooperation with Rutgers University and NMFS' Northeast Fisheries Science Center, requested EFPs for up to two vessels to conduct a supplemental finfish survey targeting Mid-Atlantic migratory species, and for up to 15 additional vessels to harvest RSA allocations. The two vessels participating in the research project, and up to 15 additional vessels, would make additional compensation fishing trips, during closed seasons, to land up to the total RSA quota allocation of 67,163 lb (30,465 kg) of summer flounder, 21,325 lb (9,673 kg) of scup, 21,338 lb (9,679 kg) of black sea bass, 140,543 lb (63,749 kg) of *Loligo* squid, 194,413 lb (88,185 kg) of *Illex* squid, 702,712 lb (318,745 kg) of Atlantic mackerel, and 141,900 lb (64,365 kg) of bluefish. However, no fish caught during these compensation fishing trips smaller than the legal minimum size could be sold, traded, bartered, or processed for sale. Landings from such trips would be sold to generate funds that would defray the costs associated with the research projects.

Under the research project, the research vessels would make two trips of several days each, along two transects, and conduct 10 research tows during each trip. One transect would be east of Hudson Canyon and one south of Baltimore Canyon. Sampling would be conducted in March and May of 2003 along each transect at 50 fm (91 m), 60 fm (110 m), 80 fm (146 m), 125 fm (229 m), 150 fm (247 m), 200 fm (366 m), and 225 fm (411 m), with two additional trawl sites added along each of the transects based on the catches of the target species. Primary target species would be summer flounder, scup, black sea bass, monkfish, and spiny dogfish; secondary target species would be skates, yellowtail flounder, winter flounder, lobster, and *Loligo* squid. One tow would be conducted at each station over a fixed distance of 2 nautical miles, with tow speeds of 3 to 3.2 knots. A four-seam box net would be used with a 2.4-inch (6-cm) mesh codend. Careful records would be kept of all gear descriptions so that subsequent surveys can use consistent gear. Scientific research personnel would be on board

the vessels at all times when the survey is conducted.

To facilitate the collection of data during periods with the greatest potential for fishing success, the research vessels would be exempt from the summer flounder closures at 50 CFR 648.101(a) and (b); summer flounder gear restrictions at § 648.104; scup trimester quota closures at § 648.121(a); scup gear restricted area provisions at § 648.122(a) and (b); scup trawl gear restrictions at § 648.123; black sea bass trip limits at § 648.140(b)(2); black sea bass quarterly quota closures at § 648.141; black sea bass gear restrictions at § 648.144(1),(2),(3), and (4); *Loligo* squid, *Illex* squid, and mackerel closures at § 648.22(a) and (c); and bluefish closures at § 648.161(a) and (b). In order to collect individual fish

sizes and other data, the research vessels would also be exempt from: Minimum size requirements for summer flounder at § 648.103(a),(b), and (c); for scup at § 648.124(a); for black sea bass at § 648.143; for monkfish at § 648.93; for spiny dogfish at § 648.233; for yellowtail flounder and winter flounder at § 648.83; and for lobster at § 697.20(b); from spiny dogfish closures at § 648.231; and from Northeast multispecies regulated mesh requirements, and restrictions on gear and methods of fishing at § 648.80.

The 1 to 15 vessels that would be used to harvest the RSA allocations would be exempt only from the summer flounder closures at § 648.101(a) and (b); summer flounder gear restrictions at § 648.104; scup trimester quota closures at § 648.121(a); black sea bass trip limits

at § 648.140(b)(2); black sea bass closures at § 648.140 and § 648.141; *Loligo* squid, *Illex* squid, and Atlantic mackerel closures at § 648.22(a) and (c); and bluefish closures at § 648.161(a) and (b).

Any landings that would occur from research or compensation fishing would be reported in the Vessel Trip Reports, as required. All landings would be landed in compliance with applicable state landing laws.

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

Dated: February 20, 2003.

Richard W. Surdi,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 03-4566 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-22-S

Notices

Federal Register

Vol. 68, No. 39

Thursday, February 27, 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

Forest Service

Notice of Resource Advisory Committee Meeting

AGENCY: Southwest Idaho Resource Advisory Committee, Boise, ID, USDA, Forest Service.

ACTION: Notice of meeting.

SUMMARY: Pursuant to the authorities in the Federal Advisory Committee Act (Pub. L. 92-463) and under the Secure Rural Schools and Community Self-Determination Act of 2000 (Pub. L. 106-393), the Boise and Payette National Forests' Southwest Idaho Resource Advisory Committee will meet Wednesday, Marcy 19, 2003 in Boise, Idaho for a business meeting. The meeting is open to the public.

SUPPLEMENTARY INFORMATION: The business meeting on March 19, begins at 10:30 a.m. at the Idaho Counties Risk Management Program Building (ICRMP), 3100 Vista Avenue, Boise, Idaho. Agenda topics will include review and approval of project proposals, and an open public forum.

FOR FURTHER INFORMATION CONTACT: Randy Swick, Designated Federal Officer, at (208) 634-0401.

Dated: February 21, 2003.

Mark J. Madrid,

Forest Supervisor, Payette National Forest.
[FR Doc. 03-4594 Filed 2-26-03; 8:45 am]

BILLING CODE 3410-11-M

DEPARTMENT OF AGRICULTURE

Natural Resources Conservation Service

Notice of Proposed Changes to Section 1 of the Iowa State Technical Guide

AGENCY: Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture.

ACTION: Notice of availability of proposed changes in the Iowa NRCS State Technical Guide for review and comment.

SUMMARY: It has been determined by the NRCS State Conservationist for Iowa that changes must be made in the NRCS State Technical Guide specifically in Section 4 Practice Standards and Specifications, Conservation Cover (327) and Critical Area Planting (342) to account for improved technology. These practice standards can be used in systems that treat highly erodible land.

DATES: Comments will be received on or before March 31, 2003.

FOR FURTHER INFORMATION CONTACT: Leroy Brown, State Conservationist, Natural Resources Conservation Service, 210 Walnut Street, 693 Federal Building, Des Moines, Iowa 50309; at 515/284-4260; fax 515/284-4394.

SUPPLEMENTARY INFORMATION: Section 343 of the Federal Agriculture Improvement and Reform Act of 1996 states that revisions made after enactment of the law to NRCS State technical guides used to carry out highly erodible land and wetland provisions of the law shall be made available for public review and comment. For the next 30 days the NRCS will receive comments relative to the proposed changes. Following that period a determination will be made by the NRCS regarding disposition of those comments and a final determination of change will be made.

Dated: February 7, 2003.

Leroy Brown,

State Conservationist.

[FR Doc. 03-4620 Filed 2-26-03; 8:45 am]

BILLING CODE 3410-16-M

DEPARTMENT OF AGRICULTURE

Rural Housing Service

Notice of Request for Extension of a Currently Approved Information Collection

AGENCY: Rural Housing Service, USDA.
ACTION: Proposed collection; comments requested.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, this notice announces the Rural Housing Service's intention to request an extension for a currently approved information collection in support of the program for Rural Rental and Cooperative Housing Loan Policies, Procedures, and Authorizations.

DATES: Comments on this notice must be received by April 28, 2003 to be assured of consideration.

FOR FURTHER INFORMATION CONTACT: Douglas H. MacDowell, Senior Loan Specialist, Rural Housing Service, U.S. Department of Agriculture, Stop 0781, Washington, DC 20250-0781, Telephone (202) 720-1604.

SUPPLEMENTARY INFORMATION:

Title: Rural Rental and Cooperative Housing Loan Policies, Procedures, and Authorizations.

OMB Number: 0575-0047.

Expiration Date of Approval: June 30, 2003.

Type of Request: Extension of a currently approved information collection.

Abstract: The Rural Housing Service (RHS), an agency of the U.S. Department of Agriculture, is authorized to make loans to finance rural rental housing (RRH) and rural cooperative housing (RCH) complexes and related facilities under Sections 515 and 521 of Title V of the Housing Act of 1949, as amended. The RRH and RCH programs provide affordable rental and cooperative housing for elderly or disabled persons and families, and other persons and families of low or moderate income in rural areas.

RHS is responsible for ensuring that these Federally funded loans are made to eligible applicants for authorized purposes. The information collected is necessary to determine the eligibility of the applicant and the feasibility of the proposed housing. If not collected, the Agency would be providing unauthorized Federal assistance.

Estimate of Burden: Public reporting burden for this collection of information is estimated to average 6.9 hours per response.

Respondents: Individuals, trusts, associations, partnerships, limited partnerships, State or local public agencies, consumer cooperatives, and profit or nonprofit corporations.

Estimated Number of Respondents: 623.

Estimated Number of Responses per Respondent: 9.

Estimated Total Annual Burden on Respondents: 35,088.

Copies of this information collection can be obtained from Tracy Givelekian, Regulations and Paperwork Management Branch, at (202) 692-0039.

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 will have practical utility; (b) the accuracy of the Agency's estimate of the burden of the proposed collection of information including the validity of the methodology and assumptions used; (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 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. Comments may be sent to Tracy Givelekian, Regulations and Paperwork Management Branch, U.S. Department of Agriculture, Rural Development, STOP 0742, 1400 Independence Ave. SW., Washington, DC 20250-0742. All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Dated: February 22, 2003.

Arthur A. Garcia,

Administrator, Rural Housing Service.

[FR Doc. 03-4622 Filed 2-26-03; 8:45 am]

BILLING CODE 3410-XV-P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[Order No. 1267]

Expansion of Foreign-Trade Zone 219, Yuma, AZ

Pursuant to its authority under the Foreign-Trade Zones Act of June 18, 1934, as amended (19 U.S.C. 81a-81u),

the Foreign-Trade Zones Board (the Board) adopts the following Order:

Whereas, the Yuma County Airport Authority, Inc., grantee of Foreign-Trade Zone 219, submitted an application to the Board for authority to expand FTZ 219 to include a site at the Yuma Commerce Center (95 acres) in Yuma, Arizona, within the San Luis Customs port of entry (FTZ Docket 32-2002; filed 8/14/02);

Whereas, notice inviting public comment was given in the **Federal Register** (67 FR 54168, 8/21/02) and the application has been processed pursuant to the FTZ Act and the Board's regulations; and,

Whereas, the Board adopts the findings and recommendations of the examiner's report, and finds that the requirements of the FTZ Act and Board's regulations are satisfied, and that the proposal is in the public interest;

Now, therefore, the Board hereby orders:

The application to expand FTZ 219 is approved, subject to the Act and the Board's regulations, including Section 400.28.

Signed at Washington, DC, this 7th day of February 2003.

Faryar Shirzad,

Assistant Secretary of Commerce for Import Administration, Alternate Chairman, Foreign-Trade Zones Board.

[FR Doc. 03-4584 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[Docket 9-2003]

Foreign-Trade Zone 148—Knoxville, Tennessee, Area; Application for Expansion

An application has been submitted to the Foreign-Trade Zones (FTZ) Board (the Board) by the Industrial Development Board of Blount County, grantee of Foreign-Trade Zone 148, requesting authority to expand FTZ 148, in the Knoxville, Tennessee, area, adjacent to the Knoxville 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 February 6, 2003.

FTZ 148 was approved on June 28, 1988 (Board Order 384, 53 FR 26095, 7/11/88). The zone project currently consists of the following sites: *Site 1* (45.6 acres)—within the Bill Mullins Warehouse Park, Prosser Road,

Knoxville; *Site 2* (4.5 acres)—Blount County Industrial Park, some five miles south of McGhee Tyson Airport, Maryville; *Site 2A* (27,000 sq. ft)—McGhee Tyson Airport, some 3 miles north of Site 2, Alcoa; and, *Site 3* (6.5 acres)—Valley Industrial Park, State Route 62, Oak Ridge.

The applicant is now requesting authority to expand the general-purpose zone to include an additional site (54 acres) in Crossville: *Proposed Site 4* (54 acres)—within the CoLinX warehousing facilities, 1536 Genesis Road, Crossville. The site is owned by the Industrial Development Board of Cumberland County and the City of Crossville. It will be operated by CoLinX LLC, a logistics services provider. 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 April 28, 2003. Rebuttal comments in response to material submitted during the foregoing period may be submitted during the subsequent 15-day period (to May 13, 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 U.S. Customs Service, Duncan Federal Building, 710 Locust Street, Room 435, Knoxville, Tennessee 37902.

Dated: February 6, 2003.

Dennis Puccinelli,

Executive Secretary.

[FR Doc. 03-4580 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE**Foreign-Trade Zones Board****[Order No. 1268]****Approval for Expanded Manufacturing Authority (Industrial Automation Products), Within Foreign-Trade Subzone 204A, Siemens Energy & Automation, Inc.; Carter County, TN**

Pursuant to its authority under the Foreign-Trade Zones Act of June 18, 1934, as amended (19 U.S.C. 81a–81u), the Foreign-Trade Zones Board (the Board) adopts the following Order:

Whereas, the Tri-Cities Airport Commission, grantee of Foreign-Trade Zone 204, has applied to expand the scope of manufacturing authority for FTZ Subzone 204A (Siemens Energy & Automation, Inc. facilities in Carter County, Tennessee) to include production of additional finished products (e.g., automotive, media, and traffic technologies) and components under FTZ procedures (FTZ Doc. 16–2002; filed 3–4–2002);

Whereas, notice inviting public comment was given in the **Federal Register** (67 FR 11097, 3–12–2002); and,

Whereas, the Board adopts the findings and recommendations of the examiner's report, and finds that the requirements of the FTZ Act and Board's regulations are satisfied, and

that approval of the application is in the public interest;

Now, therefore, the Board hereby approves the request subject to the FTZ Act and the Board's regulations, including Section 400.28, and further subject to a restriction that carrying cases of textile materials (HTS 4202.12) be admitted to the subzone in privileged-foreign status.

Signed at Washington, DC, this 7th day of February 2003.

Faryar Shirzad,

Assistant Secretary of Commerce for Import Administration, Alternate Chairman, Foreign-Trade Zones Board.

[FR Doc. 03–4581 Filed 2–26–03; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE**International Trade Administration****Initiation of Antidumping and Countervailing Duty Administrative Reviews**

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice of initiation of antidumping and countervailing duty administrative reviews.

SUMMARY: The Department of Commerce (the Department) has received requests to conduct administrative reviews of various antidumping and countervailing duty orders and findings with January anniversary dates. In accordance with the Department's regulations, we are initiating those administrative reviews.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT:

Holly A. Kuga, Office of AD/CVD Enforcement, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230, telephone: (202) 482–4737.

SUPPLEMENTARY INFORMATION:**Background**

The Department has received timely requests, in accordance with 19 CFR 351.213(b)(2002), for administrative reviews of various antidumping and countervailing duty orders and findings with January anniversary dates.

Initiation of Reviews

In accordance with 19 CFR 351.221(c)(1)(i), we are initiating administrative reviews of the following antidumping and countervailing duty orders and findings. We intend to issue the final results of these reviews not later than January 31, 2004.

	Period to be reviewed
Antidumping Duty Proceedings	
France:	
Anhydrous Sodium Metasilicate (ASM), A–427–098	1/1/02–12/31/02
Rhone-Poulenc, S.A.	
The People's Republic of China:	
Folding Gift Boxes ¹ A–570–866	8/6/01–12/31/02
Red Point Paper Products Co., Ltd.	
Yun Choy, Ltd.	
Potassium Permanganate ² A–570–001	1/1/02–12/31/02
Groupstars Chemicals, LLC	
The Republic of Korea:	
Top-of-the-Stove Stainless Steel Cooking Ware, A–580–601	1/1/02–12/31/02
Dong Won Metal Co., Ltd.	
Countervailing Duty Proceedings: None.	
Suspension Agreements: None.	

¹ If one of the above-named companies does not qualify for a separate rate, all other exporters of folding gift boxes from the People's Republic of China who have not qualified for a separate rate are deemed to be covered by this review as part of the single PRC entity of which the named exporters are a part.

² If one of the above-named companies does not qualify for a separate rate, all other exporters of potassium permanganate from the People's Republic of China who have not qualified for a separate rate are deemed to be covered by this review as part of the single PRC entity of which the named exporters are a part.

During any administrative review covering all or part of a period falling between the first and second or third and fourth anniversary of the publication of an antidumping duty order under § 351.211 or a determination under § 351.218(f)(4) to

continue an order or suspended investigation (after sunset review), the Secretary, if requested by a domestic interested party within 30 days of the date of publication of the notice of initiation of the review, will determine whether antidumping duties have been

absorbed by an exporter or producer subject to the review if the subject merchandise is sold in the United States through an importer that is affiliated with such exporter or producer. The request must include the name(s) of the

exporter or producer for which the inquiry is requested.

Interested parties must submit applications for disclosure under administrative protective orders in accordance with 19 CFR 351.305.

These initiations and this notice are in accordance with section 751(a) of the Tariff Act of 1930, as amended (19 U.S.C. 1675(a)), and 19 CFR 351.221(c)(1)(i).

Dated: February 21, 2003.

Holly A. Kuga,

*Senior Office Director, Group II, Office 4,
Import Administration.*

[FR Doc. 03-4650 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

International Trade Administration

[A-570-007]

Barium Chloride From the People's Republic of China: Rescission of Antidumping Duty Administrative Review

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice of rescission of antidumping duty administrative review.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT: Drew Jackson of John Conniff at (202) 482-4406 or (202) 482-1009, respectively; AD/CVD Enforcement, Office 4, Group II, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230.

SUPPLEMENTARY INFORMATION:

Background

On October 2, 2002, the Department of Commerce (the Department) published a notice of opportunity to request an administrative review of the antidumping duty order on barium chlorloride from the People's Republic of China (PRC) (67 FR 61849). Pursuant to a request made by Chemical Products Corporation (the petitioner), the Department initiated an administrative review of the antidumping duty order on barium chloride from the PRC for the period October 1, 2001, through September 30, 2002, on November 18, 2002 (67 FR 70402); (November 22, 2002). On January 7, 2003, the petitioner withdrew its request for the administrative review of barium chloride from the PRC.

Rescission of Review

Section 351.213(d)(1) of the Department's regulations provides that a party that requests an administrative review may withdraw the request within 90 days after the date of publication of the notice of initiation of the requested administrative review. The Department is rescinding the administrative review of the order on barium chloride from the PRC for the period October 1, 2001, through September 30, 2002, because the requesting party has withdrawn its request for this administrative review within the 90-day time limit and no other interested parties have requested a review of barium chloride from the PRC for this time period.

This notice is in accordance with section 777(i)(1) of the Act and 19 CFR 351.213(d)(4).

Dated: February 20, 2003.

Bernard T. Carreau,

Deputy Assistant Secretary for Import Administration.

[FR Doc. 03-4582 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-M

DEPARTMENT OF COMMERCE

International Trade Administration

[A-489-805]

Notice of Rescission of Antidumping Duty Administrative Review: Certain Pasta from Turkey

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice of Rescission of Antidumping Duty Administrative Review.

SUMMARY: On August 19, 2002, the Department of Commerce (the Department) initiated an administrative review of the antidumping duty order on certain pasta (pasta) from Turkey, covering the period July 1, 2001 through June 30, 2002, and one manufacturer/exporter of the subject merchandise, Filiz Gida Sanayi ve Ticaret (Filiz). *See Initiation of Antidumping and Countervailing Duty Administrative Reviews and Requests for Revocation in Part*, 67 FR 55000 (August 27, 2002). This review has now been rescinded due to Filiz's withdrawal of its request for an administrative review.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT: Lyman Armstrong or Jim Neel, AD/CVD Enforcement, Office 6, Group II, Import Administration, International Trade Administration, U.S. Department of

Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482-3601 or (202) 482-4161, respectively.

SUPPLEMENTARY INFORMATION:

Background

On July 31, 2002, the Department received a letter from Filiz requesting an administrative review of the antidumping order on pasta from Turkey. On August 19, 2002, the Department initiated an administrative review of the antidumping order on pasta from Turkey for the period July 1, 2001 to June 30, 2002. On August 29, 2002, Filiz submitted a letter requesting to withdraw from the above referenced administrative review.

Scope of the Review

Imports covered by this review are shipments of certain non-egg dry pasta in packages of five pounds (2.27 kilograms) or less, whether or not enriched or fortified or containing milk or other optional ingredients such as chopped vegetables, vegetable purees, milk, gluten, diastases, vitamins, coloring and flavorings, and up to two percent egg white. The pasta covered by this scope is typically sold in the retail market, in fiberboard or cardboard cartons, or polyethylene or polypropylene bags of varying dimensions.

Excluded from the scope of this review are refrigerated, frozen, or canned pastas, as well as all forms of egg pasta, with the exception of non-egg dry pasta containing up to two percent egg white.

The merchandise subject to review is currently classifiable under item 1902.19.20 of the *Harmonized Tariff Schedule of the United States* (HTSUS). Although the HTSUS subheading is provided for convenience and Customs purposes, the written description of the merchandise subject to the order is dispositive.

Rescission of Administrative Review

Within 90 days of the August 27, 2002 notice of initiation, Filiz requested to withdraw from the above referenced administrative review. *See* Letter from Filiz to the Department dated August 29, 2002 on file in the Central Records unit, Room B-099, Main Building of the Department of Commerce.

In accordance with the Department's regulations, and consistent with its practice, the Department hereby rescinds the administrative review of pasta from Turkey for the period July 1, 2001 to June 30, 2002. *See* 19 CFR section 351.213(d)(1), which states in pertinent part: "The Secretary will

rescind an administrative review under this section, in whole or in part, if a party that requested a review withdraws the request within 90 days of the date of publication of notice of initiation of the requested review."

This notice is in accordance with section 751(a)(1) of the Tariff Act of 1930, as amended, and section 351.213(d) of the Department's regulations.

Dated: February 13, 2003.

Bernard Carreau,

Deputy Assistant Secretary for Import Administration.

[FR Doc. 03-4579 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-S

DEPARTMENT OF COMMERCE

International Trade Administration

[A-570-847]

Persulfates from the People's Republic of China: Extension of Time Limit for Preliminary Results in Antidumping Duty Administrative Review

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Extension of Time Limit for Preliminary Results of Antidumping Duty Administrative Review.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT:

Michael Strollo at (202) 482-0629, Office of AD/CVD Enforcement, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, N.W., Washington D.C. 20230.

SUPPLEMENTARY INFORMATION: On August 27, 2002, the Department published in the Federal Register a notice of initiation of administrative review of the antidumping duty order on persulfates from the People's Republic of China. See Initiation of Antidumping and Countervailing Duty Administrative Reviews and Requests for Revocation in Part, 67 FR 55000 (Aug. 27, 2002). The period of review is July 1, 2001 through June 30, 2002. The review covers one exporter of the subject merchandise to the United States.

In accordance with section 751(a)(3)(A) of the Tariff Act of 1930, as amended (the Act), the Department shall make a preliminary determination in an administrative review of an antidumping duty order within 245 days after the last day of the anniversary month of the date of publication of the order. The Act further provides,

however, that the Department may extend the 245-day period to 365 days if it determines it is not practicable to complete the review within the foregoing time period. Due to the respondent's request for a partial revocation of the antidumping duty order, and the fact that the Department needs sufficient time to conduct a verification in this proceeding, it is not practicable to complete this review within the time limit mandated by section 751(a)(3)(A) of the Act. Therefore, in accordance with section 751(a)(3)(A) of the Act, we have fully extended the deadline until July 31, 2003.

Dated: February 21, 2003.

Susan Kuhbach,

Acting Deputy Assistant Secretary for Import Administration.

[FR Doc. 03-4653 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-S

DEPARTMENT OF COMMERCE

International Trade Administration

[A-351-837, A-533-828, A-580-852, A-201-831, A-549-820]

Notice of Initiation of antidumping duty investigations: Prestressed Concrete Steel Wire Strand From Brazil, India, the Republic of Korea, Mexico, and Thailand

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Initiation of antidumping duty investigations.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT:

Magd Zalok (Brazil and Republic of Korea) at (202) 482-4162, Victoria Schepker (India and Thailand) at (202) 482-1756, and David Layton (Mexico) at (202) 482-0371, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230.

Initiation of Investigations

The Petitions

On January 31, 2003, the Department received petitions filed in proper form by American Spring Wire Corp., Insteel Wire Products Company, and Sumiden Wire Products Corp. (collectively, the petitioners). The Department received supplemental information to the petitions from February 4 through February 14, 2003.

In accordance with section 732(b)(1) of the Tariff Act of 1930, as amended

(the Act), the petitioners allege that imports of prestressed concrete steel wire strand (PC strand) from Brazil, India, the Republic of Korea (Korea), Mexico, and Thailand are, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Act, and that imports from Brazil, India, Korea, Mexico, and Thailand are materially injuring, or are threatening to materially injure an industry in the United States.

The Department finds that the petitioners filed these petitions on behalf of the domestic industry because they are interested parties as defined in sections 771(9)(C) of the Act and they have demonstrated sufficient industry support with respect to each of the antidumping investigations that they are requesting the Department to initiate. See *infra*, "Determination of Industry Support for the Petitions."

Period of Investigation

The anticipated period of investigation (POI) for Brazil, India, Korea, Mexico, and Thailand is January 1, 2002, through December 31, 2002.

Scope of Investigations

For purposes of these investigations, prestressed concrete steel wire (PC strand) is steel strand produced from wire of non-stainless, non-galvanized steel, which is suitable for use in prestressed concrete (both pretensioned and post-tensioned) applications. The product definition encompasses covered and uncovered strand and all types, grades, and diameters of PC strand.

The merchandise under these investigations is currently classifiable under subheadings 7312.10.3010 and 7312.10.3012 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS subheadings are provided for convenience and Customs purposes, the written description of the merchandise under investigation is dispositive.

As discussed in the preamble to the Department's regulations (*Antidumping Duties; Countervailing Duties; Final Rule*, 62 FR 27296, 27323 (May 19, 1997)), we are setting aside a period for parties to raise issues regarding product coverage. The Department encourages all parties to submit such comments within 20 calendar days of publication of this notice. Comments should be addressed to Import Administration's Central Records Unit, Room 1870, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230. The period of scope consultations is intended to provide the Department with ample opportunity to consider all comments

and consult with parties prior to the issuance of the preliminary determinations.

Determination of Industry Support for the Petitions

Section 732(b)(1) of the Act requires that a petition be filed on behalf of the domestic industry. Section 732(c)(4)(A) of the Act provides that the Department's industry support determination, which is to be made before the initiation of the investigation, be based on whether a minimum percentage of the relevant industry supports the petition. A petition meets this requirement if the domestic producers or workers who support the petition account for: (1) At least 25 percent of the total production of the domestic like product; and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the petition. Moreover, section 732(c)(4)(D) of the Act provides that, if the petition does not establish support of domestic producers or workers accounting for more than 50 percent of the total production of the domestic like product, the Department shall either poll the industry or rely on other information in order to determine if there is support for the petition.

Section 771(4)(A) of the Act defines the "industry" as the producers of a domestic like product. Thus, to determine whether a petition has the requisite industry support, the statute directs the Department to look to producers and workers who produce the domestic like product. The U.S. International Trade Commission (ITC), which is responsible for determining whether "the domestic industry" has been injured, must also determine what constitutes a domestic like product in order to define the industry. While both the Department and the ITC must apply the same statutory definition regarding the domestic like product (section 771(10) of the Act), they do so for different purposes and pursuant to a separate and distinct authority. In addition, the Department's determination is subject to limitations of time and information. Although this may result in different definitions of the like product, such differences do not render the decision of either agency contrary to the law.¹

Section 771(10) of the Act defines the domestic like product as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this title." Thus, the reference point from which the domestic like product analysis begins is "the article subject to an investigation," *i.e.*, the class or kind of merchandise to be investigated, which normally will be the scope as defined in the petition.

The petitions cover PC strand as defined in the *Scope of Investigations* section, above, a single class or kind of merchandise. The Department has no basis on the record to find the petitioners' definition of the domestic like product to be inaccurate. The Department, therefore, has adopted the domestic like product definition set forth in the petitions.

Finally, the Department has determined that, pursuant to section 732(c)(4)(A) of the Act, the petitions contain adequate evidence of industry support and, therefore, polling is unnecessary. See Import Administration Antidumping Investigations Initiation Checklist: Prestressed Concrete Steel Wire Strand from Brazil, India, Korea, Mexico, and Thailand, Industry Support section, February 20, 2003 (the Initiation Checklist), on file in the Central Records Unit, Room B-099 of the main Department of Commerce building.

For each country, we determined, based on information provided in the petition, that the petitioners have demonstrated industry support representing over 50 percent of total production of the domestic like product. Therefore, the domestic producers or workers who support the petitions account for at least 25 percent of the total production of the domestic like product, and the requirements of section 732(c)(4)(A)(i) of the Act are met. Furthermore, because the Department received no opposition to the petitions, the domestic producers or workers who support the petitions account for more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for or opposition to the petitions. Thus, the requirements of section 732(c)(4)(A)(ii) are also met. Accordingly, we determine that these petitions are filed on behalf of the domestic industry within the meaning of section 732(b)(1) of the Act. See the Injury Allegation section in the Initiation Checklist.

Initiation Standard for Cost Investigations

Pursuant to section 773(b) of the Act, the petitioners provided information demonstrating reasonable grounds to believe or suspect that sales in the home markets of India, Korea, Mexico, and Thailand were made at prices below the cost of production (COP) and, accordingly, requested that the Department conduct country-wide sales-below-COP investigations in connection with these investigations. The Statement of Administrative Action (SAA), submitted to the Congress in connection with the interpretation and application of the Uruguay Round Agreements Act (URAA), states that an allegation of sales below COP need not be specific to individual exporters or producers. The SAA states that "Commerce will consider allegations of below-cost sales in the aggregate for a foreign country, just as Commerce currently considers allegations of sales at less than fair value on a country-wide basis for purposes of initiating an antidumping investigation." SAA, H.R. Doc. No. 103-316 at 833 (1994).

Further, the SAA provides that section 773(b)(2)(A) of the Act retains the requirement that the Department have "reasonable grounds to believe or suspect" that below-cost sales have occurred before initiating such an investigation. Reasonable grounds exist when an interested party provides specific factual information on costs and prices, observed or constructed, indicating that sales in the foreign market in question are at below-cost prices. We have analyzed the country-specific allegations as described below for India, Korea, Mexico, and Thailand. Based on our analysis, we found reasonable grounds to believe or suspect that sales of PC strand in the above-referenced countries were made at prices below cost. See the Normal Value sections below.

Export Price and Normal Value

The following are descriptions of the allegations of sales at less than fair value upon which the Department based its decision to initiate these investigations. The sources of data for the deductions and adjustments relating to U.S. and home market prices, and constructed value (CV) are discussed in greater detail in the Initiation Checklist. Should the need arise to use any of this information as facts available under section 776 of the Act in our preliminary or final determinations, we may re-examine the information and revise the margin calculations, if appropriate.

¹ See *Algoma Steel Corp. Ltd. v. United States*, 688 F. Supp. 639, 642-44 (CIT 1988); *High Information Content Flat Panel Displays and Display Glass from Japan: Final Determination; Rescission of Investigation and Partial Dismissal of Petition*, 56 FR 32376, 32380-81 (July 16, 1991).

Brazil*Constructed Export Price*

The petitioners based constructed export price (CEP) on prices for sales of low-relaxation PC strand from a Brazilian producer, through its U.S. affiliate, to an unaffiliated U.S. purchaser. The petitioners calculated a single average U.S. gross unit price and deducted from it estimated costs for international freight and insurance charges, U.S. inland freight charges, harbor maintenance and merchandise processing fees, and imputed credit expenses to arrive at an average net U.S. price. Information regarding U.S. warehousing expenses, indirect selling expenses, inventory carrying expenses, and CEP profit was not reasonably available to petitioners; therefore, the petitioners did not deduct these items from the average gross unit price. Instead, as a conservative estimate of these expenses, the petitioners subtracted from the U.S. price an amount for the prevailing commission rate for PC strand sold in the United States via unaffiliated agents to foreign producers' unaffiliated U.S. customers.

Normal Value

With respect to the normal value (NV), the petitioners provided a home market price for low-relaxation PC strand that was obtained from a foreign market researcher familiar with Brazilian sales. See Memorandum to the File from Magd Zalok, Case Analyst, concerning Telephone Conversation with Market Researcher Regarding the Petitions for Imposition of Antidumping: Prestressed Concrete Steel Wire Strand from Brazil (February 12, 2003). To calculate the NV, the petitioners adjusted the gross unit price for home market credit expenses and inland freight.

The estimated dumping margin for Brazil, based on a comparison of CEP and home market price, is 118.75 percent.

India*Constructed Export Price*

The petitioners based CEP on prices for low-relaxation PC strand from an Indian producer, through its U.S. affiliate, to unaffiliated U.S. purchasers. The petitioners calculated a single average gross unit price and deducted estimated costs for international freight and insurance charges, U.S. inland freight charges, harbor maintenance and merchandise processing fees, and imputed credit expenses to calculate an average net U.S. price. Information regarding U.S. warehousing expenses,

indirect selling expenses, inventory carrying expenses, and CEP profit were not reasonably available to the petitioners; therefore, the petitioners did not deduct these items from the average gross unit price. Instead, as a conservative estimate of these expenses, the petitioners subtracted from the U.S. price an amount for the prevailing commission rate for PC strand sold in the United States via unaffiliated agents to foreign producers' unaffiliated U.S. customers.

Normal Value

With respect to NV, the petitioners provided home market prices for low-relaxation PC strand produced that was obtained from a foreign market researcher familiar with Indian sales. See Memorandum to the File from Victoria Schepker, Case Analyst, concerning Telephone Conversation with Market Researcher Regarding the Petitions for Imposition of Antidumping: Prestressed Concrete Steel Wire Strand from India (February 7, 2003). The petitioners calculated an average gross unit price and adjusted the average price for home market credit expenses and inland freight.

The petitioners also provided information demonstrating reasonable grounds to believe or suspect that sales of PC strand in the home market were made at prices below the fully absorbed COP, within the meaning of section 773(b) of the Act, and requested that the Department conduct a country-wide sales-below-cost investigation.

Pursuant to section 773(b)(3) of the Act, COP consists of cost of manufacture (COM); selling, general and administrative (SG&A) expenses; financial expenses; and packing expenses. The petitioners calculated COM based on their own production experience, adjusted for known differences between costs incurred to produce PC strand in the United States and in India using publicly available data. For initiation purposes, we have recalculated the labor and electricity costs by first indexing the costs in the foreign denominated currency and then converting the costs to U.S. Dollars based on the prevailing exchange rate for the comparison period. To calculate SG&A, the petitioners relied on amounts reported in the financial statements, for the fiscal year ending March 31, 2002, of Tata SSL Ltd., an Indian PC strand producer. To calculate financial expenses, the petitioners relied on amounts reported in the consolidated financial statements, for the fiscal year ending March 31, 2002, of Tata Iron & Steel Company Ltd., an Indian PC strand producer. Based upon a

comparison of the price of the foreign like product in the home market to the calculated COP of the product, we find reasonable grounds to believe or suspect that sales of the foreign like product were made below the COP, within the meaning of section 773(b)(2)(A)(i) of the Act. Accordingly, the Department is initiating a country-wide cost investigation.

Pursuant to sections 773(a)(4), 773(b) and 773(e) of the Act, the petitioners also based NV for sales in India on CV. The petitioners calculated CV using the same COM, SG&A, and interest expense figures used to compute the Indian home market costs. Consistent with section 773(e)(2) of the Act, the petitioners included in CV an amount for profit based upon amounts reported by an Indian PC strand producer's financial statements for the year ended March 31, 2002.

The estimated dumping margin for India, based on a comparison of CEP and home market price, is 65.23 percent. The estimated dumping margin based on a comparison between CEP and CV is 102.07 percent.

Korea*Export Price*

The petitioners based export price (EP) on prices within the POI for sales of low-relaxation PC strand produced by two Korean companies and offered for sale to an unaffiliated U.S. customer. The petitioners averaged the gross prices, by company, and deducted from the average prices international freight and insurance expenses, U.S. customs duties, U.S. harbor maintenance and merchandise processing fees, and the U.S. inland freight expenses.

Normal Value

With respect to NV, the petitioners provided home market prices based on prices within the POI for sales of PC strand produced by two Korean companies and offered for sale to an unaffiliated customer. The price quotes are based on information gathered by a market researcher familiar with the Korean sales. See Memorandum to the File from Magd Zalok, Case Analyst, concerning Telephone Conversation with Market Researcher Regarding the Petitions for Imposition of Antidumping: Prestressed Concrete Steel Wire Strand from Korea (February 11, 2003). To calculate the NV, the petitioners deducted inland freight from the home market prices, and, consistent with our statutory EP circumstances-of-sale calculation methodology, adjusted the home market prices for imputed credit and commissions by deducting

home market credit expenses from the home market prices and adding the U.S. imputed credit and U.S. commission expenses to these prices.

The petitioners also provided information demonstrating reasonable grounds to believe or suspect that sales of PC strand in the home market were made at prices below the fully absorbed COP, within the meaning of section 773(b) of the Act, and requested that the Department conduct a country-wide sales-below-cost investigation.

Pursuant to section 773(b)(3) of the Act, COP consists of COM, SG&A expenses, financial expenses, and packing expenses. The petitioners calculated COM based on their own production experience, adjusted for known differences between costs incurred to produce PC strand products in the United States and Korea using publicly available data. For initiation purposes, we have recalculated the labor and electricity costs by first indexing the costs in the foreign denominated currency and then converting the costs to U.S. Dollars based on the prevailing exchange rate for the comparison period. To calculate SG&A and interest expenses, the petitioners relied upon amounts reported in the 2001 financial statements of Kiswire—Koryo Steel Company (Kiswire) and Dong il—Dong-il Steel Manufacturing Co. Inc., two Korean producers of PC strand. Based upon a comparison of the price of the foreign like product in the home market to the calculated COP of the product, we find reasonable grounds to believe or suspect that sales of the foreign like product were made below the COP, within the meaning of section 773(b)(2)(A)(i) of the Act. Accordingly, the Department is initiating a country-wide cost investigation.

Pursuant to sections 773(a)(4), 773(b) and 773(e) of the Act, the petitioners also based NV for sales in Korea on CV. The petitioners calculated CV using the same COM, SG&A and interest expense figures used to compute the Korean home market costs. Consistent with 773(e)(2) of the Act, the petitioners included in CV an amount for profit. For profit, the petitioners relied upon amounts reported in Kiswire's 2001 financial statements.

The estimated dumping margin for Korea, based on a comparison of EP and home market prices, ranges from 18.67 to 27.06 percent. The estimated dumping margin, based on a comparison between EP and CV, ranges from 42.62 to 54.19 percent.

Mexico

Export Price

The petitioners based EP on prices within the POI for sales of low-relaxation PC strand manufactured by a Mexican producer and offered for sale directly to an unaffiliated U.S. customer. The petitioners averaged the gross prices for the individual prices and deducted U.S. import duties, freight and insurance to the U.S. port of entry, and U.S. inland freight from the average price. The petitioners did not deduct U.S. harbor maintenance and merchandise processing fees, based on the conservative assumption that the Mexican products were shipped over land.

Normal Value

With respect to NV, the petitioners provided a home market price that was obtained from an invoice for an actual sale in Mexico to an unaffiliated customer. The petitioners state that the invoice price reported was a delivered price. To calculate the NV, the petitioners deducted inland freight from the home market price, and, consistent with our statutory EP circumstances-of-sale calculation methodology, adjusted the home market price for imputed credit and commissions by deducting home market credit expenses from the home market prices and adding the U.S. imputed credit and U.S. commission expenses to this price.

The petitioners have provided information demonstrating reasonable grounds to believe or suspect that sales of PC strand in the home market were made at prices below the fully absorbed COP, within the meaning of section 773(b) of the Act, and requested that the Department conduct a country-wide sales-below-cost investigation.

Pursuant to section 773(b)(3) of the Act, COP consists of the COM, SG&A, financial expenses, and packing expenses. The petitioners calculated COM based on their own production experience, adjusted for known differences between costs incurred to produce PC Strand in the United States and in Mexico using publicly available data. For initiation purposes, we have recalculated the labor, electricity and natural gas costs by first indexing the costs in the foreign-denominated currency and then converting the costs to U.S. Dollars based on the prevailing exchange rate for the comparison period. To calculate SG&A and financial expenses, the petitioners relied upon amounts reported in the 2001 financial statements of Aceros Camesa, S.A. de C.V. (Camesa), a Mexican producer of PC strand. Based upon a comparison of

the prices of the foreign like product in the home market to the calculated COP of the product, we find reasonable grounds to believe or suspect that sales of the foreign like product were made below the COP, within the meaning of section 773(b)(2)(A)(i) of the Act. Accordingly, the Department is initiating a country-wide cost investigation.

Pursuant to sections 773(a)(4), 773(b) and 773(e) of the Act, the petitioners also based NV for sales in Mexico on CV. The petitioners calculated CV using the same COM, SG&A, and financial expense figures used to compute home market costs. Consistent with 773(e)(2) of the Act, the petitioners included in CV an amount for profit. For profit, the petitioners relied upon amounts reported in Camesa's 2001 financial statements.

The estimated dumping margin in the petition for Mexico based on a comparison of EP and home market price is 50.16 percent. The estimated dumping margin based on a comparison between EP and CV is 77.20 percent.

Thailand

Export Price

The petitioners based EP on a price for sales of low-relaxation PC strand produced by a Thai company and offered for sale to an unaffiliated U.S. purchaser. The petitioners calculated a net U.S. price by deducting estimated costs for international freight, insurance charges, and harbor maintenance and merchandise processing fees.

Normal Value

With respect to NV, the petitioners provided a home market price for low-relaxation PC strand produced by a Thai company and offered for sale to an unaffiliated Thai purchaser. The price quotes are based on information gathered by a market researcher familiar with the Thai sales. See Memorandum to the File from Victoria Schepker, Case Analyst, concerning Telephone Conversation with Market Researcher Regarding the Petitions for Imposition of Antidumping: Prestressed Concrete Steel Wire Strand from Thailand (February 10, 2003). To calculate the NV, the petitioners deducted inland freight from the home market price, and, consistent with our statutory EP circumstances-of-sale calculation methodology, added the U.S. imputed credit and U.S. commission expenses to this price.

The petitioners have provided information demonstrating reasonable grounds to believe or suspect that sales of PC strand in the home market were

made at prices below the fully absorbed COP, within the meaning of section 773(b) of the Act, and requested that the Department conduct a country-wide sales-below-cost investigation.

Pursuant to section 773(b)(3) of the Act, COP consists of the COM, SG&A, financial expenses, and packing expenses. The petitioners calculated COM based on their own production experience, adjusted for known differences between costs incurred to produce PC Strand in the United States and in Thailand using publicly available data. For initiation purposes, we have recalculated the labor and electricity costs by first indexing the costs in the foreign-denominated currency and then converting the costs to U.S. Dollars based on the prevailing exchange rate for the comparison period. To calculate SG&A and financial expenses, the petitioners relied upon amounts reported in the 2001 financial statements of Siam Wire. Based upon a comparison of the prices of the foreign like product in the home market to the calculated COP of the product, we find reasonable grounds to believe or suspect that sales of the foreign like product were made below the COP, within the meaning of section 773(b)(2)(A)(i) of the Act. Accordingly, the Department is initiating a country-wide cost investigation.

Pursuant to sections 773(a)(4), 773(b) and 773(e) of the Act, the petitioners also based NV for sales in Thailand on CV. The petitioners calculated CV using the same COM, SG&A, and financial expense figures used to compute the Thai home market costs. Consistent with 773(e)(2) of the Act, the petitioners included in CV an amount for profit. For profit, the petitioners relied upon amounts reported in the Siam Wire's 2001 financial statements.

The estimated dumping margin for Thailand, based on a comparison of EP and home market price is 13.53 percent. The estimated dumping margin based on a comparison between EP and CV is 29.68 percent.

Fair Value Comparisons

Based on the data provided by the petitioners, there is reason to believe that imports of PC strand from Brazil, India, Korea, Mexico, and Thailand are being, or are likely to be, sold at less than fair value.

Allegations and Evidence of Material Injury and Causation

The petitioners allege that the U.S. industry producing the domestic like product is being materially injured, or is threatened with material injury, by reason of the cumulated imports from

Brazil, India, Korea, Mexico, and Thailand of the subject merchandise sold at less than NV.

The petitioners contend that the industry's injured condition is evident in the declining trends in net operating profits, net sales volumes, domestic prices, revenue, profit-to-sales ratios, production employment, capacity utilization, and domestic market share. The allegations of injury and causation are supported by relevant evidence including U.S. Customs import data, lost sales, and pricing information. We have assessed the allegations and supporting evidence regarding material injury and causation, and we have determined that these allegations are properly supported by adequate evidence and meet the statutory requirements for initiation. *See the Initiation Checklist.*

Initiation of Antidumping Investigations

Based upon our examination of the petitions on PC strand, we have found that they meet the requirements of section 732 of the Act. *See the Initiation Checklist.* Therefore, we are initiating antidumping duty investigations to determine whether imports of PC strand from Brazil, India, Korea, Mexico, and Thailand are being, or are likely to be, sold in the United States at less than fair value. Unless this deadline is extended, we will make our preliminary determinations no later than 140 days after the date of this initiation.

Distribution of Copies of the Petitions

In accordance with section 732(b)(3)(A) of the Act, a copy of the public version of each petition has been provided to the representatives of the governments of Brazil, India, Korea, Mexico, and Thailand. We will attempt to provide a copy of the public version of each petition to each exporter named in the petitions, as provided for under 19 CFR 351.203(c)(2).

ITC Notification

We have notified the ITC of our initiations as required by section 732(d) of the Act.

Preliminary Determinations by the ITC

The ITC will determine no later than March 17, 2003, whether there is a reasonable indication that imports of PC strand from Brazil, India, Korea, Mexico, and Thailand are causing material injury, or threatening to cause material injury, to a U.S. industry. A negative ITC determination for any country will result in the investigation being terminated with respect to that country; otherwise, these investigations

will proceed according to statutory and regulatory time limits.

This notice is issued and published pursuant to section 777(i) of the Act.

Dated: February 20, 2003.

Faryar Shirzad,

Assistant Secretary for Import Administration.

[FR Doc. 03-4652 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

International Trade Administration

[A-122-838]

Certain Softwood Lumber Products From Canada: Notice of Rescission of Antidumping Duty New Shipper Review

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice of rescission of antidumping duty new shipper review.

EFFECTIVE DATE: February 27, 2003.

SUMMARY: On January 8, 2003, the Department of Commerce (the Department) published in the **Federal Register** (68 FR 1030) a notice announcing the initiation of a new shipper review of the antidumping duty order on certain softwood lumber products from Canada, covering the period May 22, 2002, through October 31, 2002. The review covers Sciere La Pointe & Roy Ltee (La Pointe & Roy). We are now rescinding this review as a result of La Pointe & Roy's withdrawal of its request for a new shipper review.

FOR FURTHER INFORMATION CONTACT: Vicki Schepker or Keith Nickerson, at (202) 482-1756 or (202) 482-3813, respectively, AD/CVD Enforcement Office V, Group II, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street & Constitution Avenue, NW., Washington, DC 20230.

SUPPLEMENTARY INFORMATION:

Background

In accordance with 19 CFR 351.214(c) (April 2002), on November 26, 2002, La Pointe & Roy requested a new shipper review of the antidumping duty order on certain softwood lumber products from Canada. On December 31, 2002, in accordance with section 751(a)(2)(B)(ii) of the Tariff Act of 1930, as amended (the Act), and 19 CFR 351.214(d)(1), we initiated a new shipper review of this order for the period May 22, 2002, through October 31, 2002 (68 FR 1030). La Pointe & Roy withdrew its request for

a new shipper review on January 31, 2003.

Rescission of New Shipper Review

The Department's regulations at 19 CFR 351.214(f)(1) provide that the Department will rescind a new shipper review if the party that requested the review withdraws its request for review within 60 days of the date of publication of the notice of initiation of the requested review. La Pointe & Roy withdrew its request within the 60-day period. Accordingly, we are rescinding this review.

Notification

Bonding is no longer permitted to fulfill security requirements for shipments of certain softwood lumber products from Canada produced and exported by La Pointe & Roy, entered, or withdrawn from warehouse, for consumption in the United States on or after the publication of this rescission notice in the **Federal Register**.

This notice also serves as the only reminder to parties subject to administrative protective order (APO) of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305(a)(3). Timely written notification of the return/destruction of APO material or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanctions.

This notice is issued and published in accordance with sections 751(a)(2)(B)(iv) and 777(i) of the Act and 19 CFR 351.214(f)(3).

Dated: February 19, 2003.

Faryar Shirzad,

Assistant Secretary for Import Administration.

[FR Doc. 03-4583 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

International Trade Administration

[A-822-805]

Notice of Final Determination of Sales at Less Than Fair Value: Urea Ammonium Nitrate Solutions from Belarus

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice of Final Determination of Sales at Less Than Fair Value.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT: Tom Martin or Tom Futtner, AD/CVD Enforcement, Office 4, Group II, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone: (202) 482-3936, and (202) 482-3814, respectively.

SUPPLEMENTARY INFORMATION:

Final Determination

We determine that urea ammonium nitrate solutions (UANS) from Belarus are being sold, or are likely to be sold, in the United States at less than fair value (LTFV), as provided in section 735 of the Act. The estimated margins of sales at LTFV are shown in the *Final Determination of Investigation* section of this notice.

Case History

On October 3, 2002, the Department of Commerce (the Department) published the preliminary determination of sales at LTFV in the antidumping duty investigation of UANS from Belarus. *See Notice of Preliminary Determination of Sales at Less Than Fair Value: Urea Ammonium Nitrate Solutions From Belarus*, 67 FR 62015 (October 3, 2002) (*Preliminary Determination*). Since the preliminary determination, the following events have occurred.

On November 7, 2002, the Department published a postponement of the final determination of sales at LTFV in the antidumping duty investigation of UANS from Belarus. *See Postponement of the Final Determinations in the Less-Than-Fair-Value Investigations of Urea Ammonium Nitrate Solutions From Belarus, the Russian Federation, and Ukraine*, 67 FR 67823 (November 7, 2002).

During November 2002, the Department conducted a verification of Grodno Production Republican Enterprise's (Grodno) sales and factors of production (FOP) information. *See Memorandum from Tom Martin, Import Compliance Specialist, through Tom Futtner, Program Manager, to The File, "Verification of Sales and Factors of Production Information Reported by Grodno Production Republican Enterprise,"* dated December 20, 2002 (Verification Report). Both the petitioner and Grodno filed surrogate value information and data on November 26, 2002.¹

On November 1, 2002, the petitioner requested a hearing pursuant to 19 CFR

351.301(e). However, no hearing was held in this investigation because the petitioner withdrew its request for a hearing.

In a memorandum filed on December 23, 2002, we altered the time limit for submitting case briefs pursuant to 351.309(c)(1)(i) of the Department's regulations. We received a case brief from the petitioner on January 7, 2003. On January 14, 2003, the respondent, through the Embassy of the Republic of Belarus, requested, and the Department granted, an extension for Grodno to submit comments. The respondent provided comments on January 17, 2003.

Scope of the Investigation

For purposes of this investigation, the product covered is all mixtures of urea and ammonium nitrate in aqueous or ammoniacal solution, regardless of nitrogen content by weight, and regardless of the presence of additives, such as corrosion inhibitors. The merchandise subject to this investigation is classified in the Harmonized Tariff Schedule of the United States (HTSUS) under item number 3102.80.00.00. Although the HTSUS item number is provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.

Period of Investigation

The period of investigation (POI) is October 1, 2001, through March 31, 2002.

Analysis of Comments Received

All issues raised in the comments by parties to this proceeding and to which we have responded are listed in the Appendix to this notice and addressed in the Memorandum from Bernard T. Carreau, Deputy Assistant Secretary, to Faryar Shirzad, Assistant Secretary, "Issues and Decision Memorandum for the Final Determination in the Antidumping Duty Investigation of Urea Ammonium Nitrate Solutions from Belarus C October 1, 2001, through March 31, 2002," dated concurrently with this notice (*Decision Memorandum*), which is hereby adopted by this notice. Parties can find a complete discussion of the issues raised in this investigation and the corresponding recommendations in this public memorandum which is on file in the Central Records Unit (CRU), room B-099 of the main Department building. In addition, a complete version of the *Decision Memorandum* can be accessed directly on the Web at <http://ia.ita.doc.gov>. The paper copy and

¹ The petitioner in this investigation is the Nitrogen Solutions Fair Trade Committee. Its members consist of CF Industries, Inc., Mississippi Chemical Corporation, and Terra Industries, Inc.

electronic version of the *Decision Memorandum* are identical in content.

Non-Market Economy

The Department has treated Belarus as a nonmarket economy (NME) country in all previous antidumping investigations. See *Notice of Final Determination of Sales at Less Than Fair Value: Steel Concrete Reinforcing Bars From Belarus*, 66 FR 33528 (June 22, 2001). In accordance with section 771(18)(C)(i) of the Act, any determination that a foreign country is an NME country shall remain in effect until revoked. Therefore, pursuant to section 771(18)(C)(i) of the Act, the Department has continued to treat Belarus as an NME country for the purposes of this investigation.

Separate Rates

In our Preliminary Determination, we found that the only responding company, Grodno, met the criteria for the application of separate, company-specific antidumping duty rates. We have not received any other information since the preliminary determination which would warrant reconsideration of our separates rates determination with respect to this company. For a complete discussion of the Department's determination that the respondent is entitled to a separate rate, see the *Preliminary Determination*. We have also addressed an allegation made by the petitioner in the *Decision Memorandum* at Comment 4.

The Belarus-Wide Rate

In all NME cases, the Department makes a rebuttable presumption that all exporters or producers located in the NME country comprise a single exporter under common government control, "the NME entity." The Department assigns a single NME rate to the NME entity unless an exporter can demonstrate eligibility for a separate rate.

In the *Preliminary Determination*, Grodno qualified for a separate rate. Furthermore, information on the record of this investigation indicates that Grodno accounted for all imports of subject merchandise during the POI. Since Grodno is the only known Belarusian exporter of UANS to the United States during the POI, we have calculated a Belarus-wide rate for this investigation based on the weighted-average margin determined for Grodno.

Surrogate Country

When the Department is investigating imports from an NME country, section 773(c)(1) of the Act directs the Department to base normal value (NV) on the NME producer's FOP, valued in a comparable market economy that is a significant producer of comparable merchandise. For purposes of the final determination, we continue to find that South Africa remains the appropriate surrogate country for Belarus. We received comments from the respondent pertaining to our selection of South Africa, which are discussed in the accompanying *Decision Memorandum* at Comment 1.

Verification

As provided in section 782(i) of the Act, we verified the information submitted by the respondent for use in our final determination. We used standard verification procedures including examination of relevant accounting and production records, and original source documents provided by the respondents. For changes from the Preliminary Determination as a result of verification, see the *Changes Since the Preliminary Determination* section below.

Changes Since the Preliminary Determination

Based on our findings at verification and on our analysis of the comments

received, we have made adjustments to the calculation methodologies. We are valuing the river water FOP and the steam FOPs separately from surrogate overhead value, and we are applying truck freight rather than rail freight to three FOPs. These adjustments are discussed in detail in the (1) *Decision Memorandum*, (2) *Memorandum from the Team to the File*, "Additional Surrogate Country Values Used for the Final Determination of the Antidumping Duty Investigation of Urea Ammonium Nitrate Solutions from Belarus," dated February 18, 2003, and (3) *Memorandum from the Team to the File*, "Calculation Memorandum for the Final Determination," dated February 18, 2003.

Continuation of Suspension of Liquidation

In accordance with section 735(c)(1)(B)(ii) of the Act, we are directing the U.S. Customs Service (Customs) to continue suspension of liquidation of entries of subject merchandise from Belarus that are entered, or withdrawn from warehouse, for consumption on or after October 3, 2002 (the date of publication of the *Preliminary Determination* in the **Federal Register**). We will instruct the Customs Service to require a cash deposit or the posting of a bond equal to the weighted-average amount by which the NV exceeds the U.S. price, as indicated in the chart below. These suspension-of-liquidation instructions will remain in effect until further notice.

Final Determination of Investigation

We determine that the following weighted-average percentage margins exist for the period October 1, 2001, through March 31, 2002:

Manufacturer/exporter	Weighted-Average Margin (percent)
Grodno Production Republican Enterprise	226.82
Belarus-Wide Rate	226.82

The Belarus-wide rate applies to all entries of the subject merchandise except for entries from Grodno.

U.S. International Trade Commission Notification

In accordance with section 735(d) of the Act, we have notified the U.S. International Trade Commission (ITC) of our determination. As our final determination is affirmative, the ITC

will determine, within 45 days, whether these imports are materially injuring, or threaten material injury to, the U.S. industry. If the ITC determines that material injury, or threat of material injury does not exist, the proceeding will be terminated and all securities posted will be refunded or canceled. If the ITC determines that such injury does exist, the Department will issue an antidumping duty order directing

Customs officials to assess antidumping duties on all imports of subject merchandise entered for consumption on or after the effective date of the suspension of liquidation.

Notification Regarding Administrative Protective Order (APO)

This notice also serves as a reminder to parties subject to APO of their responsibility concerning the

disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

This determination is issued and published in accordance with sections 735(d) and 777(i)(1) of the Act.

Dated: February 19, 2003.

Faryar Shirzad,

Assistant Secretary for Import Administration.

Appendix--Issues in Decision Memorandum

1. Whether Lithuania Should Be Used as a Surrogate Country
2. Whether Catalysts Should Be Valued Separately
3. Whether Water and Water-based Inputs (Steam and Raw Condensate) Should Be Valued Separately
4. Whether Grodno Should Be Issued a Separate Rate

[FR Doc. 03-4648 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-S

DEPARTMENT OF COMMERCE

International Trade Administration

[A-823-814]

Notice of Final Determination of Sales at Less Than Fair Value: Urea Ammonium Nitrate Solutions from Ukraine

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT: Crystal Scherr Crittenden at (202) 482-0989, or Tom Futtner at (202) 482-3814, Office of AD/CVD Enforcement IV, Group II, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230.

SUPPLEMENTARY INFORMATION:

Final Determination

We determine that urea ammonium nitrate solutions (UANS) from Ukraine are being, or are likely to be, sold in the United States at less than fair value (LFTV), as provided in section 735 of the Tariff Act of 1930, as amended (the Act). The estimated margins are shown in the "Suspension of Liquidation" section of this notice.

Case History

On October 3, 2002, the Department published its preliminary determination in the above-captioned antidumping duty investigation. *See Notice of Preliminary Determination of Sales at Less Than Fair Value: Urea Ammonium Nitrate Solutions from Ukraine*, 67 FR 62013 (October 3, 2002) (*Preliminary Determination*). *See also Notice of Initiation of Antidumping Duty Investigations: Urea Ammonium Nitrate Solutions from Belarus, Lithuania, the Russian Federation, and Ukraine*, 67 FR 35492 (May 20, 2002) (*Initiation Notice*).

Since the preliminary determination, the following events have occurred. On November 1, 2002, the petitioner¹ requested a hearing pursuant to 19 CFR 351.301(e). However, no hearing was held in this investigation because the petitioner withdrew its request for a hearing. On November 27, 2002, the Department postponed the final determination for this investigation in accordance with 19 CFR 351.210(b). *See Postponement of the Final Determinations in the Less-Than-Fair-Value Investigations of Urea Ammonium Nitrate Solutions From Belarus, the Russian Federation, and Ukraine*, 67 FR 67823 (November 7, 2002). On December 23, 2002, the Department issued the schedule for interested parties to comment on the preliminary determination. *See Memo to the File from Paige Rivas, Thomas Martin and Crystal Crittenden dated December 23, 2002.* No case or rebuttal briefs were submitted.

Scope of Investigation

For purposes of these investigations, the product covered is all mixtures of urea and ammonium nitrate in aqueous or ammoniacal solution, regardless of nitrogen content by weight, and regardless of the presence of additives, such as corrosion inhibitors. The merchandise subject to these investigations is classified in the Harmonized Tariff Schedule of the United States (HTSUS) under item number 3102.80.00.00. Although the HTSUS item number is provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.

Period of Investigation

The period of investigation (POI) is October 1, 2001, through March 31, 2002.

¹ The petitioner is the Nitrogen Solutions Fair Trade Committee (the petitioner). Its members consist of CF Industries, Inc., Mississippi Chemical Corporation, and Terra Industries, Inc.

Nonmarket Economy Country Status

The Department has treated Ukraine as an nonmarket economy (NME) country in all previous antidumping investigations. *See Notice of Final Determination of Sales at Less Than Fair Value: Solid Agricultural Ammonium Nitrate from Ukraine*, 66 FR 38632 (July 25, 2001). This NME designation remains in effect until it is revoked by the Department. *See* section 771(1)(C) of the Act. No party has sought revocation of the NME status in this investigation.² Therefore, in accordance with section 771(1)(C) of the Act, we will continue to treat Ukraine as an NME country.

Ukraine-Wide Rate

In an NME proceeding, the Department presumes that all companies within the country are subject to governmental control, and assigns separate rates only if the respondent demonstrates the absence of both *de jure* and *de facto* governmental control over export activities. *See Notice of Sales at Less Than Fair Value: Bicycles From the People's Republic of China*, 61 FR 19026, 19027 (April 30, 1996). In the *Preliminary Determination*, we found that the mandatory respondents, JSC Stirol (Stirol) and JSC Azot Cherkassy (Cherkassy), did not demonstrate eligibility for a separate rate. Accordingly, we preliminarily determined that Stirol and Cherkassy, in addition to all other exporters, are part of the NME-entity and subject to the Ukraine-wide rate.

We received no comments on this issue. Therefore, in our final results we continue to find that Stirol and Cherkassy, in addition to all other exporters, are part of the NME entity and therefore subject to the Ukraine-wide rate.

Use of Facts Available

In the *Preliminary Determination*, the Department found that the respondents did not cooperate to the best of their ability and applied the total adverse facts available rate of 193.58 percent, the corroborated initiation rate, as the "Ukraine-wide" rate. *See Preliminary Determination. See also Initiation Notice.* No interested party objected to the use of adverse facts available, nor to

² We note that the Department received a request for revocation of Ukraine's NME status but determined to defer its decision on this issue. *See Notice to Defer a Decision Regarding Ukraine's Non-Market Economy Status: Antidumping Duty Investigation of Carbon and Certain Alloy Steel Wire Rod from Ukraine*, 67 FR 51536 (August 8, 2002). Information on this separate proceeding can also be found at Import Administration's website, at <http://ia.ita.doc.gov/>

the Department's choice of facts available. For this final determination, we are continuing to apply total adverse facts available for the "Ukraine-wide" rate.

Changes Since the Preliminary Determination

The Department updated the 2000 income data for expected wages of selected NME countries initially revised in September 2002. In the *Preliminary Determination*, the Department calculated the "Ukraine-wide" rate using \$0.78 per hour, the 2000 expected wage for Ukraine revised in September 2002, as the surrogate value for Ukrainian labor. See Total Facts Available Corroboration Memorandum, dated September 26, 2002. For the final determination, we applied \$0.76 per hour, the 2000 expected wage for Ukraine corrected in February 2003, as the surrogate value for Ukrainian labor. See Memorandum from Crystal Crittenden, Import Compliance Specialist, Through Tom Futtner, Senior Program Manager, to The File, "Changes Since the Preliminary Determination Calculation Memorandum," dated February 18, 2003.

Suspension of Liquidation

Pursuant to section 735(c)(1)(B) of the Act, we are instructing the U.S. Customs Service (Customs) to continue to suspend liquidation of all entries of UANS from Ukraine that are entered, or withdrawn from warehouse, for consumption on or after October 3, 2003 (the date of publication of the *Preliminary Determination* in the *Federal Register*). Customs shall continue to require a cash deposit or the posting of a bond equal to the estimated amount by which the normal value exceeds the U.S. price as shown below. The suspension of liquidation instructions will remain in effect until further notice.

We determine that the following percentage margin exists for the period October 1, 2001, through March 31, 2002:

Manufacturer/Exporter	Margin (percent)
Ukraine-wide	193.57

U.S. International Trade Commission (ITC) Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination. As our final determination is affirmative, the ITC will determine, within 45 days, whether these imports are causing material injury, or threat of material injury, to an industry in the United States. If the ITC

determines that material injury, or threat of injury does not exist, the proceeding will be terminated and all securities posted will be refunded or cancelled. If the ITC determines that such injury does exist, the Department will issue an antidumping duty order directing Customs officials to assess antidumping duties on all imports of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the effective date of the suspension of liquidation.

Notification Regarding Administrative Protective Order (APO)

This notice also serves as a reminder to parties subject to APO of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

This determination is issued and published in accordance with sections 735(d) and 777(i)(1) of the Act.

Dated: February 19, 2003.

Faryar Shirzad,

Assistant Secretary for Import Administration.

[FR Doc. 03-4649 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-S

DEPARTMENT OF COMMERCE

International Trade Administration

[C-533-829]

Notice of Initiation of Countervailing Duty Investigation: Prestressed Concrete Steel Wire Strand From India

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Initiation of countervailing duty investigation.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT: Robert Copyak, Alicia Kinsey, or Jim Neel, AD/CVD Enforcement, Office VI, Group II, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; (202) 482-2209, (202) 482-4793, or (202) 482-4161, respectively.

Initiation of Investigation

The Applicable Statute and Regulations

Unless otherwise indicated, all citations to the statute are references to the provisions effective January 1, 1995, the effective date of the amendments made to the Tariff Act of 1930 (the Act) by the Uruguay Round Agreements Act (URAA). In addition, unless otherwise indicated, all citations to the Department of Commerce's (the Department's) regulations are references to the provisions codified at 19 CFR part 351 (2002).

The Petition

On January 31, 2003, the Department received a petition filed in proper form by the following parties: American Spring Wire Corp., Insteel Wire Products Company, and Sumiden Wire Products Corp. (collectively, the petitioners). The Department received from the petitioners information supplementing the petition on February 12, 2003.

In accordance with section 702(b)(1) of the Act, the petitioners allege that manufacturers, producers, or exporters of prestressed concrete steel wire strand ("PC strand") in India receive countervailable subsidies within the meaning of section 701 of the Act.

The Department finds that the petitioners filed this petition on behalf of the domestic industry because they are interested parties as defined in sections 771(9)(C) and (d) of the Act. The petitioners have demonstrated sufficient industry support with respect to the countervailing duty investigation that they are requesting the Department to initiate (see the Determination of Industry Support for the Petition section below).

Scope of Investigation

For purposes of this investigation, prestressed concrete steel wire (PC strand) is steel strand produced from wire of non-stainless, non-galvanized steel, which is suitable for use in prestressed concrete (both pretensioned and post-tensioned) applications. The product definition encompasses covered and uncovered strand and all types, grades, and diameters of PC strand.

The merchandise under this investigation is currently classifiable under subheadings 7312.10.3010 and 7312.10.3012 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS subheadings are provided for convenience and Customs purposes, the written description of the merchandise under investigation is dispositive.

As discussed in the preamble to the Department's regulations (*Antidumping Duties; Countervailing Duties; Final Rule*, 62 FR 27296, 27323 (May 19, 1997)), we are setting aside a period for parties to raise issues regarding product coverage. The Department encourages all parties to submit such comments within 20 calendar days of publication of this notice. Comments should be addressed to Import Administration's Central Records Unit, Room 1870, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230. The period of scope consultations is intended to provide the Department with ample opportunity to consider all comments and consult with parties prior to the issuance of the preliminary determination.

Consultations

In accordance with Article 13.1 of the Agreement on Subsidies and Countervailing Measures and section 702(b)(4)(A)(ii) of the Act, on February 13, 2003, we invited the Government of India ("GOI") to hold consultations with us regarding this petition. Representatives of the GOI accepted our offer for consultations, but ultimately were unable to meet prior to this initiation. See the February 20, 2003, memorandum to the file titled "Invitation for Consultations with the Government of India Regarding the Countervailing Duty Petition on Prestressed Concrete Steel Wire Strand from India." We continue to extend the opportunity to meet for consultations to the GOI.

Determination of Industry Support for the Petition

Section 702(b)(1) of the Act requires that a petition be filed on behalf of the domestic industry. Section 702(c)(4)(A) of the Act provides that the Department's industry support determination, which is to be made before the initiation of the investigation, be based on whether a minimum percentage of the relevant industry supports the petition. A petition meets this requirement if the domestic producers or workers who support the petition account for: (1) at least 25 percent of the total production of the domestic like product; and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the petition. Moreover, section 702(c)(4)(D) of the Act provides that, if the petition does not establish support of domestic producers or workers accounting for more than 50 percent of the total

production of the domestic like product, the Department shall either poll the industry or rely on other information in order to determine if there is support for the petition.

Section 771(4)(A) of the Act defines the "industry" as the producers of a domestic like product. Thus, to determine whether the petition has the requisite industry support, the statute directs the Department to look to producers and workers who produce the domestic like product. The International Trade Commission (ITC), which is responsible for determining whether "the domestic industry" has been injured, must also determine what constitutes a domestic like product in order to define the industry. While both the Department and the ITC must apply the same statutory definition regarding the domestic like product (section 771(10) of the Act), they do so for different purposes and pursuant to separate and distinct authorities. In addition, the Department's determination is subject to limitations of time and information. Although this may result in different definitions of the like product, such differences do not render the decision of either agency contrary to the law.¹

Section 771(10) of the Act defines the domestic like product as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this title." Thus, the reference point from which the domestic like product analysis begins is "the article subject to an investigation," i.e., the class or kind of merchandise to be investigated, which normally will be the scope as defined in the petition.

The petition covers PC strand as defined in the *Scope of Investigation* section, above, a single class or kind of merchandise. The Department has no basis on the record to find the petitioners' definition of the domestic like product to be inaccurate. The Department, therefore, has adopted the domestic like product definition set forth in the petition.

We determined, based on information provided in the petition, that the petitioners have demonstrated industry support representing over 50 percent of total production of the domestic like product. Therefore, the domestic producers or workers who support the petition account for at least 25 percent of the total production of the domestic

like product, and the requirements of section 702(c)(4)(A)(i) of the Act are met. Furthermore, because the Department received no opposition to the petition, the domestic producers or workers who support the petition account for more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for or opposition to the petition. Thus, the requirements of section 702(c)(4)(A)(ii) are also met. Because the Department has determined that, pursuant to section 702(c)(4)(A) of the Act, the petition contains adequate evidence of industry support, polling is unnecessary. 702(c)(4)(D) of the Act; see Import Administration Countervailing Duty Investigation Initiation Checklist ("*Initiation Checklist*"), Industry Support Section, February 20, 2003, on file in the Central Records Unit (CRU) of the main Department of Commerce building. Accordingly, we determine that this petition is filed on behalf of the domestic industry within the meaning of section 702(b)(1) of the Act. See the Injury Allegation section in the *Initiation Checklist*.

Injury Test

Because India is a "Subsidies Agreement Country" within the meaning of section 701(b) of the Act, section 701(a)(2) applies to this investigation. Accordingly, the ITC must determine whether imports of the subject merchandise from India materially injure, or threaten material injury to, a U.S. industry.

Allegations and Evidence of Material Injury and Causation

The petitioners allege that the U.S. industry producing the domestic like product is being materially injured, or is threatened with material injury, by reason of subsidized imports of the subject merchandise.

The petitioners contend that the industry's injured condition is evident in the declining trends in net operating profits, net sales volumes, domestic prices, revenue, profit-to-sales ratios, production employment, capacity utilization, and domestic market share. The allegations of injury and causation are supported by relevant evidence including U.S. Customs import data, lost sales, and pricing information. We have assessed the allegations and supporting evidence regarding material injury and causation, and we have determined that these allegations are properly supported by adequate evidence and meet the statutory requirements for initiation. See the Injury Allegation section of the *Initiation Checklist*.

¹ See *Algoma Steel Corp. Ltd., v. United States*, 688 F. Supp. 639, 642-44 (CIT 1988); *High Information Content Panel Displays and Display Glass from Japan: Final Determination; Recission of Investigation and Partial Dismissal of Petition*, 56 FR 32376, 32380-81 (July 16, 1991).

Period of Investigation (POI)

The petitioners contend that the POI is April 1, 2001 through March 31, 2002, which is the last completed fiscal year for each of the alleged producers/exporters of the subject merchandise. If these companies do not have the same fiscal year then the POI would be calendar year 2001.

Allegations of Subsidies

Section 702(b) of the Act requires the Department to initiate a countervailing duty proceeding whenever an interested party files a petition, on behalf of an industry, that (1) alleges the elements necessary for an imposition of a duty under section 701(a), and (2) is accompanied by information reasonably available to petitioners supporting the allegations.

We are initiating an investigation of the following programs alleged in the petition to have provided countervailable subsidies to manufacturers, producers and exporters of the subject merchandise in India (a full description of each program is provided in the *Initiation Checklist*):

A. Government of India Programs

1. Duty Entitlement Passbook Scheme (DEPBS)
2. Pre-Shipment and Post-Shipment Export Financing
3. Export Promotion of Capital Goods Scheme (EPCGS)
4. Loans from the Steel Development Fund (SDF)
5. Exemption of Export Credit from Interest Taxes
6. Advance Licenses
7. Income Tax Exemption Scheme (ITES) (Sections 10A, 10B and 80 HHC)
8. Government of India Loan Guarantees

B. Programs in the State of Maharashtra

1. Sales Tax Incentives
2. Capital Incentive Scheme
3. Octroi Refund Scheme
4. Electricity Duty Exemption Scheme
5. Exemption of Sales and Purchase Taxes for Certain Investments Related to Automobiles or Automobile Components

C. Program in the State of Bihar

1. Sales Tax Incentives

D. Programs in the State of Jharkhand

1. Sales Tax Incentives
2. Captive Electricity Generative Plant Subsidy
3. Interest Subsidy
4. Stamp Duty and Registration
5. Pollution Control Equipment Subsidy
6. Mega Units

7. Captive Electricity Tax Exemptions**E. Program in the State of Gujarat****1. Sales Tax Incentives**

We are not initiating an investigation of the following programs alleged in the petition to have provided countervailable subsidies to manufacturers, producers and exporters of the subject merchandise in India (a full description of each program is provided in the *Initiation Checklist*):

D. Government of India Program**1. Special Import Licenses (SILs)****E. Program in the State of Bihar****1. Power Incentives****C. Programs in the State of Gujarat**

1. Incentives to Premier and Prestigious Units
2. Incentives for Private Sector Investments in Infrastructure Projects
3. Government Infrastructure Assistance to Medium and Large Industries
4. Promotion of Specific Industrial Sectors

Initiation of Countervailing Duty Investigation

The Department has examined the countervailing duty petition on PC strand from India, and found that it complies with the requirements of section 702(b) of the Act. Therefore, in accordance with section 702(b) of the Act, we are initiating a countervailing duty investigation to determine whether manufacturers, producers, or exporters of PC strand from India receive countervailable subsidies.

Distribution of Copies of the Petition

In accordance with section 702(b)(4)(A)(i) of the Act, a copy of the public version of the petition has been provided to the representatives of the GOI. We will attempt to provide a copy of the public version of the petition to each exporter named in the petition, as provided for under 19 CFR 351.203(c)(2).

International Trade Commission Notification

Pursuant to section 702(d) of the Act, we have notified the ITC of our initiation.

Preliminary Determination by the ITC

The ITC will determine by March 17, 2003, whether there is a reasonable indication that imports of PC strand from India are causing material injury, or threatening to cause material injury, to a U.S. industry. A negative ITC determination will result in the

investigation being terminated; otherwise, this investigation will proceed according to statutory and regulatory time limits.

This notice is issued and published pursuant to section 777(i) of the Act.

Dated: February 20, 2003.

Faryar Shirzad,

Assistant Secretary for Import Administration.

[FR Doc. 03-4651 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE**International Trade Administration**

[C-475-821]

Notice of Rescission of Countervailing Duty Administrative Review: Stainless Steel Wire Rod from Italy

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice of Rescission of Countervailing Duty Administrative Review.

SUMMARY: On October 18, 2002, the Department of Commerce (the Department) initiated an administrative review of the countervailing duty order on stainless steel wire rod (SSWR) from Italy, covering the period January 1, 2001 through December 31, 2001, and one manufacturer/exporter of the subject merchandise, Acciaierie Valbruna S.p.A. (Valbruna). See *Initiation of Antidumping and Countervailing Duty Administrative Reviews and Requests for Revocation in Part*, 67 FR 65336 (October 24, 2002). This review has now been rescinded due to Valbruna's withdrawal of its request for an administrative review.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT: Stephanie Moore or Jim Neel, AD/CVD Enforcement, Office 6, Group II, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482-3692 or (202) 482-4161, respectively.

SUPPLEMENTARY INFORMATION:**Background**

On September 30, 2002, the Department received a letter from Valbruna requesting an administrative review of the countervailing order on SSWR from Italy. On October 18, 2002, the Department initiated an administrative review of this order for the period January 1, 2001 through

December 31, 2001. On January 6, 2003, Valbruna submitted a letter requesting to withdraw from the above referenced administrative review.

Scope of the Review

For purposes of this administrative review, SSWR comprises products that are hot-rolled or hot-rolled annealed and/or pickled and/or descaled rounds, squares, octagons, hexagons or other shapes, in coils, that may also be coated with a lubricant containing copper, lime or oxalate. SSWR is made of alloy steels containing, by weight, 1.2 percent or less of carbon and 10.5 percent or more of chromium, with or without other elements. These products are manufactured only by hot-rolling or hot-rolling, annealing, and/or pickling and/or descaling, and are normally sold in coiled form, and are of solid cross-section. The majority of SSWR sold in the United States is round in cross-sectional shape, annealed and pickled, and later cold-finished into stainless steel wire or small-diameter bar. The most common size for such products is 5.5 millimeters or 0.217 inches in diameter, which represents the smallest size that normally is produced on a rolling mill and is the size that most wire drawing machines are set up to draw. The range of SSWR sizes normally sold in the United States is between 0.20 inches and 1.312 inches in diameter.

The products covered by this administrative review are currently classifiable under subheadings 7221.00.0005, 7221.00.0015, 7221.00.0030, 7221.00.0045, and 7221.00.0075 of the *Harmonized Tariff Schedule of the United States* (HTSUS). Although the HTSUS subheadings are provided for convenience and Customs purposes, the written description of the scope of this review is dispositive.

Rescission of Review

Within 90 days of the October 24, 2002 notice of initiation, Valbruna requested to withdraw its request for an administrative review. See Letter from Valbruna to the Department dated January 6, 2003 on file in the Central Records unit, Room B-099, Main Building of the Department of Commerce.

In accordance with the Department's regulations, and consistent with its practice, the Department hereby rescinds the administrative review of SSWR from Italy for the period January 1, 2001 to December 31, 2001. See 19 CFR section 351.213(d)(1), which states in pertinent part: "The Secretary will rescind an administrative review under this section, in whole or in part, if a

party that requested a review withdraws the request within 90 days of the date of publication of notice of initiation of the requested review."

This notice is in accordance with section 751(a)(1) of the Tariff Act of 1930, as amended, and section 351.213(d) of the Department's regulations.

Dated: February 13, 2003.

Bernard Carreau,

Deputy Assistant Secretary for Import Administration.

[FR Doc. 03-4578 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DS-S

DEPARTMENT OF COMMERCE

International Trade Administration

[Docket No. 021220324-3029-02]

Special American Business Internship Training Program (SABIT)

AGENCY: International Trade Administration, Department of Commerce.

ACTION: Notice of extension of funding availability for grants under the Special American Business Internship Training Program (SABIT).

SUMMARY: The International Trade Administration publishes this notice to extend the closing date for the Special American Business Internship Training Program (SABIT) from March 1, 2003, to April 7, 2003.

DATES: To be considered, applications must be received in the SABIT office by April 7, 2002. Processing of complete applications takes approximately three to four months. All awards are expected to be made by July 1, 2003.

FOR FURTHER INFORMATION CONTACT: Liesel Duhon, Director, Special American Business Internship Training program, International Trade Administration, U.S. Department of Commerce, phone—(202) 482-0073, facsimile—(202) 482-2443. These are not toll free numbers.

SUPPLEMENTARY INFORMATION: This notice amends the **Federal Register** notice of December 27, 2002 (67 FR 79056-79059), announcing the availability of funds for the Special American Business Internship Training program (SABIT), for training business executives and scientists (also referred to as "interns") from Eurasia (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan). This notice extends the closing date of the referenced **Federal Register** notice for

five weeks to April 7, 2003. All applications must be received by SABIT by April 7, 2003. All information in the previous announcement remains current, except for the change of the closing date.

Dated: February 21, 2003.

Tracy M. Rollins,

Deputy Director, SABIT Program.

[FR Doc. 03-4497 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-HE-P

DEPARTMENT OF COMMERCE

International Trade Administration

Closed Meeting of the U.S. Automotive Parts Advisory Committee (APAC)

AGENCY: International Trade Administration, Commerce.

ACTION: Announcement of meeting.

SUMMARY: The APAC will have a closed meeting on March 13, 2003 at the U.S. Department of Commerce to discuss U.S.-made automotive parts sales in Japanese and other Asian markets.

DATES: March 13, 2003.

FOR FURTHER INFORMATION CONTACT: Dr. Robert Reck, U.S. Department of Commerce, Room 4036, Washington, DC 20230, telephone: 202-482-1418.

SUPPLEMENTARY INFORMATION: The U.S. Automotive Parts Advisory Committee (the "Committee") advises U.S. Government officials on matters relating to the implementation of the Fair Trade in Automotive Parts Act of 1998 (Pub. L. 105-261). The Committee: (1) Reports to the Secretary of Commerce on barriers to sales of U.S.-made automotive parts and accessories in Japanese and other Asian markets; (2) reviews and considers data collected on sales of U.S.-made auto parts and accessories in Japanese and other Asian markets; (3) advises the Secretary of Commerce during consultations with other Governments on issues concerning sales of U.S.-made automotive parts in Japanese and other Asian markets; and (4) assists in establishing priorities for the initiative to increase sales of U.S.-made auto parts and accessories to Japanese markets, and otherwise provide assistance and direction to the Secretary of Commerce in carrying out the intent of that section; and (5) assists the Secretary of Commerce in reporting to Congress by submitting an annual written report to the Secretary on the sale of U.S.-made automotive parts in Japanese and other Asian markets, as well as any other issues with respect to which the Committee provides advice pursuant to its authorizing legislation.

At the meeting, committee members will discuss specific trade and sales expansion programs related to automotive parts trade policy between the United States and Japan and other Asian markets.

The Acting Assistant Secretary for Administration, with the concurrence of the General Counsel formally determined on February 12, 2003, pursuant to Section 10(d) of the Federal Advisory Committee Act, as amended, that the March 13th meeting of the Committee and of any subcommittee thereof, dealing with privileged or confidential commercial information may be exempt from the provisions of the Act relating to open meeting and public participation therein because these items are concerned with matters that are within the purview of 5 U.S.C. 552b (c)(4) and (9)(B). A copy of the Notice of Determination is available for public inspection and copying Room 5317, Main Commerce.

Dated: February 12, 2003.

Henry Misisco,

Director, Office of Automotive Affairs.

[FR Doc. 03-4610 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-DR-P

DEPARTMENT OF COMMERCE

International Trade Administration

North American Free-Trade Agreement, Article 1904; NAFTA Panel Reviews; Request for Panel Review

AGENCY: NAFTA Secretariat, United States Section, International Trade Administration, Department of Commerce.

ACTION: Notice of Completion of Panel Review of the final remand determination made by the U.S. International Trade Administration, in the matter of Pure and Alloy Magnesium from Canada, Secretariat File No. USA-CDA-2000-1904-07.

SUMMARY: Pursuant to the Order of the Binational Panel dated January 10, 2003, affirming the final remand determination described above was completed on January 21, 2003.

FOR FURTHER INFORMATION CONTACT: Caratina L. Alston, United States Secretary, NAFTA Secretariat, Suite 2061, 14th and Constitution Avenue, Washington, DC 20230, (202) 482-5438.

SUPPLEMENTARY INFORMATION: On January 10, 2003, the Binational Panel issued an order which affirmed the final remand determination of the United States International Trade Administration ("ITA") concerning Pure and Alloy Magnesium from Canada. The

Secretariat was instructed to issue a Notice of Completion of Panel Review on the 31st day following the issuance of the Notice of Final Panel Action, if no request for an Extraordinary Challenge was filed. No such request was filed. Therefore, on the basis of the Panel Order and Rule 80 of the *Article 1904 Panel Rules*, the Panel Review was completed and the panelists discharged from their duties effective February 21, 2003.

Dated: February 21, 2003.

Caratina L. Alston,

United States Secretary, NAFTA Secretariat.

[FR Doc. 03-4606 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-GT-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 021203B]

Environmental Impact Statement (EIS) for Scientific Research on Longline Fishing—National Marine Fisheries Service, Honolulu Laboratory

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

ACTION: Notice of intent to prepare an EIS; notice of scoping meetings; request for comments.

SUMMARY: NMFS announces its intention to prepare an EIS, pursuant to NOAA policy as described in NOAA Administrative Order 216-6, to identify and analyze a range of alternatives for fishing experiments to test methods of reducing the incidental take and mortality of threatened and endangered sea turtles by Pacific longline fisheries, as well as the issuance of any permits necessary for the conduct of this activity.

NMFS will hold scoping meetings to inform interested parties of the fishing experiments and solicit input from Federal, State and local agencies, other interested parties, and the general public on the range of actions, alternatives, and impacts that the EIS should consider, including a no-action alternative.

DATES: The meeting dates are:

1. March 27, 2003, 6 - 8 p.m., Hilo, HI.
2. April 3, 2003, 3 - 5 p.m., Silver Spring, MD.
3. April 9, 2003, 6 - 8 p.m., Honolulu, HI.
4. April 16, 2003, 3 - 5 p.m., Long Beach, CA.

Comments should be received by April 16, 2003.

ADDRESSES: The scoping meeting locations are:

1. Paki Hale, main floor, 3840 Paki Avenue, Honolulu, HI 96815.
2. NOAA Silver Spring Metro Center Complex, NOAA Science Center, 1301 East West Highway, Silver Spring, MD 20910.
3. Naniloa Hotel, Kilohana Room, 93 Banyan Drive, Hilo, HI 96720.
4. Glenn M. Anderson Federal Building, Room 3470, 501 W. Ocean Blvd., Long Beach, CA 90802.

Written comments and requests to be included on a mailing list of persons interested in the EIS should be sent to Dr. Christofer Boggs, NMFS Honolulu Laboratory, 2570 Dole Street, Honolulu, HI 96822.

FOR FURTHER INFORMATION CONTACT:

Wende Goo, Management Analyst, Honolulu Laboratory, 808-983-5303

SUPPLEMENTARY INFORMATION:

Background

Given that sea turtles are known to interact with the Pacific longline fishery, NMFS believes that research is needed to investigate ways to reduce these interactions. Consequently, NMFS proposes that the Honolulu Laboratory conduct experiments to test gear modifications designed to reduce sea turtle bycatch in longline fisheries.

The objective of the proposed research is to develop gear and fishing methods that will reduce the number of endangered and threatened sea turtles incidentally caught in longline fisheries in the Pacific Ocean. Regulations closing large segments of the North Pacific fishing area to the Hawaii-based U.S. longline fleet have proven to be effective in reducing the incidental catch of sea turtles by that fleet. However, foreign fisheries in the Pacific are responsible for the vast majority of longline bycatch of sea turtles. Development and export of commercially viable gear modifications are viewed as the best means to reduce foreign bycatch of sea turtles.

The research effort is intended to meet the priority one recovery goal identified in the Final Recovery Plans for the U.S. Pacific Populations of the Loggerhead, Leatherback, Olive Ridley, and Green Turtles adopted by NMFS and the U.S. Fish and Wildlife Service (FWS). In these plans, NMFS and FWS identified monitoring and reduction of sea turtle mortality in commercial fisheries as a recovery action needed for all four species (green, leatherback, loggerhead, and olive ridley). The four species of sea turtles are listed as either endangered or threatened under the ESA, which requires that actions taken

by Federal agencies must not jeopardize these species and directs these agencies to take affirmative steps to enhance their prospects for recovery.

In 2001, NMFS proposed to conduct a specific set of experiments for reducing sea turtle bycatch, and applied for a scientific research permit under the ESA in order to proceed. A permit was required because the research involved the take of listed sea turtles. That research proposal/permit application was evaluated in the Final Environmental Assessment on Issuance of Scientific Research Permit No. 1303 to the National Marine Fisheries Service, Honolulu Laboratory, dated January 2002 (Jan. 2002 EA) and in the Endangered Species Act Section 7 Consultation Biological Opinion signed January 25, 2002 (Jan. 25 BiOp). On January 25, 2002, Permit No. 1303 authorizing that research was issued under Section 10 of the ESA.

As a result of litigation challenging the permit, NMFS was ordered by the U.S. District Court of Hawaii to prepare an EIS. The Court determined that Plaintiffs demonstrated a substantial likelihood that the taking of threatened and endangered species during the course of the research may adversely affect these species, a level of effect in this particular case that could be considered significant under the National Environmental Policy Act (NEPA). The Court also noted that an EIS would have a number of benefits, including a more thorough exploration of alternatives, greater opportunity for public involvement, and the preparation of a Record of Decision that clearly lays out the decision and rationale.

NMFS subsequently withdrew Permit No. 1303 on January 8, 2003, to allow consideration of any information obtained or developed during preparation of an EIS, as well as the analysis of that information, in a reconsideration of those experiments.

Scoping for Proposed Action

Scoping for the EIS commences with publication of this Notice, which is intended to meet the NEPA scoping guidelines at 40 CFR 1501.7 and 1508.22. In addition to holding the scoping meetings announced in this Notice, NMFS is accepting written comments on the range of actions, alternatives, and impacts it should consider in the EIS.

Public involvement in the scoping of issues and alternatives is an important part of the EIS process. The action now under consideration and the subject of this EIS is the conduct of fishing experiments to test methods for reducing sea turtle bycatch by Pacific

longline fisheries, including the issuance of any permits which may be necessary for the conduct of the research activity. A no-action alternative and its environmental consequences will also be considered and evaluated.

The research activities proposed are similar to those previously authorized under Permit No. 1303. Modifications or alternatives could alter the specific gear to be tested, but would not increase the number of sea turtles affected. No alternative will be considered that requires a greater take of sea turtles than the research proposed and evaluated for Permit No. 1303. Some alternatives may reduce the number of gear modifications to be tested or reduce the number of turtles affected.

NMFS anticipates that the conduct of the fishing experiments proposed will require the Office of Protected Resources to make a decision on whether or not a research permit should be issued.

Issues

As a result of preparation of the Jan. 2002 EA, the Jan. 25 BiOp, and the litigation discussed above, a number of issues associated with the research have been identified. These issues include: (1) number of sea turtle hookings and mortalities expected to result from the research; (2) effects of those hookings and mortality levels on sea turtle populations; (3) the cumulative effect on sea turtle populations resulting from the research and the numbers and species of turtles already affected by ongoing fishing and other activities; (4) how each of the four sea turtle populations would be affected if the research is not conducted; (5) effects of the research on endangered short-tailed albatross and other species of interest; (6) whether the research could meet its goals while being conducted in ways that would reduce impacts to sea turtles; (7) the likelihood that any successful fishing methods detected could successfully be transferred to and adopted by foreign longliners; (8) whether the experiment could be conducted using active vessels in current fisheries so the research would not add to the number of sea turtles already being affected by ongoing fishing activity; (9) what options exist for different experimental designs that would meet the research goals; (10) whether the results of other research conducted in the North Atlantic, Azores, and elsewhere already answer the questions to be addressed by the research; and (11) whether the methods of longline fishing to be tested would likely be commercially viable. NMFS solicits and invites public comment on these as well as other relevant issues.

Additional Information Available

The Endangered Species Act (ESA) requires a research permit for activities involving directed taking of a species listed as threatened or endangered that may include injury and potential mortality. The fishing experiments could also involve the importation of living, deeply hooked sea turtles for treatment and rehabilitation which would also require an ESA permit. The fishing experiments are anticipated to take place on the high seas as well as within the U.S. Exclusive Economic Zone (EEZ).

The Office of Protected Resources issued a Final Environmental Assessment and Biological Opinion that evaluated the effects of the proposed fishing experiments and four alternatives. These documents (Jan. 2002 EA and Jan. 25 BiOp) provide descriptions and discussions of the initial research proposal and issuance of Permit No. 1303 (now withdrawn). In addition, the FWS issued its Biological Opinion on the Effects on the Short-tailed Albatross of National Marine Fisheries Service Research on Sea Turtles in December 2001, concluding that the estimated level of take resulting from the research would not result in jeopardy to that species nor impact any critical habitat.

Alternatives considered in the Jan. 2002 EA included not issuing a permit and variations in the design of the experiments. The total takes of turtles requested to be authorized over the 3-year life of the research permit was 15 green, 44 leatherback, 233 loggerhead, and 24 olive ridley, and the requested lethal take was 117 turtles (6 green, 15 leatherback, 87 loggerhead, and 9 olive ridley). These were determined to be the number of turtles necessary for the fishing experiments to have sufficient statistical validity (that is, to be able to detect significant differences between gear types and fishing methods in their ability to reduce bycatch of sea turtles).

The Jan. 2002 EA and both Biological Opinions are available from the NMFS Honolulu Laboratory (see ADDRESSES).

The Responsible Program Manager for this EIS is Sam Pooley, Acting Director, Honolulu Laboratory, NMFS.

Special Accommodations

These meetings are accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Wende Goo, 808-983-5303 (voice) or 808-983-2901 (fax), at least five days before the scheduled meeting date.

Authority: 16 U.S.C. 1531 *et seq.*, 42 U.S.C. 4371 *et seq.*

Dated: February 20, 2003.

Laurie K. Allen,

*Director, Office of Protected Resources,
National Marine Fisheries Service.*

[FR Doc. 03-4565 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-22-S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 022103A]

Gulf of Mexico Fishery Management Council; Public Meetings

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

ACTION: Notice of public meeting.

SUMMARY: The Gulf of Mexico Fishery Management Council will convene public meetings on management issues regarding Gulf fisheries.

DATES: The meetings will be held on March 11-14, 2003. For specific dates and times see SUPPLEMENTARY INFORMATION.

ADDRESSES: These meetings will be held at the Adam's Mark Hotel, 64 South Water Street, Mobile, AL 36602; telephone: 251-438-4000.

Council address: Gulf of Mexico Fishery Management Council, 3018 U.S. Highway 301 North, Suite 1000, Tampa, FL 33619.

FOR FURTHER INFORMATION CONTACT: Wayne E. Swingle, Executive Director, Gulf of Mexico Fishery Management Council; telephone: 813-228-2815.

SUPPLEMENTARY INFORMATION:

Meeting Dates and Agendas

The Council will meet to discuss the following items:

March 11:

8:30-10 a.m.—(Closed Session) Convene the Advisory Panel (AP) Selection Committee to appoint members of the APs. The committee will make recommendations for full Council review in closed session on Thursday afternoon and be presented to the public on Friday morning.

10-11:30 a.m.—(Closed Session) Convene the Scientific and Statistical Committee (SSC) Selection Committee to appoint members of the SSCs, stock assessment panels, and socioeconomic panel. The committee will make recommendations for full Council review in closed session on Thursday afternoon and be presented to the public on Friday morning.

1-2 p.m.—Convene the Data Collection Committee to hear a presentation of a proposed Florida State University economic study.

2-3:30 p.m.—Convene the Administrative Policy Committee to discuss revisions to guidelines for National Standard 1.

3:30-5:30 p.m.—Convene the Reef Fish Management Committee to discuss the Reef Fish Amendment 21 Public Hearing Document and hear a presentation by NMFS Enforcement on grouper fishery violations.

March 12:

8:30-10 a.m.—Convene the Mackerel Management Committee to review a draft regulatory amendment/ environmental assessment which addresses maximum sustainable yield (MSY), optimum yield (OY), minimum stock size threshold (MSST), and maximum fishing mortality threshold (MFMT) for the coastal migratory pelagic species, and a scoping document for draft Amendment 15 to include size and bag limit alternatives for cobia, and commercial landings for blue runner.

10-11:30 a.m.—Convene the Shrimp Management

Committee to discuss the Shrimp Amendment 13 Options Paper addressing MSY, OY, MSST, and MFMT for shrimp stocks; vessel monitoring systems; and bycatch reduction.

1-2 p.m.—Convene a joint meeting of the Reef Fish, Mackerel, and Red Drum Management Committees to discuss the proposed scoping document and meetings on an aquaculture generic amendment.

2-5 p.m.—Convene the Habitat Protection Committee to review and comment on the alternatives for specifying essential fish habitat (EFH), habitat areas of particular concern, and impacts of fishing on EFH in the Draft Environmental Impact Statement for the EFH Generic Amendment.

March 13:

8:30 a.m.—Convene.

8:45-9:30 a.m.—Hear a presentation by the Gulf States Marine Fisheries Commission on accessing the Fisheries Information Network.

9:30-9:45 a.m.—Hear a request for fishing vessel designation from the Worldwide Water Foundation.

9:45-12 noon—Receive public testimony on the Draft Coastal Pelagics (CMP) Regulatory Amendment. The draft CMP Regulatory Amendment sets standards for MSY, OY, overfished and overfishing for king and Spanish mackerel, and cobia. Final action to approve the regulatory amendment will be taken at a subsequent meeting.

1:30-2 p.m.—Receive the Habitat Protection Committee report.

2-2:30 p.m.—Receive the Shrimp Management Committee report.

2:30-2:45 p.m.—Receive the Mackerel Management Committee report.

2:45-3 p.m.—Receive the Reef Fish Management Committee report.

3-3:30 p.m.—Receive the Administrative Policy Committee report.

3:30-4:15 p.m.—(Closed Session) Receive the report of the AP Selection Committee.

4:15-5:30 p.m.—(Closed Session) Receive the report of the SSC Selection Committee.

March 14:

8:30-8:45 a.m.—Receive the Data Collection Committee Report.

8:45-9 a.m.—Receive the Joint Reef Fish/Mackerel/Red Drum Management Committee report.

9-9:15 a.m.—Receive a report from the Logo Selection Committee.

9:15-9:30 a.m.—Receive the AP Selection Committee Report.

9:30-9:45 a.m.—Receive the SSC Selection Committee Report.

9:45-10 a.m.—Receive a report of the NMFS Billfish AP.

10-10:15 a.m.—Receive a report of the NMFS Highly Migratory Species AP.

10:15-10:30 p.m.—Receive the South Atlantic Fishery Management Council liaison report.

10:30-10:45 a.m.—Receive a report of the Summit for Gulf of Mexico Shrimp Industry.

10:45-11 a.m.—Receive a report of the Gulf Safety Committee.

11-11:15 a.m.—Receive Enforcement Reports.

11:15-11:30 a.m.—Receive the NMFS Regional Administrator's Report.

11:30-11:45 a.m.—Receive Director's Reports.

11:45-12 noon—Other Business

Although non-emergency issues not contained in the agenda may come before the Council for discussion, in accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), those issues may not be the subject of formal Council action during this meeting. Council action will be restricted to those issues specifically identified in this notice and any issues arising after publication of this notice that require emergency action under section 305(c) of the MSFCMA, provided the public has been notified of the Council's intent to take final action to address the emergency. A copy of the Committee schedule and agenda can be obtained by calling 813-228-2815.

Special Accommodations

These meetings are physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Anne Alford at the Council (see **ADDRESSES**) by March 4, 2003.

Dated: February 21, 2003.

Theophilus R. Brainerd,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 03-4564 Filed 2-26-03; 8:45 am]

BILLING CODE 3510-22-S

DEPARTMENT OF EDUCATION**President's Advisory Commission on Educational Excellence for Hispanic Americans**

AGENCY: President's Advisory Commission on Educational Excellence for Hispanic Americans, Department of Education.

ACTION: To amend the notice printed in the **Federal Register**/Vol. 68, No. 31/ Friday, February 14, 2003.

SUMMARY: This notice sets forth a change in date of a forthcoming teleconference meeting of the President's Advisory Commission on Educational Excellence for Hispanic Americans.

DATES: Originally scheduled for Monday, February 24, 2003, this teleconference meeting has been rescheduled for Tuesday, March 4, 2003, the hour and location to be determined.

FOR FURTHER INFORMATION CONTACT: Leslie Sanchez, Executive Director, or Adam Chavarria, Associate Director, White House Initiative on Educational Excellence for Hispanic Americans, 400 Maryland Ave., SW., Washington, DC 20202, (202) 401-1411.

SUPPLEMENTARY INFORMATION: Individuals who will need accommodations for a disability in order to observe the meeting (*i.e.*, interpreting services, assistive listening devices, materials in alternative format) should notify Adam Chavarria at (202) 401-1411 by no later than February 26, 2003. We will attempt to meet requests after this date, but cannot guarantee availability of the requested accommodation. The meeting site is accessible to individuals with disabilities.

Dated: February 20, 2003.

William Hansen,

Deputy Secretary, Department of Education.

[FR Doc. 03-4573 Filed 2-26-03; 8:45 am]

BILLING CODE 400-01-M

DEPARTMENT OF ENERGY**Los Alamos Site Office; National Nuclear Security Administration; Notice of Floodplain Involvement for the Fire Road Project at Los Alamos National Laboratory, Los Alamos, NM**

AGENCY: National Nuclear Security Administration, Los Alamos Site Office, DOE.

ACTION: Notice of floodplain involvement.

SUMMARY: The National Nuclear Security Administration (NNSA), Los Alamos Site Office of the Department of Energy (DOE) plans to improve existing firebreaks and access roads into remote forested areas at Los Alamos National Laboratory (LANL) for the purpose of providing reliable access for fire fighting crews. Improvements will focus on changes to drainage crossings and improved roadbeds within floodplain areas. Improvements would be minor and would mostly consist of installing culverts and stabilizing roadbeds. These roads are limited use roads that are restricted to official access only. In accordance with 10 CFR part 1022, NNSA has prepared a floodplain/wetland assessment and will perform this proposed action in a manner so as to avoid or minimize potential harm to or within the affected floodplain.

DATES: Comments are due to the address below no later than March 14, 2003.

ADDRESSES: Written comments should be addressed to: Elizabeth Withers, Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, 528 35th Street, Los Alamos, NM 87544, or submit them to the Mail Room at the above address between the hours of 8 a.m. and 4:30 p.m., Monday through Friday. Written comments may also be sent electronically to: ewithers@doeal.gov or by facsimile to (505) 667-9998.

FOR FURTHER INFORMATION CONTACT: Everett Trollinger, Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, 528 35th Street, Los Alamos, NM 87544. Telephone (505) 667-0281, facsimile (505) 667-9998.

For Further Information on General DOE Floodplain Environmental Review Requirements, contact: Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance, EH-42, Department of Energy, 1000 Independence Avenue, SW., Washington DC 20585-0119. Telephone (202) 586-4600 or (800) 472-2756, facsimile (202) 586-7031.

SUPPLEMENTARY INFORMATION: After the May 2000 Cerro Grande Fire event,

NNSA developed a Wildfire Hazard Reduction Program for LANL. This program includes the improvement of firebreaks and the improvement of access to remote portions of LANL through the upgrade and maintenance of the existing fire road network. There are about 12 firebreaks and 40 fire roads at LANL that will be improved as part of this project. These improvements will require: clearing each road of hazard trees (mostly these are dead or dying trees); grading of the roads and realignment of sharp curves; cut and fill of road areas where needed to accommodate heavy fire fighting equipment.

Culverts will be installed where necessary based on road substrate, and rock gabions and other erosion control features may also be installed. Disturbed soil will be revegetated after work is completed. Firebreak and road improvements will commence in fiscal year 2003 and be completed over the next 9 months.

In accordance with DOE regulations for compliance with floodplain and wetlands environmental review requirements (10 CFR part 1022), NNSA has prepared a floodplain/wetland assessment for this action, which is available by contacting Elizabeth Withers at the previously identified addresses, phone and facsimile numbers. The floodplain/wetland assessment is available for review at the DOE Reading Room at the Los Alamos Outreach Center, 1619 Central Avenue, Los Alamos, NM 878544; and the DOE Reading Room at the Zimmerman Library, University of New Mexico, Albuquerque, NM 87131. The NNSA will publish a floodplain statement of findings for this project in the **Federal Register** no sooner than March 14, 2003.

Issued in Los Alamos on February 14, 2003.

Ralph E. Erickson,

Manager, U. S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office.

[FR Doc. 03-4607 Filed 2-26-03; 8:45 am]

BILLING CODE 6450-01-P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission**

[Docket No. RP02-492-003]

Algonquin Gas Transmission Company; Notice of Compliance Filing

February 21, 2003.

Take notice that on February 19, 2003, Algonquin Gas Transmission Company (Algonquin) tendered for filing as part of

its FERC Gas Tariff, Fourth Revised Volume No. 1, the following tariff sheets, to be effective October 1, 2002:

2nd Sub 1st Rev Fourth Revised Sheet No. 640

Original Sheet No. 640A

Algonquin states that it is filing the revised tariff sheets, which address the determination of partial day release quantities, pursuant to an order issued by the Commission in the captioned docket on February 6, 2003 (February 6 Order).

Algonquin states that copies of its filing have been mailed to all affected customers of Algonquin and interested state commissions, and all parties on the Commission's official service list in this proceeding.

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 Section 385.211 of the Commission's Rules and Regulations. All such protests must be filed in accordance with Section 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 FEROnlineSupport@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: March 3, 2003.

Magalie R. Salas,

Secretary.

[FR Doc. 03-4716 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. RP02-493-003]

East Tennessee Natural Gas Company; Notice of Compliance Filing

February 21, 2003.

Take notice that on February 19, 2003, East Tennessee Natural Gas Company

(East Tennessee) tendered for filing as part of its FERC Gas Tariff, Second Revised Volume No. 1, the following tariff sheets, to be effective October 1, 2002:

2nd Sub 1st Rev Third Rev Sheet No. 147
Original Sheet No. 147.01

East Tennessee states that it is filing these revised tariff sheets, which address the determination of partial day release quantities, pursuant to an order issued by the Commission in the captioned docket on February 5, 2003 (February 5 Order).

East Tennessee states that copies of its filing have been mailed to all affected customers of East Tennessee and interested state commissions, and all parties on the Commission's official service list in this proceeding.

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 Section 385.211 of the Commission's Rules and Regulations. All such protests must be filed in accordance with Section 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 FEROnlineSupport@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: March 3, 2003.

Magalie R. Salas,

Secretary.

[FR Doc. 03-4717 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. RP00-411-007 and RP01-44-009]

Iroquois Gas Transmission System, L.P.; Notice of Compliance Filing

February 21, 2003.

Take notice that on February 19, 2003, Iroquois Gas Transmission System, L.P. (Iroquois) tendered for filing as part of its FERC Gas Tariff, First Revised Volume No. 1, Sub. Second Revised Sheet No. 50B, proposed to become effective November 1, 2002.

Iroquois asserts that the purpose of this filing is to comply with the Commission's order issued February 6, 2003 (February 6 Order), in Docket No. RP00-411-003 and RP01-44-005.

Iroquois states that copies of its filing were served on all jurisdictional customers and interested state regulatory agencies and all parties to the proceeding.

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 Section 385.211 of the Commission's Rules and Regulations. All such protests must be filed in accordance with Section 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 FEROnlineSupport@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: March 3, 2003.

Magalie R. Salas,

Secretary.

[FR Doc. 03-4713 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission**

[Docket No. RP02-489-003]

Maritimes & Northeast Pipeline, L.L.C.; Notice of Compliance Filing

February 21, 2003.

Take notice that on February 19, 2003, Maritimes & Northeast Pipeline, L.L.C. (Maritimes) tendered for filing as part of its FERC Gas Tariff, First Revised Volume No. 1, the following tariff sheets, to be effective October 1, 2002:

Original Sheet No. 249A

Original Sheet No. 249B

Second Sub Third Revised Sheet No. 250

Maritimes states that it is filing these tariff sheets, which address the determination of partial day release quantities, pursuant to an order issued by the Commission in the captioned docket on February 6, 2003 (February 6 Order).

Maritimes states that copies of its filing have been mailed to all affected customers of Maritimes and interested state commissions, and all parties on the Commission's Official Service List in this proceeding.

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 Section 385.211 of the Commission's Rules and Regulations. All such protests must be filed in accordance with Section 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: March 3, 2003.**Magalie R. Salas,***Secretary.*

[FR Doc. 03-4715 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission**

[Docket Nos. RP00-467-002 and RP01-19-002]

Midwestern Gas Transmission Company; Notice of Compliance Filing

February 21, 2003.

Take notice that on February 18, 2003, Midwestern Gas Transmission Company (Midwestern) tendered for filing as part of its FERC Gas Tariff, Third Revised Volume No. 1, the revised tariff sheets identified at Appendix A to the filing.

Midwestern states that the revised tariff sheets are being filed in order to comply with the Commission's December 19, 2002 Order in the referenced proceedings, which relates to Midwestern's previous filings to comply with Order Nos. 637, 637-A, and 637-B.

Midwestern states that copies of this filing have been sent to all of Midwestern's contracted Shippers, interested state regulatory commissions, and all parties of record in this proceeding.

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 Section 385.211 of the Commission's Rules and Regulations. All such protests must be filed in accordance with Section 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: March 3, 2003.**Magalie R. Salas,***Secretary.*

[FR Doc. 03-4714 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission**

[Docket No. RP02-68-002]

Midwestern Gas Transmission Company; Notice of Compliance Filing

February 21, 2003.

Take notice that on February 14, 2003, Midwestern Gas Transmission Company (Midwestern) tendered for filing a report of activities during the first year of service under Rate Schedule PAL, Park and Loan Service.

Midwestern states that the filing is being made in compliance with Commission's December 28, 2001 order (97 FERC ¶ 61,386 (2001)), requiring Midwestern to file a report of its activities during the first year of service under Rate Schedule PAL.

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 Section 385.211 of the Commission's Rules and Regulations. All such protests must be filed on or before the comment date. 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. Comments, protests and interventions may be filed electronically via the Internet in lieu of paper. 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: February 28, 2003.**Magalie R. Salas,***Secretary.*

[FR Doc. 03-4719 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission**

[Docket No. EL03-50-000]

Powerex Corp., Complainant, v. California Power Exchange Corporation, Respondent; Notice of Complaint

February 21, 2003.

Take notice that on February 20, 2003, Powerex Corp. (Powerex) filed a complaint in which it requests that the Commission find that the California Power Exchange Corporation (CalPX) should release Powerex's letter of credit provided as a condition for participating in the CalPX's now-defunct markets, consistent with the Commission's September 30, 2002, order on rehearing in *Constellation Power Source, Inc. v. California Power Exchange Corporation*, 100 FERC ¶ 61,380 (2002) and return Powerex's chargeback amounts. Powerex requests that the Commission invoke its Fast-Track Proceeding procedures.

Any person desiring to be heard 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. The answer to the complaint and all comments, interventions or protests must be filed on or before the comment date. 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 for TTY, contact (202)502-8659. The answer to the complaint, 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.

Comment Date: March 12, 2003.

Magalie R. Salas,
Secretary.

[FR Doc. 03-4701 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission**

[Docket No. ER03-539-000]

Quark Power L.L.C.; Notice of Filing

February 21, 2003.

Take notice that on February 14, 2003, Quark Power L.L.C. (Quark) filed with the Federal Energy Regulatory Commission (Commission), pursuant to section 205 of the Federal Power Act, its revised FERC Electric Rate Schedule No. 1 for the resale of Firm Transmission Rights (FTRs), or their equivalent, to become effective as of February 18, 2003.

This filing was sent to PJM Interconnection, L.L.C., the New York Independent System Operator, Inc., and the New England Power Pool/ISO New England, Inc.

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, please 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.

Comment Date: March 3, 2003.

Magalie R. Salas,
Secretary.

[FR Doc. 03-4702 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission**

[Docket No. RP02-494-003]

Texas Eastern Transmission, LP; Notice of Compliance Filing

February 21, 2003.

Take notice that on February 19, 2003, Texas Eastern Transmission, LP (Texas Eastern) tendered for filing as part of its FERC Gas Tariff, Seventh Revised Volume No. 1, the following tariff sheets, to be effective October 1, 2002:

2nd Sub 1st Rev Original Sheet No. 533A
Original Sheet No. 533B

Texas Eastern states that it is filing these revised tariff sheets, which address the determination of partial day release quantities, pursuant to an order issued by the Commission in the captioned docket on February 6, 2003 (February 6 Order).

Texas Eastern states that copies of its filing have been mailed to all affected customers of Texas Eastern and interested state commissions, and all parties on the Commission's official service list in this proceeding.

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 Section 385.211 of the Commission's Rules and Regulations. All such protests must be filed in accordance with Section 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: March 3, 2003.

Magalie R. Salas,
Secretary.

[FR Doc. 03-4718 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 11509-009]

Notice of Request for Extension of Time To Commence and Complete Project Construction and Soliciting Comments

February 21, 2003.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

- a. *Type of Application:* Request for extension of time.
- b. *Project No.:* 11509-009.
- c. *Date Filed:* January 13, 2003.
- d. *Applicant:* City of Albany, Oregon.
- e. *Name of Project:* City of Albany Hydroelectric Project.
- f. *Location:* The project is located on the Albany-Santiam Canal system in Linn County, Oregon.
- g. *Pursuant to:* Public Law 107-376, H.R. 5436.
- h. *Applicant Contact:* Peter Harr, P.E., City of Albany, City Hall, 333 Broadalbin, SW., P.O. Box 490, Albany, OR 97321-0144, (541) 917-7500.
- i. *FERC Contact:* Any questions on this notice should be addressed to Mr. Lynn R. Miles, Sr. at (202) 502-8763.
- j. *Deadline for filing comments and or motions:* March 21, 2003.

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.

k. *Description of Project:* The licensee requests a two-year extension of time from the existing deadline of October 23, 2002, to October 23, 2004, to commence project construction of the City of Albany Hydroelectric Project. If granted, this would be the licensee's first 2-year extension of the three authorized by Public Law No. 107-376, H.R. 5436.

l. 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, call toll-free 1-866-208-3676 or e-mail

ferconlineSupport@ferc.gov. For TTY, call (202) 502-8659. A copy is also available for inspection and reproduction at the address in item g. above.

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", "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 an original and eight copies to: The 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.

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.

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. 03-4703 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Application Accepted for Filing and Soliciting Comments, Protests, and Motions To Intervene

February 21, 2003.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

- a. *Type of Application:* Preliminary permit.
- b. *Project No.:* 12208-000.
- c. *Date filed:* June 6, 2002.
- d. *Applicant:* Wanawish Hydro, LLC.
- e. *Name and Location of Project:* The Wanawish Dam Project would be located on the Yakima River in Benton County, Washington. The proposed project would be located on an existing diversion dam owned by the Columbia Basin Irrigation District (CBID).
- f. *Filed pursuant to:* Federal Power Act, 16 U.S.C. 791(a)—825(r).
- g. *Applicant contact:* Mr. Brent L. Smith, Northwest Power Services, Inc., P.O. Box 535, Rigby, ID 83442, (208) 745-0834.
- h. *FERC Contact:* Tom Papsidero, (202) 502-6002.
- i. *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.

j. *Description of Project:* The proposed project would consist of: (1) CBID's existing concrete diversion dam which is 20 feet high and 523 feet long, (2) a proposed 500-foot-long, 8-foot-diameter penstock, (2) a proposed powerhouse

containing one generating unit with an installed capacity of 1.4 megawatts, (3) a proposed one-quarter-mile-long, 15-kv transmission line, and (4) appurtenant facilities. The project would operate in a run-of-river mode and would have an average annual generation of 7.2 GWh.

k. 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 for TTY, contact (202)502-8659. A copy is also available for inspection and reproduction at Wanawish Hydro, LLC, 975 South State Highway, Logan, UT 84321, (435) 752-2580.

l. 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.

m. 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.

n. 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.

o. 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.

p. 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.

q. 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 an original and eight copies to: The 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.

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.

r. 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. 03-4704 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Application Accepted for Filing and Soliciting Comments, Protests, and Motions To Intervene

February 21, 2003.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Type of Application:* Preliminary permit.

b. *Project No.:* 12389-000.

c. *Date filed:* October 3, 2002.

d. *Applicant:* Universal Electric Power Corporation.

e. *Name and Location of Project:* The H.K. Thatcher L&D Hydroelectric Project would be located on the Ouachita River in Union County, Arkansas. The proposed project would utilize the existing H.K. Thatcher Lock and Dam administered by the U.S. Army Corps of Engineers.

f. *Filed pursuant to:* Federal Power Act, 16 U.S.C. 791(a)—825(r).

g. *Applicant contact:* Mr. Raymond Helter, Universal Electric Power Corporation, 1145 Highbrook Street, Akron, OH 44301, (330) 535-7115.

h. *FERC Contact:* Tom Papsidero, (202) 502-6002.

i. *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.

j. *Description of Project:* The proposed project, using the Corps' existing H.K. Thatcher Lock and Dam and Reservoir, would consist of: (1) two proposed 240-

foot-long, 8-foot-diameter steel penstocks, (2) a proposed powerhouse containing two generating units with a combined installed capacity of 3 megawatts, (3) a proposed 500-foot-long, 14.7-kv transmission line, and (4) appurtenant facilities. The project would operate in a run-of-river mode and would have an average annual generation of 18 GWh.

k. 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, call toll-free 1-866-208-3676 or e-mail ferconlineSupport@ferc.gov. For TTY, call (202) 502-8659. A copy is also available for inspection and reproduction at the applicant's address in item g above.

l. 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.

m. 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.

n. 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.

o. 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.

p. 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.

q. 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 an original and eight copies to: The 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.

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.

r. 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. 03-4705 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Application Accepted for Filing and Soliciting Comments, Protests, and Motions To Intervene

February 21, 2003.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Type of Application*: Preliminary permit.

b. *Project No.*: 12390-000.

c. *Date filed*: October 16, 2002.

d. *Applicant*: Universal Electric Power Corporation.

e. *Name and Location of Project*: The Paint Creek Dam Hydroelectric Project would be located on Paint Creek near the town of Bainbridge in Highland County, Ohio. The proposed project would utilize an existing dam administered by the U.S. Army Corps of Engineers.

f. *Filed pursuant to*: Federal Power Act, 16 U.S.C. 791(a)—825(r).

g. *Applicant contact*: Mr. Raymond Helter, Universal Electric Power Corporation, 1145 Highbrook Street, Akron, OH 44301, (330) 535-7115.

h. *FERC Contact*: Tom Papsidero, (202) 502-6002.

i. *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.

j. *Description of Project*: The proposed project, using the Corps' existing Paint

Creek Dam and Reservoir, would consist of: (1) two proposed 80-foot-long, 8-foot-diameter steel penstocks, (2) a proposed powerhouse containing two generating units with a combined installed capacity of 2.14 megawatts, (3) a proposed 500-foot-long, 14.7-kv transmission line, and (4) appurtenant facilities. The project would operate in a run-of-river mode and would have an average annual generation of 13.1 GWh.

k. 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, call toll-free 1-866-208-3676 or e-mail ferconlineSupport@ferc.gov. For TTY, call (202) 502-8659. A copy is also available for inspection and reproduction at the applicant's address in item g above.

l. 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.

m. 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.

n. 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.

o. 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.

p. 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.

q. 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 an original and eight copies to: The 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.

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.

r. 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. 03-4706 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Application Accepted for Filing and Soliciting Comments, Protests, and Motions To Intervene

February 21, 2003.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Type of Application*: Preliminary Permit.

b. *Project No.*: 12404-000.

c. *Date filed*: October 30, 2002.

d. *Applicant*: Universal Electric Power Corporation.

e. *Name and Location of Project*: The Beltzville Lake Dam Hydroelectric Project would be located on Pohopoco Creek near the town of Lehighton in Carbon County, Pennsylvania. The proposed project would utilize an existing dam administered by the U.S. Army Corps of Engineers.

f. *Filed Pursuant to*: Federal Power Act, 16 U.S.C. 791(a)-825(r).

g. *Applicant contact*: Mr. Raymond Helter, Universal Electric Power Corporation, 1145 Highbrook Street, Akron, OH 44301, (330) 535-7115.

h. *FERC Contact*: Tom Papsidero, (202) 502-6002.

i. *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.

j. *Description of Project:* The proposed project, using the Corps' existing Beltzville Lake Dam and Reservoir, would consist of: (1) One proposed 100-foot-long, 7-foot-diameter steel penstock, (2) a proposed powerhouse containing one generating unit with a combined installed capacity of 1.77 megawatts, (3) a proposed one-mile-long, 14.7-kv transmission line, and (4) appurtenant facilities. The project would operate in a run-of-river mode and would have an average annual generation of 11 GWh.

k. 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, call toll-free 1-866-208-3676 or e-mail ferconlineSupport@ferc.gov. For TTY, call (202) 502-8659. A copy is also available for inspection and reproduction at the applicant's address in item g above.

l. *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.

m. *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.

n. *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.

o. *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.

p. *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.

q. *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 an original and eight copies to: The 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.

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.

r. *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. 03-4707 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Application Accepted for Filing and Soliciting Comments, Protests, and Motions To Intervene

February 21, 2003.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Type of Application:* Preliminary Permit.

b. *Project No.:* 12412-000.

c. *Date filed:* November 12, 2002.

d. *Applicant:* Universal Electric Power Corporation.

e. *Name and Location of Project:* The Kentucky L&D #8 Hydroelectric Project would be located on the Kentucky River in Jessamine County, Kentucky. The proposed project would utilize an existing dam administered by the U.S. Army Corps of Engineers.

f. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791(a)-825(r).

g. *Applicant contact:* Mr. Raymond Helter, Universal Electric Power Corporation, 1145 Highbrook Street, Akron, OH 44301, (330) 535-7115.

h. *FERC Contact:* Tom Papsidero, (202) 502-6002.

i. *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.

j. *Description of Project:* The proposed project, using the Corps' existing Kentucky Lock and Dam No. 8 and Reservoir, would consist of: (1) Five proposed 50-foot-long, 8-foot-diameter steel penstocks, (2) a proposed powerhouse containing five generating units with a combined installed capacity of 7 megawatts, (3) a proposed 400-foot-long, 14.7-kv transmission line, and (4) appurtenant facilities. The project would operate in a run-of-river mode and would have an average annual generation of 42 GWh.

k. 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, call toll-free 1-866-208-3676 or e-mail ferconlineSupport@ferc.gov. For TTY, call (202) 502-8659. A copy is also available for inspection and reproduction at the applicant's address in item g above.

l. *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.

m. *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.

n. *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.

o. *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.

p. *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.

q. *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 an original eight copies to: The 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.

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.

r. *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. 03-4708 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Application Accepted for Filing and Soliciting Comments, Protests, and Motions To Intervene

February 21, 2003.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Type of Application:* Preliminary Permit.

b. *Project No.:* 12421-000.

c. *Date filed:* November 25, 2002.

d. *Applicant:* Universal Electric Power Corporation.

e. *Name and Location of Project:* The Kanopolis Dam Hydroelectric Project would be located on the Smokey Hill River in Ellsworth County, Kansas. The proposed project would utilize the existing Kanopolis Dam administered by the U.S. Army Corps of Engineers.

f. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791(a)-825(r).

g. *Applicant contact:* Mr. Raymond Helter, Universal Electric Power Corporation, 1145 Highbrook Street, Akron, OH 44301, (330) 535-7115.

h. *FERC Contact:* Tom Papsidero, (202) 502-6002.

i. *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.

j. *Description of Project:* The proposed project, using the Corps' existing Kanopolis Dam and Reservoir, would consist of: (1) Two proposed 80-foot-long, 8-foot-diameter steel penstocks, (2) a proposed powerhouse containing two generating units with a combined installed capacity of 1.3 megawatts, (3) a proposed 2-mile-foot-long, 14.7-kv transmission line, and (4) appurtenant facilities. The project would operate in a run-of-river mode and would have an average annual generation of 8 GWh.

k. 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, call toll-free 1-866-208-3676 or e-mail ferconlineSupport@ferc.gov. For TTY, call (202) 502-8659. A copy is also available for inspection and reproduction at the applicant's address in item g above.

l. *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.

m. *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.

n. *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.

o. *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.

p. *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.

q. *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 an original and eight copies to: The 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.

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.

r. *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. 03-4709 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 11887-000]

Notice of Application Accepted for Filing and Soliciting Comments, Motions To Intervene, and Protests

February 21, 2003.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Type of Application:* Preliminary Permit.

b. *Project No:* 12429-000.

c. *Date Filed:* January 2, 2003.

d. *Applicant:* Clark Canyon Hydro, LLC.

e. *Name of Project:* Clark Canyon Dam Hydroelectric Project.

f. *Location:* The proposed project would be located on an existing dam owned by the U.S. Bureau of Reclamation (BOR), on the Beaverhead River in Beaverhead County, Montana.

g. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791(a)-825(r).

h. *Applicant Contact:* Mr. Brent L. Smith, Northwest Power Services, Inc., PO Box 535, Rigby, ID 83442, (208) 745-0834.

i. *FERC Contact:* Any questions on this notice should be addressed to Mr. Lynn R. Miles, Sr. at (202) 502-8763.

j. *Deadline for filing motions to intervene, protests and comments:* 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.

k. *Description of Project:* The proposed run-of-river project using the BOR's existing Clark Canyon Dam would consist of: (1) One 8-foot-diameter, 300-foot-long steel penstock, (2) a powerhouse containing one generating unit with a total installed capacity of 3 MW, (3) a 15-kv transmission line approximately 4 miles long, and (4) appurtenant facilities. The project would have an annual generation of 12 GWh.

l. 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, call toll-free 1-866-208-3676 or e-mail ferconlinesupport@ferc.gov. For TTY, call (202) 502-8659. A copy is also available for inspection and reproduction at the address in item g. above.

l. *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.

m. *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.

n. *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.

o. *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.

p. *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.

q. *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 an original and eight copies to: The 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.

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.

r. *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. 03-4710 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 1957-020]

Notice of Application for Amendment of License and Soliciting Comments, Motions To Intervene, and Protests

February 21, 2003.

a. *Type of Filing:* Amendment of license to decrease project installed capacity from 700 kW to 450 kW by deleting Unit #3.

b. *Project No:* 1957-020.

c. *Date Filed:* January 17, 2003.

d. *Applicant:* Wisconsin Public Service Corporation.

e. *Name of Project:* Otter Rapids Project.

f. *Location:* The project is located on the Wisconsin River in Vilas and Oneida Counties, Wisconsin.

g. *Filed Pursuant to:* Federal Power Act 16 U.S.C. 791(a)-825(r), Section 4.201 of the Commission's regulations.

h. *Applicant Contact:* Wisconsin Public Service Corporation, 700 No. Adams St., PO Box 19002, Green Bay, WI 54307-9002.

i. *FERC Contact:* William Guey-Lee, (202) 502-6064, or william.gueylee@ferc.gov.

j. *Deadline for filing comments, motions to intervene or protests:* March 21, 2003.

The Commission's rules of practice and procedure require all intervenors filing documents with the Commission to serve a copy of that document on each person whose name appears on the official service list for the project. Further, if an intervenor 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.

k. *Description of Project:* The applicant requests that the license for the Otter Rapids Project No. 1957 be amended to delete the 250-kW Unit #3 from the license and decrease the licensed install capacity from 700 kW to 450 kW. Unit #3 is not operational and is in need of numerous repairs. The licensee states that repairing Unit #3 is not economically justified.

l. *Location of the Filing:* A copy of the filing is available for inspection and reproduction at the Commission's Public Reference Room, located at 888 First Street, NE., Room 2A, Washington, DC 20426, or by calling (202) 502-8371 and may also be viewed on the Commission's Web site at <http://www.ferc.gov>, using the "FERRIS" link. Enter the project number excluding the last three digits in the project 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 for TTY, contact (202) 502-8659. A copy is also available for inspection and reproduction at the address in item h above.

m. Individuals desiring to be included on the Commission's mailing list should so indicate by writing to the Secretary of the Commission.

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.

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 Project Number of the particular application to which the filing refers. Any of the above-named documents must be filed by providing an original and eight copies to: The Secretary, Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426. A copy of any

motion to intervene must also be served upon each representative of the Applicant specified in the particular application.

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.

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. 03-4711 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Notice of Application for Surrender of License and Soliciting Comments, Motions To Intervene, and Protests

February 21, 2003.

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Application Type:* Surrender of License.

b. *Project No.:* P-696-013.

c. *Date Filed:* December 31, 2002.

d. *Applicant:* PacifiCorp.

e. *Name of Project:* American Fork Hydroelectric Project.

f. *Location:* On American Fork Creek, near the City of American Fork, Utah County, Utah, about 3 miles east of Highland, Utah. The project affects about 28.8 acres of federal lands within the Uinta National Forest. Also, approximately 2,000 feet of flowline passes through the Timpanogos Cave National Monument, administered by the U.S. Department of the Interior, National Park Service.

g. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791(a)-825(r).

h. *Applicant Contact:* Monte Garrett, Licensing Manager, PacifiCorp 825 NE Multnomah, suite 1500, Portland, Oregon, 97232 (503) 813-6629.

i. *FERC Contact:* Kenneth Hogan (202)502-8434, e-mail at kenneth.hogan@ferc.gov.

j. *Cooperating agencies:* We are asking federal, state, local, and tribal agencies with jurisdiction and/or special expertise with respect to environmental issues to cooperate with us in the preparation of the environmental document. Agencies who would like to request cooperating status should follow the instructions for filing documents described in item k below.

k. *Deadline for filing comments, motions to intervene, protests, and requests for cooperating agency status:* 30 days from the issuance date of this notice.

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; 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.

The Commission's Rules of Practice and Procedure require all intervenors filing documents with the Commission to serve a copy of that document on each person whose name appears on the official service list for the project. Further, if an intervenor 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.

l. PacifiCorp filed an application to surrender its minor license for the American Fork Hydroelectric Project. PacifiCorp proposes to continue operation of the project through August 2006, at which time they will begin the project's decommissioning, with completion by December 31, 2007. PacifiCorp proposes to do the following: (1) Demolish, remove, and dispose of the existing concrete diversion dam, Tainter gates, hoists and steel structures, trash racks, and control building; (2) repair the powerhouse structure and retaining wall for the protection of the powerhouse for conveyance to the U.S. Government; (3) remove the spillway, transformer pad, tender's house, garage; (4) reconstruct the stream channel as necessary; (5) remove exposed sections of the penstock and support structures; (6) re-vegetate and/or re-habilitate disturbed areas.

m. A copy of the application is on file with the Commission and is available for public inspection. This filing may also 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 for TTY, contact (202)502-8659. A copy is also available for inspection and reproduction at the address in item h above. To facilitate the subject surrender, the Commission will incorporate into the record for this proceeding, all documents filed with or issued by the Commission as part of the earlier relicensing proceeding (P-696-010).

n. With this notice, we are initiating consultation with the State Historic Preservation Officer as required by § 106, National Historic Preservation Act, and the regulations of the Advisory Council on Historic Preservation, 36 CFR 800.4.

o. Individuals desiring to be included on the Commission's mailing list should so indicate by writing to the Secretary of the Commission.

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.

Any filings must bear in all capital letters the title "COMMENTS," "PROTEST," or "MOTION TO INTERVENE," as applicable, and the Project 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.

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. 03-4712 Filed 2-26-03; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Western Area Power Administration

Boulder Canyon Project

AGENCY: Western Area Power Administration, DOE.

ACTION: Notice of proposed base charge and rates adjustment.

SUMMARY: The Western Area Power Administration (Western) is proposing an adjustment to the Boulder Canyon Project (BCP) firm power base charge and rates. The current base charge and rates expire September 30, 2003. The current base charge is not sufficient to pay all annual costs including operation, maintenance, replacement, and interest expenses, and to repay investment obligations within the required period. The proposed base charge will provide sufficient revenue to pay all annual costs, including operation, maintenance, replacement, and interest expenses, and to repay investment obligations within the allowable period. A detailed rate package that identifies the reasons for the base charge and rates adjustment will be available in April 2003. The proposed base charge and rates are scheduled to become effective on October 1, 2003, the beginning of Federal fiscal year (FY) 2004, and will remain in effect through September 30, 2004. This **Federal Register** notice initiates the formal process for the proposed base charge and rates.

DATES: The consultation and comment period will begin today and will end May 28, 2003. Western representatives will explain the proposed base charge and rates at a public information forum on April 1, 2003, beginning at 10:30 a.m. MST, in Phoenix, AZ. Interested parties can provide oral and written comments at a public comment forum on April 23, 2003, beginning at 10:30 a.m. MST, at the same location.

ADDRESSES: The meetings will be held at the Desert Southwest Customer Service Regional Office, located at 615 South 43rd Avenue, Phoenix, Arizona. Please send comments to: Mr. J. Tyler Carlson, Regional Manager, Desert Southwest Customer Service Region, Western Area Power Administration, P.O. Box 6457, Phoenix, AZ 85005-6457, e-mail carlson@wapa.gov. Western must receive comments by the end of the consultation and comment period to be assured consideration.

FOR FURTHER INFORMATION CONTACT: Mr. Jack Murray, Rates Team Lead, Desert Southwest Customer Service Region, Western Area Power Administration, P.O. Box 6457, Phoenix, AZ 85005-

6457, telephone (602) 352-2442, e-mail jmurray@wapa.gov.

SUPPLEMENTARY INFORMATION:

Proposed Base Charge and Rates for BCP Firm Power

The proposed base charge and rates for BCP firm power service are designed to recover an annual revenue requirement that includes the investment repayment, interest, operation and maintenance, replacements, payment to states, visitor services, and uprating payments. These annual costs are reduced by the projected revenue from water sales, visitor services, water pump energy sales, facility use charges, regulation services, miscellaneous leases, and late fees. The projected annual revenue requirement is the base charge for firm power service and is divided equally between capacity dollars and energy dollars. Annual energy dollars are divided by annual energy sales, and annual capacity dollars are divided by annual capacity sales to determine the proposed energy rate and the proposed capacity rate.

The Deputy Secretary of the Department of Energy (DOE) approved the existing rate formula for calculating the base charge and rates in Rate Schedule BCP-F6 for BCP firm power service on September 18, 2000, (Rate Order No. WAPA-94, October 13, 2000). The Federal Energy Regulatory Commission (FERC) confirmed and approved the rate formula on a final basis in Docket No. EF00-5092-000 issued July 31, 2001. Rate Schedule BCP-F6 became effective on October 1, 2000, for the period ending September 30, 2005. Under Rate Schedule BCP-F6, for FY 2003, the base charge is \$50,761,729, the forecasted energy rate is 5.58 mills per kilowatt-hour (mills/kWh) and the forecasted capacity rate is \$1.08 per kilowatt month (kWmonth). The composite rate is 11.16 mills/kWh.

The FY 2004 proposed base charge is \$53,284,854, the forecasted energy rate is 5.92 mills/kWh, and the forecasted capacity rate is \$1.14/kWmonth. The proposed composite rate is 11.84 mills/kWh. This is approximately a 6-percent increase from the current composite rate. The proposed base charge and rates are based on the FY 2003 operating plan for Western and the Bureau of Reclamation (Reclamation), and also account for the lower revenue level due to restriction of public tours at Hoover Dam following the September 11, 2001 terrorist attack in the United States. The following table compares the current and proposed base charge and rates.

COMPARISON OF CURRENT AND PROPOSED BASE CHARGE AND RATES

	Current October 1, 2002 through September 30, 2003	Proposed October 1, 2003 through September 30, 2004	Percent change increase
Total Composite (mills/kWh)	11.16	11.84	6
Base Charge (\$)	50,761,729	53,284,854	5
Energy Rate (mills/kWh)	5.58	5.92	6
Capacity Rate (\$/kWmonth)	1.08	1.14	5

The increase in the base charge and rates results from higher annual costs in operation and maintenance and lower revenue projections for the visitor center.

Procedural Requirements

Western will hold both a public information forum and a public comment forum. After considering comments, Western will recommend the proposed base charge and rates for final approval by the DOE Deputy Secretary.

The proposed firm power service base charge and rates for BCP are being established pursuant to the DOE Organization Act, 42 U.S.C. 7101-7352; the Reclamation Act of 1902, ch. 1093, 32 Stat. 388, as amended and supplemented by subsequent enactments, particularly section 9(c) of the Reclamation Project Act of 1939, 43 U.S.C. 485h(c); and other acts specifically applicable to the project involved.

Availability of Information

Interested parties may review and copy all brochures, studies, comments, letters, memorandums, or other documents made or kept by Western for developing the proposed base charge and rates. These documents are at the Desert Southwest Customer Service Regional Office, located at 615 South 43rd Avenue, Phoenix, Arizona.

Regulatory Procedural Requirements

Regulatory Flexibility Analysis

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601, *et seq.*) requires Federal agencies to perform a regulatory flexibility analysis if a final rule is likely to have a significant economic impact on a substantial number of small entities, and there is a legal requirement to issue a general notice of proposed rulemaking. This action does not require a regulatory flexibility analysis since it is a rulemaking of particular applicability involving rates or services.

Environmental Compliance

In compliance with the National Environmental Policy Act of 1969

(NEPA) (42 U.S.C. 4321, *et seq.*); Council On Environmental Quality Regulations (40 CFR parts 1500-1508); and DOE NEPA Regulations (10 CFR part 1021), Western has determined that this action is categorically excluded from preparing an environmental assessment or an environmental impact statement.

Determination Under Executive Order 12866

Western has an exemption from centralized regulatory review under Executive Order 12866; therefore, this notice requires no clearance by the Office of Management and Budget.

Small Business Regulatory Enforcement Fairness Act

Western has determined that this rule is exempt from congressional notification requirements under 5 U.S.C. 801 because the action is a rulemaking of particular applicability relating to rates or services and involves matters of procedure.

Dated: February 4, 2003.

Michael S. HacsKaylo,

Administrator.

[FR Doc. 03-4608 Filed 2-26-03; 8:45 am]

BILLING CODE 6450-01-P

ENVIRONMENTAL PROTECTION AGENCY

[FRI-7455-8]

Clean Air Act Advisory Committee; Notice of Meeting

AGENCY: Environmental Protection Agency.

ACTION: Notice.

SUMMARY: The Environmental Protection Agency (EPA) established the Clean Air Act Advisory Committee (CAAAC) on November 19, 1990, to provide independent advice and counsel to EPA on policy issues associated with implementation of the Clean Air Act of 1990. The Committee advises on economic, environmental, technical

scientific, and enforcement policy issues.

Open Meeting Notice: Pursuant to 5 U.S.C. App. 2, section 10(a)(2), notice is hereby given that the Clean Air Act Advisory Committee will hold its next open meeting on Friday, March 21, 2003, from approximately 8:30 a.m. to 2:30 p.m. at the Renaissance Mayflower Hotel, 1127 Connecticut Ave., NW., Washington, DC. Seating will be available on a first come, first served basis. Two of the CAAAC's four subcommittees (the Linking Energy, Land Use, Transportation, and Air Quality Concerns Subcommittee; and the Economics Incentives and Regulatory Innovations Subcommittee) will hold meetings on Thursday, March 20, 2003 from approximately 12:30 p.m. to 4:30 a.m. at the Renaissance Mayflower Hotel, the same location as the full Committee. The Permits/NSR/Toxics Subcommittee and the Energy, Clean Air and Climate Change Subcommittee will not meet at this time. The schedule for the three Subcommittees meetings is: Linking Energy, Land Use, Transportation, and Air Quality—12:30 p.m. to 2:30 p.m.; and Economics Incentives and Regulatory Innovations—2:30 p.m. to 4:30 p.m.

Inspection of Committee Documents: The Committee agenda and any documents prepared for the meeting will be publicly available at the meeting. Thereafter, these documents, together with CAAAC meeting minutes, will be available by contacting the Office of Air and Radiation Docket and requesting information under docket item A-94-34 (CAAAC). The Docket office can be reached by telephoning 202-260-7548; FAX 202-260-4400.

FOR FURTHER INFORMATION CONTACT: For further information concerning this meeting of the full CAAAC, please contact Paul Rasmussen, Office of Air and Radiation, US EPA (202) 564-1306, FAX (202) 564-1352 or by mail at US EPA, Office of Air and Radiation (Mail code 6102 A), 1200 Pennsylvania Avenue, NW., Washington DC 20004. For information on the Subcommittee

meetings, please contact the following individuals: (1) Linking Transportation, Land Use and Air Quality Concerns—Robert Larson, 734-214-4277; and (2) Economic Incentives and Regulatory Innovations—Carey Fitzmaurice, 202-564-1667. Additional information on these meetings and the CAAAC and its Subcommittees can be found on the CAAAC Web Site: <http://www.epa.gov/oar/caac/>.

Dated: February 21, 2003.

Robert D. Brenner,

Principal Deputy Assistant Administrator for Air and Radiation.

[FR Doc. 03-4632 Filed 2-26-03; 8:45 am]

BILLING CODE 6560-50-M

FEDERAL COMMUNICATIONS COMMISSION

[Report No. AUC-03-83-A (Auction No. 83); DA 03-359]

FM Translator Auction Filing Window and Application Freeze

AGENCY: Federal Communications Commission.

ACTION: Notice.

SUMMARY: This document announces an auction filing window for certain FM translator station construction permit applications and a freeze on the acceptance of FM translator and FM booster minor change and FM booster new construction permit applications from February 8 to March 14, 2003.

DATES: The filing window will open on March 10, 2003, and close on March 14, 2003.

FOR FURTHER INFORMATION CONTACT: James Bradshaw or Lisa Scanlan, Audio Division, Media Bureau at (202) 418-2700; Auction Technical Support at (202) 414-1250.

SUPPLEMENTARY INFORMATION: This is a summary of a Public Notice released February 6, 2003. The complete text of the Public Notice, including four attachments providing guidelines for electronic application filing, is available for inspection and copying during normal business hours in the FCC Reference Information Center (Room CY-A257), 445 12th Street, SW., Washington, DC. It may also be purchased from the Commission's copy contractor, Qualex International, 445 12th Street, SW., Room CY-B402, Washington, DC 20554, (202) 863-2898. It is also available on the Commission's Web site at <http://www.fcc.gov>.

General Information

The Media Bureau ("MB") and the Wireless Telecommunications Bureau

("WTB") announce an auction filing window for certain FM translator station construction permit applications. The filing window will open on March 10, 2003, and close on March 14, 2003. In connection with this window, MB also announces that it will not accept FM translator and FM booster minor change construction permit applications and FM booster new construction permit applications between February 8, 2003, and March 14, 2003.

The window is available for non-reserved band (channels 221 to 300) proposals for new FM translator stations and major modifications to authorized FM translator facilities. (See "Implementation of section 309(j) of the Communications Act—Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses," First Report and Order, 63 FR 48615, September 11, 1998. A window open for proposals in the non-reserved band provides a filing opportunity for both noncommercial educational ("NCE") and commercial FM translator applicants. See 47 CFR 74.1202(b)).

The Commission also will consider those FM translator station new and major modification applications that were received on or before November 26, 1997, but for which no "A" cut-off list had been released by that date ("Frozen FM Translator Applications"). Also on file are a number of FM translator station new and major modification applications filed after November 26, 1997, with "freeze waiver" requests ("Freeze Waiver Applications"). These applicants also may participate in the filing window. Freeze Waiver Applications must protect all minor change applications filed on or before February 7, 2003, in order to be considered in the upcoming window, the same requirement that will apply generally to new FM translator station and major change proposals submitted for the first time in the filing window.

MB will institute a temporary freeze on the acceptance of minor change FM translator applications on all channels (channels 201-300) at 12:01 a.m. Eastern Time ("ET"), February 8, 2003. The freeze shall remain in effect until the close of the window. Minor change applications filed during this freeze will be dismissed.

Participation. All applicants for new FM translator stations and major modifications to authorized FM translator facilities *must*:

- If Form 349 IS NOT on file: File electronically FCC Form 349, Application for Authority to Construct or Make Changes in an FM Translator or FM Booster Station, between 12:01 a.m.

ET, March 8, 2003 and 6 p.m. ET, March 14, 2003.

- If an FCC Form 349 Frozen FM Translator Application or Freeze Waiver Application IS currently on file: The applicant should confirm that the information on file is accurate and complete.

- If no changes in the previously filed Form 349 applications are necessary, the applicant must only file Form 175. The Form 175 must include the file number of all previously filed Form 349 applications.

- If any information in a Frozen FM Translator Application or Freeze Waiver Application is no longer accurate and complete, the applicant must file a new Form 349 application electronically, completing Section I, the Tech Box of Section III-A, and the Section VI Certification.

- File electronically an FCC Form 175 by 6 p.m. ET March 14, 2003.

- Comply with all provisions outlined in the Public Notice and applicable rules of the Commission.

An applicant's failure to reference a pending Form 349 application on its Form 175 will result in the dismissal of that Form 349 application. No consideration will be given any proposal for which the required engineering information is not on file by the close of the window. No application filing fee is required at this time.

Application Processing. After the close of the window, the Commission will make mutual exclusivity determinations with regard to all timely and complete filings. Applications received during the filing window that are not mutually exclusive with any other applications submitted in the filing window will be identified by subsequent public notice. No amendments to the FM translator filing window Form 349 application, technical or otherwise, will be accepted between the close of the application filing window, March 14, 2003, and the public notice listing the non-mutually exclusive FM translator applications. Complete FCC Form 349 non-mutually exclusive applications will be processed and the staff will release public notices listing those applications determined acceptable for filing. Petitions to deny must be filed within 15 days of the public notice announcing acceptance of the application at issue.

MB and WTB will issue a public notice identifying mutually exclusive applications received during the window. This public notice will also specify a settlement period for resolving application mutual exclusivity. Technical amendments submitted by applicants to resolve conflicts must be

minor, as defined by the applicable rules of the FM translator service, and must not create any new mutual exclusivity or other application conflict. No amendments to the FM translator filing window Form 349 application, technical or otherwise, will be accepted between the close of the application filing window, March 14, 2003, and the public notice listing the mutually exclusive FM translator applications.

Federal Communications Commission.

Lisa Scanlan,

*Assistant Division Chief, Audio Division,
Media Bureau.*

[FR Doc. 03-4605 Filed 2-26-03; 8:45 am]

BILLING CODE 6712-01-P

FEDERAL ELECTION COMMISSION

Sunshine Act Notices

AGENCY: Federal Election Commission.

DATE & TIME: Tuesday, March 4, 2003 at 10 a.m.

PLACE: 999 E Street, NW., Washington, DC.

STATUS: This meeting will be closed to the public.

ITEMS TO BE DISCUSSED:

Compliance matters pursuant to 2 U.S.C. 437g.

Audits conducted pursuant to 2 U.S.C. 437g, 438(b), and Title 26, U.S.C.

Matters concerning participation in civil actions or proceedings or arbitration.

Internal personnel rules and procedures or matters affecting a particular employee.

DATE AND TIME: Thursday, March 6, 2003 at 10 a.m.

PLACE: 999 E Street, NW., Washington, DC (Ninth Floor).

STATUS: This meeting will be open to the public.

ITEMS TO BE DISCUSSED:

Correction and Approval of Minutes.

Draft Advisory Opinion 2003-01—NORPAC by Mitchell J. Eichen, Treasurer.

Administrative Matters.

FOR FURTHER INFORMATION CONTACT: Mr. Ron Harris, Press Officer, Telephone: (202) 694-1220.

Mary W. Dove,

Secretary of the Commission.

[FR Doc. 03-4826 Filed 2-25-03; 3:31 pm]

BILLING CODE 6715-01-M

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 *et seq.*) (BHC Act), Regulation Y (12 CFR Part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The application also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States. Additional information on all bank holding companies may be obtained from the National Information Center website at www.ffiec.gov/nic/.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than March 24, 2003.

A. Federal Reserve Bank of Chicago (Phillip Jackson, Applications Officer) 230 South LaSalle Street, Chicago, Illinois 60690-1414:

1. *Capitol Bancorp, Ltd.*, Lansing, Michigan and First California Southern Bancorp, San Diego, California; to acquire 51 percent of the voting shares of First International Bank, Chula Vista, California.

In connection with this application, First California Southern Bancorp, San Diego, California; has applied to become a bank holding company by acquiring 51 percent of the voting shares of First International Bank, Chula Vista, California.

B. Federal Reserve Bank of Kansas City (Susan Zubradt, Assistant Vice President) 925 Grand Avenue, Kansas City, Missouri 64198-0001:

1. *Bethlehem Financial Corporation*, Belen, New Mexico; to become a bank holding company by acquiring 100 percent of the voting shares of Bank of Belen, Belen, New Mexico.

Board of Governors of the Federal Reserve System, February 21, 2003.

Robert deV. Frierson,

Deputy Secretary of the Board.

[FR Doc. 03-4571 Filed 2-26-03; 8:45 am]

BILLING CODE 6210-01-S

FEDERAL RESERVE SYSTEM

Notice of Proposals to Engage in Permissible Nonbanking Activities or to Acquire Companies that are Engaged in Permissible Nonbanking Activities

The companies listed in this notice have given notice under section 4 of the Bank Holding Company Act (12 U.S.C. 1843) (BHC Act) and Regulation Y (12 CFR Part 225) to engage *de novo*, or to acquire or control voting securities or assets of a company, including the companies listed below, that engages either directly or through a subsidiary or other company, in a nonbanking activity that is listed in § 225.28 of Regulation Y (12 CFR 225.28) or that the Board has determined by Order to be closely related to banking and permissible for bank holding companies. Unless otherwise noted, these activities will be conducted throughout the United States.

Each notice is available for inspection at the Federal Reserve Bank indicated. The notice also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the question whether the proposal complies with the standards of section 4 of the BHC Act. Additional information on all bank holding companies may be obtained from the National Information Center website at www.ffiec.gov/nic/.

Unless otherwise noted, comments regarding the applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than March 13, 2003.

A. Federal Reserve Bank of Philadelphia (Michael E. Collins, Senior Vice President) 100 North 6th Street, Philadelphia, Pennsylvania 19105-1521:

1. *Royal Bancshares of Pennsylvania, Inc.*, Narberth, Pennsylvania; to engage through its subsidiary Royal Equity Partners, Narberth, Pennsylvania, in extending credit and servicing loans, pursuant to section 225.28(b)(1) of Regulation Y.

Board of Governors of the Federal Reserve System, February 21, 2003.

Robert deV. Frierson,

Deputy Secretary of the Board.

[FR Doc.03-4572 Filed 2-26-03; 8:45 am]

BILLING CODE 6210-01-S

FEDERAL TRADE COMMISSION

[File No. 021 0140]

Quest Diagnostics Incorporated, et al.; Analysis To Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Proposed Consent Agreement.

SUMMARY: The consent agreement in this matter settles alleged violations of federal law prohibiting unfair or deceptive acts or practices or unfair methods of competition. The attached Analysis to Aid Public Comment describes both the allegations in the draft complaint that accompanies the consent agreement and the terms of the consent order—embodied in the consent agreement—that would settle these allegations.

DATES: Comments must be received on or before March 24, 2003.

ADDRESSES: Comments filed in paper form should be directed to: FTC/Office of the Secretary, Room 159-H, 600 Pennsylvania Avenue, NW., Washington, DC 20580. Comments filed in electronic form should be directed to: consentagreement@ftc.gov, as prescribed below.

FOR FURTHER INFORMATION CONTACT: Michael Cowie or Jackie Mendel, FTC, Bureau of Competition, 600 Pennsylvania Avenue, NW., Washington, DC 20580, (202) 326-2214 or 326-2603.

SUPPLEMENTARY INFORMATION: Pursuant to Section 6(f) of the Federal Trade Commission Act, 38 Stat. 721, 15 U.S.C. 46(f), and Section 2.34 of the Commission's Rules of Practice, 16 CFR 2.34, notice is hereby given that the above-captioned consent agreement containing a consent order to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of thirty (30) days. The following Analysis to Aid Public Comment describes the terms of the consent agreement, and the allegations in the complaint. An electronic copy of the full text of the consent agreement package can be obtained from the FTC Home Page (for February 21, 2003), on the World Wide Web, at <http://www.ftc.gov/os/2003/02/index.htm>. A paper copy can be

obtained from the FTC Public Reference Room, Room 130-H, 600 Pennsylvania Avenue, NW., Washington, DC 20580, either in person or by calling (202) 326-2222.

Public comments are invited, and may be filed with the Commission in either paper or electronic form. Comments filed in paper form should be directed to: FTC/Office of the Secretary, Room 159-H, 600 Pennsylvania Avenue, NW., Washington, DC 20580. If a comment contains nonpublic information, it must be filed in paper form, and the first page of the document must be clearly labeled "confidential." Comments that do not contain any nonpublic information may instead be filed in electronic form (in ASCII format, WordPerfect, or Microsoft Word) as part of or as an attachment to email messages directed to the following email box: consentagreement@ftc.gov. Such comments will be considered by the Commission and will be available for inspection and copying at its principal office in accordance with Section 4.9(b)(6)(ii) of the Commission's Rules of Practice, 16 CFR 4.9(b)(6)(ii).

Analysis of Agreement Containing Consent Orders To Aid Public Comment

The Federal Trade Commission ("Commission") has accepted, subject to final approval, an Agreement Containing Consent Order ("Consent Agreement") from Quest Diagnostics Incorporated ("Quest") and Unilab Corporation ("Unilab") (collectively "Respondents"). The Consent Agreement is designed to remedy the anticompetitive effects resulting from Quest's proposed acquisition of Unilab. The Consent Agreement includes a proposed Decision and Order (the "Order"), which would require the Respondents to divest to Laboratory Corporation of America ("LabCorp") assets used to provide clinical laboratory testing services to physician groups in Northern California.

The Consent Agreement has been placed on the public record for thirty (30) days for receipt of comments by interested persons. Comments received during this period will become part of the public record. After thirty (30) days, the Commission will again review the Consent Agreement and the comments received, and will decide whether it should withdraw from the proposed Consent Agreement or make it final.

Pursuant to an Agreement and Plan of Merger dated April 2, 2002 ("Merger Agreement"), Quest proposes to acquire all of the issued and outstanding voting securities of Unilab in exchange for cash, stock of Quest, or a combination of cash and stock of Quest. The value of the transaction was approximately \$877

million at the time the Merger Agreement was announced. On January 4, 2003, Quest and Unilab agreed to amend the Merger Agreement to extend the termination date and to reduce the purchase price for the overall transaction by approximately \$60 million. The Commission's complaint alleges that the proposed acquisition, if consummated, would violate Section 7 of the Clayton Act, as amended, 15 U.S.C. 18, and Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. 45, in the market for providing clinical laboratory testing services to physician groups in Northern California.

The Merging Parties

Headquartered in Teterboro, New Jersey, Quest is the largest supplier of clinical laboratory testing services in the United States, with a nationwide network of 30 full-service laboratories located in major metropolitan areas throughout the United States, approximately 100 smaller "stat," or rapid response, laboratories, and approximately 1,350 patient service centers ("PSCs"). Quest had sales of approximately \$4.1 billion in 2002. Quest's operations in Northern California consist of a full-service testing laboratory located in Dublin, California, 5 stat labs, and approximately 76 PSCs.

Unilab, headquartered in Tarzana, California, is the largest supplier of clinical laboratory testing services in California. Unilab had sales of approximately \$390 million in 2001. It operates 3 full-service laboratories, located in Los Angeles, San Jose, and Sacramento; 39 stat laboratories; and approximately 386 PSCs. About 23 of the stat labs and 230 of the PSCs are located in Northern California.

The Clinical Laboratory Testing Services Market

Clinical laboratory testing services ("Laboratory Services") are a critical element in the delivery of quality health care in the United States. Clinical laboratory tests are used to detect and analyze the presence, concentrations or composition of chemical, biological or cellular components in human body fluids and tissue in order to help physicians diagnose, monitor, and treat their patients' health conditions. They include thousands of individual test procedures in the areas of hematology, blood chemistry, urine chemistry, endocrinology, and microbiology, among others. Examples of commonly ordered tests include red and white blood cell counts, blood chemistry panels, urinalyses, microbiology cultures, HIV screening tests, and

pregnancy tests. Most of these high-volume, "routine" tests are performed by automated equipment and the results are generally reported electronically to the physician within a 24-hour period. Other tests, including most immunological and genetic tests, are performed less frequently and require more sophisticated and specialized knowledge or equipment. Two examples of such "esoteric" tests are immunoelectrophoresis (used for the diagnosis of autoimmune disorders and myelomas) and polymerase chain reaction tests for hepatitis C.

Delivery of health care in California is distinguished by high penetration by managed health care. Under the managed care model prevalent in the state, health plans often delegate the financial risk for providing primary, specialty, and ancillary medical services to physician groups, such as independent practice associations and medical groups, under a capitated arrangement, pursuant to which the physician group receives a prospective payment to care for the enrollees of the health plan. That is, rather than receive payments for each service provided by the physician group, the physician group receives a per member per month ("PMPM") payment designed to cover the expected costs of care by the physicians. The physicians then bear the risk of whether the capitation payments will cover the actual costs of care—including, in many cases, the cost of providing Laboratory Services.

Physician groups in Northern California that assume the financial risk for Laboratory Services under this California delegated model constitute a significant category of purchasers of Laboratory Services. Generally, these physician groups pursue exclusive or semi-exclusive contracts with laboratories to purchase such services, most often under a capitated arrangement in which the physician group pays a set amount (PMPM) to the laboratory to perform Laboratory Services for the physician group's patients who are affiliated with pre-paid health plans.

In general, three types of providers may perform clinical laboratory testing: independent clinical laboratories, such as Quest and Unilab; hospital-affiliated laboratories; and physician office laboratories. While individual physicians can perform a limited number of relatively simple diagnostic tests in their own offices, this testing is not a substitute for the clinical testing performed in a laboratory. Physician groups require that a clinical laboratory offer, among other things, a comprehensive menu of routine and

esoteric tests; stat testing capabilities; and an extensive field collection and distribution system that includes conveniently located patient service centers and courier networks.

Hospital laboratories that supply physician groups in Northern California are treated as market participants in the proposed complaint. Most acute-care hospitals maintain on-site laboratories to provide quick-response testing for patients in the hospital. In addition, many hospital laboratories have established outreach programs to obtain additional business by providing outpatient Laboratory Services to physicians in the communities surrounding the hospitals. In some instances, hospital laboratory outreach programs in Northern California supply Laboratory Services under capitated arrangements to physician groups. Hospital laboratories have been most successful when competing to supply physician groups that are affiliated with the hospital and whose physicians are located in medical buildings on or near the hospital campus.

The proposed complaint alleges that the relevant market does not include physician office laboratories. Some medical groups operate laboratories that perform many stat and routine tests exclusively for doctors in the medical group. Physician groups do not view these physician office laboratories as viable substitute suppliers of Laboratory Services, because these laboratories do not offer the array of tests, capabilities, and services that are offered by independent clinical laboratories, including convenient patient access through PSCs. Furthermore, physician groups that do not have their own clinical laboratories are unlikely to develop such capabilities, even in the event of a significant increase in the price of Laboratory Services.

The draft complaint alleges that the relevant section of the country (*i.e.*, the geographic market) within which to analyze the effects of the proposed acquisition is Northern California. The relevant geographic market is local in nature because physician groups prefer to have specimens collected at PSCs located where they are convenient and accessible to all plan enrollees. Physicians also require prompt reporting of routine test results, generally within 24 hours. In addition, physicians require even more rapid reporting of results for stat testing, generally within a few hours. For these reasons, a clinical laboratory must have stat testing facilities and PSCs proximate to the physicians' offices. Physician groups in California have service areas that vary from a single

town to multiple counties; however, none has a service area that spans both northern and southern California.

Quest and Unilab are the two leading providers of Laboratory Services to physician groups in Northern California, based on the total patient lives covered under physician group capitated contracts. If the proposed merger were to be consummated, Quest would have a market share of more than 70 percent. Quest's next largest competitor in the relevant market is a hospital laboratory that would have a market share of about 4 percent. The proposed acquisition would increase concentration in the relevant market by more than 1,500 points to a Herfindahl-Hirschman Index level above 5,300.

Quest and Unilab compete vigorously against each other for contracts to supply Laboratory Services to physician groups, and this competition has benefitted customers in Northern California. Many physician groups in Northern California regard Quest and Unilab to be the closest competitors bidding for their Laboratory Services business in terms of both price and service offerings. The proposed acquisition would thus allow the combined firm to exercise market power unilaterally by eliminating competition between the two largest, and frequently lowest-cost, providers of Laboratory Services to physician groups in Northern California. As a result, the proposed acquisition would increase the likelihood that physician groups in Northern California would be forced to pay higher prices for Laboratory Services.

Substantial and effective expansion by smaller competitors, as well as new entry, sufficient to deter or counteract the anticompetitive effects of the proposed acquisition in the market for providing Laboratory Services to physician groups in Northern California, is unlikely. Expansion by hospital laboratories or small independent clinical laboratories located in Northern California is unlikely to be sufficient to avert the anticompetitive effects from the merger. In general, large regional and national independent clinical laboratory companies like Unilab and Quest enjoy significant cost advantages over hospital laboratories and small independent clinical laboratories. As a result, the large independent laboratories are able more effectively to compete for and service price-sensitive customers such as physician groups seeking services under capitated arrangements.

It is also unlikely that new independent clinical laboratories will enter the relevant market. There are

significant costs associated with establishing the staffed PSCs, courier routes, and sales force and other infrastructure necessary to serve the needs of a physician group. New entry is unlikely to occur because a new entrant would have significantly higher incremental costs of serving a particular physician group than an independent clinical laboratory that has an existing infrastructure in or near the area served by the physician group. Also, it is difficult to recoup the required incremental investments through a single physician group contract without charging higher than current rates, and opportunities to bid on multiple physician group contracts in the same area do not occur frequently. Thus, bidding at current rates in the hopes of winning future business would be risky for a new entrant.

The risk for an entrant would be further increased because "pull-through" business is an important determinant of the profitability of capitated contracts. Physician groups that participate in capitated plans for some of their customers also frequently participate in fee-for-service plans for other customers. Under fee-for-service plans, physicians are paid for each procedure. When Laboratory Services are needed for a patient with a fee-for-service plan, the health plan pays the laboratory directly but the physician chooses which laboratory covered by the plan will be used. The Laboratory Services provider for the capitated business of a physician group frequently has a significant advantage in winning a substantial amount of the "pull-through" fee-for-service business of the group, because physicians are familiar with the laboratory and it is easier to deal with one laboratory for all patients. Laboratory Services providers take into account the potential for pull-through business when determining their bids for capitated contracts. A new entrant to an area would not have a reputation or relationships with the physicians in the group and thus may have difficulty achieving similar pull-through rates as incumbent firms. As a result, because a new entrant would be cost-disadvantaged in competing against independent clinical labs that already have an existing infrastructure, it would be unlikely to secure capitated contracts with physician groups at pre-merger price levels.

The Proposed Order

The proposed Order effectively remedies the Commission's competitive concerns about the proposed acquisition by requiring the companies to divest Laboratory Services assets in Northern

California to LabCorp, including 46 PSCs; 5 stat laboratories; all of Quest's, and one of Unilab's, capitated contracts with physician groups; and all related assets necessary for the provision of Laboratory Services to physician groups, including customer lists and information. With these assets and LabCorp's experience as a provider of Laboratory Services in Southern California and elsewhere in the United States, LabCorp will be able to replicate Quest's operations, thus replacing the competition that would be lost as a result of the proposed acquisition. The Commission required that the Respondents make all of Quest's Northern California outpatient Laboratory Services business available to prospective buyers but has approved LabCorp's proposed acquisition of a smaller package of assets because LabCorp will be able to replicate the competition that Quest represents today with the smaller package of assets. As a result, after the divestiture, competition in the market for providing Laboratory Services to physician groups in Northern California will remain virtually unchanged by the proposed acquisition. Furthermore, the proposed Order includes measures designed to help ensure an effective transition of the divested assets to LabCorp.

LabCorp is a well-positioned acquirer of the divested assets for several reasons. As the second largest provider of Laboratory Services in the United States, LabCorp offers an extensive range of more than 4,000 routine and esoteric clinical tests, as well as other services that physician groups require, such as patient encounter data and test result reporting information technology. LabCorp currently provides Laboratory Services throughout most areas of the country, but has a limited presence in Northern California, where its business consists primarily of providing clinical reference testing to hospitals and esoteric HIV-related testing. Due to its operations in Southern California, however, LabCorp has substantial experience satisfying the requirements of physician groups in California's managed care environment. Furthermore, LabCorp has the financial resources to purchase the assets and operate the business in a competitive manner.

Pursuant to the proposed Order, Quest is required to consummate its transaction with LabCorp within ten days of the date that Quest and Unilab consummate the Merger Agreement ("Acquisition Date") and to complete the transfer of the assets to LabCorp within six months of the Acquisition Date. If Quest fails to comply with either

of these obligations, the Commission may appoint a trustee to divest Quest's outpatient Laboratory Services business in Northern California or its entire Laboratory Services business in Northern California. In the event that Quest transfers some of the assets to LabCorp, but LabCorp abandons its efforts to complete the transfer of the remaining assets and the interim monitor so notifies the Commission, the Commission may require Quest to rescind the transaction with LabCorp and order Quest to divest its Northern California outpatient Laboratory Services business to a Commission-approved acquirer within six months. Should Quest fail to do so, the Commission may appoint a trustee to divest either Quest's outpatient Laboratory Services business in Northern California or its entire Laboratory Services business in Northern California. The purpose of these provisions is to assure the Commission's ability to secure an acceptable buyer—able to maintain and restore competition in the relevant market—in the event that LabCorp does not acquire the divested assets. The provisions require divestiture of a more extensive package of assets consisting of either Quest's outpatient Laboratory Services business or its entire Laboratory Services business in Northern California because a prospective buyer other than LabCorp may require additional assets to fully restore competition in the relevant market.

The proposed Order contains several provisions designed to ensure that the divestiture is successful. The proposed Order requires Quest to maintain the viability, marketability, and competitiveness of its Laboratory Services business assets in Northern California pending transfer of the divested assets. It also requires Quest to provide transitional services that the acquirer of the divested assets may need until the assets are completely divested and transferred. The proposed Order also prohibits Quest from interfering with the employment of any employees relating to the divested assets by the acquirer and requires Quest to provide incentives to certain employees to continue in their positions until the divestiture and to accept employment with the acquirer. For a period of one year following the date that the transfer of the divested assets is accomplished, Quest is prohibited from soliciting any employees of Quest or Unilab that accept offers of employment from the acquirer of the divested assets. Additionally, the proposed Order

requires Quest to take steps to maintain the confidentiality of certain confidential information relating to the divested assets.

Pursuant to the terms of the proposed Order, the Commission has approved the appointment of Bruce K. Farley as an interim monitor trustee to ensure that Quest expeditiously transfers the divested assets and complies with its obligations under the proposed Order. Mr. Farley has over 13 years of experience in the Laboratory Services industry. In addition, he has significant experience supervising the integration of business operations subsequent to mergers and acquisitions.

Finally, in order to ensure that the Commission remains informed about the status of Quest's clinical laboratory testing business in Northern California pending divestiture, and about efforts being made to accomplish the transfer of the divested assets, the proposed Order requires Quest to report to the Commission within 30 days, and every 30 days thereafter until the divestiture is fully accomplished. In addition, Quest is required to report to the Commission every six months regarding its confidentiality obligations, as well as its obligations regarding non-solicitation of employees of the acquirer of the divested assets.

The purpose of this analysis is to facilitate public comment on the Consent Agreement, and it is not intended to constitute an official interpretation of the Consent Agreement or proposed Order or to modify the terms of the Consent Agreement or proposed Order in any way.

By direction of the Commission.

Donald S. Clark,
Secretary.

[FR Doc. 03-4609 Filed 2-26-03; 8:45 am]

BILLING CODE 6750-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[60Day-03-43]

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 Anne O'Connor, 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: Work Organization, Cardiovascular Disease, and Depression Study—NEW—The National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC).

Cardiovascular disease (CVD) and depression represent health problems of staggering proportion for the United States. An estimated 60 million Americans, over half of whom are younger than 65 years of age, currently have some form of CVD and nearly 20% of all Americans will experience at least one episode of major depression during their lifetimes. In economic terms, the total yearly costs of CVD and depression in the United States have been estimated at \$327 billion and \$43 billion, respectively.

In addition to being common and costly health problems, CVD and depression co-morbidity is frequent and recent studies have shown increased cardiovascular morbidity and mortality in depressed patients, implicating depression as a potential independent risk factor for CVD. Understanding the causes and etiologic relationships between these two illnesses represents a

major challenge for public health researchers.

In addition to traditionally recognized risk factors, occupational factors appear to play a role in the etiology of both CVD and depression. For example, studies of occupational groups have shown markedly different rates of CVD and depression that are too large to be explained by known risk factors alone, and it is generally inferred that chemical, physical and/or work organizational exposures must be involved. While of relatively recent origins, the term "work organization" has evolved to serve as a rubric that encompasses diverse workplace exposures (often called job stressors) such as psychological demands, limited job control, work role demands and shift-work. There is considerable evidence that such factors play a role in the etiology of both CVD and depression, but design and sample size limitations of existing studies make it difficult to establish a causal association and make specific public health recommendations.

This proposed study will examine the relationships between specific job stressors, CVD and depression. To overcome the limitations of previous studies, we are proposing a five-year prospective study with a population of 20,000 workers, half of them women. Workers will be identified through 20 large businesses sampled from the four geographic Census regions of the U.S. Different types of businesses will be sampled in order to incorporate diverse types of jobs and work. Specific job stressors, perceived non-work stressors and general risk factors for CVD and depression will be assessed. To ascertain exposures and outcomes, the study will rely on employee medical records, blood samples, and both self-reports and work-site assessments of job conditions. Several instruments to evaluate the work environment will be used, including the NIOSH Generic Job Stress Questionnaire, which assess a variety of job stressors, as well as other relevant aspects of the work environment.

This request is for three years of the five-year proposed data collection with a total of 57,646 burden hours, and an estimated annualized burden of 19,215 hours. There is no cost to respondents.

Data	Number of respondents	Number of responses/respondent	Average burden/response (in hours)	Total burden (in hours)
Baseline Interview/Blood Collection Biometrics	21,993	1	75/60	27,491
Medical Records for Baseline	4,398	1	30/60	2,199

Data	Number of respondents	Number of responses/ respondent	Average burden/response (in hours)	Total burden (in hours)
Follow-up Interview 1	17,594	1	30/60	8,797
Refusal Questionnaire	4,399	1	5/60	367
Medical Records for Follow-up 1	3,519	1	30/60	1,760
Follow-up Interview 2	14,995	1	30/60	7,498
Refusal Questionnaire	2,639	1	5/60	220
Medical Records for Follow-up 2	2,999	1	30/60	1,500
Follow-up Interview 3	12,712	1	30/60	6,356
Refusal Questionnaire	2,243	1	5/60	187
Medical Records for Follow-up 3	2,542	1	30/60	1,271
Total				57,646

Dated: February 18, 2003.

Thomas Bartenfeld,

Acting Associate Director for Policy, Planning and Evaluation, Centers for Disease Control and Prevention.

[FR Doc. 03-4598 Filed 2-26-03; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[60Day-03-45]

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 Anne O'Connor, 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: Congenital Syphilis (CS) Case Investigation and Report Form (CDC73.126) OMB No. 0920-0128—Extension—National Center for HIV, STD, and TB Prevention (NCHSTP), Centers for Disease Control and Prevention (CDC).

CDC proposes to continue data collection for congenital syphilis case

investigations under the "Congenital Syphilis Case Investigation and Report Form" (CDC73.126 REV 11-98); this form is currently approved under OMB No. 0920-0128. This request is for a 3-year extension of clearance. Reducing congenital syphilis is a national objective in the DHHS Report entitled *Healthy People 2010 (Vol I and II)*. Objective 25-9 of this document states the goal: "Reduce congenital syphilis to 1 new case per 100,000 live births". In order to meet this national objective, an effective surveillance system for congenital syphilis must be continued to monitor current levels of disease and progress towards the year 2010 objective. This data will also be used to develop intervention strategies and to evaluate ongoing control efforts.

Respondent burden is approximately 15 minutes per reported case. The estimated annual number of cases expected to be reported using the current case definition is 500 or less. Therefore, the total number of hours for congenital syphilis reporting required will be approximately 130 hours per year. There is no cost to respondents except their time.

Respondents	Number of respondents	Number of responses/ respondent	Average burden/response (in hours)	Total burden (in hours)
State/local health departments	65	8	15/60	130
Total				130

Dated: February 21, 2003.

Thomas Bartenfeld,

Acting Associate Director for Policy, Planning and Evaluation, Centers for Disease Control and Prevention.

[FR Doc. 03-4600 Filed 2-26-03; 8:45 am]

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[60Day-03-44]

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 Anne O'Connor, 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: The Role of Housing in HIV/AIDS Prevention—New—National Center for HIV, STD, and TB Prevention (NCHSTP), Centers for Disease Control and Prevention (CDC).

The Centers for Disease Control and Prevention (CDC) and the Department of Housing and Urban Development (HUD) propose to study the effects of housing for homeless or unstably housed persons on the transmission of HIV and the health of persons living with HIV. Results from the study will be used by policy makers to better understand the types of housing and other affiliated services most likely to reduce HIV transmission and disease progression in the homeless population.

The population to be studied will be drawn from persons living with HIV/AIDS who are seeking housing services from three communities with unmet housing needs as evidenced by a waiting list for services, or other evidence of unmet housing need, through the Housing Opportunities for Persons with AIDS (HOPWA) program. The project will be a longitudinal cohort study, following participants for 18 months. Participants will be randomized into two groups. One group will receive vouchers for housing

subsidies plus a 2-session behavioral intervention; the other group will receive referral to housing resources through participating and other agencies plus the 2-session behavioral intervention. No study participants will be denied access to other housing services that are available through participating agencies or other community resources. Since all participants receive the behavioral intervention, the study technically assesses the effects of housing over and above the behavioral intervention.

A cost study will also be conducted to determine the resources needed for this approach and the cost benefits of providing housing for homeless and unstable housed people living with HIV. The purpose of the cost study is to evaluate the effects of housing affordability and the cost-effectiveness (*i.e.* cost-utility ratio) of this strategy relative to other interventions in other public health and other HIV prevention interventions.

The burden for this collection is estimated to be approximately 90 minutes for the survey at baseline and at 6, 12, and 18 months after baseline and 120 minutes for the interview with HUD site service providers. Blood samples for CD4 and viral load counts will also be collected for all participants. These estimates include the time needed to determine if the respondent is eligible to be interviewed, obtain informed consent, and administer the interview.

There are no costs to respondents for participation in the survey other than their time.

Respondents	Number of respondents	Number of responses/respondent	Average burden/response (in hours)	Total burden (in hours)
HOPWA Program Participants	1000	4	90/60	6000
HUD Site Service Provider	15	1	2	30
Total				6030

Dated: February 21, 2003.

Thomas Bartenfeld,

Acting Associate Director for Policy, Planning and Evaluation, Centers for Disease Control and Prevention.

[FR Doc. 03-4601 Filed 2-26-03; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[60Day-03-46]

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 Anne O'Connor, 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: Restriction on Travel of Persons, (0920-0488)—Extension—National Center for Infectious Diseases (NCID), Centers for Disease Control and Prevention (CDC).

In 2000, the Food and Drug Administration (FDA) and CDC consolidated regulations related to controlling the spread of communicable diseases. FDA formerly administered the regulations contained in part 1240 of Title 21, Code of Federal Regulations, which pertained to interstate control of communicable diseases. These regulations may now be found in part 70 of Title 42, Code of Federal Regulations.

Among the regulations in 21 CFR part 1240, FDA transferred to CDC certain sections that relate to restrictions on interstate travel of any person who is in

the communicable period of cholera, plague, smallpox, typhus, or yellow fever, or who, having been exposed to any such disease, is in the incubation period thereof. One of the sections—formerly 21 CFR 1240.50 and now 42 CFR 70.5 (Certain communicable diseases; special requirements)—contains a requirement for reporting certain information to the Federal government. Specifically, this regulation requires any person who is in the communicable period of cholera, plague, smallpox, typhus or yellow fever, or who, having been exposed to any such disease, is in the incubation period thereof, to apply for and receive a permit from the Surgeon General or his authorized representative in order to travel from one State or possession to another.

Control of disease transmission within the States is considered to be the province of state and local health authorities, with federal assistance being sought by those authorities on a cooperative basis, without application of federal regulations. The regulations formerly administered by FDA and assumed by CDC were developed to facilitate Federal action in the event of large outbreaks requiring a coordinated effort involving several states, or in the

event of inadequate local control. While it is not known whether, or to what extent, situations may arise in which these regulations would be invoked, contingency planning for domestic emergency preparedness is now commonplace. Should this occur, CDC will use the reporting and record-keeping requirements contained in the regulations to carry out quarantine responsibilities as required by law.

Because of the uncertainty about whether a situation will ever arise precipitating CDC's enforcement of this rule, the following data collection burden estimate was prepared using the article *Smallpox: An Attack Scenario*, Tara O'Toole; Emerging Infectious Diseases, Vol. 5, No. 4, Jul-Aug 1999. This article describes the aftermath of a hypothetical domestic public health emergency situation involving smallpox virus. Of the potentially 15,000 persons infected with smallpox, the data collection assumes that one-fourth of these would apply for a permit to move from one state to another while in the communicable period of or having been exposed to smallpox. Should the event be different and/or involve a different number of people, the burden will vary accordingly.

Respondent	Number of responses	Number of responses/ respondents	Average burden/response (in hrs.)	Total burden (in hrs.)
Applicants (per application for a permit to move from state to state while in the communicable period of or having been exposed to smallpox	3,750	1	15/60	938
Total .....	.....	.....	.....	938

Dated: February 21, 2003.

Thomas Bartenfeld,

Acting Associate Director for Policy, Planning and Evaluation, Centers for Disease Control and Prevention.

[FR Doc. 03-4602 Filed 2-26-03; 8:45 am]

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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), Department of Health and Human Services (HHS).

ACTION: Notice.

SUMMARY: The Centers for Disease Control and Prevention (CDC) National Immunization Program (NIP) is seeking

a Cooperative Research and Development Agreement (CRADA) partner for collaboration in the development of a Vaccine Management Software (VACMAN) dynamic link library (DLL) component to interface with immunization information systems. The current DLL is compatible to VACMAN version 2.6x and will not be compatible when VACMAN is upgraded to version 3.

Because CRADAs 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. This opportunity is available until 30 days

after publication of this notice in the **Federal Register**. Respondents may be provided a longer period of time to furnish additional information if CDC finds this necessary.

FOR FURTHER INFORMATION CONTACT:

Technical: Terry Boyd, Data Management Division, National Immunization Program, Centers for Disease Control and Prevention (CDC), 1600 Clifton Rd., NE., Mailstop E-62, Atlanta, GA 30333, telephone (404) 639-8584.

Business: Janet Kelly, Data Management Division, National Immunization Program, Centers for Disease Control and Prevention (CDC), 1600 Clifton Rd., NE., Mailstop E-62, Atlanta, GA 30333, telephone (404) 639-8735.

SUPPLEMENTARY INFORMATION: The VACMAN application was developed by the CDC NIP and is used by CDC Immunization Grant programs to purchase vaccines through a Vaccine

Ordering and Distribution System. The VACMAN DLL interface component allows immunization information systems to interface with VACMAN.

The CDC/NIP Development Team will work with respondent to develop and promote a product that will support VACMAN connectivity with immunization information systems and other applications that might exist on different operating systems. Respondent will be given access to VACMAN 3 database specifications and business rules. Respondent will maintain the code such that it is constantly kept updated accordingly as changes in the VACMAN product occurs. CDC/NIP requires the use of the source code and free distribution rights for the object code, which may include vendors, to ensure all available products can interact with VACMAN consistently and that all Grant programs have the opportunity to integrate VACMAN with their other processes for properly managing their vaccines.

Applicant submissions will be judged according to the following criteria:

1. Evidence of expertise in software development and supporting data (e.g., resumes) of qualifications for the principle investigator who would be involved in the CRADA.
2. Specific operating systems and development languages proposed for development of the DLL.
3. Evidence of commitment for development to release to Grant programs, including vendors, the compiled components along with all appropriate documentation such as Application Program Interface documentation.

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 license 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 is proposed and implemented under the 1986 Federal Technology Transfer Act: Public Law 99-502, as amended.

The responses must be made to: Lisa Blake-DiSpigna, Technology Development Coordinator, National Center for Infectious Diseases, Centers for Disease Control and Prevention (CDC), 1600 Clifton Rd. NE., Mailstop C-19, Atlanta, GA 30333.

Dated: February 21, 2003.

Joseph R. Carter,

Associate Director for Management and Operations, Centers for Disease Control and Prevention (CDC).

[FR Doc. 03-4599 Filed 2-26-03; 8:45 am]

BILLING CODE 4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Advisory Board on Radiation and Worker Health: Meeting

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463), the Centers for Disease Control and Prevention (CDC) announces the following committee meeting.

Name: Advisory Board on Radiation and Worker Health (ABRWH).

Time and Date: 1 p.m.-4 p.m., March 14, 2003.

Place: Teleconference call will originate at the Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health (NIOSH), Atlanta, Georgia. Please see **SUPPLEMENTARY INFORMATION** for details on accessing the teleconference.

Status: Open to the public, teleconference access limited only by ports available.

Background: The Advisory Board on Radiation and Worker Health ("the Board") was established under the Energy Employees Occupational Illness Compensation Program Act of 2000 to advise the President, through the Secretary of Health and Human Services (HHS), on a variety of policy and technical functions required to implement and effectively manage the new compensation program. Key functions of the Board include providing advice on the development of probability of causation guidelines which have been promulgated by HHS as a Final Rule, advice on methods of dose reconstruction which have also

been promulgated as a Final Rule, evaluation of the scientific validity and quality of dose reconstructions conducted by NIOSH for qualified cancer claimants, and advice on the addition of classes of workers to the Special Exposure Cohort.

In December 2000, the President delegated responsibility for funding, staffing, and operating the Board to HHS, which subsequently delegated this authority to the CDC. NIOSH implements this responsibility for CDC. The charter was signed on August 3, 2001 and in November, 2001, the President completed the appointment of members to the Board to ensure a balanced representation on the Board. The initial tasks of the Board have been to review and provide advice on the proposed, interim, and final rules of HHS.

Purpose: This board is charged with (a) providing advice to the Secretary, HHS on the development of guidelines under Executive Order 13179; (b) providing advice to the Secretary, HHS on the scientific validity and quality of dose reconstruction efforts performed for this Program; and (c) upon request by the Secretary, HHS, advise the Secretary on whether there is a class of employees at any Department of Energy facility who were exposed to radiation but for whom it is not feasible to estimate their radiation dose, and on whether there is reasonable likelihood that such radiation doses may have endangered the health of members of this class.

Matters To Be Discussed: Agenda for this meeting will focus on the Special Exposure Cohort Notice of Proposed Rule Making finalization of recommendations.

Agenda items are subject to change as priorities dictate.

SUPPLEMENTARY INFORMATION: This conference call is scheduled for 1 p.m. Eastern Time. To access the teleconference you must dial 1-800-311-3437. To be automatically connected to the call, you will need to provide the operator with the participant code "528890" and you will be connected to the call.

CONTACT PERSON FOR MORE INFORMATION: Larry Elliott, Executive Secretary, ABRWH, NIOSH, CDC, 4676 Columbia Parkway, Cincinnati, Ohio 45226, telephone 513/841-4498, fax 513/458-7125.

The Director, Management Analysis and Services Office, has been delegated the authority to sign **Federal Register** notices pertaining to announcements of meetings and other committee management activities for both the

Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

Dated: February 21, 2003.

Alvin Hall,

Director, Management Analysis and Services Office, Centers for Disease Control and Prevention.

[FR Doc. 03-4603 Filed 2-26-03; 8:45 am]

BILLING CODE 4163-19-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

Agency Recordkeeping/Reporting Requirements Under Emergency Review by the Office of Management and Budget (OMB)

Title: Design and field testing of Head Start National Reporting System on Child Outcomes.

OMB No.: New Request.

Description: The Administration on Children, Youth and Families (ACYF), Administration for Children and Families (ACF) of the Department of Health and Human Services (DHHS) is requesting comments on plans to conduct the Design and Field Testing of the Head Start National Reporting System on Child Outcomes. This study is being conducted under contract with Westat and Xtria (#282-98-0015) to collect child outcomes information that will be used for program improvement in Head Start.

The purpose of this field test is to create the framework and procedures for a national outcomes report of children's ability and progress on the Presidentially and congressionally-mandated standards of learning. This effort will involve a subsample of 36

Head Start programs. In these programs, we will collect direct assessment data on approximately 1,440 sample children as well as their demographic information, the backgrounds of their respective classroom teachers, and the characteristics of their respective programs. This data will be used to develop and evaluate a system to report this outcome information.

After designing the framework and procedures for the National Reporting System, Westat/Xtria will then evaluate how well such a system would work, based on analysis of direct assessment data from a national sample of programs, classes, and children. Westat will then recommend any modifications to the design for the full national implementation year of the National Reporting System (NRS), based on the results of the field test. This could include recommendations on the training procedures of field staff or modifications of the assessment battery.

In the implementation of the NRS, staff training in collecting and submitting data will be critical. In order to ensure high quality data for the NRS, two different approaches to staff training will be evaluated in two study conditions:

Standard Training

The NRS will use a "training the trainers" training program. This effort will involve a subsample of 26 programs drawn from around the country. Selected staff from each program will travel to Rockville, Maryland to be trained in the procedures to teach other Head Start staff members how to administer the assessment battery and how to use the computer reporting system (Condition Two). Once trained, these "trained trainers" will return to their respective Head Start programs

and train their local teachers how to administer the assessment battery and how to use the computer reporting system.

Extended Training

This training condition will involve a subsample of 10 Head Start programs drawn from around the country. These programs will receive the standard 3-day training workshop plus one extra day of extended training on how to conduct training sessions for their local Head Start staff (Condition One).

The field test will also evaluate any differences between the types of assessors administering the assessment. Head Start classroom teachers, the first type of assessor, will be responsible for administering the assessment to children from their own classroom. The second type of assessor is any other Head Start staff, or "non-classroom teachers," including program coordinators, education coordinators, education specialists, or even teachers from other classrooms (e.g., teacher from classroom A assesses children from classroom B). The purpose of examining these types of assessors is to determine if there are any differences in the administration of the assessment and/or the scores collected by these different types of assessors. Any possible bias or unreliability in the assessment scores collected by the different types of assessors, and the ease of administration and fidelity to standard administration procedures will be evaluated.

Respondents: Head Start Children and Head Start Staff.

Annual Burden Estimates: Estimated Annual Response Burden to Respondents for the Design and field testing of Head Start National Reporting System on Child Outcomes.

ESTIMATED RESPONSE BURDEN FOR RESPONDENTS IN THE HEAD START NATIONAL REPORTING SYSTEM FIELD TEST—SPRING 2003

Activities	Number of respondents	Number of responses per respondent	Average burden hours per response	Total burden hours
Head Start Children: Complete Direct Assessments	1440	1	1/3	480
Head Start Staff: Administer Direct Assessment	144	10	1/3	480
Head Start Staff: Enter Child Demographic Information	1440	1	1/12	120
Head Start Staff: Enter Teacher Background Information	144	1	1/30	4.8
Head Start Children: Parallel Child Assessments administered by Field Staff	480	1	1/3	160
Program Directors Technology Survey	400	1	1/4	100
Condition One Head Start Staff: Training as Trainers for the Direct Child Assessments	10	1	28	280
Condition Two head Start Staff: Training as Trainers for the Direct Child Assessments	26	1	20	520
Head Start Staff: Training Local Staff for the Direct Child Assessments	36	1	8	288
Head Start Staff: Receiving Training for the Direct Child Assessments	144	1	8	1152
Totals for Spring 2003				3,584.8

Additional Information: ACF is requesting that OMB grant a 180 day approval for this information collection under procedures for emergency processing by March 15, 2003. A copy of this information collection, with applicable supporting documentation, may be obtained by calling the Administration for Children and Families, Reports Clearance Officer, Robert Sargis at (202) 690-7275. In addition, a request may be made by sending an e-mail request to: rsargis@acf.dhhs.gov.

Comments and questions about the information collection described above should be directed to the following address by March 15, 2003: Office of Information and Regulatory Affairs, Attn: OMB Desk Officer for ACF, Office of Management and Budget, Paper Reduction Project, 725 17th Street, NW., Washington, DC 20503.

Dated: February 21, 2003.

Robert Sargis,

Reports Clearance Officer.

[FR Doc. 03-4585 Filed 3-26-03; 8:45 am]

BILLING CODE 4184-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 01E-0367]

Determination of Regulatory Review Period for Purposes of Patent Extension; Starlix

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) has determined the regulatory review period for Starlix and is publishing this notice of that determination as required by law. FDA has made the determination because of the submission of an application to the Director of Patents and Trademarks, Department of Commerce, for the extension of a patent that claims that human drug product.

ADDRESSES: Submit written comments and petitions to the Dockets Management Branch (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. Submit electronic comments to <http://www.fda.gov/dockets/ecomments>.

FOR FURTHER INFORMATION CONTACT: Claudia Grillo, Office of Regulatory Policy (HFD-013), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-827-3460.

SUPPLEMENTARY INFORMATION: The Drug Price Competition and Patent Term Restoration Act of 1984 (Public Law 98-417) and the Generic Animal Drug and Patent Term Restoration Act (Public Law 100-670) generally provide that a patent may be extended for a period of up to 5 years so long as the patented item (human drug product, animal drug product, medical device, food additive, or color additive) was subject to regulatory review by FDA before the item was marketed. Under these acts, a product's regulatory review period forms the basis for determining the amount of extension an applicant may receive.

A regulatory review period consists of two periods of time: a testing phase and an approval phase. For human drug products, the testing phase begins when the exemption to permit the clinical investigations of the drug becomes effective and runs until the approval phase begins. The approval phase starts with the initial submission of an application to market the human drug product and continues until FDA grants permission to market the drug product. Although only a portion of a regulatory review period may count toward the actual amount of extension that the Director of Patents and Trademarks may award (for example, half the testing phase must be subtracted, as well as any time that may have occurred before the patent was issued), FDA's determination of the length of a regulatory review period for a human drug product will include all of the testing phase and approval phase as specified in 35 U.S.C. 156(g)(1)(B).

FDA recently approved for marketing the human drug product Starlix (nateglinide). Starlix is indicated as monotherapy to lower blood glucose in patients with Type 2 diabetes (non-insulin dependent diabetes mellitus, NIDDM) whose hyperglycemia cannot be adequately controlled by diet and physical exercise and who have not been chronically treated with other anti-diabetic agents. Subsequent to this approval, the Patent and Trademark Office received a patent term restoration application for Starlix (U.S. Patent No. 34,878) from Novartis, and the Patent and Trademark Office requested FDA's assistance in determining this patent's eligibility for patent term restoration. In a letter dated October 2, 2001, FDA advised the Patent and Trademark Office that this human drug product had undergone a regulatory review period and that the approval of Starlix represented the first permitted commercial marketing or use of the product. Shortly thereafter, the Patent and Trademark Office requested that

FDA determine the product's regulatory review period.

FDA has determined that the applicable regulatory review period for Starlix is 2,147 days. Of this time, 1,775 days occurred during the testing phase of the regulatory review period, while 372 days occurred during the approval phase. These periods of time were derived from the following dates:

1. *The date an exemption under section 505 of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 355) became effective:* March 9, 1995. The applicant claims February 7, 1995, as the date the investigational new drug application (IND) became effective. However, FDA records indicate that the IND became effective on March 9, 1995, which is 30 days after FDA's receipt of the IND.

2. *The date the application was initially submitted with respect to the human drug product under section 505 of the act:* December 17, 1999. FDA has verified the applicant's claim that the new drug application (NDA) for Starlix (NDA 21-204) was initially submitted on December 17, 1999.

3. *The date the application was approved:* December 22, 2000. FDA has verified the applicant's claim that NDA 21-204 was approved on December 22, 2000.

This determination of the regulatory review period establishes the maximum potential length of a patent extension. However, the U.S. Patent and Trademark Office applies several statutory limitations in its calculations of the actual period for patent extension. In its application for patent extension, this applicant seeks 1,259 days of patent term extension.

Anyone with knowledge that any of the dates as published are incorrect may submit to the Dockets Management (*see ADDRESSES*) written comments and ask for a redetermination by April 28, 2003. Furthermore, any interested person may petition FDA for a determination regarding whether the applicant for extension acted with due diligence during the regulatory review period by August 26, 2003. To meet its burden, the petition must contain sufficient facts to merit an FDA investigation. (See H. Rept. 857, part 1, 98th Cong., 2d sess., pp. 41-42, 1984.) Petitions should be in the format specified in 21 CFR 10.30.

Comments and petitions should be submitted to the Dockets Management Branch. Three copies of any information are to be submitted, except that individuals may submit a single copy. Copies are to be identified with the docket number found in brackets in the heading of this document. Comments and petitions may be seen in the

Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday.

Dated: January 13, 2003.

Jane A. Axelrad,

Associate Director for Policy, Center for Drug Evaluation and Research.

[FR Doc. 03-4567 Filed 2-26-03; 8:45 am]

BILLING CODE 4160-01-S

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 03N-0059]

Pharmaceutical Current Good Manufacturing Practices for the 21st Century: A Risk-Based Approach; Establishment of a Public Docket

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that it is establishing a public docket for information relevant to the agency's current good manufacturing practice (CGMP) initiative concerning the regulation of pharmaceutical manufacturing and product quality. This action is intended to ensure that all information submitted to FDA on the CGMP initiative regarding a risk-based approach to the regulation of pharmaceutical manufacturing and product quality is available to all interested persons in a timely fashion.

ADDRESSES: The public dockets are located in the Dockets Management Branch (HFA-305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. The public dockets can be accessed directly under the docket number provided and on the agency's site at <http://www.fda.gov/ohrms/dockets>.

FOR FURTHER INFORMATION CONTACT:

Maureen A. Hess, Center for Drug Evaluation and Research (HFD-6), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-594-5461.

SUPPLEMENTARY INFORMATION:

I. Background

On August 21, 2002, FDA announced that it is undertaking a significant new initiative to enhance the regulation of pharmaceutical manufacturing and product quality. The initiative entitled "Pharmaceutical CGMPs for the 21st Century: A Risk-Based Approach," applies to veterinary drugs and human drugs, including biological drug

products. Additional detailed information describing the scope and purpose of the initiative can be found on the Internet at www.fda.gov/bbs/topics/NEWS/2002/NEW00829.html. FDA has received recommendations on how the agency should implement various aspects of, as well as, the overall CGMP initiative and encourages further recommendations. To provide timely public access to these recommendations, FDA is establishing a public docket through which interested persons can have access to these recommendations and other information submitted to FDA. FDA expects to place submissions it receives on this initiative in the public docket.

II. Comments

Interested persons may submit to the Dockets Management Branch (see **ADDRESSES**) written or electronic comments regarding the CGMP initiative. Submit a single copy of electronic comments to <http://www.fda.gov/dockets/ecomments> or two hard copies of any mailed comments, except that individuals may submit one hard copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday.

Dated: February 21, 2003.

William K. Hubbard,

Associate Commissioner for Policy and Planning.

[FR Doc. 03-4568 Filed 2-26-03; 8:45 am]

BILLING CODE 4160-01-S

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Availability of Final Comprehensive Conservation Plan for Crescent Lake National Wildlife Refuge, Ellsworth, NE

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability.

SUMMARY: Pursuant to the Refuge Improvement Act of 1997, the U.S. Fish and Wildlife Service has published the Crescent Lake National Wildlife Refuge Comprehensive Conservation Plan and Summary. This Plan describes how the FWS intends to manage the Crescent Lake NWR for the next 10 to 15 years.

ADDRESSES: A copy of the Plan or Summary may be obtained by writing to U.S. Fish and Wildlife Service, Crescent Lake National Wildlife Refuge Complex, 115 Railway Street, Suite C109,

Scottsbluff, NE 69363-1346; or download from <http://mountain-prairie.fws.gov/planning/>

FOR FURTHER INFORMATION CONTACT:

Steve Knode, Complex Manager, U.S. Fish and Wildlife Service, Crescent Lake NWR, 115 Railway Street, Suite C109, Scottsbluff, NE 69363-1346, phone 308/635-7851; fax 308/635-7841; e-mail: steve_knode@fws.gov

SUPPLEMENTARY INFORMATION:

The 45,849-acre Crescent Lake National Wildlife Refuge, established in 1931, is located 28 miles north of Oshkosh, Nebraska in Garden County at the southwestern end of the Nebraska Sandhills. It is administered by the U.S. Fish and Wildlife Service as part of the Crescent Lake National Wildlife Refuge Complex and is within the Central Flyway. The Complex headquarters is 100 miles to the west in the City of Scottsbluff, NE.

The initial Refuge was 36,920 acres, acquired primarily from one large ranch. Additional lands were acquired between 1932 and 1937. Most lands were acquired or exchanged under the authority of the Migratory Bird Conservation Act (45 Stat. 1222). About 2,566 acres were acquired under the Resettlement Administration (Executive Order 7027, April 30, 1935), a drought and depression relief program.

The Nebraska Sandhills were settled largely as a result of the Kincaid Act of 1904, a modification of the Homestead Act to allow settlers 640 acres in "less productive" areas. As a result, a homestead existed in almost every meadow. However, 640 acres was not a viable farm/ranch unit in the Sandhills, and land was soon consolidated into larger units. Today, the Sandhills are home to some of the largest ranches in the country. Because of the large acreage required to support economically viable units, Garden County is among the least densely populated areas in the continental United States. Most of the Refuge location names originated from the early homesteaders.

The availability of the Draft CCP/Environmental Assessment (EA) for 30-day public review and comment was noticed in the **Federal Register** on Wednesday, May 1, 2002, in Volume 67, Number 84, page 21711. The Draft CCP/EA identified and evaluated four management alternatives for the Crescent Lake National Wildlife Refuge as to their effectiveness in achieving the Refuge's purposes and their impact on the human environment for the next 15 years. Alternative 1—No Action Alternative which would continue the current management for the Refuge and not include extensive restoration of

wetland and grassland habitats; Alternative 2—historical management of refuge habitats and wildlife to replicate pre-settlement conditions; Alternative 3—the intensive management of refuge habitats and refuge program to increase outputs in certain areas; and the preferred Alternative 4—modified historical management of habitats for native birds and wild animals and to pursue a more natural historic management regime. The alternatives were assessed in the Draft CCP management plan and Environmental Assessment. Based on this assessment and comments received, the preferred Alternative 4 was selected for implementation.

The preferred alternative was selected because it best meets the purposes of the Refuge to reserve and set apart as a refuge and breeding ground for birds and wild animals. The preferred alternative will also provide for public access for wildlife-dependent recreation, and provides environmental education opportunities related to fish and wildlife resources.

Dated: October 2, 2002.

Elliott Sutta,

Acting Regional Director, Denver, Colorado.

[FR Doc. 03-4590 Filed 2-26-03; 8:45 am]

BILLING CODE 4310-55-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Draft Environmental Impact Statement, Draft Environmental Impact Report, and Receipt of an Application for an Incidental Take Permit for the Western Riverside County Multiple Species Habitat Conservation Plan

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability; reopening of comment period.

SUMMARY: The Fish and Wildlife Service is reopening the comment period on the draft Multiple Species Habitat Conservation Plan, draft Implementing Agreement, and Draft Environmental Impact Statement for an incidental take permit for 146 species in western Riverside County, California.

DATES: To ensure consideration, we must receive written comments on or before March 14, 2003.

ADDRESSES: Send comments to Mr. Jim Bartel, Field Supervisor, U.S. Fish and Wildlife Service, 2730 Loker Avenue West, Carlsbad, CA 92008. You also may submit comments by facsimile to (760) 431-9618.

FOR FURTHER INFORMATION CONTACT: Ms. Karen Evans, Assistant Field Supervisor, at the Carlsbad Fish and Wildlife Office (*see ADDRESSES*); telephone (760) 431-9440.

SUPPLEMENTARY INFORMATION: The County of Riverside (County), Riverside County Flood Control and Water Conservation District, Riverside County Transportation Commission, Riverside County Parks and Open Space District, Riverside County Waste Department, California Department of Transportation, California Department of Parks and Recreation, and 14 western Riverside County cities (Applicants) have applied to the U.S. Fish and Wildlife Service (Service) for an incidental take permit pursuant to section 10(a)(1)(B) of the Endangered Species Act of 1973, as amended (Act). The Applicants seek a permit to authorize incidental take of 146 species, including unlisted species that may become listed during the term of the permit. An incidental take permit is required to authorize take of listed species during urban and rural development in the approximately 5,095-square-kilometer (1.26-million-acre (1,967-square-mile)) Plan Area in western Riverside County. The proposed term of the permit is 75 years.

On November 15, 2002, we published "Notice of Availability of a Draft Environmental Impact Statement/Environmental Impact Report and Receipt of an Application for an Incidental Take Permit for the Western Riverside County Multiple Species Habitat Conservation Plan" (67 FR 69236). In that notice, we requested public comment on the draft Multiple Species Habitat Conservation Plan (MSHCP) and draft Implementing Agreement. We also made available for public review a Draft Environmental Impact Statement, which is the Federal portion of the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR), to analyze the impacts of the MSHCP. The analyses provided in the Draft EIS/EIR are intended to inform the public of our proposed action, alternatives, and associated impacts; address public comments received during the scoping period for the Draft EIS/EIR; disclose the direct, indirect, and cumulative environmental effects of the proposed action and each of the alternatives; and indicate any irreversible commitment of resources that would result from implementation of the proposed action.

The comment period for the November 15, 2002, notice closed on January 14, 2003. We are now reopening the comment period for 15 days on the

draft MSHCP, draft Implementing Agreement, and Draft EIS. The County of Riverside has decided not to reopen the comment period on the Draft EIR. Comments already submitted on the Draft EIS/EIR, draft Implementing Agreement, and draft MSHCP need not be resubmitted, as they will be fully considered in the final documents.

Authority: This notice is provided pursuant to section 10(a) of the Endangered Species Act, as amended (16 U.S.C. 1531 *et seq.*), and Service regulations (40 CFR 1506.6) for implementing the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*).

Dated: February 13, 2003.

Ken McDermond,

Deputy Manager, California/Nevada Operations Office, Sacramento, CA.

[FR Doc. 03-4591 Filed 2-24-03; 4:31 pm]

BILLING CODE 4310-55-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Receipt of a Permit Application (Tindall) for Incidental Take of the Houston Toad

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability.

SUMMARY: Lewis Tindall (Applicant) has applied for an incidental take permit (TE-0666141-0) pursuant to Section 10(a) of the Endangered Species Act (Act). The requested permit would authorize the incidental take of the endangered Houston toad (*Bufo houstonensis*). The proposed take would occur as a result of the construction and operation of a retail store on a 1.01-acre property on Highway 71, Bastrop County, Texas.

DATES: Written comments on the application should be received on or before April 28, 2003.

ADDRESSES: Persons wishing to review the application may obtain a copy by writing to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 1306, Room 4102, Albuquerque, New Mexico 87103. Persons wishing to review the EA/HCP may obtain a copy by contacting Clayton Napier, U.S. Fish and Wildlife Service, 10711 Burnet Road, Suite 200, Austin, Texas 78758 (512/490-0057). Documents will be available for public inspection by written request, by appointment only, during normal business hours (8:00 to 4:30) at the U.S. Fish and Wildlife Service, Austin, Texas. Written data or comments concerning the application and EA/HCP should be submitted to the

Supervisor, U.S. Fish and Wildlife Service, Austin, Texas, at the above address. Please refer to permit number TE-066641-0 when submitting comments.

FOR FURTHER INFORMATION CONTACT:

Clayton Napier at 10711 Burnet Road, Suite 200, Austin, Texas 78758.

SUPPLEMENTARY INFORMATION: Section 9 of the Act prohibits the "taking" of endangered species such as the Houston toad. However, the Fish and Wildlife Service (Service), under limited circumstances, may issue permits to take endangered wildlife species incidental to, and not the purpose of, otherwise lawful activities. Regulations governing permits for endangered species are at 50 CFR 17.22.

The Service has prepared the Environmental Assessment/Habitat Conservation Plan for the incidental take application. A determination of jeopardy to the species and a decision pursuant to the National Environmental Policy Act (NEPA) will not be made until at least 60 days from the date of publication of this notice. This notice is provided pursuant to Section 10(c) of the Act and NEPA regulations (40 CFR 1506.6).

Applicant: Lewis Tindall plans to construct a retail store, within 5 years, on a 1.01 acre property on Highway 71, Bastrop County, Texas. This action will eliminate 1.01 acres or less of Houston toad habitat and result in indirect impacts within the lot. The Applicant proposes to compensate for this incidental take of the Houston toad by providing \$4,000.00 to the Houston Toad Conservation Fund at the National Fish and Wildlife Foundation for the specific purpose of land acquisition and management within Houston toad habitat.

Susan MacMullin,

Acting Regional Director, Region 2.

[FR Doc. 03-4592 Filed 2-26-03; 8:45 am]

BILLING CODE 4510-55-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Draft Endangered Karst Invertebrate Survey Guidance, Draft Karst Feature Survey Guidance, Draft Preserve Design To Conserve Endangered Karst Invertebrates Guidance, and Draft Recommendations for Protection of Water Quality of the Edwards Aquifer

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability.

SUMMARY: The U.S. Fish and Wildlife Service (Service) provides an update on its intentions to revise and make available for public comment the following documents: (1) Draft karst feature survey guidance; (2) draft endangered karst invertebrate survey guidance; (3) draft preserve design to conserve endangered karst invertebrates guidance; and (4) draft recommendations for protection of water quality of the Edwards Aquifer. The first two documents are survey guidance for use in determining: (1) The presence of karst features that may contain potential habitat for karst invertebrates listed under the Endangered Species Act of 1973 (as amended) as endangered in central Texas; and (2) the presence/absence of endangered karst invertebrates within karst features determined to contain potential habitat. The first three documents have commonly been known as the "Karst Protocols" and the document that addressed water quality was often called "water quality criteria."

DATES: We will accept public comments on the approach proposed in this Notice until April 28, 2003.

ADDRESSES: Written comments and information should be submitted to Field Supervisor, U.S. Fish and Wildlife Service, Austin Ecological Services Field Office, 10711 Burnet Road, Suite 200, Austin, Texas 78758 telephone (512) 490-0057; facsimile (512) 490-0974.

FOR FURTHER INFORMATION CONTACT: Field Supervisor, Austin Ecological Services Field Office (*see ADDRESSES*).

SUPPLEMENTARY INFORMATION:

Background

Sixteen species of invertebrates known to occur in Bexar, Travis, Williamson and parts of Burnet counties, Texas, are currently listed as endangered under the Endangered Species Act. These invertebrates are only capable of surviving in caves or karstic rock. Karst ecosystems receive moisture and nutrients from the surface community in the form of leaf litter and other organic debris that are washed in or fall into the cave, from tree and other vascular plant roots, and/or through the feces, eggs or dead bodies of animals. In addition to providing nutrients to the karst ecosystem, the plant community also filters contaminants and buffers against changes in temperature and humidity. The major threats to karst invertebrates include the loss of habitat due to urbanization; contamination; predation by and competition with non-native fire ants; and vandalism.

The Edwards Aquifer and associated springs, which includes the Southern, Barton Springs, and Northern segments, provide habitat for 9 federally listed aquatic species, including three salamanders, two fish, three aquatic invertebrates and one plant. In addition, 3 candidate species and many other unique aquatic species are also dependent upon water from the Edwards Aquifer. These species may be vulnerable to water quality degradation, particularly through pollutants entering the aquifer by storm water runoff from urban areas.

The Service has reviewed the Karst Protocols and the Water Quality Recommendations, and decided that an alternative course of action is preferred because we need to ensure that a wider partnership is involved when providing guidance to the interested public. To the extent possible, the Service will use the recovery planning process to gain the public's review and comment on guidance meant to aid in the recovery of threatened and endangered species. Through this notice, the Service announces its intentions to do the following:

(1) With respect to survey guidance for use in determining the presence of karst features that may contain potential habitat for endangered karst invertebrates in central Texas, the Service will work with the Texas Commission on Environmental Quality (TCEQ) and other partners to update as needed the existing TCEQ guidance on Karst Feature Surveys. The Service will recognize TCEQ's guidance as suitable guidance when surveying for karst features.

(2) With respect to survey guidance for endangered karst invertebrates, the Service will request a panel of experts to review all new information regarding how to survey for karst invertebrates. The Service will use the panel's recommendations to modify the section 10(a)(1)(A) permitting requirements and to develop karst invertebrate survey guidance on when to survey caves and how to survey for endangered karst invertebrates found in the caves. This guidance will be made available for review and comment through a Notice of Availability that will be published in the **Federal Register** by December 30, 2003.

(3) With respect to guidance for preserve design to conserve endangered karst invertebrates, the Service intends to incorporate the guidance as a component of the Service's Bexar County Invertebrate Recovery Plan. The draft recovery plan will be made available for review and comment. The Service no longer intends to issue

separate guidance on the establishment of karst preserves. Additionally, the Texas Parks and Wildlife Department, with the Service as a partner, will include "no take" guidance for these listed invertebrates as part of the species accounts that will be developed as a priority update to the revision of the 1995 Endangered and Threatened Animals of Texas document published by the Texas Parks and Wildlife Department. The Service will incorporate the "no take" guidance into the draft recovery plan for the species, which will be available for public review and comment.

(4) With regard to recommendations for protection of water quality of the Edwards Aquifer, the Service does not intend to issue separate guidance. Instead, the draft Barton Springs Salamander Recovery Plan, which is scheduled to be completed in 2003, will include recommendations for protection of water quality in the Barton Springs Zone.

The Service states that prior versions of the Karst Protocols and Water Quality Recommendations are not rules, regulations, requirements, or project evaluation criteria of the Service and will not be used as such by the Service. The documents that have been used in the past as guidance do not create any legal obligations and have no binding legal effect, nor do they establish minimum standards or criteria required to be adopted by state or local governments. Should at any future time the Service decide that guidance on these subjects, other than as outlined above, is needed, the Service will make the draft guidance available for public review and comment for a period of not less than 60 days. At the conclusion of this period, the Service will determine whether to publish any final guidance documents on these topics and, if so, in what form.

Authority: The authority for this action is the Endangered Species Act, as amended (16 U.S.C.1532 *et seq.*).

H. Dale Hall,

Regional Director, Region 2, Albuquerque, New Mexico.

[FR Doc. 03-4612 Filed 2-26-03; 8:45 am]

BILLING CODE 4310-55-P

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

Indian Gaming

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice of approved amendment to a Tribal-State compact.

SUMMARY: Under section 11 of the Indian Gaming Regulatory Act of 1988 (IGRA), Pub. L. 100-497, 25 U.S.C. 2710, the Secretary of the Interior shall publish, in the **Federal Register**, notice of the approved Tribal-State compacts for the purpose of engaging in Class III gaming activities on Indian lands. The Assistant Secretary—Indian Affairs, Department of the Interior, through her delegated authority, has approved the Amendment to the Class III gaming compact between the Assiniboine and Sioux Tribes of the Fort Peck Reservation and the State of Montana.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT: George T. Skibine, Director, Office of Indian Gaming Management, Bureau of Indian Affairs, Washington, DC 20240, (202) 219-4066.

Dated: February 12, 2003.

Aurene M. Martin,

Acting Assistant Secretary—Indian Affairs.

[FR Doc. 03-4656 Filed 2-26-03; 8:45 am]

BILLING CODE 4310-4N-M

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

Indian Gaming

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice of approved amendment to a Tribal-State compact.

SUMMARY: Under section 11 of the Indian Gaming Regulatory Act of 1988 (IGRA), Pub. L. 100-497, 25 U.S.C. 2710, the Secretary of the Interior shall publish, in the **Federal Register**, notice of the approved Tribal-State compacts of the purpose of engaging in Class III gaming activities on Indian lands. The Assistant Secretary—Indian Affairs, Department of the Interior, through her delegated authority, has approved the Amendment to the Class III gaming compact between the Confederated Tribes of the Warm Springs Reservation and the State of Oregon.

EFFECTIVE DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT: George T. Skibine, Director, Office of Indian Gaming Management, Bureau of Indian Affairs, Washington, DC 20240, (202) 219-4066.

Dated: February 12, 2003.

Aurene M. Martin,

Acting Assistant Secretary—Indian Affairs.

[FR Doc. 03-4655 Filed 2-26-03; 8:45 am]

BILLING CODE 4310-4N-M

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

Indian Gaming

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice of approved amendment to a Tribal-State compact.

SUMMARY: Under section 11 of the Indian Gaming Regulatory Act of 1988 (IGRA), Pub. L. 100-497, 25 U.S.C. 2710, the Secretary of the Interior shall publish, in the **Federal Register**, notice of the approved Tribal-State compacts for the purpose of engaging in Class III gaming activities on Indian lands. The Assistant Secretary—Indian Affairs, Department of the Interior, through her delegated authority, has approved the Amendment to the Class III gaming compact between the Crow Tribe and the State of Montana.

EFFECTIVE DATE: February 26, 2003.

FOR FURTHER INFORMATION CONTACT: George T. Skibine, Director, Office of Indian Gaming Management, Bureau of Indian Affairs, Washington, DC 20240, (202) 219-4066.

Dated: February 12, 2003.

Aurene M. Martin,

Acting Assistant Secretary—Indian Affairs.

[FR Doc. 03-4657 Filed 2-26-03; 8:45 am]

BILLING CODE 4310-4N-M

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[AK-931-1310-DP]

Draft Northwest National Petroleum Reserve—Alaska Integrated Activity Plan/Environmental Impact Statement

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice.

SUMMARY: In response to a request from the interested public the Bureau of Land Management is adding to its schedule one meeting for accepting public comments on the Draft Northwest National Petroleum Reserve—Alaska Integrated Activity Plan/Environmental Impact Statement (IAP/EIS). The meeting location and time will be provided to the public through appropriate media outlets in the Washington, DC area.

DATES: March 13, 2003, 2 p.m. till 5 p.m.

ADDRESSES: Courtyard Marriott, 1600 Rhode Island Avenue, Northwest, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Curtis J. Wilson (907-271-5546;

c1wilson@ak.blm.gov) or Mike Kleven (907-474-2317; mkleven@ak.blm.gov).

SUPPLEMENTARY INFORMATION: The Bureau of Land Management originally published a Notice of Availability for the IAP/EIS that listed public meetings only in Alaska, however, in response to a request from several organizations one meeting has been added to seek public comment in the Washington, DC area.

Dated: February 21, 2003.

Henri R. Bisson,
State Director.

[FR Doc. 03-4818 Filed 2-25-03; 2:55 pm]
BILLING CODE 4310-JA-P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[CA-610-03-1220-AA]

Notice of Public Meetings of the California Desert District Advisory Council

AGENCY: Bureau of Land Management, Department of the Interior.

ACTION: Notice of public meetings of the California Desert District Advisory Council.

SUMMARY: Notice is hereby given, in accordance with Public Laws 92-463 and 94-579, that the California Desert District Advisory Council to the Bureau of Land Management, U.S. Department of the Interior, has scheduled three meetings during 2003 at the following dates and locations:

- March 27-29;* Ramada Inn (workshop and formal session), 1511 E. Main Street, Barstow, California.
- 27: Half day field tour; gather 12 noon, parking lot, Ramada Inn.
 - 28: Council workshop 8 a.m. to noon; formal session, 1 p.m. to 5 p.m.
 - 29: Formal session, 8 a.m. to 5 p.m.
- June 27-28;* Marriott (workshop and formal session, 3400 Market Street, Riverside, California.
- 27: Council workshop.
 - 28: Formal session 8 a.m. to 5 p.m.
- Sept. 19-20;* Kerr McGee Center, 100 West California Avenue, Ridgecrest, California 93555.
- Field tour: gather 7:15 a.m., parking lot, China Lake Best Western Inn, 400 South China Lake Boulevard, Ridgecrest, CA.
 - Formal session, Kerr McGee Center, 8 a.m. to 5 p.m.

The Council and interested members of the public will assemble for the field tours at the designated parking lot locations. The public is welcome to participate in the tours, but should plan

on providing their own transportation, drinks, and lunch.

All Desert District Advisory Council meetings are open to the public. Time for public comment is scheduled at the beginning of the meeting for topics not on the agenda, and will be made available by the Council Chairman during the presentation of various agenda items. Time for public comment is also scheduled at the end of the meeting.

Written comments may be filed in advance of the meeting for the California Desert District Advisory Council, c/o Bureau of Land Management, Public Affairs Office, 22835 Calle San Juan De Los Lagos, Moreno Valley, California 92553. Written comments also are accepted at the time of the meeting and, if copies are provided to the recorder, will be incorporated into the minutes.

FOR FURTHER INFORMATION CONTACT: For additional information regarding meeting and tour agendas contact Doran Sanchez, BLM California Desert District Public Affairs Specialist, (909) 697-5220.

Dated: February 22, 2003.

Linda Hansen,
District Manager.

[FR Doc. 03-4597 Filed 2-26-03; 8:45 am]
BILLING CODE 4310-40-P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[AZ-020-00-1430-EU; AZA-31774FD]

Notice of Realty Action; Recreation and Public Purposes (R&PP) Act Classification; Arizona, Correction

AGENCY: Bureau of Land Management, Interior.

Correction

In notice issued in Volume 68 Number 30 beginning on page 7387 in the issue dated February 13, 2003, make the following correction: On page 7387 under the heading, in the third column, "(AZ-020-00-1430-EU; AZA-31744FD)" should read "(AZ-020-00-1430-EU; AZA-31774FD)".

Dated: February 19, 2003.

MarLynn Spears,
Acting Field Manager, Phoenix Field Office.
[FR Doc. 03-4593 Filed 2-26-03; 8:45 am]
BILLING CODE 4310-32-P

DEPARTMENT OF JUSTICE

Immigration and Naturalization Service

Agency Information Collection Activities: Proposed Collection; Comment Request

ACTION: 30-day notice of information collection under review: Request for fee waiver; Form I-912.

The Department of Justice, Immigration and Naturalization Service (INS) has submitted the following information collection request to the Office of Management and Budget (OMB) for review and clearance in accordance with the Paperwork Reduction Act of 1995. The information collection was previously published in the **Federal Register** on May 20, 2002 at 67 FR 35593, allowing for a 60-day public comment period. No comments were received by the INS on this proposed information collection.

The purpose of this notice is to allow an additional 30 days for public comments. Comments are encouraged and will be accepted until March 3, 2003. This process is conducted in accordance with 5 CFR 1320.10.

Written comments and/or suggestions regarding the items contained in this notice, especially regarding the estimated public burden and associated response time, should be directed to the Office of Management and Budget, Office of Information and Regulatory Affairs, Attention: Department of Justice Desk Officer, 725-17th Street, NW., Room 10235, Washington, DC 20530.

Written comments and suggestion from the public and affected agencies concerning the proposed collection of information should address one or more of the following four points:

(1) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) 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, e.g., permitting electronic submission of responses.

Overview of this information collection:

(1) *Type of Information Collection:* New information collection.

(2) *Title of the Form/Collection:* Request for Fee Waiver.

(3) *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection:* Form I-912, Adjudications Division, Immigration and Naturalization Service.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract:* Primary: Individuals or Households. The data collected on this form will be used by the INS to determine eligibility for a fee waiver associated with the requested immigration benefit.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* 16,000 responses at 1 hour and 15 minutes per response.

(6) *An estimate of the total public burden (in hours) associated with the collection:* 20,000 annual burden hours.

If you have additional comments, suggestions, or need a copy of the proposed information collection instrument with instructions, or additional information, please contact Richard A. Sloan 202-514-3291, Director, Regulations and Forms Services Division, Immigration and Naturalization Service, U.S. Department of Justice, Room 4304, 425 I Street, NW., Washington, DC 20536. Additionally, comments and/or suggestions regarding the item(s) contained in this notice, especially regarding the estimated public burden and associated response time may also be directed to Mr. Richard A. Sloan.

If additional information is required contact: Mr. Robert B. Briggs, Clearance Officer, United States Department of Justice, Information Management and Security Staff, Justice Management Division, 601 D Street, NW., Patrick Henry Building, Suite 1600, Washington, DC 20530.

Dated: February 24, 2003.

Richard A. Sloan,

Department Clearance Officer, United States Department of Justice, Immigration and Naturalization Service.

[FR Doc. 03-4654 Filed 2-26-03; 8:45 am]

BILLING CODE 4410-10-M

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice (03-027)]

NASA Advisory Council, Biological and Physical Research Advisory Committee, Space Station Utilization Advisory Subcommittee; Meeting

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, Public Law 92-463, as amended, the National Aeronautics and Space Administration announces a meeting of the NASA Advisory Council, Biological and Physical Research Advisory Committee, Space Station Utilization Advisory Subcommittee (SSUAS).

DATES: Tuesday, March 11, 2003, 8 a.m. to 5:30 p.m., and Wednesday, March 12, 2003, 8 a.m. to 5:30 p.m.

ADDRESSES: South Shore Harbour Resort, 2500 South Shore Blvd., League, Texas 77573.

FOR FURTHER INFORMATION CONTACT: Dr. Neal Pellis, Code U, National Aeronautics and Space Administration, Houston, TX 77058, (281) 483-2357.

SUPPLEMENTARY INFORMATION: The meeting will be open to the public up to the seating capacity of the room. Advance notice of attendance to the Executive Secretary is requested.

The agenda for the meeting will include the following topics:

- International Space Station Program Status/Plans.
- New Research Plans for Increment 7.
- Research Report on Increment 5 and 6.
- Telecon with Investigators.
- OBPR Report.
- ISS Payloads Office Report.
- Science Operations Report.
- Centrifuge Accommodation/Science Module.
- Orbital Space Plan Overview.
- Cross-Enterprise Prioritization.
- Re-Invention Team.
- Coordination of International Requirements.
- ISS Institute/NGO.
- Crew Time Optimization.
- Middeck Optimization.
- Payloads Process Improvement.
- ISS Research Prioritization and Metrics.
- Discussion and Development of Recommendations.
- Summary of Recommendations to NASA.

It is imperative that the meeting be held on this date 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. 03-4570 Filed 2-26-03; 8:45 am]

BILLING CODE 7510-01-P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice (03-026)]

Notice of Prospective Patent License

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of prospective patent license.

SUMMARY: NASA hereby gives notice that Circuit Avenue Netrepreneurs, LLC, of Camden, New Jersey, has applied for a partially exclusive license to practice the invention described and in NASA Case No. ARC-14480-1, entitled "An Approach to Automating the Manipulation of Information," for which a Patent Application was filed and assigned to the United States of America as represented by the Administrator of the National Aeronautics and Space Administration. The fields of use will include medical devices; monitoring and controlling; chemical, research and manufacturing; pharmaceutical, research and manufacturing; and biotechnology, research and manufacturing. Written objections to the prospective grant of a license should be sent to the Ames Research Center.

DATES: Responses to this notice must be received by March 14, 2003.

FOR FURTHER INFORMATION CONTACT: Rob Padilla, Patent Counsel, NASA Ames Research Center, Mail Stop 202A-4, Moffett Field, CA 94035, telephone (650) 604-5104; fax (650) 604-2767.

Dated: February 20, 2003.

Robert M. Stephens,

Deputy General Counsel.

[FR Doc. 03-4569 Filed 2-26-03; 8:45 am]

BILLING CODE 7510-01-P

NATIONAL CRIME PREVENTION AND PRIVACY COMPACT COUNCIL

Notice of Intent To Publish a Rule Permitting the Privatization of Noncriminal Justice Criminal History Record Check Functions

AGENCY: National Crime Prevention and Privacy Compact Council.

ACTION: Notice of intent to publish a rule that will permit the privatization of administrative functions requiring access to criminal history record information for noncriminal justice purposes.

SUMMARY: Pursuant to Title 28, Code of Federal Regulations (CFR), Chapter IX, the Compact Council (Council), established by the National Crime Prevention and Privacy Compact Act of 1998 (Compact), is issuing notice of its intent to promulgate a rule enabling third parties to act as agents for governmental and nongovernmental agencies while performing administrative functions requiring access to criminal history record information (CHRI) for authorized noncriminal justice purposes.

Authority: Title 42, United States Code, Section 14616.

Additionally, a limited number of third parties will be preapproved by the FBI to serve as conduits to send electronic noncriminal justice fingerprint requests to, and receive CHRI from, the FBI's Criminal Justice Information Services (CJIS) Division for dissemination to authorized recipients as provided by federal statute or federal executive order.

FOR FURTHER INFORMATION CONTACT: Ms. Cathy L. Morrison, interim FBI Compact Officer, FBI CJIS Division, 1000 Custer Hollow Road, Module C3, Clarksburg, WV 26306; Telephone (304) 625-2736; E-mail cmorriso@leo.gov; Fax number (304) 625-5388.

SUPPLEMENTARY INFORMATION: The Council is comprised of federal, state and local representatives of criminal and noncriminal justice agencies. The Compact authorizes the Council to establish rules, procedures, and standards for fingerprint-based noncriminal justice criminal history record checks. The Council, in cooperation with the FBI's CJIS Division and its Advisory Policy Board, is announcing its intent to promulgate a rule that will enable authorized local, state, and federal governmental agencies and nongovernmental entities to contract with the private sector to perform administrative duties relating to the noncriminal justice use of CHRI for employment, licensing, and other authorized purposes.

The reason for the proposed rule is that, over the last several years, the volume of authorized fingerprint-based noncriminal justice criminal history record checks has escalated. In many states, the number of fingerprint submissions for noncriminal justice purposes outnumber those submitted for

criminal justice purposes. The escalating number of noncriminal justice fingerprint submissions has resulted in increased workloads for local, state, and federal governmental agencies and for nongovernmental entities. Implementation of the Aviation and Transportation Security Act, the USA PATRIOT Act and other federal and state statutes since the terrorist attacks of September 11, 2001, has contributed to the recent increase of authorized criminal history record checks. Efforts are underway to modify the CFR to permit authorized recipients of CHRI to contract with the private sector to accomplish such fingerprint-based criminal history record checks for noncriminal justice purposes and to do so in an efficient, effective, and secure fashion.

Dated: February 19, 2003.

Monte C. Strait,

Section Chief, Programs Development Section, Federal Bureau of Investigation.

[FR Doc. 03-4611 Filed 2-26-03; 8:45 am]

BILLING CODE 4410-02-P

NUCLEAR REGULATORY COMMISSION

Handbook of Parameter Estimation for Probabilistic Risk Assessment (PRA)

AGENCY: Nuclear Regulatory Commission (NRC).

ACTION: Announcement of issuance for public comment, availability, and public meeting.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) has issued for public comment a document entitled "Handbook of Parameter Estimation for Probabilistic Risk Assessment." This handbook provides guidance on sources of information and methods of estimating distributions of parameters used in probabilistic risk assessment. This includes determination of both plant-specific and generic estimates for initiating event frequencies, component failure rates and unavailability, and equipment non-recovery probabilities. Interested individuals may obtain a copy of this document from the person identified under the caption **FOR FURTHER INFORMATION CONTACT**.

DATES: Please submit comments by May 23, 2003. Comments received after this date will be considered if it is practical to do so, but the NRC Staff is able to ensure consideration only for comments received on or before this date.

A public meeting will be held on April 2, 2003, from 8:30 a.m. until 4:30 p.m. The purpose of this meeting is to

discuss the document and give guidance for its review and to address external stakeholder comments received before the public meeting. The primary authors will be available at the public meeting to answer questions and discuss items of interest to the public.

The NRC is interested in receiving comments on specific topics reviewers wish to discuss at the public meeting. Reviewers are requested to contact Mr. Arthur Salomon at 301-415-6552 or e-mail ads@nrc.gov by March 21, 2003, with comments or issues they wish to have addressed at the public meeting.

ADDRESSES: Please submit comments to Chief, Rules and Directives Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Or, you may deliver comments to 11545 Rockville Pike, Rockville, Maryland, between 7:30 a.m. and 4:30 p.m. Federal workdays.

The public meeting will be held at Two White Flint North, Room T10 A1, 11545 Rockville Pike, Rockville, Maryland.

The draft document and certain other documents related to this action may be examined in the NRC Public Document Room, 11555 Rockville Pike, Public File Area O1 F21, Rockville, Maryland.

FOR FURTHER INFORMATION CONTACT: Arthur D. Salomon, Division of Risk Analysis and Applications, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Telephone: 301-415-6552, e-mail: ads@nrc.gov.

SUPPLEMENTARY INFORMATION: During the last several years the NRC and the nuclear industry have recognized that PRA has evolved to the point where it can be used as a tool in the regulatory decision-making process. The increased use of PRA has led to the conclusion that the PRA scope and model must be commensurate with the applications. Several procedural guides and standards (such as the "Standard For Probabilistic Risk Assessment For Nuclear Power Plant Applications" published by The American Society of Mechanical Engineers in 2002) have been and are being developed that identify requirements for the PRA models. This handbook was prepared to supplement these documents. It provides a compendium of good practices that a PRA analyst can use to develop parameter distributions required for quantifying PRA models. It complements the ASME PRA Standard by providing guidance for estimation of parameters related to initiating events; by describing statistical techniques for estimating parameters used in analysis

of basic events such as equipment failures; and by addressing methods for estimating equipment unavailability. Furthermore, the handbook includes appendices describing the basics of probability and statistics used in performing the more detailed analyses discussed in the main portion of the document.

The handbook provides the basic information needed to generate estimates of the parameters commonly used in PRA analysis. It begins by describing the probability models and plant data used to evaluate each of the parameters. Possible sources for the plant data are identified and guidance on the collection, screening, and interpretation is provided. The statistical techniques (both Bayesian and classical methods) required to analyze the collected data and test the validity of statistical models are described. Examples are provided to help the PRA analyst utilize the different techniques. The handbook also provides advanced techniques that address modeling of time trends. Methods for combining data from a number of similar, but not identical sources are also provided. This includes empirical and hierarchical Bayesian approaches. Examples are provided to guide the analyst. The handbook does not provide guidance on parameter estimation for all of the events included in a PRA. Specifically, common cause failure and human error probabilities are not addressed. In addition, guidance is not provided regarding the use of expert elicitation. However, suggested references regarding these technical areas are provided in the handbook introduction.

Dated at Rockville, Maryland, this 21st day of February, 2003.

For the Nuclear Regulatory Commission.

Scott F. Newberry,

Director, Division of Risk Analysis and Applications, Office of Nuclear Regulatory Research.

[FR Doc. 03-4624 Filed 2-26-03; 8:45 am]

BILLING CODE 7590-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-47386; File No. SR-NASD-2003-20]

Self-Regulatory Organizations; Notice of Filing and Order Granting Accelerated Approval of Proposed Rule Change and Amendment No. 1 by the National Association of Securities Dealers, Inc. Relating to the Listing and Trading of Strategic Return Notes Linked to the Select Ten Index

February 20, 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 February 14, 2003, the National Association of Securities Dealers, Inc. ("NASD"), through its subsidiary, The Nasdaq Stock Market, Inc. ("Nasdaq"), 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 Nasdaq. On February 20, 2003, the Amex submitted Amendment No. 1 to the proposed rule change.³ 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

Nasdaq proposes to list and trade Strategic Return Notes® Linked to the Select Ten Index ("Notes") issued by Merrill Lynch & Co., Inc. ("Merrill Lynch").

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, Nasdaq 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.

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See letter from John D. Nachmann, Senior Attorney, Nasdaq, to Katherine A. England, Assistant Director, Division of Market Regulation, Commission, dated February 20, 2003.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

Nasdaq proposes to list and trade notes, the return on which is based upon an approximately equal-dollar weighted portfolio of securities representing the ten highest dividend yielding stocks in the Dow Jones Industrial Average ("DJIA") from year to year ("Select Ten Index" or "Index").⁴

Under Rule 4420(f), Nasdaq may approve for listing and trading innovative securities which cannot be readily categorized under traditional listing guidelines.⁵ Nasdaq proposes to list for trading notes based on the Select Ten Index under Rule 4420(f). The Select Ten Index is expected to be determined, calculated and maintained solely by the American Stock Exchange ("Amex").⁶

The Notes will initially be subject to Nasdaq's listing criteria for other securities under Rule 4420(f).

Specifically, under Rule 4420(f)(1):

(A) The issuer shall have assets in excess of \$100 million and stockholders' equity of at least \$10 million. In the case of an issuer which is unable to satisfy the income criteria set forth in paragraph (a)(1), Nasdaq generally will require the issuer to have the following: (i) assets in excess of \$200 million and stockholders' equity of at least \$10 million; or (ii) assets in excess of \$100 million and stockholders' equity of at least \$20 million;

(B) There must be a minimum of 400 holders of the security, provided, however, that if the instrument is traded in \$1,000 denominations, there must be a minimum of 100 holders;

(C) For equity securities designated pursuant to this paragraph, there must be a minimum public distribution of 1,000,000 trading units;

(D) The aggregate market value/principal amount of the security will be at least \$4 million.

⁴ The portfolio of securities comprising the Select Ten Index currently consists of the ten common stocks in the DJIA having the highest dividend yield on May 24, 2002, and are as follows: Caterpillar Inc.; Eastman Kodak Company; E.I. du Pont de Nemours and Company; Exxon Mobil Corporation; General Motors Corporation; International Paper Company; J.P. Morgan Chase & Co.; Merck & Co., Inc.; Philip Morris Companies Inc.; and SBC Communications Inc.

⁵ See Securities Exchange Act Release No. 32988 (September 29, 1993); 58 FR 52124 (October 6, 1993).

⁶ Subject to the criteria in the prospectus supplement regarding the construction of the Index, the Amex has sole discretion regarding changes to the Index due to annual reconstitutions and adjustments to the Index and the multipliers of the individual components.

In addition, Merrill Lynch satisfies the listed marketplace requirement set forth in Rule 4420(f)(2).⁷ Lastly, pursuant to Rule 4420(f)(3), prior to the commencement of trading of the Notes, Nasdaq will distribute a circular to members providing guidance regarding compliance responsibilities and requirements, including suitability recommendations, and highlighting the special risks and characteristics of the Notes. In particular, Nasdaq will advise members recommending a transaction in the Notes to: (1) Determine that such transaction is suitable for the customer; and (2) have a reasonable basis for believing that the customer can evaluate the special characteristics of, and is able to bear the financial risks of, such transaction.

The Notes will be subject to Nasdaq's continued listing criterion for other securities pursuant to Rule 4450(c). Under this criterion, the aggregate market value or principal amount of publicly-held units must be at least \$1 million. The Notes also must have at least two registered and active market makers as required by Rule 4450(a)(6). Nasdaq will also consider prohibiting the continued listing of the Notes if Merrill Lynch is not able to meet its obligations on the Notes.

The Notes are a series of senior non-convertible debt securities of Merrill Lynch that provide for a single payment at maturity. The Notes will have a term of not less than one, nor more than ten, years. The Notes will entitle the owner at maturity to receive an amount based upon the percentage change between the "Starting Index Value" and the "Ending Index Value" (the "Redemption Amount"). The "Starting Index Value" is the value of the Select Ten Index on the date on which Merrill Lynch prices the Notes for the initial sale to the public. The "Ending Index Value" is the value of the Select Ten Index over a period shortly prior to the expiration of the Notes. The "Ending Index Value" will be used in calculating the amount owners will receive upon maturity. The Notes may not have a minimum principal amount that will be repaid and, accordingly, payments on the Notes prior to or at maturity may be less than the original issue price of the Notes. During the designated month each year, investors will have the right to require Merrill Lynch to repurchase

the Notes at a redemption amount based on the value of the Select Ten Index at such repurchase date. The Notes are not callable by Merrill Lynch.

The Notes are cash-settled in U.S. dollars and do not give the holder any right to receive a portfolio security or any other ownership right or interest in the portfolio securities, although the return on the investment is based on the aggregate portfolio value of the Select Ten Index securities.

The Select Ten Index will consist of the ten stocks with the highest dividend yields among the thirty stocks that comprise the DJIA, adjusted as described below. The Commission has previously approved the listing of options on, and securities the performance of which have been linked to or based on, an index of the top ten dividend yielding stocks of the DJIA.⁸ The Commission has also previously approved the listing of securities with a structure identical to that of the Notes.⁹

Components of the Select Ten Index approved pursuant to this filing will meet the following criteria: (1) A minimum market value of at least \$75 million, except that up to 10% of the component securities in the Select Ten Index may have a minimum market value of \$50 million; (2) average monthly trading volume in the last six months of not less than 1 million shares, except that up to 10% of the component securities in the Select Ten Index may have an average monthly trading volume of 500,000 shares or more in the last six months; (3) 90% of the Select Ten Index's numerical value and at least 80% of the total number of component securities will meet the then current criteria for standardized option trading set forth in Amex Rule 915; and (4) all component stocks will either be listed on the Amex, the NYSE, or traded through the facilities of Nasdaq and reported National Market System securities.

As of January 22, 2003, the market capitalization of the portfolio of securities representing the Select Ten Index ranged from a high of \$124.9 billion to a low of \$9.7 billion. The average monthly trading volume for the last six months, as of the same date, ranged from a high of 288 million shares to a low of 45.2 million shares.

Moreover, as of January 22, 2003, all of the components comprising the portfolio of securities representing the Select Ten Index were eligible for standardized options trading pursuant to Amex Rule 915.

The value of the Select Ten Index at any time will equal: (1) The sum of the products of the current market price for each stock underlying the Select Ten Index and the applicable share multiplier,¹⁰ plus (2) an amount reflecting current calendar quarter dividends, and less (3) a pro rata portion of the annual index adjustment factor.¹¹ Current quarter dividends for any day will be determined by the Amex and will equal the sum of each dividend paid by the issuer on one share of stock during the current calendar quarter multiplied by the share multiplier applicable to such stock on the ex-dividend date.

As of the first day of the start of each calendar quarter, the Amex will allocate the current quarter dividends as of the end of the immediately preceding calendar quarter to each then outstanding components of the Select Ten Index. The amount of the current quarter dividends allocated to each stock will equal the percentage of the value of such stock contained in the portfolio of securities comprising the Select Ten Index relative to the value of the entire portfolio based on the closing market price of such stock on the last day in the immediately preceding calendar quarter. The share multiplier of each stock will be increased to reflect the number of shares, or portion of a share, that the amount of the current quarter dividends allocated to each stock can purchase of each stock based on the closing market price on the last day in the immediate preceding calendar quarter.

As of the close of business on each anniversary date (May 29th of each year, which is the anniversary of the date the Select Ten Index was originally calculated and disseminated) through the applicable anniversary date in the year preceding the maturity of the Notes, Nasdaq states that the portfolio of securities comprising the Select Ten

¹⁰ The multiplier indicates the number of shares (or fraction of one share) of a security, given its market price on an exchange or Nasdaq, to be included in the calculation of the portfolio.

¹¹ At the end of each day, the Index will be reduced by a pro rata portion of the annual index adjustment factor, 1.5% (*i.e.*, 1.5%/365 days = 0.0041% daily). This reduction to the value of the Index will reduce the total return to investors upon redeeming the Notes at maturity. An explanation of this deduction will be included in any marketing materials, fact sheets, or any other materials circulated to investors regarding the trading of this product.

⁷ Rule 4420(f)(2) requires issuers of securities designated pursuant to this paragraph to be listed on The Nasdaq National Market or the New York Stock Exchange ("NYSE") or be an affiliate of a company listed on The Nasdaq National Market or the NYSE; provided, however, that the provisions of Rule 4450 will be applied to sovereign issuers of "other" securities on a case-by-case basis.

⁸ See Securities Exchange Act Release No. 39453 (December 16, 1997), 62 FR 67101 (December 23, 1997) (approving the listing and trading of options on the Dow Jones High Yield Select 10 Index); Securities Exchange Act Release No. 37533 (August 7, 1996), 61 FR 42075 (August 13, 1996) (approving the listing and trading of Top Ten Yield Market Index Target-Term Securities).

⁹ Securities Exchange Act Release No. 44342 (May 23, 2001), 66 FR 29613 (May 31, 2001) (approving the listing and trading of Select Ten Notes).

Index will be reconstituted by the Amex so as to include the ten common stocks in the DJIA having the highest dividend yield on the second scheduled index business day prior to such anniversary date. Nasdaq represents that the Amex will announce such changes to investors at least one day prior to the anniversary date.¹²

The portfolio will be reconstituted and rebalanced on the anniversary date so that each stock in the Select Ten Index will represent 10% of the value of the Index. To effectuate this, Nasdaq states that the share multiplier for each new stock will be determined by the Amex and will indicate the number of shares or fractional portion thereof of each new stock, given the closing market price of such new stock on the anniversary date, so that each new stock represents an equal percentage of the Select Ten Index value at the close of business on such anniversary date. For example, if the Select Ten Index value at the close of business on an anniversary date was 200, then each of the ten new stocks comprising the Select Ten Index would be allocated a portion of the value of the Index equal to 20, and if the closing market price of one such new stock on the anniversary date was 40, the applicable share multiplier would be 0.5. Conversely, if the Select Ten Index value was 80, then each of the ten new stocks comprising the Select Ten Index would be allocated a portion of the value of the Select Ten Index equal to 8, and if the closing market price of one such new stock on the anniversary was 40, the applicable share multiplier would be 0.2. The last anniversary date on which such reconstitution will occur will be the anniversary date in the year preceding the maturity of the Notes. As noted above, investors will receive information on the new portfolio of securities comprising the Select Ten Index at least one day prior to each anniversary date.

The multiplier of each component stock in the Select Ten Index will remain fixed unless adjusted for quarterly dividend adjustments, annual reconstitutions or certain corporate events, such as payment of a dividend other than an ordinary cash dividend, a distribution of stock of another issuer to its shareholders,¹³ stock split, reverse stock split, and reorganization.

¹² Nasdaq states that the Amex will publish a notice to advise investors of changes to the securities underlying the Index if any such changes are made following an annual reconstitution.

¹³ If the issuer of a component security in the Select Ten Index issues to all of its shareholders publicly traded stock of another issuer, such new securities will be added to the portfolio comprising

The multiplier of each component stock may be adjusted, if necessary, in the event of a merger, consolidation, dissolution or liquidation of an issuer or in certain other events such as the distribution of property by an issuer to shareholders. If the issuer of a stock included in the Select Ten Index were to no longer exist, whether by reason of a merger, acquisition or similar type of corporate transaction, a value equal to the stock's final value will be assigned to the stock for the purpose of calculating the Select Ten Index value prior to the subsequent anniversary date. For example, if a company included in the Select Ten Index were acquired by another company, a value will be assigned to the company's stock equal to the value per share at the time the acquisition occurred. If the issuer of stock included in the Select Ten Index is in the process of liquidation or subject to a bankruptcy proceeding, insolvency, or other similar adjudication, such security will continue to be included in the Select Ten Index so long as a market price for such security is available or until the subsequent anniversary date. If a market price is no longer available for an Index stock due to circumstances including, but not limited to, liquidations, bankruptcy, insolvency, or any other similar proceeding, then the security will be assigned a value of zero when calculating the Select Ten Index for so long as no market price exists for that security or until the subsequent anniversary date. If the stock remains in the Select Ten Index, the multiplier of that security in the Select Ten Index may be adjusted to maintain the component's relative weight in the Select Ten Index at the level immediately prior to the corporate action. In all cases, the multiplier will be adjusted, if necessary, to ensure Select Ten Index continuity.

Nasdaq states that the Amex will calculate the Select Ten Index and, similar to other stock index values published by the Amex, the value of the Index will be calculated continuously and disseminated every fifteen seconds over the Consolidated Tape Association's Network B. The Index value will equal the sum of the products of the most recently available market prices and the applicable multipliers for the component securities. In the event that Amex discontinues the publication of the Select Ten Index, Nasdaq will

the Select Ten Index until the subsequent anniversary date. The multiplier for the new component will equal the product of the original issuer's multiplier and the number of shares of the new component issued with respect to one share of the original issuer.

facilitate the calculation and dissemination every 15 seconds of a value of a successor index either through the facilities of Nasdaq or those of an outside provider that is an independent calculation agent, unless otherwise approved by the Commission.¹⁴ Amex could discontinue publication of the Select Ten Index, and Amex or another entity could publish a successor or substitute index that the calculation agent, in its sole discretion, could deem a comparable successor index. Also, Amex could discontinue publication of the Select Ten Index and the calculation agent could not select a successor index. In such case, the calculation agent will compute a substitute value for the Select Ten Index in accordance with the procedures last used to calculate the Select Ten Index before any discontinuance. If Amex discontinues publication of the Select Ten Index before the period during which the Redemption Amount is to be determined and the calculation agent determines that no successor index is available at that time, then on each business day until the earlier to occur of (1) the determination of the Ending Value or (2) a determination by the calculation agent that a successor index is available, the calculation agent will determine the value that would be used in computing the Redemption Amount as if that day were a calculation day.¹⁵

Since the Notes will be deemed equity securities for the purpose of Rule 4420(f), the NASD and Nasdaq's existing equity trading rules will apply to the Notes. First, pursuant to Rule 2310 and IM-2310-2, members must have reasonable grounds for believing that a recommendation to a customer regarding the purchase, sale or exchange of any security is suitable for such customer upon the basis of the facts, if any, disclosed by such customer as to his other security holdings and as to his financial situation and needs.¹⁶ In addition, Nasdaq will distribute a circular to advise members recommending a transaction in the Notes to, among other things, have a reasonable basis for believing that the customer can evaluate the special characteristics of, and is able to bear the

¹⁴ See Amendment No. 1, *supra* n. 3.

¹⁵ Telephone conference between John Nachmann, Senior Attorney, Nasdaq, and Geoff Pemble, Special Counsel, Commission, dated February 20, 2003.

¹⁶ Rule 2310(b) requires members to make reasonable efforts to obtain information concerning a customer's financial status, a customer's tax status, the customer's investment objectives, and such other information used or considered to be reasonable by such member or registered representative in making recommendations to the customer.

financial risks of, such transaction. Furthermore, the Notes will be subject to the equity margin rules. Lastly, the regular equity trading hours of 9:30 am to 4 pm will apply to transactions in the Notes.

Nasdaq represents that NASD's surveillance procedures are adequate to properly monitor the trading of the Notes. Specifically, NASD will rely on its current surveillance procedures governing equity securities, and will include additional monitoring on key pricing dates.

2. Statutory Basis

Nasdaq believes that the proposed rule change, as amended, is consistent with section 15A of the Act,¹⁷ in general, and furthers the objectives of section 15A(b)(6) of the Act,¹⁸ in particular, in that the proposal is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and, in general, to protect investors and the public interest. Specifically, the proposed rule change, as amended, will provide investors with another investment vehicle based on an index of the top ten dividend yielding stocks of the DJIA.

B. Self-Regulatory Organization's Statement on Burden on Competition

Nasdaq 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.

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 at the Commission's Public Reference Room. Copies of such filing will also be available for inspection and copying at the principal office of the Exchange. All submissions should refer to File No. SR-NASD-2003-20 and should be submitted by March 20, 2003.

IV. Commission's Findings and Order Granting Accelerated Approval of Proposed Rule Change

After careful review, the Commission finds that implementation of the proposed rule change, as amended, is consistent with the requirements of section 15A of the Act¹⁹ and the rules and regulations thereunder applicable to a national securities association.²⁰ Specifically, the Commission believes that the proposal is consistent with section 15A(b)(6) of the Act.²¹ The Commission believes that the availability of the Notes will provide an instrument for investors to achieve desired investment objectives through the purchase of a publicly-traded debt product linked to the Select Ten Index. These objectives include participating in or gaining exposure to the Index while limiting somewhat downside risk. However, the Commission notes that the Notes are index-linked debt securities whose value in whole or in part will be based upon the performance of the Select Ten Index. In addition, the Notes are non-principal protected; they do not have a minimum principal amount that will be repaid, and payments on the Notes at maturity may be less than their original issue price. For the reasons discussed below, the Commission has concluded that the Nasdaq listing standards applicable to the Notes are consistent with the Act.

The Notes are non-convertible and will conform initially to the Nasdaq listing criteria for other securities under Rule 4420(f), and continued listing criterion for other securities pursuant to Rule 4450(c). The specific maturity date will not be established until the time of the offering, but will be not less than one, nor more than ten years from the date of issue. The Notes will entitle the owner at maturity to receive an amount based upon the percentage change

between the Starting Index Value (the value of the Index on the date the issuer prices the Notes for the initial sale to the public) and the Ending Index Value (the value of the Index over a period shortly prior to the expiration of the Notes). The Ending Index Value will be used in calculating the amount investors will receive upon maturity. The Notes will not have a minimum principal amount that will be repaid and, accordingly, payments on the Notes prior to, or at maturity, may be less than the original issue price of the Notes. During the designated month each year, investors will have the right to require the issuer to repurchase the Notes at a redemption amount based on the value of the Index at such repurchase date. The Notes are cash-settled in U.S. dollars and may not be called by the issuer.

The Notes are non-leveraged, non-principal protected instruments. The Notes are debt instruments whose price will be derived and based upon the value of the Select Ten Index. The Notes do not have a minimum principal amount that will be repaid at maturity and the payments on the Notes prior to or at maturity may be less than the original issue price of the Notes.²² Thus, if the Select Ten Index has declined at maturity, the holder of the Note may receive significantly less than the original public offering price of the Note. Accordingly, the level of risk involved in the purchase or sale of the Notes is similar to the risk involved in the purchase or sale of traditional common stock. Because the final rate of return of the Notes is derivatively priced, based on the performance of the Underlying Index, and because the Notes are instruments that do not guarantee a return of principal, there are several issues regarding the trading of this type of product.

The Commission notes that Nasdaq's rules and procedures that address the special concerns attendant to the trading of hybrid securities will be applicable to the Notes. In particular, by imposing the hybrid listing standards, suitability, disclosure, and compliance requirements noted above, the Commission believes the Exchange has addressed adequately the potential problems that could arise from the hybrid nature of the Notes. Moreover, the Commission notes that Nasdaq will distribute a circular to its membership calling attention to the specific risks associated with the Notes. The circular should include, among other things, a

¹⁹ 15 U.S.C. 78o-3.

²⁰ 15 U.S.C. 78o-3(b)(6). In approving this rule, the Commission notes that it has considered the proposed rule's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

²¹ *Id.*

²² The Commission recognizes that during a designated month each year investors will have the right to require the issuer to repurchase the Notes at a redemption amount based on the value of the Select Ten Index at such repurchase date.

¹⁷ 15 U.S.C. 78o-3.

¹⁸ 15 U.S.C. 78o-3(b)(6).

discussion of the risks that may be associated with the Notes in addition to details on the composition of the Index and how the rates of return will be computed. In particular, Nasdaq will advise members recommending a transaction in the Notes to: (1) Determine that such transaction is suitable for the customer; and (2) have a reasonable basis for believing that the customer can evaluate the special characteristics of, and is able to bear the financial risks of, such a transaction. Based on these factors, the Commission finds that the proposal to trade the Notes is consistent with section 15(b)(6) of the Act.²³ The Commission also notes that Merrill Lynch will deliver a prospectus in connection with the initial purchase of the Notes.

The Commission notes that the Notes are dependent upon the individual credit of the issuer, Merrill Lynch. To some extent this credit risk is minimized by Nasdaq's listing standards in Rule 4420(f), which provide the only issuers satisfying substantial asset and equity requirements may issue securities such as the Notes. In addition, Nasdaq's "other securities" listing standards further require that the Notes have at least \$4 million in market value.²⁴ In any event, financial information regarding Merrill Lynch, in addition to the information on the Underlying Index, will be publicly available.²⁵

The Commission also has a systemic concern, however, that a broker-dealer, such as Merrill Lynch, or a subsidiary providing a hedge for the issuer will incur position exposure. However, as the Commission has concluded in previous approval orders for other hybrid instruments issued by broker-dealers,²⁶ the Commission believes that this concern is minimal given the size of the Notes issuance in relation to the net worth of Merrill Lynch.

The Commission also believes that the listing and trading of the Notes should

not unduly impact the market for the component securities of the Underlying Index or raise manipulative concerns. The Commission notes that Amex maintains the Select Ten Index and states that it has sole discretion in determining, calculating, and maintaining the Index. The Commission notes that Nasdaq is relying on Amex to calculate continuously and disseminate the Index value every fifteen seconds over the Consolidated Tape Association's Network B. The Commission considers the dissemination of this Index value important to this product's approval and expects Nasdaq to be ultimately responsible for such dissemination.²⁷ The Commission also notes that Amex could discontinue publication of the Select Ten Index and Amex or another entity could publish a successor or substitute index that the calculation agent,²⁸ in its sole discretion, could deem a comparable successor index. Also, Amex could discontinue publication of the Select Ten Index and the calculation agent could not select a successor index. In such a case, the calculation agent will compute a substitute value for the Select Ten Index in accordance with the procedures last used to calculate the Select Ten Index before any discontinuance. If Amex discontinues publication of the Select Ten Index before the period during which the Redemption Amount is to be determined and the calculation agent determines that no successor index is available at that time, then on each business day until the earlier to occur of (1) the determination of the Ending Value or (2) a determination by the calculation agent that a successor index is available, the calculation agent will determine the value that would be used in computing the Redemption Amount as if that day were a calculation day. The Commission notes that these risks should be disclosed in the circular that Nasdaq provides to its members.

The Commission also notes that, at the outset, securities in the Select Ten Index will represent approximately an equal percentage of the starting value of the Index, but the Index will only be

rebalanced on an annual basis. The Commission notes that the Select Ten Index is composed of stocks with significant market capitalization and average daily trading volume. The portfolio of securities underlying the Index will be rebalanced annually so as to include the ten highest dividend yielding stocks in the DJIA.

In addition, Nasdaq's equity margin rules and debt trading rules will apply to the Notes. The Commission believes that the application of these rules should strengthen the integrity of the Notes. The Commission also believes that Nasdaq has appropriate surveillance procedures in place to detect and deter potential manipulation for similar index-linked products. By applying these procedures to the Notes, the Commission believes that the potential for manipulation of the Notes is minimal, thereby protecting investors and the public interest. The Commission further notes that the underlying measure on which the Select Ten Index is based (the DJIA), is broad-based and independent of both Nasdaq and the Issuer, factors that the Commission believes should act to minimize the possibility of manipulation.

Nasdaq has requested that the Commission find good cause for approving the proposed rule change, as amended, prior to the thirtieth day after the date of publication of notice thereof in the **Federal Register**. Nasdaq has requested accelerated approval because this product is similar to several other instruments currently traded on Nasdaq. In determining to grant the accelerated approval for good cause, the Commission notes that it has previously approved the listing of securities and options on securities the performance of which has been linked to or based on an index of the top dividend yielding stocks of the DJIA. Additionally, the Notes will be listed pursuant to existing hybrid security listing standards as described above. Based on the above, the Commission finds good cause to accelerate approval of the proposed rule change, as amended, prior to the thirtieth day after the date of publication of notice thereof in the **Federal Register**.

It is therefore Ordered, pursuant to section 19(b)(2) of the Act,²⁹ that the proposed rule change, as amended (SR-NASD-2003-20) is hereby approved on an accelerated basis.

²³ 15 U.S.C. 78o-3(b)(6).

²⁴ See NASD Rule 4420(f)(1).

²⁵ The companies that comprise the Select Ten Index are reporting companies under the Act, and the Notes will be registered under section 12 of the Act.

²⁶ See, e.g., Securities Exchange Act Release Nos. 44913 (October 9, 2001), 66 FR 52469 (October 15, 2001) (order approving the listing and trading of notes whose return is based on the performance of the Nasdaq-100 Index) (File No. SR-NASD-2001-73); 44483 (June 27, 2001), 66 FR 35677 (July 6, 2001) (order approving the listing and trading of notes whose return is based on a portfolio of 20 securities selected from the Amex Institutional Index) (File No. SR-Amex-2001-40); and 37744 (September 27, 1996), 61 FR 52480 (October 7, 1996) (order approving the listing and trading of notes whose return is based on a weighted portfolio of healthcare/biotechnology industry securities) (File No. SR-Amex-96-27).

²⁷ Nasdaq represents that, in the event that Amex discontinues the publication of the Select Ten Index, Nasdaq will facilitate the calculation and dissemination every 15 seconds of a value of a successor index either through the facilities of Nasdaq or those of an outside provider that is an independent calculation agent (e.g., not Merrill Lynch), unless otherwise approved by the Commission. See Amendment No. 1, *supra* n. 3.

²⁸ The Commission notes that in approving this product any such calculation agent that calculates and disseminates the value of a comparable successor index should be independent of the issuer of the Notes.

²⁹ 15 U.S.C. 78s(b)(2).

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.³⁰

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 03-4577 Filed 2-26-03; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-47388; File No. SR-PCX-2003-01]

Self-Regulatory Organizations; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change by the Pacific Exchange, Inc. Relating to Determination of Top 120 and 250 Issues

February 21, 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 January 27, 2003, the Pacific Exchange, Inc. ("PCX" or "Exchange") filed with the Securities and Exchange Commission ("Commission" or "SEC") the proposed rule change as described in Items I, II and III below, which Items have been prepared by the PCX. The Exchange filed the proposed rule change pursuant to section 19(b)(3)(A) of the Act³ and Rule 19b-4(f)(6) thereunder,⁴ which renders the proposal effective upon filing with the Commission. 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

PCX proposes to amend PCX Rule 6.37(b)(5), PCX Rule 6.87(b), the PCX Schedule of fees, and RBO 02-08 in order to change the calculation period for determining the top 120 and top 250 issues. The text of the proposed rule change is available for inspection and copying in the Commission's Public Reference Room and at the principal office of the PCX.

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 PCX 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. The PCX 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

In evaluating the type and quality of issues traded on the Exchange, the Exchange ranks issues based upon the total national volume. A common benchmark that the Exchange uses is called "top 120" and "top 250," indicating that equity option issues falling within these groups would qualify as being among the top 120 or top 250, respectively, of the most actively-traded equity option issues. Because the Exchange relies on the top 120 and top 250 rankings with respect to many of its processes, it believes it needs to define them in such a way as to provide greater accuracy and meaning to the point of reference. Currently, the Exchange defines "top 120" as:

for each current month, the Exchange's determination of whether an equity option ranks in the top 120 most active issues will be based on volume statistics for the one month of trading activity that occurred two months prior to the current month.

The Exchange determines the top 250 rankings in the same manner. Accordingly, the current approach would use September's national equity option volumes to determine November's rankings.

The Exchange represents that it has observed that volumes fluctuate from month to month and as a result, an issue may fall out of, or into, the top 120 or top 250 ranking somewhat sporadically. Moreover, the Exchange believes that evaluating the option volumes over a one-month period does not provide great accuracy in determining the long-term performance of an issue and its rank. Accordingly, the Exchange proposes to adopt a trailing three-month average, starting with the most currently completed calendar month, in order to determine the rankings of issues. For

example, under the proposed rule change, the Exchange would determine its November ranking in October and base the ranking on the national volumes of the September, August and July trade months. Consistently, it would determine its December ranking in November and base it on the October, September and August national volumes.

2. Statutory Basis

The Exchange believes that the proposal is consistent with section 6(b) of the Act,⁵ in general, and furthers the objective of section 6(b)(5),⁶ in particular, because it is designed to promote just and equitable principles of trade, to remove impediments 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 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 on the proposed rule change were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The PCX represents that it submitted a draft of this filing, including the proposed new rule text, to the Commission on January 9, 2003 in fulfillment of the five-day draft notice period of Rule 19b-4(f)(6).⁷ The PCX has further designated that the proposed rule change: (1) Does not significantly affect the protection of investors or the public interest; (2) does not impose any significant burden on competition; and (3) does not become operative for 30 days after the date of filing, or such shorter time as the Commission may designate if consistent with the protection of investors and the public interest. Therefore, the proposed rule change has become effective immediately upon filing with the Commission pursuant to section

³⁰ 17 CFR 200.30-3(a)(12).

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). The PCX requests that the Commission waive the 30-day operative delay. The PCX provided the Commission with notice of its intention to file this proposal on January 9, 2003.

⁵ 15 U.S.C. 78f(b).

⁶ 15 U.S.C. 78f(b)(5).

⁷ 17 CFR 240.19b-4(f)(6).

19(b)(3)(A) of the Act⁸ and Rule 19b-4(f)(6) thereunder.⁹

A proposed rule change filed under Rule 19b-4(f)(6)¹⁰ does not become operative until 30 days after the date of filing or such shorter time as the Commission may designate if such action is consistent with the protection of investors and the public interest. The PCX has requested that the Commission accelerate the implementation of this proposed rule change so that it may take effect before the 30-day period specified in Rule 19b-4(f)(6)(iii).¹¹ The Commission believes that it is consistent with the protection of investors and the public interest to waive the 30-day period and to designate that the proposed rule change has become operative as of January 27, 2003, the date the PCX filed the proposal with the Commission.¹²

At any time within 60 days after the filing of the proposed rule change, the Commission may summarily abrogate the 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 PCX. All submissions should refer to File No.

SR-PCX-2003-01 and should be submitted by March 20, 2003.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.¹³

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 03-4617 Filed 2-26-03; 8:45 am]

BILLING CODE 8010-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-47378; File No. SR-PCX-2002-20]

Self-Regulatory Organizations; Order Approving Proposed Rule Change and Amendment No. 1 by the Pacific Exchange, Inc. Relating to a Stay of a Committee Action

February 19, 2003.

I. Introduction

On April 9, 2002, the Pacific Exchange, Inc. ("PCX" or "Exchange") filed with the Securities and Exchange Commission ("Commission" or "SEC"), pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² a proposed rule change to adopt an interim stay provision in connection with its rules regarding review of committee actions. On December 31, 2002, PCX filed Amendment No. 1 to the proposed rule change.³ The proposed rule change and Amendment No. 1 were published for comment in the **Federal Register** on January 15, 2003.⁴ No comment letters were received on the proposal, as amended. This order approves the proposed rule change and Amendment No. 1.

II. Description of the Proposal

The Exchange's Board of Governors delegates certain powers and duties to committees that administer the provisions of the Constitution and the Rules of the Exchange.⁵ The rules of the Exchange provide that persons aggrieved by committee decisions (other than disciplinary matters) may seek review of the decisions subject to the procedural prerequisite of PCX Rule 11.7 (Hearing and Review of Committee Action). PCX represents that, while the rule does not expressly provide a right to interim relief from committee

decisions, applicants seeking such relief routinely request that the Exchange stay further action pending review. In the absence of an express policy or procedures relating to interim relief, the Exchange has evaluated the merits of stay applications on a case-by-case basis relying upon the guidelines that are used by the Commission in reviewing stay applications of self-regulatory organization actions.⁶ As a consequence of the Exchange's *ad hoc* review, the Exchange believes that applicants are either not aware that they have a right to interim relief or they are not familiar with the criteria that they must satisfy to obtain a stay.

The Exchange proposed to set forth the criteria and procedures necessary to request a stay of committee action. The proposed new Exchange rule will set forth four factors that the Exchange will consider when evaluating the merits of a stay application: (1) Whether there is a likelihood that the applicant will prevail on the merits of the appeal; (2) that without a stay, the applicant is likely to suffer irreparable injury; (3) that it is likely there will not be substantial harm to other parties if the stay is granted; and (4) that the issuance of a stay is likely to serve the interests of the Exchange or an identified public interest.⁷ The Exchange represents that the applicant must prove each of these factors based solely on the evidence and information presented in the application for a stay.

The proposed new Exchange rule will also clarify the procedures that an applicant must satisfy in seeking a stay. The proposed rule specifies that an applicant must pay a \$500 fee in order to request a stay. The fee will be used to cover a portion of Exchange expenses including the allocation of staff time in processing a request for a stay. The proposal also provides that applicants must request a stay by the earlier of ten business days after a committee renders its decision or forty-eight hours before the committee implements action. From time to time, the Exchange represents that it may be required to implement a particular committee decision immediately without leaving sufficient time for an aggrieved party to request a stay of action. According to the Exchange, this situation occurs, for example, when the Exchange must identify a particular Lead Market Maker to trade a new option on the following

⁸ 15 U.S.C. 78s(b)(3)(A).

⁹ 17 CFR 240.19b-4(f)(6).

¹⁰ *Id.*

¹¹ 17 CFR 240.19b-4(f)(6)(iii).

¹² The Commission notes that it has considered the proposed rule's impact on efficiency, competition, and capital formation for the sole purpose of accelerating the operative date of the proposed rule change. 15 U.S.C. 78c(f).

¹³ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ Amendment No. 1 replaced the PCX's original 19b-4 filing in its entirety.

⁴ Securities Exchange Act Release No. 47143 (January 8, 2003), 68 FR 2096.

⁵ See PCX Rule 11.4.

⁶ See 17 CFR 201.401(d); see also Order Preliminarily Considering Whether to Issue Stay *Sua Sponte* and Establishing Guidelines for Seeking Stay Applications, Securities Exchange Act Release No. 33870 (April 7, 1994) ("Commission Order").

⁷ The Exchange represents that it relies on the Commission's guidelines in proposing these factors.

business day, or when the Options Floor Trading Committee makes *ad hoc* trading decisions on the trading floor regarding Auto-Ex decisions pursuant to PCX Rule 6.87. In those unique situations, the Exchange notes that the aggrieved party will not have an opportunity to stay the action, but will be able to appeal the committee decision pursuant to PCX Rule 11.7. The Exchange also represents that it will not be required to consider a request for a stay made within the forty-eight hours before a committee implements action.

The proposed new Exchange rule will also provide that the Exchange's Board Appeals Committee may render a decision summarily based solely on the documents submitted in support of, and opposition to, the request for stay. In the event that the Board Appeals Committee denies the request for a stay, the Board Appeals Committee will state the reasons for its denial and state facts that support its decision.⁸ The Exchange believes that these procedures will guide applicants through the stay process and will provide the Exchange's Board Appeals Committee with a uniform standard by which to judge the merits of an application for interim relief. The proposed new Exchange rule will not apply to disciplinary matters and will not affect an aggrieved person's underlying right to appeal a committee decision.

III. Discussion

After careful review, the Commission finds that the proposed rule change, as amended, is consistent with the Act and the rules and regulations promulgated thereunder applicable to a national securities exchange and, in particular, with the requirements of Section 6(b).⁹ Specifically, the Commission finds that approval of the proposed rule change, as amended, is consistent with Section 6(b)(5)¹⁰ of the Act in that it is designed to facilitate transactions in securities; to prevent fraudulent and manipulative acts and practices; to promote just and equitable principles of trade; to foster cooperation and coordination with persons engaged in regulating, clearing,

settling, processing information with respect to, and facilitating transactions in securities; 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. In addition, the Commission finds that approval of the proposed rule change, as amended, is consistent with Section 6(b)(4) of the Act¹¹ because it provides for the equitable allocation of reasonable dues, fees and other charges among members, issuers and other persons.

The Exchange proposes to amend Exchange Rule 11.7 to explicitly codify criteria and procedures necessary to request a stay of committee action so that applicants are aware that they have a right to interim relief from committee decisions and to provide applicants with clear guidelines on how to request a stay. The Commission believes that the criteria proposed by the Exchange for evaluating the merits of a stay application, as described above, are similar to criteria that the Commission uses to access requests for stays in connection with petitions seeking review of a Commission order.¹²

The Exchange proposes that applicants must request a stay by the earlier of ten business days after a committee renders its decision or forty-eight hours before the committee implements action. The Commission notes that the Exchange has represented that, at the time of the committee's decision, the applicant will be notified of the date when the committee will implement its action and will therefore be able to assess when he or she would need to file an application to request a stay.¹³ In addition, the Exchange represents that it will not be required to consider a request for a stay made within the forty-eight hours before a committee implements action. The Commission recognizes that, under certain circumstances, such as when the Exchange's Options Floor Trading Committee need to make *ad hoc* trading decisions on the trading floor regarding the Exchange's Auto-Ex system, it would be necessary for the committee to take immediate action following a committee decision. In such cases, a request for interim relief from the committee's decision would be

impractical. The Exchange has represented, however, that the applicant would have a right to appeal the decision pursuant to Exchange Rule 11.7.

The Exchange's proposal further permits its Board Appeals Committee to render its decision summarily based solely on the documents submitted in support of, and opposition to, the request for stay, and not on the underlying complaint. The Commission notes that the Exchange has represented that its Board Appeals Committee will notify the applicant if his or her request for a stay is denied and will provide the applicant with the grounds for such denial.

Consequently, the Commission believes that the Exchange's proposed criteria to request a stay of a committee action are clear and that they provide objective and uniform guidelines for applicants. The Commission finds that proposed guidelines for requesting a stay are consistent with the Act.

In addition, the Commission believes that requiring all applicants to pay a \$500 fee to request a stay of committee action is appropriate because it covers the expense for the Exchange to process the applicant's application, and because it applies to all applicants uniformly regardless of whether the request for a stay is accepted or denied.

IV. Conclusion

For the foregoing reasons, the Commission finds that the proposed rule change, as amended, is consistent with the Act and the rules and regulations thereunder applicable to a national securities exchange, and, in particular, with sections 6(b)(5)¹⁴ and 6(b)(4).¹⁵

It is therefore ordered, pursuant to section 19(b)(2) of the Act,¹⁶ that the proposed rule change (SR-PCX-2002-20) and Amendment No. 1 are approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.¹⁷

Margaret H. McFarland,
Deputy Secretary.

[FR Doc. 03-4618 Filed 2-26-03; 8:45 am]

BILLING CODE 8010-01-P

⁸ The Exchange represents that the Board Appeals Committee will notify the applicant of its denial of a request for a stay, as well as the reasons for its denial. Telephone conversation between Mai S. Shiver, Senior Attorney, Regulatory Policy, PCX, and Sapna C. Patel, Attorney, Division of Market Regulation ("Division"), Commission, on January 8, 2003.

⁹ 15 U.S.C. 78f(b). In approving this proposal, the Commission has considered the proposed rule's impact on efficiency, competition and capital formation. 15 U.S.C. 78c(f).

¹⁰ 15 U.S.C. 78f(b)(5).

¹¹ 15 U.S.C. 78f(b)(4).

¹² See Section 25(c)(2) of the Act, 15 U.S.C. 78y(c)(2), and the Commission's Rules of Practice Rule 401, 17 CFR 201.401(d); see also Commission Order, *supra* note 6.

¹³ Telephone conversation between Mai S. Shiver, Senior Attorney, Regulatory Policy, PCX, and Sapna C. Patel, Attorney, Division, Commission, on February 19, 2003.

¹⁴ 15 U.S.C. 78f(b)(5).

¹⁵ 15 U.S.C. 78f(b)(4).

¹⁶ 15 U.S.C. 78s(b)(2).

¹⁷ 17 CFR 200.30-3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-47389; File No. SR-PHLX-2002-34]

Self-Regulatory Organizations; Order Approving Proposed Rule Change by the Philadelphia Stock Exchange, Inc. To Adopt a Seat Transaction Policy and Add Supplementary Material to PHLX Rule 708

February 21, 2003.

On June 21, 2002, the Philadelphia Stock Exchange, Inc. ("Phlx or "Exchange") filed with the Securities and Exchange Commission ("Commission") pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² a proposed rule change to adopt a Seat Transaction Policy for Governors, Committee Members and Associated Members Organizations ("Seat Transaction Policy" or the "Policy") and in addition, the Exchange proposes to amend Phlx Rule 708: *Acts Detrimental to the Interest and Welfare of the Exchange*. On December 16, 2002, the Exchange filed Amendment No. 1 to the proposed rule change.³ On December 27, 2002, the Exchange filed Amendment No. 2 to the proposed rule change.⁴

The proposed rule change was published for comment in the **Federal Register** on January 10, 2003.⁵ The Commission received no comments on the proposed rule change.

The Commission has carefully reviewed the Phlx's proposed rule change and finds that the proposal is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange,⁶ and with the provisions of Section 6(b) of the Act.⁷ In particular, the Commission finds the proposal is consistent with Sections 6(b)(5),⁸ in that it is designed to prevent fraudulent and manipulative acts and

practices and with Section 6(b)(6),⁹ in that it is designed to appropriately discipline members for violation of the rules of the Exchange.

The Commission notes that the Exchange adopted the Policy to establish procedures to govern the purchase or sale of a Phlx membership, foreign currency option ("FCO") participation, or Philadelphia Board of Trade ("PBOT") membership, (each an "Exchange Seat" or a Seat") by a Governance Member or Member Organization ("Covered Person").¹⁰ The Policy generally restricts a Covered Person who is in possession of Material Confidential Information¹¹ of the Exchange to engage in purchases or sales of Exchange Seats, except in accordance with the procedures set forth in the Policy.¹² At the time the Policy was adopted, the Phlx recognized that Covered Persons may be subject to conflicting duties whenever they engage in a transactions to purchase or sell an Exchange Seat. The Phlx was concerned that, as a result of a Covered Person's position on the Board or on an Exchange Committee, that Person may learn Material Confidential Information regarding the Exchange that may affect the value of all Exchange Seats, or the value of particular Exchange Seats. The Commission believes that adopting the Exchange's Policy will enable the Exchange to resolve the tension between a Covered Person's legitimate business needs to purchase or sell Exchange Seats from time to time and the Exchange's legitimate business interest in preventing disclosure of Material Confidential Information to anyone involved in a Seat Transaction.

In addition, the Phlx has adopted an amendment to Phlx Rule 708, *Acts Detrimental to the Interest and Welfare of the Exchange*, which provides notice and makes clear to Covered Persons that any violation of the Policy constitutes an act detrimental to the Exchange, and therefore is a violation of Phlx Rule 708.

The Commission believes that adopting the proposed amendments would accommodate both of these

interests by allowing a Special Committee to review the facts surrounding a seat transaction and, if necessary, to impose conditions on the seat transaction in order to prevent or limit disclosure of Material Confidential Information of the Exchange to third parties.

The Commission believes that the Policy as specified in the Governance Members Code of Conduct, and Phlx Rule 708, as amended, should discourage fraudulent and manipulative acts and practices in connection with the purchase and sale of Exchange Seats by Covered Persons, who owe a fiduciary duty to the Exchange and its Members.

It is therefore ordered, pursuant to Section 19(b)(2) of the Act¹³ that the proposed rule change (SR-Phlx-2002-34), as amended, is approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.¹⁴

Margaret McFarland,
Deputy Secretary.

[FR Doc. 03-4616 Filed 2-26-03; 8:45 am]

BILLING CODE 8010-01-P

DEPARTMENT OF STATE

[Public Notice 4266]

Shipping Coordinating Committee; Notice of Meeting

The Shipping Coordinating Committee (SHC) will conduct an open meeting at 9:30 a.m. on Wednesday, March 12, 2003 in Room 6103 of the U.S. Coast Guard Headquarters, 2100 Second Street, SW., Washington, DC 20593-0001. The primary purpose of the meeting is to prepare for the Eighth Session of International Maritime Organization (IMO) the Sub-Committee on Bulk Liquids and Gases to be held at the IMO Headquarters in London, England from March 24, 2003 to March 28, 2003.

The primary matters to be considered include:

- Matters related to the probabilistic methodology for oil outflow analysis
- Review of Annex I of International Convention for the Prevention of Pollution From Ships (MARPOL 73/78)
- Review of Annex II of MARPOL 73/78
- Evaluation of safety and pollution hazards of chemicals and preparation of consequential amendments
- Amendments to requirements on electrical installations in the

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See letter from John Dayton, Assistant Secretary and Counsel, Phlx, to Florence Harmon, Senior Special Counsel, Division of Market Regulation ("Division"), Commission, dated December 13, 2002 ("Amendment No. 1").

⁴ See letter from John Dayton, Assistant Secretary and Counsel, Phlx, to Florence Harmon, Senior Special Counsel, Division, Commission, dated December 27, 2002 ("Amendment No. 2").

⁵ See Securities Exchange Act Release No. 47118 (January 2, 2003), 68 FR 1500 (January 10, 2003).

⁶ In approving this rule proposal, the Commission notes that it has also considered the proposed rule's impact on efficiency, competition and capital formation, 15 U.S.C. 78c(f).

⁷ 15 U.S.C. 78f(b).

⁸ 15 U.S.C. 78f(b)(5).

⁹ 15 U.S.C. 78f(b)(6).

¹⁰ A Covered Person includes: Exchange Governors, Committee Members and Member Firms for which such Governor is an officer or director, who own or lease an Exchange Seat to conduct business on the Exchange.

¹¹ Material Confidential Information is confidential and proprietary to the Exchange and may not, under the Governance Members Code of Conduct, Exchange policy, and applicable law, be disclosed or used for person gain when purchasing or selling a seat.

¹² Neither the Policy nor the proposed amendment to Phlx Rule 708 would apply to Exchange members other than Governors, Committee Members and their associated Member Organizations.

¹³ 15 U.S.C. 78s(b)(2).

¹⁴ 17 CFR 200.30-3(a)(12).

- International Bulk Chemical (IBC) and the International Gas Carrier (IGC) Codes
- Application of MARPOL requirements to Floating Production, Storage and Offloading/Floating Storage Units (FPSOs and FSUs)
- Requirements for personnel protection involved in the transportation of cargoes containing toxic substances in all types of tankers
- Oil tagging systems
- Revision of the fire protection requirements of the IBC and IGC Codes
- Ship recycling-related matters

Members of the public may attend this meeting up to the seating capacity of the room. For further information, please contact Commander J. M. Michalowski, at U.S. Coast Guard Headquarters, 2100 Second Street, SW., Washington, DC 20593-0001, telephone (202) 267-1217.

Dated: February 20, 2003.

Frederick J. Kenney,

Executive Secretary, Shipping Coordinating Committee, Department of State.

[FR Doc. 03-4613 Filed 2-26-03; 8:45 am]

BILLING CODE 4710-07-P

DEPARTMENT OF STATE

[Public Notice 4265]

Shipping Coordinating Committee Notice of Meeting

The Shipping Coordinating Committee (SHC) will conduct an open meeting at 2 p.m. on Monday, March 31, 2003, in Room 2415 of the United States Coast Guard Headquarters Building, 2100 2nd Street SW., Washington, DC, 20593-0001. The primary purpose of the meeting is to prepare for the 11th Session of the International Maritime Organization (IMO) Sub-Committee on Flag State Implementation to be held at IMO Headquarters in London, England from April 7th to 11th.

The primary matters to be considered include:

- Responsibilities of Governments and measures to encourage flag State compliance;
- Self-assessment of flag State performance;
- Comprehensive analysis of difficulties encountered in the implementation of IMO instruments;
- Regional cooperation on port State control;
- Reporting procedures on port State control detentions and analysis and evaluation of reports;
- Mandatory reports under MARPOL 73/78;

- Casualty statistics and investigations;
- Development of provisions on transfer of class;
- Review of resolution A.746(18);
- Illegal, unregulated and unreported (IUU) fishing and implementation of resolution A.925(22);
- Development of guidelines under the 2001 AFS Convention;
- Ship recycling-related matters;
- Introduction of the HSSC into MARPOL Annex VI on prevention of air pollution.

Members of the public may attend this meeting up to the seating capacity of the room. Interested persons may seek information by writing to Commander Linda Fagan, Commandant (G-MOC), U.S. Coast Guard Headquarters, 2100 Second Street SW., Room 1116, Washington, DC 20593-0001 or by calling (202) 267-2978.

Dated: February 20, 2003.

Frederick J. Kenney,

Executive Secretary, Shipping Coordinating Committee, Department of State.

[FR Doc. 03-4614 Filed 2-26-03; 8:45 am]

BILLING CODE 4710-01-P

DEPARTMENT OF STATE

[Public Notice 4226]

Shipping Coordinating Committee; Notice of Meeting

The Shipping Coordinating Committee (SHC) will conduct an open meeting at 10 a.m. on Wednesday, April 23, 2003 in Room 2415 at U.S. Coast Guard Headquarters, 2100 Second Street, SW., Washington, DC. The purpose of this meeting is to prepare for the eighty-sixth session of the International Maritime Organization's (IMO) Legal Committee (LEG 86) scheduled from April 28 to May 2, 2003.

The provisional LEG 86 agenda calls for the Legal Committee to review proposed amendments to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 1988, and its Protocol of 1988 relating to Fixed Platforms Located on the Continental Shelf (SUA Convention and Protocol). The Committee will also examine the draft Wreck Removal Convention with the objective of having the draft ready for a Diplomatic Conference in the 2004-5 biennium. In addition, the Legal Committee will monitor the implementation of the International Convention on Liability and Compensation for Damage in Connection With the Carriage of Hazardous and Noxious Substances by Sea. The provisional LEG 86 agenda also

indicates that documents relating to the topic of places of refuge, treatment of persons rescued at sea, and the code of practice for the investigation of crimes of piracy and armed robbery at sea may be submitted for the Legal Committee's consideration. Additionally, the provisional LEG 86 agenda allots time to address any other issues that may arise on the Legal Committee's work program.

Members of the public are invited to attend the SHC meeting up to the seating capacity of the room. To facilitate the building security process, those who plan to attend should call or send an e-mail two days before the meeting. Upon request, participating by phone may be an option. For further information please contact Captain Joseph F. Ahern or Lieutenant Vasilios Tasikas, at U.S. Coast Guard, Office of Maritime and International Law (G-LMI), 2100 Second Street, SW., Washington, DC 20593-0001; e-mail vtasikas@comdt.uscg.mil, telephone (202) 267-1527; fax (202) 267-4496.

Dated: January 31, 2003.

Frederick J. Kenney,

Executive Secretary, Shipping Coordinating Committee, Department of State.

[FR Doc. 03-4615 Filed 2-26-03; 8:45 am]

BILLING CODE 4710-01-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Notice of Opportunity for Public Comment on Surplus Property Release at Piedmont Triad International Airport, Greensboro, NC

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice.

SUMMARY: Under the provisions of Title 49, U.S.C. 47153(c), notice is being given that the FAA is considering a request from the Piedmont Triad Airport Authority to waive the requirement that a 169.20-acre parcel of surplus property, located at the Piedmont Triad International Airport, be used for aeronautical purposes.

DATES: Comments must be received on or before March 31, 2003.

ADDRESSES: Comments on this notice may be mailed or delivered in triplicate to the FAA at the following address: Atlanta Airports District Office, Attn: Tracie D. Kleine, Program Manager, 1701 Columbia Ave., Suite 2-260, Atlanta, GA 30337-2747.

In addition, one copy of any comments submitted to the FAA must be mailed or delivered to Mickie L.

Elmore, Director of Development of the Piedmont Triad Airport Authority at the following address: Post Office Box 35445, Greensboro, NC 27425.

FOR FURTHER INFORMATION CONTACT: Tracie D. Kleine, Program Manager, Atlanta Airports District Office, 1701 Columbia Ave., Suite 2-260, Atlanta, GA 30337-2747, (404) 305-7148. The application may be reviewed in person at this same location.

SUPPLEMENTARY INFORMATION: The FAA is reviewing a request by the Piedmont Triad Airport Authority to release 169.20 acres of surplus property at the Piedmont Triad International Airport. This fee simple title transfer of land to the North Carolina Department of Transportation (NCDOT) is for the purpose of providing Right-of-Way (ROW) for the relocation of a portion of Bryan Boulevard. Bryan Boulevard will be a multi-lane, limited access highway that will provide improved access to and from the airport and is required as part of the overall GSO master plan development. The proposed use of this property is compatible with airport operations.

Any person may inspect the request in person at the FAA office listed above under **FOR FURTHER INFORMATION CONTACT**. In addition, any person may, upon request, inspect the request, notice and other documents germane to the request in person at the Piedmont Triad Airport Authority.

Issued in Atlanta, Georgia, on December 26, 2002.

Scott L. Seritt,

Manager, Atlanta Airports District Office, Southern Region.

[FR Doc. 03-4646 Filed 2-26-03; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

High Density Traffic Airports; Notice of Slot Usage Waiver

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of temporary slot usage waiver at high density traffic airports.

SUMMARY: This notice announces a five-day waiver of the minimum slot usage requirement at New York's John F. Kennedy and LaGuardia Airports and Washington's Reagan National Airport for the period February 15, 2003 through February 19, 2003, due to extended airport closures and the operational recovery from a major snow storm impacting much of the northeastern United States.

DATE: February 27, 2003.

FOR FURTHER INFORMATION CONTACT: Lorelei Peter, Operations and Air Traffic Law Branch, Regulations Division, Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone number 202-267-3073.

SUPPLEMENTARY INFORMATION:

Background

On February 15, 2003, a major winter storm including snow and freezing rain began to impact operations at many airports in the eastern part of the United States, including the three high density traffic airports. This storm moved up the East Coast bringing significant snowfalls and resulted in airport closures or reduced airport capacity through Monday, February 17, 2003. On Tuesday, February 18, 2003, the airport authorities reopened all three high density airports and regular operations were resumed and on Wednesday, February 19, 2003, air traffic activity approached normal levels. However, on these two days, some airlines were unable to operate scheduled flights since aircraft or crews were not in position to operate the flights as scheduled.

Statement of Policy

The regulations governing slots and slot allocation provide that any slot not utilized at least 80 percent of the time over a 2-month period shall be recalled by the Federal Aviation Administration (FAA) (14 CFR 93.277(a)). Additionally, paragraph (j) of that section provides that the Chief Counsel may waive the slot usage requirement in the event of a highly unusual and unpredictable conditions that is beyond the control of the slot holder and exists for nine days or more (14 CFR 93.227(j)). These two provisions are also applicable to slot exemptions.

The FAA has determined the conditions described above warrant a temporary waiver of the minimum slot usage requirement for the period of February 15, 2003, through February 19, 2003, even though the conditions did not exceed eight days. Therefore, the FAA will treat as used any slot that was scheduled to operate during the period of the waiver regardless of whether the flight actually was operated. In the bi-monthly slot usage reports required by 14 CFR 93.227(i), slot holders/operators should indicate whether a flight was scheduled to operate in an allocated slot and whether the flight actually operated. Canceled flights should not be listed as operated unless they did in fact

operate. Carrier may indicate that a flight was scheduled to operate in a particular slot, but was subsequently canceled during this period, by using the "Z" code that is normally applied to flights canceled due to airport deicing programs.

Alternatively, carriers may list impacted slots/flights in a separate report. The FAA will then apply the usage waiver as appropriate to slots meeting the conditions.

Issued on February 20, 2003, in Washington, DC.

James W. Whitlow,

Deputy Chief Counsel.

[FR Doc. 03-4644 Filed 2-26-03; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Notice of Passenger Facility Charge (PFC) Approvals and Disapprovals

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Monthly notice of PFC approvals and disapprovals. In January 2003, there were 15 applications approved. Additionally, 15 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 paragraph d of § 158.29.

PFC Applications Approved

Public Agency: City of Joplin, Missouri.

Application Number: 02-01-C-00-JLN.

Application Type: Impose and use a PFC.

PFC Level: \$4.50.

Total PFC Revenue Approved in This Decision: \$889,663.

Earliest Charge Effective Date: April 1, 2003.

Estimated Charge Expiration Date: July 1, 2008.

Class of Air Carriers Not Required to Collect PFC's: None.

Brief Description of Projects Approved for Collection and Use:

Purchase new aircraft rescue and firefighting vehicle.

Purchase and install new runway and taxiway signage.

Site preparation of runway 18/36 extension and parallel taxiway (phase 1).
 Site preparation of runway 18/36 extension and parallel taxiway (phase 2).
 Pave, mark, and light runway 18 extension.
 Partial parallel taxiway and connecting taxiways to runway 18.
 Install deer fence.
 Purchase medium intensity approach lighting system with runway alignment indicator lights.
 Purchase handicap lift.
 Install runway 18 navigational aids.
 Construct taxiway K.
 Construct apron extension.
 Construct airport access roadway.
 Runway 13/31 safety area improvements.
 Airport signage/lighting enhancements.
 New passenger terminal building: Environmental assessment.
 New passenger terminal building: Phase 1 (design).
Decision Date: January 9, 2003.

FOR FURTHER INFORMATION CONTACT:
 Lorna Sandridge, Central Region Airports Division, (816) 329-2641.
Public Agency: Monroe County Board of County Commissioners, Key West, Florida.
Application Number: 02-06-C-00-EYW.
Application Type: Impose and use a PFC.
PFC Level: \$4.50.
Total PFC Revenue Approved in This Decision: \$263,000.
Earliest Charge Effective Date: June 1, 2003.
Estimated Charge Expiration Date: January 1, 2004.
Class of Air Carriers Not Required to Collect PFC's:

Commuters or small certificated air carriers filing Department of Transportation Form 298-C T1 or E1.
Determination: Approved. Based on information submitted in the public agency's application, the FAA has determined that the approved class accounts for less than 1 percent of the total annual enplanements at Key West International Airport.
Brief Description of Projects Approved for Collection and Use:
 PFC application and administration.
 Master utility plan.
 Noise insulation program construction.
 Noise insulation program (phase 3) architecture and engineering.
 Security.
 Runway safety area/runway 9/27 extension feasibility study.
 West general aviation apron lighting.
 Airfield guidance signs.

Runway 9/27 drainage design and construction.
 Part 150 update.
Decision Date: January 10, 2003.
FOR FURTHER INFORMATION CONTACT:
 Susan Moore, Orlando Airports District Office, (407) 812-6331, extension 20.
Public Agency: Savannah Airport Commission, Savannah, Georgia.
Application Number: 02-05-C-00-SAV.
Application Type: Impose and use of PFC.
PFC Level: \$4.50.
Total PFC Revenue Approved in this Decision: \$3,015,790.
Earliest Charge Effective Date: July 1, 2012.
Estimated Charge Expiration Date: May 1, 2013.

Class of Air Carriers Not Required to Collect PFC's: Air taxi/commercial operators filing FAA Form 1800-31.
Determination: Approved. Based on information submitted in the public agency's application, the FAA has determined that the approved class accounts for less than 1 percent of the total annual enplanements at Savannah International Airport.
Brief Description of Projects Approved for Collection and Use:
 Precision approach path indicators runways 9 and 36.
 Interactive training system.
 Fingerprint machine.
 (Construct taxiway) new ammunition bunker.
 Baggage lifts.
 PFC administration and implementation.
 Purchase and renovate loading bridges.
 Flight information display system.
 South bag carousel #1.
 Design and construct general aviation taxiways.
Decision Date: January 13, 2003.

FOR FURTHER INFORMATION CONTACT:
 Philip Cannon, Atlanta Airports District Office, (404) 305-7152.
Public Agency: City of Pensacola, Florida.
Application Number: 03-06-U-00-PNS.
Application Type: Use PFC revenue.
PFC Level: \$4.50.
Total PFC Revenue to be Used in this Decision: \$12,300,000.
Charge Effective Date: June 1, 1999.
Estimated Charge Expiration Date: June 1, 2009.
Class of Air Carriers Not Required to Collect PFC's: No change from previous approval.
Brief Description of Project Approved for Use: Runway 8/26 extension.
Decision Date: January 15, 2003.

FOR FURTHER INFORMATION CONTACT: Bill Farris, Orlando Airports District Office, (407) 812-6331, extension 25.

Public Agency: Port of Bellingham, Bellingham, Washington.
Application Number: 02-06-U-00-BLI.
Application Type: Use PFC revenue.
PFC Level: \$4.50.
Total PFC Revenue to be Used in this Decision: \$1,200,000.
Charge Effective Date: January 1, 2000.
Estimated Charge Expiration Date: January 1, 2007.
Class of Air Carriers Not Required to Collect PFC's: No change from previous approval.
Brief Description of Project Approved for Use: Terminal rehabilitation and expansion.
Decision Date: January 16, 2003.

FOR FURTHER INFORMATION CONTACT:
 Suzanne Lee-Pang, Seattle Airports District Office, (425) 227-2654.
Public Agency: St. Joseph County Airport Authority, South Bend, Indiana.
Application Number: 03-03-C-00-SBN.
Application Type: Impose and use a PFC.
PFC Level: \$3.00.
Total PFC Revenue Approved in this Decision: \$23,898,229.
Earliest Charge Effective Date: June 1, 2003.

Estimated Charge Expiration Date: January 1, 2023.
Class of Air Carriers Not Required to Collect PFC's: Part 135 air taxi operators operating with less than 15 seats.
Determination: Approved. Based on information submitted in the public agency's application, the FAA has determined that the approved class accounts for less than 1 percent of the total annual enplanements at South Bend Regional Airport.
Brief Description of Projects Approved for Collection and Use:
 Land acquisition.
 Lincolnway West Relocation.
Decision Date: January 21, 2003.

FOR FURTHER INFORMATION CONTACT:
 Gregory N. Sweeny, Chicago Airports District Office, (847) 294-7526.
Public Agency: Raleigh-Durham Airport Authority, Raleigh-Durham, North Carolina.
Application Number: 03-01-C-00-RDU.
Application Type: Impose and use a PFC.
PFC Level: \$3.00.
Total PFC Revenue Approved in this Decision: \$69,903,473.
Earliest Charge Effective Date: April 1, 2003.
Estimated Charge Expiration Date: September 1, 2008.
Class of Air Carriers Not Required to Collect PFC's: Non-scheduled/on-demand air carriers.

Determination: Approved. Based on information submitted in the public agency's application, the FAA has determined that the approved class accounts for less than 1 percent of the total annual enplanements at Raleigh-Durham Airport.

Brief Description of Projects Approved for Collection and Use:

Surface movement guidance and control system plan and improvements.
Taxiway J and International Drive bridge.

Runway 5R/23L safety areas extension.
Preparation of PFC application.
Relocate taxiway D/expand terminal C apron.

Brief Description of Project Approved for Collection: Runway 5R/23L safety area extension.

Decision Date: January 22, 2003.

FOR FURTHER INFORMATION CONTACT:

Tracie D. Kleine, Atlanta Airports District Office, (404) 305-7148.

Public Agency: Melbourne Airport Authority, Melbourne, Florida.

Application Number: 03-06-C-00-MLB.

Application Type: Impose and use a PFC.

PFC Level: \$3.00.

Total PFC Revenue Approved in this Decision: \$8,563,500.

Earliest Charge Effective Date: October 1, 2003.

Estimated Charge Expiration Date: June 1, 2018.

Class of Air Carriers Not Required to Collect PFC's: Air taxi/commercial operator.

Determination: Approved. Based on information submitted in the public agency's application, the FAA has determined that the approved class accounts for less than 1 percent of the total annual enplanements at Melbourne International Airport.

Brief Description of Project Approved for Collection and Use: Terminal development.

Decision Date: January 23, 2003.

FOR FURTHER INFORMATION CONTACT:

Armando L. Rovira, Orlando Airports District Office, (407) 812-6331, extension 31.

Public Agency: City of Monroe, Louisiana.

Application Number: 03-01-C-00-MLU.

Application Type: Impose and use a PFC.

PFC Level: \$4.50.

Total PFC Revenue Approved in this Decision: \$1,134,672.

Earliest Charge Effective Date: April 1, 2003.

Estimated Charge Expiration Date: February 1, 2006.

Class of Air Carriers Not Required to Collect PFC's: Air taxi/commercial carriers operating under Part 135 and filing FAA Form 1800-31.

Determination: Approved. Based on information submitted in the public agency's application, the FAA has determined that the approved class accounts for less than 1 percent of the total annual enplanements at Monroe Regional Airport.

Brief Description of Projects Approved for Collection and Use: Aircraft loading equipment improvements. Rehabilitate airfield lighting. PFC application professional fees.

Decision Date: January 23, 2003.

FOR FURTHER INFORMATION CONTACT: G. Thomas Wade, Southwest Region Airports Division, (817) 222-5613.

Public Agency: Imperial County, Imperial, California.

Application Number: 03-01-C-00-IPL.

Application Type: Impose and use a PFC.

PFC Level: \$4.50.

Total PFC Revenue Approved in this Decision: \$892,781.

Earliest Charge Effective Date: April 1, 2003.

Estimated Charge Expiration Date: April 1, 2012.

Class of Air Carriers Not Required to Collect PFC's: None.

Brief Description of Projects Approved for Collection and Use:

Rehabilitate runway 14/31.

Rehabilitate runway 8/26.

Rehabilitate and construct aprons.

Rehabilitate access road and public parking areas.

Update airport master plan.

Rehabilitate passenger terminal building.

Rehabilitate aircraft rescue and firefighting vehicle.

Acquire airport sweeper.

Acquire Americans with Disabilities Act passenger lift device.

Install gate actuators.

Airport maintenance building.

Airport drainage and erosion protection.

Decision Date: January 24, 2003.

FOR FURTHER INFORMATION CONTACT: Eric Vermeeren, Western Pacific Region Airports Division, (310) 725-3631.

Public Agency: Metropolitan Airports Commission, Minneapolis, Minnesota.

Application Number: 02-06-C-00-MSP.

Application Type: Impose and use a PFC.

PFC Level: \$4.50.

Total PFC Revenue Approved in this Decision: \$1,161,478,610.

Earliest Charge Effective Date: April 1, 2003.

Estimated Charge Expiration Date: January 1, 2017.

Class of Air Carriers Not Required to Collect PFC's: Air taxi/commercial operators filing FAA Form 1800-31.

Determination: Approved. Based on information submitted in the public agency's application, the FAA has determined that the approved class accounts for less than 1 percent of the total annual enplanements at Minneapolis-St. Paul International Airport.

Brief Description of Projects Approved for Collection and Use at a \$3.00 PFC Level:

Airside bituminous construction—2001.
Taxiways A/H reconstruction.
Green/Gold connector bag belt.
Green/Gold connector ticket counter/bag check.

Brief Description of Projects Partially Approved for Collection and Use at a \$3.00 PFC Level: Runway 4/22 property acquisition.

Determination: The public agency revised its cost estimate for the project downward after the airline consultation meeting and submission of the PFC application.

Pavement rehabilitation—aprons/taxiways.

Determination: The public agency discovered, after submitting the application, that one element of the proposed project had been included in a previous PFC application and, so, deleted that element.

Brief Description of Projects Approved for Collection and Use at a \$4.50 PFC Level:

Runway 12L deicing pad.

Runway 12R deicing pad.

Buildings demolition.

Taxiway B construction.

Runway 17/35 site preparation and utility installation.

Runway 17/35 site demolition on and off airport.

Runway 17/35 runways, taxiways, taxilanes, and connectors.

Runway 17/35 airfield service roads.

Runways 17/35 and 4/22 tunnels.

Taxiways W-Y/Y-3 tunnels.

Tenant lease extinguishment.

Deicing agent processing facility.

Airfield material and equipment storage facilities.

Property acquisition.

Program planning/management costs.

Residential noise insulation.

Green concourse (concourse C) expansion—phase 1.

Green concourse (concourse C) expansion—phase 2.

Green concourse apron expansion.

Green/gold connector.

Green concourse automated people mover.

Humphrey Terminal hydrant fueling system.

Brief Description of Project Approved for Collection at a \$4.50 PFC Level: Fire/rescue replacement facility.

Brief Description of Disapproved Projects: Runway 12R/30L temporary extension.

Determination: This project does not meet Airport Improvement Program (AIP) eligibility criteria for temporary construction, paragraph 310(e)(2) of FAA Order 5100.38B, AIP Handbook, (May 31, 2002), because it is not required to maintain uninterrupted operation of the airport.

Miscellaneous airfield construction.

Determination: The project description identifies unspecified small incidental airside projects of a maintenance nature. Maintenance work at primary airports is specifically identified as being not AIP eligible per paragraph 501 of FAA Order 5100.38B, AIP Handbook, (May 31, 2002).

Maintenance facility addition—2000.
Determination: This project does not meet AIP eligibility criteria because it does not involve the storage of eligible equipment or abrasives and chemicals used in the treatment of eligible paved areas per paragraph 547(c) of FAA Order 5100.38B, AIP Handbook (May 31, 2002).

Brief Description of Withdrawn Projects:

Concourse F expansion.

Date of Withdrawal: December 20, 2002. Security fence/gate replacements.

Date of Withdrawal: January 16, 2003.

Decision Date: January 24, 2003.

FOR FURTHER INFORMATION CONTACT:

Gordon Nelson, Minneapolis Airports District Office, (612) 713-4358.

Public Agency: Missoula County Airport Authority, Missoula, Montana.

Application Number: 03-04-C-00-MSO.

Application Type: Impose and use a PFC.

PFC Level: \$4.50.

Total PFC Revenue Approved in this Decision: \$832,464.

Earliest Charge Effective Date: February 1, 2004.

Estimated Charge Expiration Date: April 1, 2006.

Class of Air Carriers Not Required to Collect PFC's: Air taxi/commercial operators filing FAA Form 1800-31.

Determination: Approved. Based on information submitted in the public agency's application, the FAA has determined that the approved class accounts for less than 1 percent of the total annual enplanements at Missoula International Airport.

Brief Description of Project Approved for Collection and Use: Rehabilitate air carrier apron (phase 2).

Decision Date: January 24, 2003.

FOR FURTHER INFORMATION CONTACT:

David S. Stelling, Helena Airports District Office, (406) 449-5271.

Public Agency: Port of Pasco, Pasco, Washington.

Application Number: 02-05-C-00-PSC.

Application Type: Impose and use a PFC.

PFC Level: \$4.50.

Total PFC Revenue Approved in this Decision: \$1,409,000.

Earliest Charge Effective Date: April 1, 2004.

Estimated Charge Expiration Date: February 1, 2006.

Class of Air Carriers Not Required to Collect PFC's: None.

Brief Description of Projects Approved for Collection and Use:

Security enhancement plan.

Terminal building passenger boarding area upgrades.

Security enhancements.

Interactive training systems.

Security fencing.

Decision Date: January 24, 2003.

FOR FURTHER INFORMATION CONTACT:

Suzanne Lee-Pang, Seattle Airports District Office, (425) 227-2654.

Public Agency: Central West Virginia Regional Airport Authority, Charleston, West Virginia.

Application Number: 03-08-C-00-CRW.

Application Type: Impose and use a PFC.

PFC Level: \$4.50.

Total PFC Revenue Approved in this Decision: \$2,834,117.

Earliest Charge Effective Date: April 1, 2003.

Estimated Charge Expiration Date: February 1, 2006.

Classes of Air Carriers Not Required to Collect PFC's:

(1) Part 135 charter operators for hire to the general public; (2) Part 121 charter operators for hire to the general public; (3) non-signatory and non-scheduled air carriers.

Determination: Approved. Based on information submitted in the public agency's application, the FAA has determined that each approved class accounts for less than 1 percent of the total annual enplanements at Yeager Airport.

Brief Description of Projects Approved for Collection and Use:

Runway 5/23 engineering study.

Obstruction removal.

Taxiway B drain repair.

Strengthen taxiways B and B1 and apron.

Acquire snow equipment (radio/friction meter).

Acquire snow removal equipment (end loader).

Acquire security vehicle.

Rehabilitate airport lighting.

Rehabilitate runway 5/23.

Acquire snow removal equipment (grader).

Construct snow equipment storage building.

Acquire airline baggage lift system.

Conduct wildlife study.

Install apron signs.

Rehabilitate runway 15/33.

Replace lighting regulators.

Repair runway 5/23.

Upgrade runway scan system.

Brief Description of Project Approved for Use: Paging system.

Brief Description of Project Disapproved for Collection: Safety area improvement runway 5 approach.

Determination: In accordance with § 158.25(b)(14)(ii), an application for authority to impose a PFC shall include a description of any alternative uses of the PFC revenue to ensure such revenue will be used only on eligible projects in the event the primary project is not approved for use authority or implemented. No alternative projects were provided in this application.

Decision Date: January 28, 2003.

FOR FURTHER INFORMATION CONTACT:

Larry F. Clark, Beckley Airports Field Office, (304) 252-6212.

Public Agency: Gulfport-Biloxi Regional Airport Authority, Gulfport, Mississippi.

Application Number: 03-06-C-00-GPT.

Application Type: Impose and use a PFC.

PFC Level: \$4.50.

Total PFC Revenue Approved in this Decision: \$14,251,901.

Earliest Charge Effective Date: June 1, 2005.

Estimated Charge Expiration Date: September 1, 2012.

Class of Air Carriers Not Required to Collect PFC's: None.

Brief Description of Projects Approved for Collection and Use:

Terminal expansion—baggage claim area.

Terminal expansion—baggage screening area.

Terminal expansion—security screening checkpoint.

Terminal expansion—flight information display/baggage information display systems.

Terminal expansion baggage claim phase II and second floor.

Brief Description of Disapproved Project: Airline security reimbursement.

Determination: The project was for costs incurred by the airlines, not the

public agency, and, thus, was not AIP or PFC eligible.

Decision Date: January 29, 2003.

FOR FURTHER INFORMATION CONTACT:
Patrick D. Vaught, Jackson Airports
District Office, (601) 664-9885.

Amendments to PFC Approvals

Amendment No. 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
97-01-C-01-BHM, Birmingham, AL	12/18/02	\$7,657,558	\$7,438,100	02/01/00	02/01/00
99-02-C-01-BHM, Birmingham, AL	12/23/02	10,736,857	9,539,381	02/01/01	10/01/00
01-14-C-01-CHO, Charlottesville, VA	01/03/03	4,480,518	4,609,392	01/01/05	03/01/06
93-01-C-13-ORD, Chicago, IL	01/23/03	1,228,917,970	1,148,517,970	02/01/17	07/01/16
96-05-C-07-ORD, Chicago, IL	01/23/03	467,714,130	467,714,130	02/01/17	07/01/16
01-12-C-04-ORD, Chicago, IL	01/23/03	972,627,790	1,072,879,304	07/01/16	04/01/17
92-01-C-05-HPN, White Plains, NY	01/23/03	17,932,607	17,252,918	05/01/04	05/01/04
*00-04-C-01-BUR, Burbank, CA	01/24/03	73,699,087	73,699,087	08/01/13	01/01/08
96-02-C-03-JAX, Jacksonville, FL	01/24/03	18,503,092	19,042,209	06/01/99	06/01/99
97-03-U-01-JAX, Jacksonville, FL	01/24/03	NA	NA	06/01/99	06/01/99
99-04-C-01-JAX, Jacksonville, FL	01/24/03	5,010,000	5,140,741	01/01/00	01/01/00
00-05-C-01-JAX, Jacksonville, FL	01/24/03	13,081,065	3,814,930	02/01/02	02/01/02
98-07-I-05-PHL, Philadelphia, PA	01/24/03	986,693,869	999,267,790	12/01/12	02/01/13
99-08-U-04-PHL, Philadelphia, PA	01/24/03	NA	NA	12/01/12	02/01/13
99-02-C-01-UNV, State College, PA	01/24/03	1,448,605	1,597,102	10/01/04	10/01/04

(Note: The amendment denoted by an asterisk (*) includes a change to the PFC level charged from \$3.00 per enplaned passenger to \$4.50 per enplaned passenger. For Burbank, CA, this change is effective on April 1, 2003.

Issued in Washington, DC on February 21, 2003.

Barry Molar,

Manager, Airports Financial Assistance Division.

[FR Doc. 03-4643] Filed 2-26-03; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Policy Statement No. ANM-03-115-04]

Exit Bands

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed policy; request for comments.

SUMMARY: The Federal Aviation Administration (FAA) announces the availability of proposed policy on colored exit bands required by § 25.811(f)(1) and (2).

DATES: Send your comments on or before March 31, 2003.

ADDRESSES: Address your comments to the individual identified under **FOR FURTHER INFORMATION CONTACT**.

FOR FURTHER INFORMATION CONTACT:
Michael T. Thompson, Federal Aviation Administration, Transport Airplane Directorate, Transport Standards Staff, Airframe and Cabin Safety Branch, ANM-115, 1601 Lind Avenue, SW., Renton, WA 98055-4056; telephone (425) 227-1157; fax (425) 227-1149; e-mail: michael.t.thompson@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The proposed policy is available on the Internet at the following address: <http://www.faa.gov/certification/aircraft/anminfo/devpaper.cfm>. If you do not have access to the Internet, you can obtain a copy of the policy by contacting the person listed under **FOR FURTHER INFORMATION CONTACT**.

The FAA invites your comments on this proposed policy. We will accept your comments, data, views, or arguments by letter, fax, or e-mail. Send your comments to the person indicated in **FOR FURTHER INFORMATION CONTACT**. Mark your comments. "Comments to Policy Statement No. ANM-03-115-04."

Use the following format when preparing your comments:

- Organize your comments issue-by-issue.
- For each issue, state what specific change you are requesting to the proposed policy.
- Include justification, reasons, or data for each change you are requesting.

We also welcome comments in support of the proposed policy.

We will consider all communications received on or before the closing date for comments. We may change the proposed policy because of the comments received.

Background

The proposed policy will further simplify the certification process pertaining to installation of the required 2-inch colored band outlining the exits on transport category airplanes. These bands are necessary so that rescue personnel can readily recognize exits in the side of the fuselage.

Issued in Renton, Washington, on February 13, 2003.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-4645 Filed 2-26-03; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA 2003-14467; Notice 1]

Michelin North America, Inc., Receipt of Application for Decision of Inconsequential Noncompliance

Michelin North America, Inc., (MNA) has determined that approximately 504 size P225/55R17 BFGoodrich Comp T/A VR4 tires do not meet the labeling requirements mandated by Federal Motor Vehicle Safety Standard (FMVSS) No. 109, "New Pneumatic Tires."

Pursuant to 49 U.S.C. 30118(d) and 30120(h), MNA has petitioned for a determination that this noncompliance is inconsequential to motor vehicle safety and has filed an appropriate report pursuant to 49 CFR part 573, "Defect and Noncompliance Reports."

This notice of receipt of an application is published under 49 U.S.C. 30118 and 30120 and does not represent any agency decision or other exercise of judgment concerning the merits of the application.

FMVSS No. 109 (S4.3(e)) requires that each tire shall have permanently molded into or onto both sidewalls the actual number of plies in the sidewall, and the actual number of plies in the tread area if different.

The noncompliance with S4.3(e) relates to the sidewall markings. MNA's Ardmore, Oklahoma plant produced approximately 504 tires with incorrect markings during the period from October 3, 2002, through October 5, 2002. The noncompliant tires were marked: "Tread Plies: 1 Polyester + 2 Steel + 1 Nylon, Sidewall Plies: 1 Polyester." The correct marking required by FMVSS No. 109 is as follows: "Tread Plies: 2 Polyester + 2 Steel + 1 Nylon, Sidewall Plies: 2 Polyester."

MNA stated that the noncompliant tires were actually constructed with more polyester sidewall plies than indicated on the sidewall marking (2 polyester plies rather than the 1 indicated). Therefore, this noncompliance is particularly unlikely to have an adverse affect on motor vehicle safety and is clearly inconsequential in that regard. The noncompliant tires meet or exceed all performance requirements of FMVSS No. 109 and will have no impact on the operational performance or safety of vehicles on which these tires are mounted.

Interested persons are invited to submit written data, views, and arguments on the application described above. Comments should refer to the docket number and be submitted to: U.S. Department of Transportation, Docket Management, Room PL-401, 400 Seventh Street, SW., Washington, DC 20590. It is requested that two copies be submitted.

All comments received before the close of business on the closing date indicated below will be considered. The application and supporting materials, and all comments received after the closing date, will also be filed and will be considered to the extent possible. When the application is granted or denied, the notice will be published in

the **Federal Register** pursuant to the authority indicated below. *Comment closing date:* March 31, 2003.

(49 U.S.C. 301118, 301120; delegations of authority at 49 CFR 1.50 and 501.8)

Issued on: February 20, 2003.

Stephen R. Kratzke,

Associate Administrator for Rulemaking.

[FR Doc. 03-4637 Filed 2-26-03; 8:45 am]

BILLING CODE 4910-59-P

DEPARTMENT OF THE TREASURY

Termination of Two Collections

AGENCY: Departmental Offices, Department of the Treasury.

ACTION: Notice of termination of reporting requirements; instructions.

SUMMARY: By this notice, the Department of the Treasury is informing the public that it will eliminate the following two forms: (1) Treasury International Capital Form BL-3 (OMB control number 1505-0088), Intermediary's Notification of Foreign Borrowing Denominated in Dollars, after respondents submit their final BL-3 reports as of end-January 2003; and (2) Treasury International Capital Form CM (OMB control number 1505-0023), Dollar Deposit and Certificate of Deposit Claims on Banks Abroad, after respondents submit their final CM reports as of end-January 2003. Upcoming revisions to other Treasury International Capital forms obviate the need to continue these two forms. This notice constitutes legal notification to all United States persons (defined below) who meet the reporting requirements for the two forms.

ADDRESSES: Direct all written comments to Dwight Wolkow, International Portfolio Investment Data Systems, Department of the Treasury, Room 4410-1440NYA, 1500 Pennsylvania

Avenue, NW., Washington, DC 20220. In view of possible delays in mail delivery, please also notify Mr. Wolkow by email (dwight.wolkow@do.treas.gov), FAX (202-622-1207) or telephone (202-622-1276).

Definition: A U.S. person is any individual, branch, partnership, associated group, association, estate, trust, corporation, or other organization (whether or not organized under the laws of any State), and any government (including a foreign government, the United States Government, a state, provincial, or local government, and any agency, corporation, financial institution, or other entity or instrumentality thereof, including a government-sponsored agency), who resides in the United States or is subject to the jurisdiction of the United States.

What to Do: Respondents should (a) cease filing new BL-3 and CM reports after submitting their BL-3 and CM reports as of end-January 2003; and (b) maintain their records of BL-3 and CM reports until March 31, 2006. Those requirements are based on respondents' obligations: (i) To respond to inquiries from Federal Reserve Bank staffs about submitted reports (*see* Instructions for TIC Banking Forms, general instructions section, part L; and Instructions for TIC Nonbanking Forms, general instructions section, part R); and (ii) to maintain records of their BL-3 and CM reports for three years after submitting them to the appropriate Federal Reserve Banks (31 CFR part 128.5).

Questions: Direct any questions to the TIC reports staff of the Federal Reserve Bank(s) to which your BL-3 and CM reports are sent; or to Mr. Wolkow.

Dwight Wolkow,

Administrator, International Portfolio Investment Data Reporting Systems.

[FR Doc. 03-4575 Filed 2-26-03; 8:45 am]

BILLING CODE 4810-25-P



Federal Register

**Thursday,
February 27, 2003**

Part II

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

**Endangered and Threatened Wildlife and
Plants; Final Designation or
Nondesignation of Critical Habitat for 95
Plant Species From the Islands of Kauai
and Niihau, HI; Final Rule**

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AG71

Endangered and Threatened Wildlife and Plants; Final Designation or Nondesignation of Critical Habitat for 95 Plant Species From the Islands of Kauai and Niihau, 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 83 of the 95 species known historically from the Hawaiian islands of Kauai and Niihau. A total of approximately 21,266 hectares (ha) (52,549 acres (ac)) of land on the island of Kauai and 144 ha (357 ac) of land on the island of Niihau fall within the boundaries of the 217 critical habitat

units designated for the 83 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 seven species. 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 March 31, 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, P.O. 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:**Background**

In the Lists of Endangered and Threatened Plants (50 CFR 17.12), there are 95 plant species that, at the time of listing, were reported from the islands of Kauai and/or Niihau (Table 1). Fifty-seven of these species are endemic to the islands of Kauai and Niihau, while 38 species are reported from one or more other islands, as well as Kauai and/or Niihau. Each of these species is described in more detail below in the section, "Discussion of Plant Taxa." Although we considered designating critical habitat on Kauai for each of the 95 plant species, for the reasons described below, the final designation includes critical habitat for 83 of 95 plant species. Species that also occur on other islands may have critical habitat designated on other islands in subsequent rulemakings.

TABLE 1.—SUMMARY OF ISLAND DISTRIBUTION OF 95 SPECIES FROM KAUAI AND NIIHAU

Species	Island distribution						
	Kauai	Oahu	Molokai	Lanai	Maui	Hawaii	N.W. Isles, Kahoolawe, Niihau
<i>Acaena exigua</i> (liliwai)	H				H		
<i>Achyranthes mutica</i> (NCN*)	H					C	
<i>Adenophorus periens</i> (pendent kihi fern)	C	H	C	R	R	C	
<i>Alectryon macrococcus</i> (mahoe)	C	C	C		C		
<i>Alsinidendron lychnoides</i> (kuawawaenohu)	C						
<i>Alsinidendron viscosum</i> (NCN)	C						
<i>Bonamia menziesii</i> (NCN)	C	C	H	C	C	C	
<i>Brighamia insignis</i> (olulu)	C						Ni (C)
<i>Centaurium sebaeoides</i> (awiwi)	C	C	C	C	C		
<i>Chamaesyce halemanui</i> (NCN)	C						
<i>Ctenitis squamigera</i> (pauoa)	H	C	C	C	C	H	
<i>Cyanea asarifolia</i> (haha)	C						
<i>Cyanea recta</i> (haha)	C						
<i>Cyanea remyi</i> (haha)	C						
<i>Cyanea undulata</i> (NCN)	C						
<i>Cyperus trachysanthos</i> (puukaa)	C	C	H	H			Ni (C)
<i>Cyrtandra cyaneoides</i> (mapele)	C						
<i>Cyrtandra limahuliensis</i> (haiwale)	C						
<i>Delissea rhytidosperra</i> (NCN)	C						
<i>Delissea rivularis</i> (oha)	C						
<i>Delissea undulatra</i> (NCN)	C				H	C	Ni (H)
<i>Diellia erecta</i> (NCN)	C	C	C	H	C	C	
<i>Diellia pallida</i> (NCN)	C						
<i>Diplazium molokaiense</i> (NCN)	H	H	H	H	C		
<i>Dubautia latifolia</i> (koholapehu)	C						
<i>Dubautia pauciflorula</i> (naenae)	C						
<i>Euphorbia haeleeleana</i> (akoko)	C	C					
<i>Exocarpos luteolus</i> (heau)	C						
<i>Flueggea neowawraea</i> (mehamehame)	C	C	H		C	C	
<i>Gouania meyenii</i> (NCN)	C	C					
<i>Hedyotis cookiana</i> (awiwi)	C	H	H			H	
<i>Hedyotis st. johnii</i> (Na Pali beach hedyotis)	C						
<i>Hesperomannia lydgatei</i> (NCN)	C						
<i>Hibiscadelphus woodii</i> (hau kuahiwi)	C						
<i>Hibiscus brackenridgei</i> (mao hau hele)	H	C	H	C	C	C	Ka (R)

TABLE 1.—SUMMARY OF ISLAND DISTRIBUTION OF 95 SPECIES FROM KAUAI AND NIIHAU—Continued

Species	Island distribution						
	Kauai	Oahu	Molokai	Lanai	Maui	Hawaii	N.W. Isles, Kahoolawe, Niihau
<i>Hibiscus clayi</i> (Clay's hibiscus)	C						
<i>Hibiscus waimeae</i> ssp. <i>hannerae</i> (kokio keokeo)	C						
<i>Ischaemum byrone</i> (Hilo ischaemum)	C	H	C		C	C	
<i>Isodendron laurifolium</i> (aupaka)	C	C					
<i>Isodendron longifolium</i> (aupaka)	C	C					
<i>Isodendron pyrifolium</i> (wahine noho kula)		H	H	H	H	C	Ni (H)
<i>Kokia kauaiensis</i> (kokio)	C						
<i>Labordia lydgatei</i> (kamakahala)	C						
<i>Labordia tinifolia</i> var. <i>wahiawaensis</i> (kamakahala)	C						
<i>Lipochaeta fauriei</i> (nehe)	C						
<i>Lipochaeta micrantha</i> (nehe)	C						
<i>Lipochaeta waimeae</i> (nehe)	C						
<i>Lobelia niihauensis</i>	C	C					Ni (H)
<i>Lysimachia filifolia</i> (NCN)	C	C					
<i>Mariscus pennatifolius</i> (NCN)	H	H			C	H	NW (C)
<i>Melicope haupuensis</i> (alani)	C						
<i>Melicope knudsenii</i> (alani)	C				C		
<i>Melicope pallida</i> (alani)	C	C					
<i>Melicope quadrangularis</i> (alani)	H						
<i>Munroidendron racemosum</i> (NCN)	C						
<i>Myrsine linearifolia</i> (kolea)	C						
<i>Nothocestrum peltatum</i> (aiea)	C						
<i>Panicum niihauense</i> (lau ehū)	C						Ni (H)
<i>Peucedanum sandwicense</i> (makou)	C	C	C		C		
<i>Phlegmariurus mannii</i> (wawaeiole)	H				C	C	
<i>Phlegmariurus nutans</i> (wawaeiole)	H	C					
<i>Phyllostegia knudsenii</i> (NCN)	C						
<i>Phyllostegia waimeae</i> (NCN)	C						
<i>Phyllostegia wawrana</i> (NCN)	C						
<i>Plantago princeps</i> (laukahi kuai)	C	C	C		C	H	
<i>Platanthera holochila</i> (NCN)	C	H	C		C		
<i>Poa mannii</i> (Mann's bluegrass)	C						
<i>Poa sandwicensis</i> (Hawaiian bluegrass)	C						
<i>Poa siphonoglossa</i> (NCN)	C						
<i>Pritchardia aylmer-robinsonii</i> (wahane)							Ni (C)
<i>Pritchardia napaliensis</i> (loulou)	C						
<i>Pritchardia viscosa</i> loulou	C						
<i>Pteralyxia kauaiensis</i> (kaulu)	C						
<i>Remya kauaiensis</i> (NCN)	C						
<i>Remya montgomeryi</i> (NCN)	C						
<i>Schiedea apokremnos</i> (maolioli)	C						
<i>Schiedea helleri</i> (NCN)	C						
<i>Schiedea kauaiensis</i> (NCN)	C						
<i>Schiedea membranacea</i> (NCN)	C						
<i>Schiedea nuttallii</i> (NCN)	C	C	C		R		
<i>Schiedea spargulina</i> var. <i>leiopoda</i> (NCN)	C						
<i>Schiedea spargulina</i> var. <i>spargulina</i> (NCN)	C						
<i>Schiedea stellarioides</i> (NCN)	C						
<i>Sesbania tomentosa</i> (ohai)	C	C	C	H	C	C	Ni (H), Ka (C), NW Isles (C)
<i>Silene lanceolata</i> (NCN)	H	C	C	H		C	
<i>Solanum incompletum</i> (popolo ku mai)	H		H	H	H	C	
<i>Solanum sandwicense</i> (aiakeakua, popolo)	C	H					
<i>Spermolepis hawaiiensis</i> (NCN)	C	C	C	C	C	C	
<i>Stenogyne campanulata</i> (NCN)	C						
<i>Vigna o-wahuensis</i> (NCN)		H	C	C	C	C	Ni (H), Ka, (C)
<i>Viola helenae</i> (NCN)	C						
<i>Viola kauaiensis</i> var. <i>wahiawaensis</i> (nani waialeale) ..	C						
<i>Wilkesia hobbii</i> (dwarf iliau)	C						
<i>Xylosma crenatum</i> (NCN)	C						
<i>Zanthoxylum hawaiiense</i> (ae)	C		C	H	C	C	

KEY

C (Current)—population last observed within the past 30 years

H (Historical)—population not seen for more than 30 years

R (Reported)—reported from undocumented observations

* NCN—No Common Name

The Islands of Kauai and Niihau

Because of its age and relative isolation, Kauai has levels of floristic diversity and endemism that are higher than on any other island in the Hawaiian archipelago. However, the vegetation on Kauai has undergone extreme alterations because of past and present land use. Land with rich soils was altered by the early Hawaiians and, more recently, converted to agricultural use or pasture. Intentional or inadvertent introduction of nonnative plant and animal species has also contributed to the reduction of native vegetation on the island of Kauai. Native forests are now limited to the upper elevation mesic (moist) and wet regions within Kauai's Conservation District. The land that supports the habitat essential to the conservation of the 83 plant taxa is owned by various private parties, the State of Hawaii (including State parks, forest reserves, natural area reserves, and a wilderness area), and the Federal government. Most of the taxa included in this final rule persist on steep slopes, precipitous cliffs, valley headwalls, and other regions where unsuitable topography has prevented agricultural development, or where inaccessibility has limited encroachment by nonnative plant and animal species (Gagne and Cuddihy 1999).

Niihau's relative isolation and severe environmental conditions have produced a few endemic species. Unfortunately, human disturbance, primarily ungulate ranching, has drastically changed the vegetation and hydrological parameters of the island, leaving few of the native vegetation communities. Niihau has been privately owned since 1864 and access has been, and continues to be, restricted (Department of Geography 1998). Therefore, current information on plant locations and population status is extremely limited.

Discussion of Plant Taxa

Species Endemic to Kauai and Niihau

Alsinidendron lychnoides (kuawawaenohu)

Alsinidendron lychnoides, a member of the pink family (Caryophyllaceae), is a weakly climbing or sprawling subshrub, woody at the base, with a dense covering of fine glandular hairs throughout. This short-lived perennial species is distinguished from others in this endemic Hawaiian genus by the weakly climbing or sprawling habit, color of the sepals (modified leaves), number of flowers per cluster, and size of the leaves. It is closely related to *A.*

viscosum, which differs primarily by having narrower leaves, fewer capsule valves (fruit chambers), and fewer flowers per cluster (Wagner *et al.* 1999).

This species has been observed with fruits during February. No additional life history information for this species is currently known (Service 1998a).

Historically, *Alsinidendron lychnoides* was found on the island of Kauai on the east rim of Kalalau Valley near Keanapuka, the western and southeastern margins of the Alakai Swamp, and southwest of the Swamp near Kaholuamano. Currently, there are four occurrences with a total of eight individual plants. This species is extant on State-owned land in the Alakai Swamp, the Mohihi-Waialae Trail, Keanapuka and Pihea in the Alakai Wilderness Preserve, Na Pali Coast State Park, and Na Pali-Kona Forest Reserve (Geographic Decision Systems International (GDSI) 2000; Hawaii Natural Heritage Program (HINHP) Database 2000).

Alsinidendron lychnoides typically grows on steep riparian clay or silty soil banks in montane wet forests dominated by *Metrosideros polymorpha* (ohia) and *Cheirodendron* spp. (olapa), or by *M. polymorpha* and *Dicranopteris linearis* (uluhe), at elevations between 828 and 1,344 meters (m) (2,715 and 4,408 feet (ft)). Associated native plant species include *Asplenium* spp. (no common name (NCN)), *Astelia* spp. (painiu), *Broussaisia arguta* (kanawao), *Carex* spp. (NCN), *Cyrtandra* spp. (haiwale), *Diplazium sandwichianum* (NCN), *Elaphoglossum* spp. (ekaha), *Hedyotis terminalis* (manono), *Machaerina* spp. (uki), *Peperomia* spp. (ala ala wai nui), or *Vaccinium* spp. (ohelo) (61 FR 53070; Ken Wood, National Tropical Botanical Garden (NTBG), pers. comm., 2001).

The major threats to this species are competition from the aggressive nonnative plant species *Rubus argutus* (prickly Florida blackberry); habitat degradation by feral pigs (*Sus scrofa*); trampling by humans; risk of extinction from naturally occurring events, such as landslides or hurricanes; and reduced reproductive vigor due to the small number of extant individuals (61 FR 53070).

Alsinidendron viscosum (no common name (NCN))

Alsinidendron viscosum, a member of the pink family (Caryophyllaceae), is a weakly climbing or sprawling subshrub densely covered with fine glandular hairs. This short-lived perennial species is distinguished from others in this endemic Hawaiian genus by the weakly climbing or sprawling habit, color of the sepals, number of flowers per cluster,

and size of the leaves. It is closely related to *A. lychnoides*, which differs primarily in having wider leaves and more capsule valves and flowers per cluster (Wagner *et al.* 1999).

Alsinidendron viscosum has been observed in flower during January, February, and April. No additional life history information for this species is currently known (Service 1998a).

Historically, *Alsinidendron viscosum* was found at Kaholuamano, Kokee, Halemanu, Nawaimaka, and Waialae areas of northwestern Kauai. Currently, there are a total of seven occurrences containing about 319 individuals on the island of Kauai. These occurrences are on State-owned land at the Halemanu-Kokee Trail, Mohihi-Waialae Trail, Kawaiiki Valley, Waialae Falls, and Nawaimaka Valley in the Alakai Wilderness Preserve, Kokee State Park, and the Na Pali-Kona Forest Reserve (GDSI 2000; HINHP Database 2000; 61 FR 53070).

Alsinidendron viscosum is typically found at elevations between 754 and 1,224 m (2,474 and 4,016 ft), on steep slopes in *Acacia koa* (koa)-*Metrosideros polymorpha* lowland and montane mesic forest. Associated native plant species include *Alyxia oliviformis* (maile), *Asplenium polyodon* (punana manu), *Bidens cosmoides* (poola nui), *Bobea* spp. (ahakea), *Carex meyenii* (NCN), *Carex wahuensis* (NCN), *Coprosma* spp. (pilo), *Dianella sandwicensis* (ukiuki), *Dodonaea viscosa* (aalii), *Doodia kunthiana* (ohupuku pulauui), *Dryopteris glabra* (kilau), *Dryopteris unidentata* (akole), *Dryopteris wallichiana* (ionui), *Dubautia laevigata* (naenae), *Gahnia* spp. (NCN), *Ilex anomala* (aiea), *Melicope* spp. (alani), *Panicum nephelophilum* (konakona), *Pleomele aurea* (hala pepe), *Psychotria* spp. (kopiko), *Pteridium aquilinum* var. *decompositum* (bracken fern), *Schiedea stellarioides* (laulihilihi), or *Vaccinium dentatum* (ohelo) (K. Wood, pers. comm., 2001).

The major threats to this species are destruction of habitat by feral pigs and goats (*Capra hircus*); competition with the nonnative plant species *Lantana camara* (lantana), and *Melinis minutiflora* (molasses grass), *Rubus argutus*; a risk of extinction from naturally occurring events, such as landslides or hurricanes; and reduced reproductive vigor due to the small number of extant populations and individuals (61 FR 53070).

Brighamia insignis (olulu)

Brighamia insignis, a member of the bellflower family (Campanulaceae), is an unbranched plant with a succulent stem that is bulbous at the bottom and

tapers toward the top, ending in a compact rosette of fleshy leaves. This short-lived perennial species is a member of a unique endemic Hawaiian genus with only one other species, *B. rockii* (pua ala), presently known only on Molokai, from which it differs by the color of its petals, its shorter calyx (sepals) lobes, and its longer flower stalks (Lammers 1999; 59 FR 9304).

Current reproduction is not thought to be sufficient to sustain populations of this species, with poor seedling establishment due to competition with nonnative grasses as the limiting factor. Pollination by native sphingid moths (Sphingidae family) is likely; however, pollination failure is common, due to either a lack of pollinators or a reduction in genetic variability. The flower structure appears to favor outcrossing (pollination between different parent plants). Some vegetative cloning has been observed and flower and leaf size appear to be dependent on moisture availability. Seeds of this species are undoubtedly dispersed by gravity. Although they may be blown for short distances, they are not adapted for wind dispersal, being ovoid to ellipsoid, smooth, and lacking any sort of wing or outgrowth (Service 1995; 59 FR 9304).

Historically, *Brighamia insignis* was known from the headland between Hoolulu and Waiahuakua Valleys along the Na Pali Coast on the island of Kauai, and from Kaali Spring on the island of Niihau. Currently, there are a total of four occurrences containing a total of about 42 to 62 individuals on the islands of Kauai and Niihau. It is reported on State land (Hono O Na Pali Natural Area Reserve (NAR)) and privately owned lands at Hoolulua and Waiahuakua Valleys, Haupu, and Keopaweo, and on the privately owned island of Niihau (GDSI 2000; HINHP Database 2000; Service 1995; Steve Perlman, NTBG, pers. comm., 2000).

Brighamia insignis is found at elevations between 0 and 748 m (0 and 2,453 ft) on rocky ledges with little soil or on steep sea cliffs in lowland dry grasslands or shrublands with annual rainfall that is usually less than 165 centimeters (cm) (65 inches (in)). Associated native plant species include *Artemisia australis* (ahinahina), *Chamaesyce celastroides* (akoko), *Eragrostis variabilis* (kawelu), *Heteropogon contortus* (pili grass), *Hibiscus kokio* (kokio), *Hibiscus kokio* ssp. *saintjohnianus* (kokio), *Lepidium serra* (anaunau), *Lipochaeta succulenta* (nehe), *Munroidendron racemosum* (NCN), or *Sida fallax* (ilima) (59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to this plant are browsing and habitat degradation by

feral goats; human disturbance; fire; the introduced carmine spider mite (*Tetranychus cinnabarinus*); a risk of extinction from naturally occurring events, such as landslides or hurricanes, due to the small number of individuals; restricted distribution; reduced reproductive vigor; and competition from nonnative plant species such as *Ageratum conyzoides* (maile hohono), *Kalanchoe pinnata* (air plant), *Lantana camara*, *Melinis minutiflora*, *Psidium cattleianum* (strawberry guava), *Psidium guajava* (guava), *Setaria parviflora* (yellow foxtail), *Sporobolus africanus* (smutgrass), or *Stachytarpheta dichotoma* (owi) (59 FR 9304).

Chamaesyce halemanui (NCN)

Chamaesyce halemanui, a short-lived perennial member of the spurge family (Euphorbiaceae), is a scandent (climbing) shrub. It is distinguished from closely related species by its decussate leaves (arranged in pairs at right angles to the next pair above or below), persistent stipules (bract- or leaf-like structures), more compact flower clusters, shorter stems on cyathia (flower cluster), and smaller capsules (Koutnik 1987; Koutnik and Huft 1999; 57 FR 20580).

Little is known about the life history of *Chamaesyce halemanui*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Chamaesyce halemanui* was found in Kauhao and Makaha Valleys in the Na Pali-Kona Forest Reserve, Mahanaloa Valley in Kuia NAR, the Halemanu drainage in Kokee State Park, and Olokele Canyon on the island of Kauai. Currently, there are a total of nine occurrences, containing about 85 to 135 individuals, in Kuia Valley, Poopooiki Valley, Kauhao Valley, Kaha Ridge, Awaawapuhi Valley, Waipio Falls, Halemanu, and Kaluahaulu in the Kokee State Park, Kuia NAR, and Na Pali-Kona Forest Reserve on State-owned land (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999; K. Wood, pers. comm., 2001).

Chamaesyce halemanui is typically found on the steep slopes of gulches in mesic *Acacia koa* forests at elevations between 556 and 1,249 m (1,825 and 4,097 ft). Associated native plant species include *Alphitonia ponderosa* (kauila), *Antidesma platyphyllum* (hame), *Asplenium* spp., *Bobea brevipes* (ahakea lau lii), *Carex meyenii*, *Carex wahuensis*, *Cheirodendron trigynum* (olapa), *Coprosma* spp., *Diospyros sandwicensis* (lama), *Dodonaea viscosa*,

Elaeocarpus bifidus (kalia), *Hedyotis terminalis*, *Kokia kauaiensis* (kokio), *Leptecophylla tameiameiae* (pukiawe), *Melicope haupuensis* (alani), *Metrosideros polymorpha*, *Microlepia strigosa* (palapalai), *Panicum nephelophilum*, *Pisonia* spp. (papala kepau), *Pittosporum* spp. (hoawa), *Pleomele aurea*, *Pouteria sandwicensis* (alaa), *Psychotria greenwelliae* (kopiko), *Psychotria mariniana* (kopiko), or *Santalum freycinetianum* (iliahii) (57 FR 20580; K. Wood, pers. comm., 2001).

The major threats to this species are competition from nonnative plants, such as *Lantana camara*, *Psidium cattleianum*, and *Stenotaphrum secundatum* (St. Augustine grass); habitat degradation by feral pigs; restricted distribution; small population size; increased potential for extinction resulting from naturally occurring events, such as landslides or hurricanes; and depressed reproductive vigor (57 FR 20580).

Cyanea asarifolia (haha)

Cyanea asarifolia, a member of the bellflower family (Campanulaceae), is a sparingly branched shrub. This short-lived perennial species is distinguished from others of the genus that grow on Kauai by the shape of the leaf base, the leaf width in proportion to the length, and the presence of a leaf stalk (Lammers 1999; 59 FR 9304).

Little is known about the life history of *Cyanea asarifolia*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Cyanea asarifolia* was known only from along the bank of Anahola Stream on Kauai. Currently, two occurrences with approximately four or five individuals are reported from the headwaters of the Wailua River in central Kauai on State-owned land in the Lihue-Koloa Forest Reserve (GDSI 2000; HINHP Database 2000).

This species typically grows in pockets of soil on sheer wet rock cliffs and waterfalls in lowland wet forests at elevations between 182 and 1,212 m (597 and 3,976 ft). Associated native plant species include ferns, *Bidens* spp. (kookoolau), *Dubautia plantaginea* (naenae), *Hedyotis centranthoides* (NCN), *Hedyotis elatior* (awiiwi), *Lysimachia filifolia* (kolokolo kuahiwi), *Machaerina angustifolia* (uki), *Metrosideros polymorpha*, or *Panicum lineale* (NCN) (59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to this species are a risk of extinction from naturally occurring events, such as hurricanes

and rock slides, and/or reduced reproductive vigor due to the small number of existing individuals; predation by introduced slugs and rodents (roof rats (*Rattus rattus*) and mice (*Mus musculus*)); and habitat degradation by feral pigs (59 FR 9304).

Cyanea recta (haha)

Cyanea recta, a member of the bellflower family (Campanulaceae), is an unbranched shrub with densely hairy flowers. This short-lived perennial species is distinguished from other species in the genus that grow on Kauai by the following characteristics: horizontal or ascending inflorescence; narrowly elliptic leaves 12 to 28 cm (4.7 to 11 in) long; flat leaf margins; and purple berries (Lammers 1990).

Little is known about the life history of *Cyanea recta*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998a).

Historically, *Cyanea recta* was found in upper Hanalei Valley, Waioli Valley, Hanapepe Valley, Kalalau cliffs, Wainiha Valley, Makaleha Mountains, Limahuli Valley, Powerline Trail, and the Lehua Makanoe-Alakai area on the island of Kauai. Currently, there is a total of eight occurrences, with approximately 198 to 208 individuals, on State and private lands in the following areas: Waioli Valley, the left and right branches of Wainiha Valley, Makaleha Mountains, and Puu Eu, including areas in Halelea Forest Reserve, Kealia Forest Reserve, and the Lihue-Koloa Forest Reserve (GDSI 2000; HINHP Database 2000).

Cyanea recta grows in lowland wet or mesic *Metrosideros polymorpha* forest or shrubland, usually in gulches or on slopes, and typically at elevations between 234 and 1,406 m (768 and 4,613 ft). Associated native plant species include *Antidesma platyphyllum*, *Cheirodendron platyphyllum* (lapalapa), *Cibotium* spp. (hapuu), *Dicranopteris linearis*, *Diplazium* spp. (NCN), or *Psychotria* spp. (61 FR 53070; K. Wood, pers. comm., 2001).

The major threats to this species are bark removal and other damage by rats; habitat degradation by feral pigs; browsing by goats; unidentified slugs that feed on the stems; and competition with the nonnative plant species *Blechnum occidentale* (blechnum fern), *Clidemia hirta* (Koster's curse), *Crassocephalum crepidioides* (NCN), *Deparia petersenii* (NCN), *Erechtites valerianifolia* (fireweed), *Lantana camara*, *Melastoma candidum* (NCN),

Paspalum conjugatum (Hilo grass), *Rubus rosifolius* (thimbleberry), *Sacciolepis indica* (Glenwood grass), or *Youngia japonica* (Oriental hawkbeard) (61 FR 53070).

Cyanea remyi (haha)

Cyanea remyi, a member of the bellflower family (Campanulaceae), is a shrub with generally unbranched, unarmed (lacking prickles) stems which are hairy toward the base. This short-lived perennial species is distinguished from others in the genus that grow on Kauai by its shrubby habit; relatively slender, unarmed stems; smooth or minutely toothed leaves; densely hairy flowers; the shape of the calyx lobes; length of the calyx and corolla; and length of the corolla lobe relative to the floral tube (Lammers 1999).

Little is known about the life history of *Cyanea remyi*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown.

Currently, there are seven known occurrences with approximately 394 to 484 individuals among them on the island of Kauai. *Cyanea remyi* is reported from Pali Elele, Waioli Valley, Makaleha, Blue Hole, Kawaikini, and Kapalaoa on privately and State-owned lands, including the Halelea and Lihue-Koloa Forest Reserves (GDSI 2000; HINHP Database 2000; Lammers and Lorence 1993; K. Wood, *in litt.* 1999).

Cyanea remyi is usually found in narrow drainages and wet streambanks in lowland wet forest or shrubland at elevations between 215 and 1,167 m (704 and 3,829 ft). Associated native plant species include various "finger ferns" (in the Grammitidaceae family) and "filmy ferns" (in the Hymenophyllaceae family), *Adenophorus* spp. (NCN), *Antidesma platyphyllum*, *Bidens* spp., *Broussaisia arguta*, *Cheirodendron* spp., *Cyrtandra* spp., *Diplazium sandwichianum*, *Eragrostis grandis* (kawelu), *Freycinetia arborea* (ieie), *Hedyotis terminalis*, *Machaerina angustifolia*, *Metrosideros polymorpha*, *Perrottetia sandwicensis* (olomea), *Pipturus* spp. (mamaki), *Psychotria hexandra* (kopiko), *Syzygium sandwicensis* (ohia ha), *Thelypteris* spp. (palapalaia), *Touchardia latifolia* (olona), or *Urera glabra* (opuhe) (61 FR 53070; K. Wood, pers. comm., 2001).

The major threats to this species are competition with the nonnative plant species *Erechtites valerianifolia*, *Melastoma candidum*, *Paspalum conjugatum*, *Psidium cattleianum*, or *Rubus rosifolius*; habitat degradation by feral pigs; browsing by feral goats; predation by rats; unidentified slugs

that feed on the stems; and a risk of extinction from naturally occurring events, such as landslides or hurricanes, due to the small number of remaining populations (61 FR 53070).

Cyanea undulata (haha)

Cyanea undulata, a member of the bellflower family (Campanulaceae), is an unbranched (or the stem is occasionally forked) shrub or subshrub with fine rust-colored hairs covering the lower surface of the leaves. Its undulating leaf margins distinguish the species from other Kauai members of the genus (Lammers 1990, 1999).

Native members of the Campanulaceae (bellflower) family, including the genus *Cyanea*, are generally believed to be adapted to pollination by native nectar-eating passerine birds, such as the Hawaiian "honeycreepers." The long, tubular, slightly curved flowers of *C. undulata* fit this model, but field observations are lacking. The fleshy orange fruits of this species are adapted for bird dispersal like other species of *Cyanea*. Although recognized as a short-lived perennial species, specific details of the life history of this species, such as growth rates, age plants begin to flower, and longevity of plants, are unknown (Lorence and Flynn 1991; Service 1994).

Historically, *Cyanea undulata* was known only from the Wahiawa Bog area on Kauai. Currently, one occurrence with a total of 28 individuals is reported on privately owned land along the bank of a tributary of the Wahiawa Stream in the Wahiawa drainage (GDSI 2000; HINHP Database 2000).

Cyanea undulata typically grows in narrow drainages and wet streambanks in *Metrosideros polymorpha* dry to montane wet forest or shrubland at elevations between 145 and 1,066 m (476 and 3,497 ft). Associated native species include various grammitid and filmy ferns, *Adenophorus* spp., *Antidesma platyphyllum*, *Broussaisia arguta*, *Cheirodendron* spp., *Diplazium sandwichianum*, *Dryopteris glabra*, *Eragrostis grandis* (kawelu), *Bidens* spp., *Freycinetia arborea*, *Machaerina angustifolia*, *Mariscus* spp. (NCN), *Melicope feddei* (alani), *Perrottetia sandwicensis*, *Pipturus* spp., *Psychotria mariniana*, *Psychotria hexandra*, *Sadleria pallida* (amau), *Sadleria squarrosa* (apuu), *Smilax melastomifolia* (pioi), *Sphenomeris chinensis* (palaa), *Syzygium sandwicensis*, or *Thelypteris* spp. (Service 1994; K. Wood, pers. comm., 2001).

The primary threats to this species include competition with the nonnative plant species *Clidemia hirta*, *Cyathea*

cooperi (Australian tree fern), *Deparia petersenii*, *Elephantopus mollis* (NCN), *Erechtites valerianifolia*, *Melaleuca quinquenervia* (paperbark tree), *Melastoma candidum*, *Oplismenus hirtellus* (basketgrass), *Paspalum conjugatum*, *Paspalum urvillei* (Vasey grass), *Pluchea carolinensis* (sourbush), *Psidium cattleianum*, *Rhodomyrtus tomentosa* (rose myrtle), *Rubus rosifolius*, *Sacciolepis indica*, *Setaria parviflora*, *Stachytarpheta australis*, or *Youngia japonica*; trampling by feral pigs; landslides; seed predation by rats; herbivory by introduced slugs; loss of pollinators; hurricanes; and decreased reproductive vigor, restricted distribution, and extinction due to unforeseen circumstances because of small population size (Service 1994; 56 FR 47695).

Cyrtandra cyaneoides (mapele)

Cyrtandra cyaneoides, a member of the African violet family (Gesneriaceae), is an erect or ascending, fleshy, usually unbranched shrub with opposite toothed leaves which have impressed veins on the lower surface that are sparsely covered with long hairs. This short-lived perennial species differs from others of the genus that grow on Kauai by being a succulent, erect or ascending shrub; a bilaterally symmetrical calyx that is spindle-shaped in bud and falls off after flowering; leaves that are 41 to 56 cm (16 to 22 in) long and 23 to 35 cm (9 to 14 in) wide and have a wrinkled surface; and berries with shaggy hairs (Wagner *et al.* 1999).

Little is known about the life history of *Cyrtandra cyaneoides*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998a).

Historically, *Cyrtandra cyaneoides* was known to occur only along the trail to Waialae Valley on Kauai until recently discovered in other areas. It is currently known from five occurrences, containing about 354 to 454 individuals, on private and State lands (including Halelea Forest Reserve and Alakai Wilderness Preserve) at Pihea, Waioli Valley, Lumahai, the left branch of Wainiha Valley, and Makaleha (GDSI 2000; HINHP Database 2000; 61 FR 53070).

Cyrtandra cyaneoides typically grows on talus rubble on steep slopes or cliffs with water seeps running below, near streams or waterfalls in lowland or montane wet forest or shrubland dominated by *Metrosideros polymorpha* or a mixture of *M. polymorpha*, *Cheirodendron* spp., and *Dicranopteris*

linearis at elevations between 157 and 1,406 m (514 and 4,614 ft). Associated native species include *Bidens* spp., *Boehmeria grandis* (akolea), *Coprosma* spp., *Cyanea* spp. (haha), *Cyrtandra longifolia* (haiwale), *Cyrtandra kauaiensis* (ulunahale), *Cyrtandra limahuliensis* (haiwale), *Diplazium sandwichianum*, *Freycinetia arborea*, *Gunnera kauaiensis* (ape ape), *Hedyotis terminalis*, *Hedyotis tryblum* (NCN), *Machaerina* spp., *Melicope clusiifolia* (kukaemoa), *Melicope puberula* (alani), *Perrottetia sandwicensis*, *Pipturus* spp., *Psychotria* spp., *Pritchardia* spp. (loulou), or *Stenogyne purpurea* (NCN) (61 FR 53070; K. Wood, pers. comm., 2001).

The major threats to this species are competition with nonnative plant species such as *Deparia petersenii*, *Drymaria cordata* (pipili), *Paspalum conjugatum*, and *Rubus rosifolius*; predation of seeds by rats; reduced reproductive vigor and a risk of extinction from naturally occurring events, such as landslides and hurricanes, due to the small number of populations; and habitat degradation by feral pigs (61 FR 53070).

Cyrtandra limahuliensis (haiwale)

Cyrtandra limahuliensis, a member of the African violet family (Gesneriaceae), is an unbranched or few-branched shrub with moderately or densely hairy leaves. The following combination of characteristics distinguishes this short-lived perennial species from others of the genus: the leaves are usually hairy (especially on lower surfaces), the usually symmetrical calyx is tubular or funnel-shaped and encloses the fruit at maturity, and the flowers are borne singly (Wagner *et al.* 1990).

Little is known about the life history of *Cyrtandra limahuliensis*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Cyrtandra limahuliensis* was known from three locations on Kauai: Wainiha Valley, Lumahai Valley, and near Kilauea River, until it was recently discovered in additional areas. Currently, a total of 13 occurrences, containing approximately 2,746 to 3,024 individuals, are reported on private and State lands (including the Halelea, Kealia, and Lihue-Koloa Forest Reserves) at Limahuli Falls, Lumahai Valley, Waipa Valley, Waioli Valley, Kekoiki, Makaleha, the right fork of Wainiha Valley, Kualapa, Blue Hole, Kepalaoa, and Puu Kolo (GDSI 2000; HINHP Database 2000).

This species typically grows along streambanks in lowland wet forests at

elevations between 208 and 1,594 m (681 and 5,228 ft). Associated native plant species include *Antidesma platyphyllum*, *Bidens* spp., *Boehmeria grandis*, *Charpentiera* spp. (papala), *Cibotium glaucum* (hapuu), *Cyanea* spp., *Cyrtandra kealiae* (haiwale), *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dubautia* spp. (naenae), *Eugenia reinwardtiana* (nioi), *Gunnera kauaiensis*, *Hedyotis terminalis*, *Hibiscus waimeae* (kokio keokeo), *Metrosideros polymorpha*, *Perrottetia sandwicensis*, *Pipturus* spp., *Pisonia* spp., *Pritchardia* spp., *Psychotria* spp., *Touchardia latifolia*, or *Urera glabra* (59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to this species are competition from nonnative plant species (*Blechnum occidentale*, *Clidemia hirta*, *Erechtites valerianifolia*, *Hedychium flavescens* (yellow ginger), *Melastoma candidum*, *Paspalum conjugatum*, *Psidium cattleianum*, *Psidium guajava*, *Rubus rosifolius*, or *Youngia japonica*); habitat degradation by feral pigs; natural landslides; and hurricanes (59 FR 9304).

Delissea rhytidosperma (NCN)

Delissea rhytidosperma, a member of the bellflower family (Campanulaceae), is a branched shrub with lance-shaped or elliptic toothed leaves. This short-lived perennial species differs from other species of the genus by the shape, length, and margins of the leaves and by having hairs at the base of the anthers (part of stamen that produces pollen) (Lammers 1999).

Little is known about the life history of *Delissea rhytidosperma*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Delissea rhytidosperma* was known from as far north as Wainiha and Limahuli Valleys, as far east as Kapaa and Kealia, and as far south as the Haupu Range, between the elevations of 122 and 915 m (400 and 3,000 ft) on the island of Kauai. Currently, three occurrences on private and State lands (including Kuia NAR), with a total of 11 individuals, are reported from Kuia Valley, Puhakukane, and the Haupu Range (GDSI 2000; HINHP Database 2000).

This species generally grows in well-drained soils with medium or fine-textured subsoil in *Diospyros* (lama) diverse lowland mesic forests or diverse *Metrosideros polymorpha*-*Acacia koa* forests at elevations between 167 and 895 m (547 and 2,935 ft). Associated native plant species include grammitid

ferns, *Adenophorus* spp., *Cyanea* spp., *Dianella sandwicensis*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Doodia kunthiana*, *Euphorbia haeleeleana* (akoko), *Hedyotis* spp. (NCN), *Leptecophylla tameiameia*, *Microlepia strigosa*, *Nestegis sandwicensis* (olopua), *Pisonia* spp., *Psychotria hobbayi* (kopiko), or *Pteralyxia kauaiensis* (kaulu) (59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to this species are predation and/or habitat degradation by mule deer (*Odocoileus hemionus columbianus*), feral pigs, and goats; herbivory by rats and introduced slugs; fire; and competition with the nonnative plants *Cordyline fruticosa* (ti), *Lantana camara*, *Passiflora ligularis* (sweet granadilla), and *Passiflora tarminiana* (banana poka); and a risk of extinction from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor due to the small number of existing individuals (Service 1995; 59 FR 9304).

Delissea rivularis (oha)

Delissea rivularis, a member of the bellflower family (Campanulaceae), is a shrub, unbranched or branched near the base, with hairy stems and leaves arranged in a rosette at the tips of the stems. This short-lived perennial species is distinguished from others of the genus by the color, length, and curvature of the corolla, shape of the leaves, and presence of hairs on the stems, leaves, flower clusters, and corolla (Lammers 1999).

Little is known about the life history of *Delissea rivularis*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998a).

Historically, *Delissea rivularis* was found at Waiakealoha Waterfall, Waialae Valley, Hanakoa Valley, and Kaholuamanu on the island of Kauai (61 FR 53070). Currently, this species is known from two occurrences with a total of 40 individuals. The occurrences are reported from Moaalele and Hanakapiai on State land within the Hono o Na Pali NAR (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

Delissea rivularis is found on steep slopes near streams in *Metrosideros polymorpha*-*Cheirodendron trigynum* montane wet or mesic forest at elevations between 722 and 1,306 m (2,370 and 4,286 ft). Associated native plant species include *Boehmeria grandis*, *Broussaisia arguta*, *Carex* spp., *Coprosma* spp., *Dubautia knudsenii* (naenae), *Diplazium sandwichianum*,

Hedyotis foggiana (NCN), *Ilex anomala*, *Machaerina angustifolia*, *Melicope anisata* (mokihana), *Melicope clusiifolia*, *Pipturus* spp., *Psychotria hexandra*, or *Sadleria* spp. (amau) (61 FR 53070; K. Wood, pers. comm., 2001).

The major threats to this species are competition with the encroaching nonnative plant *Rubus argutus*; habitat destruction by feral pigs; predation by rats; and reduced reproductive vigor and a risk of extinction from naturally occurring events, such as landslides or hurricanes, due to the small number of remaining individuals (Service 1998a; 61 FR 53070).

Diellia pallida (NCN)

Diellia pallida, a member of the spleenwort family (Aspleniaceae), is a fern that grows in tufts of three to four light green, lance-shaped fronds along with a few persistent dead ones, and reproduces by spores, the minute, reproductive dispersal unit of ferns and fern allies. This short-lived perennial species differs from others of this endemic Hawaiian genus by the color and sheen of the midrib, the presence and color of scales on the midrib, and the frequent fusion of sori (a group or cluster of spore cases) (Wagner 1952, 1987).

Little is known about the life history of *Diellia pallida*. Its reproductive cycles, dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Diellia pallida was known historically from Halemanu on the island of Kauai. More recently additional occurrences have been found and currently, there is a total of six occurrences with 43 to 48 individuals in Mahanaloa and Kuia Valleys, Makaha Valley, Waimea Canyon, and Koaie Canyon, all on State-owned land including Kuia NAR, Na Pali-Kona Forest Reserve, and Puu Ka Pele Forest Reserve (GDSI 2000; HINHP Database 2000; 59 FR 9304; K. Wood, *in litt.* 1999).

This species grows on bare granular soil with dry to mesophytic leaf litter with a pH of 6.9 to 7.9 on steep talus slopes in lowland mesic forests at elevations between 445 and 1,027 m (1,460 and 3,371 ft). Associated native plant species include *Acacia koa*, *Alectryon macrococcus*, *Alphitonia ponderosa*, *Alyxia oliviformis*, *Antidesma platyphyllum*, *Asplenium* spp., *Carex meyenii*, *Diospyros hillebrandii* (lama), *Diospyros sandwicensis*, *Doodia kunthiana*, *Hedyotis knudsenii* (NCN), *Leptecophylla tameiameia*, *Metrosideros polymorpha*, *Microlepia strigosa*, *Myrsine lanaiensis* (kolea),

Nestegis sandwicensis, *Psychotria mariniana*, *Psydrax odorata* (alahee), *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis* (hao), *Tetraplasandra kawaiensis* (ohe ohe), *Wilkesia gymnoxiphium* (iliau), or *Zanthoxylum dipetalum* (ae) (59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to this species include competition with the nonnative plants *Aleurites moluccana* (kukui), *Cordyline fruticosa*, *Lantana camara*, *Melia azedarach* (Chinaberry), *Oplismenus hirtellus*, or *Stenotaphrum secundatum*; predation and habitat degradation by feral goats, pigs, and deer; fire; and a risk of extinction from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor due to the small number of existing individuals (59 FR 9304).

Dubautia latifolia (koholapehu)

Dubautia latifolia, a member of the aster family (Asteraceae), is a diffusely branched, woody perennial vine with leaves that are conspicuously net-veined, with the smaller veins outlining nearly square areas. A vining habit, distinct petioles (leaf stalks), and broad leaves with conspicuous net veins outlining squarish areas separate this from closely related species (Carr 1982b, 1985, 1999a).

Individual plants of this species do not appear to be able to fertilize themselves. Since at least some individuals of *Dubautia latifolia* require cross-pollination, the wide spacing of individual plants (e.g., each 0.5 kilometer (km) (0.3 mile (mi)) apart) may pose a threat to the reproductive potential of the species. The very low seed set noted in plants in the wild indicates a reproductive problem, possibly asynchronous flowering or lack of pollinators. Seedling establishment and survival to juvenile stage is also rare. *Dubautia latifolia* experiences seasonal vegetative decline during the spring and summer, often losing most of its leaves. New growth and flowering occur in the fall, with fruits developing in November. Pollinators and seed dispersal agents are unknown (Carr 1982b; Service 1995).

Historically, *Dubautia latifolia* was found in the Makaha, Awaawapuhi, Waialae, Kawaiula, and Kauhao Valleys of the Na Pali-Kona Forest Reserve, Nualolo Trail and Valley in Kuia NAR; Halemanu in Kokee State Park; along Mohihi Road in both Kokee State Park and Na Pali-Kona Forest Reserve, along the Mohihi-Waialae Trail on Mohihi and Kohua Ridges in both Na Pali-Kona Forest Reserve and Alakai Wilderness Preserve; and at Kaholuamanu on the

island of Kauai. Currently, there are a total of 26 occurrences containing approximately 65 to 84 individuals on State-owned land in Kauhao Valley, Makaha Valley headwaters, Kuia Valley, Kawaiula Valley, Kumuwela Ridge, Awaawapuhi Valley, Waiakoali picnic area, Alakai picnic area, Honopu Trail, Nualolo Trail, Waieke Swamp, Noe Stream, Kumuwela Ridge, Mohihi Ditch, Mohihi-Waialae Trail, and Kaluahaulu Ridge in the Alakai Wilderness Preserve, Kokee State Park, Kuia NAR, Na Pali-Kona Forest Reserve, and Waimea Canyon State Park (Carr 1982b; GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

This species typically grows on gentle to steep slopes in well drained soil in semi-open or closed, diverse montane mesic forest dominated by *Acacia koa* and/or *Metrosideros polymorpha*, at elevations between 544 and 1,277 m (1,786 and 4,189 ft). Commonly associated native plant species are *Alphitonia ponderosa*, *Antidesma platyphyllum*, *Bobea* spp., *Claoxylon sandwicense* (poola), *Coprosma waimeae* (olena), *Cyrtandra* spp., *Dicranopteris linearis*, *Diplazium sandwicianum*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Ilex anomala*, *Melicope anisata*, *Nestegis sandwicensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria mariniana*, *Scaevola* spp. (naupaka), or *Xylosma* spp. (maua) (59 FR 9304; K. Wood, pers. comm., 2001).

The threats to this species include competition from the nonnative plants *Acacia mearnsii* (black wattle), *Erigeron karvinskianus* (daisy fleabane), *Hedychium* spp. (ginger), *Lonicera japonica* (Japanese honeysuckle), *Passiflora tarminiana*, *Psidium cattleianum*, or *Rubus argutus*; damage from trampling and grazing by feral pigs and deer; vehicle traffic and road maintenance; seasonal dieback; the small number of extant individuals; and restricted distribution (59 FR 9304).

Dubautia pauciflora (naenae)

Dubautia pauciflora, a member of the aster family (Asteraceae), is a somewhat sprawling shrub or erect small tree with narrowly lance-shaped or elliptic leaves clustered toward the ends of the stems. The tiny, two- to four-flowered heads distinguish this short-lived perennial species from its relatives (Carr 1985, 1999a).

Few details are known about the life history of any *Dubautia* species under natural conditions. Certain species produce viable seed when self-pollinated (self-fertile), although others fail to do so (self-infertile). Low pollinator numbers resulting in reduced

cross-pollination and consequently low numbers of viable seeds could explain the small population sizes. Because of their structure and small size, flowers of *D. pauciflora* are presumably pollinated by small generalist insects, although field observations are lacking. The bristle-like pappus (tuft of appendages that crowns the ovary or fruit) probably represents an adaptation for wind dispersal. Very little is known about the life cycle of this species, including growth rates, longevity of the plants, and number of years the plants remain reproductive (Carr 1985; Service 1994; 56 FR 47695).

Historically and currently, this species is found only on State (including the Lihue-Koloa Forest Reserve) and privately owned lands in the Wahiawa drainage on Kauai. There are four occurrences containing 42 individual plants (GDSI 2000; HINHP Database 2000).

These populations are found in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest within stream drainages at elevations between 564 and 1,093 m (1,849 and 3,587 ft). Associated native plant species include *Antidesma platyphyllum*, *Broussaisia arguta*, *Cheirodendron* spp., *Dubautia laxa* (naenae pua melemele), *Embelia pacifica* (kilioe), *Hesperomannia lydgatei*, *Labordia waialealae* (kamakahala lau lii), *Melicope* spp., *Nothoperanema rubiginosa* (NCN), *Pritchardia* spp., *Psychotria* spp., *Sadleria* spp., *Scaevola mollis* (naupaka kuahiwi), *Syzygium sandwicensis*, or *Tetraplasandra* spp. (ohe ohe) (K. Wood, pers. comm., 2001).

The threats to this plant include direct competition with nonnative plant species such as *Melastoma candidum* or *Psidium cattleianum*, and potential threats from *Clidemia hirta*, *Cyathea cooperi*, *Deparia petersenii*, *Elephantopus mollis*, *Erechtites valerianifolia*, *Melaleuca quinquenervia*, *Oplismenus hirtellus*, *Paspalum conjugatum*, *Paspalum urvillei*, *Pluchea carolinensis*, *Rhodomyrtus tomentosa*, *Rubus rosifolius*, *Sacciolepis indica*, *Setaria parviflora*, *Stachytarpheta australis*, or *Youngia japonica*; trampling by feral pigs; landslides and erosion; restricted distribution; and hurricanes (Service 1994; 56 FR 47695).

Exocarpos luteolus (heau)

Exocarpos luteolus, a member of the sandalwood family (Santalaceae), is a moderately to densely branched shrub with knobby branches and leaves that are either minute scales or typical leaves. This short-lived perennial species is distinguished from others of the genus by its generally larger fruit

with four indentations and by the color of the receptacle and fruit (Wagner *et al.* 1999).

Little is known about the life history of *Exocarpos luteolus*. This species tends to grow at habitat edges where there is adequate light and is likely to be semi-parasitic. Flowering cycles, pollination vectors, seed dispersal agents, longevity, other specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Exocarpos luteolus* was known from three general locations on Kauai: Wahiawa Bog, Kaholuamanu, and Kumuwela Ridge. Currently, there is a total of nine occurrences containing approximately 75 individual plants. This species has a scattered distribution on State (Kuia NAR, Na Pali Coast State Park, Na Pali-Kona Forest Reserve, and Puu Ka Pele Forest Reserve) and privately owned lands and is reported from Pohakuao, the right fork and left fork of Kalalau Valley, Hipalau Valley, Koaie Canyon, Mahanaloa Valley, Kuia Valley, Poopooiki Valley, Nualolo Trail, Makaha Valley, and Haeleele Valley (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

This species is found at elevations between 361 and 1,465 m (1,183 and 4,808 ft) in wet places bordering swamps or open bogs and on open, dry ridges in lowland or montane mesic *Acacia koa-Metrosideros polymorpha*-dominated forest communities with *Dicranopteris linearis*. Associated native plant species include *Bobea brevipes*, *Cheirodendron trigynum*, *Claoxylon sandwicense*, *Dianella sandwicensis*, *Dodonaea viscosa*, *Dubautia laevigata*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Leptecophylla tameiameia*, *Melicope haupuensis*, *Peperomia* spp., *Pleomele aurea*, *Poa sandwicensis* (Hawaiian bluegrass), *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Santalum freycinetianum*, or *Schiedea stellarioides* (Service 1995; 59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to this species are feral goats and pigs; competition with the nonnative plants *Acacia mearnsii*, *Corynocarpus laevigata* (karakanut), *Erigeron karvinskianus*, *Morella faya* (firetree), or *Rubus argutus*; seed predation by rats; fire; and erosion (Service 1995; 59 FR 9304).

Hedyotis st.-johnii (Na Pali beach hedyotis)

Hedyotis st.-johnii, a member of the coffee family (Rubiaceae), is a succulent perennial herb with slightly woody, trailing, quadrangular stems and fleshy leaves clustered towards the base of the

stem. This species is distinguished from related species by its succulence, basally clustered fleshy leaves, shorter floral tube, and large leafy calyx lobes when in fruit (Wagner *et al.* 1999).

Little is known about the life history of *Hedyotis st.-johnii*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Currently, there are a total of eleven occurrences, containing approximately 227 to 292 individuals, on State-owned land in Nualolo Valley, Nualolo Kai, Kaahole Valley, Keawanui, Kawaiula Valley, Milolii Spring, Makaha Point, Polihale Spring, Kalepa Valley, and Nakeikionaiwi Caves within the Na Pali Coast State Park and Puu Ka Pele Forest Reserve (GDSI 2000; HINHP Database 2000).

This plant grows in the crevices of north-facing, near-vertical coastal cliff faces within the spray zone in sparse dry coastal shrubland at elevations between 0 and 187 m (0 and 613 ft). Associated native plant species include *Artemisia australis*, *Bidens* spp., *Capparis sandwichiana* (maiapilo), *Chamaesyce celastroides*, *Eragrostis variabilis*, *Heteropogon contortus*, *Lipochaeta connata* (nehe), *Lycium sandwicense* (ohelo kai), *Myoporum sandwicense* (naio), *Nototrichium sandwicense* (kului), or *Schiedea apokremnos* (maolioli) (56 FR 49639; K. Wood, pers. comm., 2001).

The major threats to this species are herbivory and habitat degradation by feral goats; competition from nonnative plant species, especially *Pluchea carolinensis*; landslides; fire; trampling and grazing by cattle (*Bos taurus*); and a risk of extinction due to naturally occurring events, such as landslides or hurricanes, as well as decreased reproductive vigor because of the small population sizes and restricted distribution (Service 1995; 56 FR 49639).

Hesperomannia lydgatei (NCN)

Hesperomannia lydgatei, a member of the aster family (Asteraceae) is a sparsely branched, small, long-lived perennial tree 2 to 4 m (6.5 to 13 ft) tall with lance-shaped or elliptic leaves. The flower heads are clustered at the ends of branches and pendant (hanging) when mature. The species is distinguished from other members of this endemic Hawaiian genus by its pendant flower heads, longer and narrower hairless flower stalks, and shorter involucrel (floral) bracts (Wagner *et al.* 1999).

Almost no mature fruits develop, and it is possible that *Hesperomannia*

lydgatei is self-infertile and fails to set seed unless cross-pollinated with other individuals. The flower heads with long, tubular yellow florets suggest pollination by long-tongued insects such as moths or butterflies, although field observation is required to confirm this. Absence of the appropriate pollinator(s) could be responsible for the observed lack of viable seeds. The plume-like hairs crowning the fruit strongly suggests dispersal by wind, as in many members of the aster family. This species grows almost exclusively along streams, however, so dispersal by water currents is also likely. Specific details regarding growth rates, age trees begin flowering in the wild, length of time they remain reproductive, and longevity of the plants are unknown (Service 1994).

Historically, *Hesperomannia lydgatei* was found in the Wahiawa Mountains of Kauai. Currently, this species is known from State (Halelea Forest Reserve) and privately owned lands in the Pali Elele, Waiole Valley, Wahiawa and Kapalaoa areas. There are four occurrences containing a total of 304 individual plants (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

Hesperomannia lydgatei is found at elevations between 207 and 1,570 m (680 and 5,151 ft) along streambanks and forested slopes in rich brown soil and silty clay in *Metrosideros polymorpha* or *M. polymorpha-Dicranopteris linearis* lowland wet forest. Associated native plant species include *Adenophorus periens* (pendent kihi fern), *Antidesma platyphyllum*, *Broussaisia arguta*, *Cheirodendron* spp., *Cyanea* spp., *Dubautia knudsenii*, *Dubautia laxa*, *Dubautia pauciflora*, *Dubautia raillardii* (naenae), *Elaphoglossum* spp., *Freycinetia arborea*, *Hedyotis terminalis*, *Labordia lydgatei* (kamakahala), *Machaerina angustifolia*, *Peperomia* spp., *Pritchardia* spp., *Psychotria hexandra*, or *Syzygium sandwicense* (HINHP Database 2000; Service 1994; K. Wood, pers. comm., 2001).

Threats to the species include nonnative plants, feral goats, rats, landslides, and erosion (Service 1994).

Hibiscadelphus woodii (hau kuahiwi)

Hibiscadelphus woodii, a member of the mallow family (Malvaceae), is a small branched, long-lived perennial tree with a rounded crown. *Hibiscadelphus woodii* differs from the other Kauai species in the genus by characteristics of the leaf surface and whorled leaves and by bract and flower color (Bates 1999; Lorence and Wagner 1995).

Flowering material has been collected in March, April, and September, but no fruit set has been observed in spite of efforts to manually outcross the flowers. A museum specimen of a flower contains three adult Nitidulidae (sap) beetles, probably an endemic species. The damage by these larvae may be responsible for the observed lack of fruit set in *Hibiscadelphus woodii* (Lorence and Wagner 1995; Service 1998a). No additional life history information for this species is currently known.

Hibiscadelphus woodii has been found only at the site of its original discovery on State-owned land in the left branch of Kalalau Valley, within the Na Pali Coast State Park on Kauai. Only two trees of this species are currently known (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 2001).

Hibiscadelphus woodii is found at elevations between 219 and 1,197 m (717 and 3,926 ft) on basalt talus or cliff walls in *Metrosideros polymorpha* montane mesic forest. These forests contain one or more of the following associated native plant species: *Artemisia australis*, *Bidens sandwicensis* (kookoolau), *Carex meyenii*, *Chamaesyce celastroides* var. *hanapeensis* (akoko), *Dubautia* spp., *Hedyotis* spp., *Lepidium serra*, *Lipochaeta* spp. (nehe), *Lobelia niihauensis* (NCN), *Lysimachia glutinosa* (kolokolo kuahiwi), *Melicope pallida* (alani), *Myrsine* spp. (kolea), *Nototrichium* spp. (kului), *Panicum lineale*, *Poa mannii* (NCN), or *Stenogyne campanulata* (NCN) (HINHP Database 2000; Lorence and Wagner 1995; 61 FR 53070; K. Wood, pers. comm., 2001).

Major threats to *Hibiscadelphus woodii* are habitat degradation by feral goats and pigs; competition from the nonnative plant species *Erigeron karvinskianus*; nectar robbing by the Japanese white-eye (*Zosterops japonicus*), an introduced bird; and a risk of extinction from naturally occurring events (e.g., rock slides), and reduced reproductive vigor due to the small number of existing individuals at the only known site (Lorence and Wagner 1995; 61 FR 53070).

Hibiscus clayi (Clay's hibiscus)

Hibiscus clayi, a member of the mallow family (Malvaceae), is a long-lived perennial shrub or small tree. This species is distinguished from other native Hawaiian members of the genus by the lengths of the calyx, calyx lobes, and capsule and by the margins of the leaves (Bates 1999).

Little is known about the life history of *Hibiscus clayi*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific

environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Hibiscus clayi* was known from scattered locations on Kauai: the Kokee region on the western side of the island, Moloaa Valley to the north, Nounou Mountain in Wailua to the east, and as far south as Haiku near Haliu Stream. At this time, only one occurrence on State land in the Nounou Mountains, with a total of four individuals, is known to be extant (GDSI 2000; HINHP Database 2000).

Hibiscus clayi generally grows on slopes at elevations between 9 and 765 m (29 and 2,509 ft) in *Acacia koa* or *Diospyros* spp.-*Pisonia* spp.-*Metrosideros polymorpha* lowland dry or mesic forest with *Artemisia australis*, *Bidens* spp., *Cyanea hardyi* (haha), *Gahnia* spp., *Hedyotis acuminata* (au), *Munroidendron racemosum* (NCN), *Pandanus tectorius* (hala), *Panicum tenuifolium* (mountain pili), *Pipturus* spp., *Pleomele aurea*, *Psychotria* spp., or *Psydrax odorata* (HINHP Database 2000; 59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to this species are herbivory and habitat degradation by feral pigs; competition from the nonnative plant species *Araucaria columnaris* (Norfolk Island pine) and *Psidium cattleianum*; trampling by humans; and a risk of extinction due to naturally occurring events, such as landslides or hurricanes, as well as decreased reproductive vigor because of the small population size and restricted distribution (HINHP Database 2000; 59 FR 9304).

Hibiscus waimeae ssp. *hannerae* (kokio keokeo)

Hibiscus waimeae ssp. *hannerae*, a member of the mallow family (Malvaceae), is a gray-barked tree with star-shaped hairs densely covering its leaf and flower stalks and branchlets. The long-lived perennial species is distinguished from others of the genus by the position of the anthers along the staminal column, length of the staminal column relative to the petals, color of the petals, and length of the calyx. Two subspecies, ssp. *hannerae* and ssp. *waimeae*, both endemic to Kauai, are recognized. Subspecies *hannerae* is distinguishable from ssp. *waimeae* by its larger leaves and smaller flowers (Bates 1999).

Little is known about the life history of *Hibiscus waimeae* ssp. *hannerae*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998a).

Historically, *Hibiscus waimeae* ssp. *hannerae* was known from Kalihiwai and adjacent valleys, Limahuli Valley, and Hanakapiai Valley. This subspecies is no longer extant at Kalihiwai. Currently, there are two occurrences containing 27 individuals on State (Na Pali Coast State Park) and privately owned lands in Hanakapiai Valley, Limahuli Valley, and Pohakuao (Bates 1999; GDSI 2000; HINHP Database 2000).

Hibiscus waimeae ssp. *hannerae* grows at elevations between 174 and 1,154 m (570 and 3,787 ft). It is found in *Metrosideros polymorpha*-*Dicranopteris linearis* or *Pisonia* spp.-*Charpentiera elliptica* (papala) lowland wet or mesic forest with *Antidesma* spp., *Bidens* spp., *Bobea* spp., *Cibotium* spp., *Cyanea* spp., *Cyrtandra* spp., *Perrottetia sandwicensis*, *Pipturus* spp., *Psychotria* spp., *Sadleria* spp., or *Syzygium sandwicensis* (Bates 1999; HINHP Database 2000; Service 1998a; K. Wood, pers. comm., 2001).

Major threats to *Hibiscus waimeae* ssp. *hannerae* are habitat degradation by feral pigs, competition with nonnative plant species, and a risk of extinction from naturally occurring events (e.g., landslides and hurricanes) and/or reduced reproductive vigor due to the small number of remaining populations (HINHP Database 2000; 61 FR 53070).

Kokia kauaiensis (kokio)

Kokia kauaiensis, a member of the mallow family (Malvaceae), is a small tree. This long-lived perennial species is distinguished from others of this endemic Hawaiian genus by the length of the bracts surrounding the flower head, number of lobes and the width of the leaves, the length of the petals, and the length of the hairs on the seeds (Bates 1999).

Little is known about the life history of *Kokia kauaiensis*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998a).

Historically, *Kokia kauaiensis* was found as seven scattered occurrences on northwestern Kauai. Currently, there are a total of 21 occurrences with 166 to 171 individuals, found in Pohakuao, the left branch of Kalalau Valley, Paaiki Valley, Kuia Valley, Koaie Canyon, Kipalau Valley, and Kawaiiki Valley, all on State-owned land within Kuia NAR, Na Pali Coast State Park, and Na Pali-Kona Forest Reserve (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

Kokia kauaiensis typically grows in diverse mesic forest at elevations between 215 and 1,049 m (707 and

3,441 ft). Associated native plant species include *Acacia koa*, *Alyxia oliviformis*, *Antidesma* spp., *Bobea* spp., *Chamaesyce celastroides*, *Claoxylon sandwicense*, *Dicranopteris linearis*, *Diellia pallida*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Flueggea neowawraea* (mehamehame), *Hedyotis* spp., *Hibiscus* spp. (aloalo), *Isodendron laurifolium* (aupaka), *Lipochaeta fauriei* (nehe), *Melicope* spp., *Metrosideros polymorpha*, *Nestegis sandwicensis*, *Nototrichium* spp., *Pisonia* spp., *Pleomele aurea*, *Pterulia sandwicensis*, *Psydrax odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Santalum freycinetianum* var. *pyrularium* (iliahi), *Streblus pendulinus* (aia), *Syzygium sandwicensis*, *Tetraplasandra* spp., or *Xylosma* spp. (Bates 1999; HINHP Database 2000; Service 1998a; K. Wood, pers. comm., 2001).

Competition with and habitat degradation by invasive nonnative plant species, substrate loss from erosion, habitat degradation and browsing by feral goats and deer, and seed predation by rats are the major threats affecting the survival of *Kokia kauaiensis* (HINHP Database 2000; Service 1998a; Wood and Perlman 1993).

Labordia lydgatei (kamakahala)

Labordia lydgatei, a member of the logania family (Loganiaceae), is a much-branched perennial shrub or small tree with sparsely hairy, square stems. The small size of the flowers and capsules borne on sessile (attached to the base) inflorescences (a flower cluster) distinguish it from other members of the genus growing in the same area (Wagner *et al.* 1999).

Immature fruits were seen on two plants during surveys in 1991 and 1992 by botanists from NTBG, and remnants of old fruiting bodies were seen on another, suggesting that the plants are able to self-fertilize. It is also suspected that the fruits of this species are adapted for bird dispersal. Due to a lack of bird or other native pollinators, pollination may be inhibited. Microhabitat requirements for seed germination and growth may also be extremely specific. Virtually nothing is known about the life history or ecology of this species (Service 1994).

This species was originally known from the Wahiawa drainage, Waioli Stream Valley, and Makaleha Mountains on Kauai. *Labordia lydgatei* is currently known from six occurrences, consisting of 37 individual plants, located on State (Lihue-Koloa and Haleleale Forest Reserves) and privately owned lands at Pali Elelee, Waioli Valley, Lelewi, Lumahai Valley, and Kapalaoa (GDSI

2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

Labordia lydgatei is found on streambanks in *Metrosideros polymorpha*-*Dicranopteris linearis* lowland wet forest at elevations between 182 and 1,048 m (597 and 3,437 ft). Associated native plant species include *Antidesma platyphyllum* var. *hillebrandii* (hame), *Cyanea* spp., *Cyrtandra* spp., *Dubautia knudsenii*, *Hedyotis terminalis*, *Ilex anomala*, *Labordia hirtella* (kamakahala), *Psychotria* spp., or *Syzygium sandwicensis* (HINHP Database 2000; Service 1994; K. Wood, pers. comm., 2001).

Competition from nonnative plants poses the greatest threat to the survival of *Labordia lydgatei* (56 FR 47695). Additional threats include habitat degradation from feral pigs; rats, a potential seed predator; landslides and erosion; reduced germination; and a lack of dispersal or pollination agents (Service 1994).

Labordia tinifolia var. *wahiawaensis* (kamakahala)

Labordia tinifolia var. *wahiawaensis*, a member of the logania family (Loganiaceae), is a shrub or small tree with hairless, cylindrical young branches. This long-lived perennial species differs from others of the genus by having a long common flower cluster stalk, hairless young stems and leaf surfaces, transversely wrinkled capsule valves, and length of the corolla lobes. Three varieties of *Labordia tinifolia* are recognized: var. *lanaiensis* on Lanai and Molokai; var. *tinifolia* on Kauai, Oahu, Molokai, Maui, and Hawaii; and var. *wahiawaensis*, endemic to Kauai. The variety *wahiawaensis* is distinguished from the other two by its larger corolla (Wagner *et al.* 1999).

Little is known about the life history of *Labordia tinifolia* var. *wahiawaensis*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown.

Labordia tinifolia var. *wahiawaensis* has only been known from one occurrence with a current total of approximately 20 to 30 individual plants on private land in the Wahiawa drainage in the Wahiawa Mountains (GDSI 2000; HINHP Database 2000).

Labordia tinifolia var. *wahiawaensis* grows along streambanks in lowland wet forests dominated by *Metrosideros polymorpha* at elevations between 458 and 1,006 m (1,502 and 3,301 ft), with *Antidesma platyphyllum*, *Athyrium microphyllum* (akolea), *Cheirodendron* spp., *Cyrtandra* spp., *Dicranopteris linearis*, *Hedyotis terminalis*, or

Psychotria spp. (HINHP Database 2000; K. Wood, pers. comm., 2001).

The primary threats to the remaining individuals of *Labordia tinifolia* var. *wahiawaensis* are competition with nonnative plants, habitat degradation by feral pigs, trampling by humans, and a risk of extinction from catastrophic random events or reduced reproductive vigor due to the small number of individuals in a single population (61 FR 53070).

Lipochaeta fauriei (nehe)

Lipochaeta fauriei, a member of the aster family (Asteraceae), is a perennial herb with somewhat woody, erect or climbing stems. This short-lived perennial species differs from other species on Kauai by having a greater number of disk and ray flowers per flower head, longer ray flowers, and longer leaves and leaf stalks (Gardner 1976, 1979; Service 1995; Wagner *et al.* 1985, 1990).

Little is known about the life history of *Lipochaeta fauriei*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically and currently, *Lipochaeta fauriei* is known from Olokele Canyon on Kauai. This species is now found on State-owned land in Poopooiki Valley, Kuia Valley, Haelele Valley, and Kawaiiki Valley within Kuia NAR, Na Pali-Kona Forest Reserve, and Puu Ka Pele Forest Reserve. Currently there is a total of five occurrences with 82 individuals. An occurrence in Koaie Canyon previously thought to be *L. fauriei* was later identified as *Melanthera subcordata* (nehe) (Gardner 1979; GDSI 2000; HINHP Database 2000; Service 1995; K. Wood, *in litt.* 1999).

This species grows most often in moderate shade to full sun and is usually found on the sides of steep gulches in diverse lowland mesic forests at elevations between 436 and 947 m (1,432 and 3,108 ft). Associated native plant species include *Acacia koa*, *Carex meyenii*, *Carex wahuensis*, *Dicranopteris linearis*, *Diospyros* spp., *Dodonaea viscosa*, *Euphorbia haeleleana*, *Hibiscus waimeae*, *Kokia kauaiensis*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pleomele aurea*, *Psychotria greenwelliae*, *Psychotria mariniana*, or *Sapindus oahuensis* (lonomea) (HINHP Database 2000; K. Wood, pers. comm., 2001).

Major threats to *Lipochaeta fauriei* are predation and habitat degradation by feral goats and pigs and competition with invasive nonnative plants. Fire is also a significant threat to *L. fauriei* due

to the invasion of *Melinis minutiflora*, a fire-adapted grass that creates unnaturally high fuel loads. The small total number of individuals makes the species susceptible to extinction from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor (HINHP Database 2000; Service 1995; 59 FR 9304).

Lipochaeta micrantha (nehe)

Lipochaeta micrantha, a member of the aster family (Asteraceae), is a somewhat woody short-lived perennial herb. The small number of disk flowers separates this species from the other members of the genus on the island of Kauai. The two recognized varieties of this species, var. *exigua* and var. *micrantha*, are distinguished by differences in leaf length and width, degree of leaf dissection, and the length of the ray florets (Gardner 1976, 1979; Wagner *et al.* 1990).

Little is known about the life histories of *Lipochaeta micrantha* var. *exigua* and *L. m.* var. *micrantha*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Lipochaeta micrantha* var. *exigua* was only known from the Haupu Range on Kauai. Currently, five occurrences of *L. micrantha* var. *exigua*, with a total of 110 individuals, are known from privately owned land in the vicinity of Haupu Range and southwest of Hokunui summit. Historically, *L. micrantha* var. *micrantha* has been known from Olokele Canyon, Hanapepe Valley, and the Koloa District on Kauai. Currently, this variety is only known from five occurrences totaling 121 individuals on State land within the Na Pali-Kona Forest Reserve in Koaie Canyon and Kawaiiki Valley (GDSI 2000; HINHP Database 2000).

Lipochaeta micrantha grows on cliffs, ridges, streambanks, or slopes in mesic to wet mixed communities at elevations between 35 and 1,362 m (115 and 4,468 ft). Associated species include *Acacia koa*, *Antidesma* spp., *Artemisia australis*, *Bidens sandwicensis*, *Bobea* spp., *Chamaesyce celastroides* var. *hanapepens*, *Diospyros* spp., *Dodonaea viscosa*, *Eragrostis grandis*, *Eragrostis variabilis*, *Hibiscus kokio*, *Lepidium bidentatum* (anaunau), *Lobelia niihauensis*, *Melicope* spp., *Metrosideros polymorpha*, *Neraudia kauaiensis* (NCN), *Nototrichum* spp., *Pipturus* spp., *Plectranthus parviflorus* (ala ala wai nui), *Pleomele aurea*, *Psydrax odorata*, *Rumex albescens* (huahuako), *Sida fallax*, or *Xylosma*

hawaiiense (maua) (HINHP Database 2000; Service 1995; K. Wood, pers. comm., 2001).

The major threats to both varieties of *Lipochaeta micrantha* are habitat degradation by feral pigs and goats and competition with nonnative plant species such as *Erigeron karvinskianus*, *Lantana camara*, *Pluchea carolinensis*, or *Stachytarpheta australis*. The species is also threatened by extinction from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor due to the small number of existing populations (HINHP Database 2000; Lorence and Flynn 1991; Service 1995).

Lipochaeta waimeaensis (nehe)

Lipochaeta waimeaensis, a member of the aster family (Asteraceae), is a low growing, somewhat woody, short-lived perennial herb. This species is distinguished from other *Lipochaeta* species on Kauai by leaf shape and the presence of shorter leaf stalks and ray florets (Gardner 1976, 1979; Wagner *et al.* 1990).

Little is known about the life history of *Lipochaeta waimeaensis*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Lipochaeta waimeaensis has been known only from the original site of discovery along the rim of Kauai's Waimea Canyon on State-owned land. There are no more than 100 individuals (GDSI 2000; HINHP Database 2000).

This species grows on eroded soil on a precipitous, shrub-covered gulch in a diverse lowland forest at elevations between 44 and 460 m (145 and 1,509 ft) with *Artemisia australis*, *Chamaesyce celastroides*, *Dodonaea viscosa*, *Lipochaeta connata*, *Panicum* spp. (NCN), *Santalum freycinetianum*, or *Schiedea pergrulina* (NCN) (HINHP Database 2000; Wagner *et al.* 1999; K. Wood, pers. comm., 2001).

The major threats to *Lipochaeta waimeaensis* are competition from nonnative plants and habitat destruction by feral goats, whose presence exacerbates the existing soil erosion problem at the site. The single occurrence, and thus the entire species, is threatened by extinction from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor due to the small number of existing individuals (59 FR 9304).

Melicope haupuensis (alani)

Melicope haupuensis, a member of the rue family (Rutaceae), is a small

long-lived perennial tree. Unlike other species of this genus on Kauai, the exocarp (outermost layer of a fruit) and endocarp (innermost layer of a fruit) are hairless and the sepals are covered with dense hairs (Stone *et al.* 1999).

Little is known about the life history of *Melicope haupuensis*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

For 62 years, *Melicope haupuensis* was known only from the site of its original discovery on the north side of Haupu Ridge on Kauai. This occurrence is now gone. The species is now known from four occurrences with a total of 13 individuals on State-owned land within the Alakai Wilderness Preserve, Na Pali Coast State Park, and Na Pali-Kona Forest Reserve in Kalahu, Awaawapuhi Valley, and Koaie Canyon (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

Melicope haupuensis grows on moist talus slopes in *Metrosideros polymorpha*-dominated lowland mesic forests or *M. polymorpha*-*Acacia koa* montane mesic forest at elevations between 111 and 1,249 m (364 and 4,097 ft). Associated native plant species include *Antidesma platyphyllum* var. *hillebrandii*, *Bobea brevipes*, *Cheirodendron trigynum*, *Claoxylon sandwicense*, *Cryptocarya mannii* (holio), *Dianella sandwicensis* (ukiuki), *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Melicope anisata*, *M. barbiger* (uahiapale), *M. ovata* (alani), *Pleomele aurea*, *Pouteria sandwicensis*, *Pritchardia minor* (loulou), *Psychotria greenwelliae*, *Psychotria mariniana*, *Tetraplasandra waimeae* (ohetikoolā), or *Zanthoxylum dipetalum* (HINHP Database 2000; K. Wood, pers. comm., 2001).

Habitat degradation by feral goats and competition with invasive nonnative plant species are the major threats to *Melicope haupuensis*. In addition, this species may be susceptible to the black twig borer (*Xylosandrus compactus*). The existence of only 13 known trees constitutes an extreme threat of extinction from naturally occurring events, such as landslides or hurricanes, or reduced reproductive vigor (Hara and Beardsley 1979; HINHP Database 2000; Medeiros *et al.* 1986; 59 FR 9304).

Melicope quadrangularis (alani)

Melicope quadrangularis, a member of the rue family (Rutaceae), is a shrub or small tree. Young branches are generally covered with fine yellow fuzz

but become hairless with age. This species differs from others in the genus in having the following combination of characters: oppositely arranged leaves, only one or two flowers per cluster, cube-shaped capsules with fused lobes, and a deep central depression at the top of the fruit (Stone *et al.* 1999).

Little is known about the life history of *Melicope quadrangularis*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Melicope quadrangularis is known from the type locality in the Wahiawa Bog region of Kauai. One adult plant and two seedlings were discovered in 1991 by Ken Wood of NTBG on an east-facing slope of Wahiawa Ridge at 853 m (2,800 ft) on privately owned land. Subsequent exploration resulted in the location of a total of 13 individuals of this species. Although a survey after hurricane Iniki in 1992 did not relocate any individuals, it is hoped that there is a seed bank or that undiscovered individuals remain to be found (Stone *et al.* 1999).

Melicope quadrangularis grows in *Metrosideros polymorpha* diverse lowland wet forest that ranges from mesic to wet conditions at elevations between 608 and 1,593 m (1,995 and 5,228 ft). Associated native plant species include *Antidesma platyphyllum*, *Broussaisia arguta*, *Cheirodendron fauriei* (olapa), *Cibotium nealiae* (hapuu), *Cyrtandra pickeringii* (haiwale), *Dicranopteris linearis*, *Machaerina angustifolia*, *Machaerina mariscoides* (ahaniu), other *Melicope* spp., *Metrosideros waialealae* (NCN), *Psychotria hexandra*, *P. mariniana*, *P. wawrae* (kopiko), *Sadleria pallida*, *Scaevola gaudichaudiana* (naupaka kuahiwi), or *Syzygium sandwicensis* (K. Wood, pers. comm., 2001).

This species is threatened by nonnative plants and habitat disturbance by feral pigs; over-collecting for scientific purposes; extinction from naturally occurring events, such as landslides or hurricanes; and/or reduced reproductive vigor due to the dearth of individuals (Service 1994).

Munroidendron racemosum (NCN)

Munroidendron racemosum, a member of the ginseng family (Araliaceae), is a small tree with a straight gray trunk crowned with spreading branches. This long-lived perennial species is the only member of a genus endemic to Hawaii. The genus is distinguished from other closely related Hawaiian genera of the family by

its distinct flower clusters and corolla (Constance and Affolter 1999).

Reproduction occurs year-round, with flowers and fruits found throughout the year. Self-pollination is assumed to occur since viable seeds have been produced by isolated individuals. Pollinators have not been observed, but insect pollination is likely. Dispersal mechanisms are unknown (Service 1995).

Historically, *Munroidendron racemosum* was known from scattered locations throughout the island of Kauai. Occurrences are now known from Waiahuakua, Pohakuao, the left and right branches of Kalalau Valley, Nakeikionaiwi Valley, Awaawapuhi Valley spring, Honopu Valley, Nualolo Valley, Poomau Valley, Kawaiiki Valley, Koaie Canyon, Nonou, Haupu, and Keopaweo. There are currently 17 known occurrences with approximately 59 to 99 individuals on State (Hono o Na Pali NAR, Na Pali Coast State Park, Na Pali-Kona Forest Reserve, Nonou Forest Reserve, and Puu Ka Pele Forest Reserve) and privately owned lands (GDSI 2000; HINHP Database 2000).

Munroidendron racemosum is typically found on steep exposed cliffs or on ridge slopes in coastal to lowland mesic forests at elevations between 6 and 979 m (19 and 3,213 ft). Associated plant species include *Bobea brevipes*, *Brighamia insignis*, *Canavalia napaliensis* (awikiwiki), *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Nestegis sandwicensis*, *Pisonia sandwicensis* (aulu), *Pisonia umbellifera* (papala kepau), *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria* spp., *Psydrax odorata*, *Rauvolfia sandwicensis*, *Schiedea* spp. (NCN), *Sida fallax*, or *Tetraplasandra* spp. (Gagne and Cuddihy 1999; HINHP Database 2000; 59 FR 9304; K. Wood, pers. comm., 2001).

The threats to *Munroidendron racemosum* are competition with nonnative plant species, such as *Aleurites moluccana*, *Lantana camara*, *Leucaena leucocephala* (koa haole), or *Psidium guajava*; habitat degradation by feral goats and fruit predation by rats; introduced insects of the long-horned beetle family (Cerambycidae); fire; extinction from naturally occurring events, such as landslides or hurricanes; and reduced reproductive vigor (HINHP Database 2000; Service 1995; 59 FR 9304).

Myrsine linearifolia (kolea)

Myrsine linearifolia, a member of the myrsine family (Myrsinaceae), is a branched shrub. This long-lived perennial species is distinguished from others of the genus by the shape, length,

and width of the leaves, length of the petals, and number of flowers per cluster (Wagner *et al.* 1999).

Little is known about the life history of *Myrsine linearifolia*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998a).

Historically, *Myrsine linearifolia* was found at scattered locations on Kauai: Olokele Valley, Kalualea, Kalalau Valley, Kahuamaa Flat, Limahuli-Hanakapi'ai Ridge, Koaie Stream, Pohakuao, Namolokama summit plateau, and Haupu. There are currently 12 occurrences with approximately 490 to 564 individuals on State (Alakai Wilderness Preserve and Na Pali Coast State Park) and privately owned lands. The populations are found in Limahuli Valley, Alealau, the left branch of Kalalau Valley, Puu O Kila, Koaie Canyon, Namolokama, and Kapalaoa (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

Myrsine linearifolia typically grows at elevations between 105 and 1,380 m (346 and 4,526 ft) in diverse mesic or wet lowland or montane *Metrosideros polymorpha* forest with *Cheiodendron* spp. or *Dicranopteris linearis* as co-dominant species. Plants growing in association with this species include *Bobea brevipes*, *Cryptocarya mannii*, *Dubautia* spp., *Eurya sandwicensis* (anini), *Freycinetia arborea*, *Hedyotis terminalis*, *Lysimachia glutinosa*, *Machaerina angustifolia*, *Melicope* spp., *Myrsine* spp., *Nothoestrum* spp. (aiea), *Psychotria* spp., *Sadleria pallida*, or *Syzygium sandwicensis* (HINHP Database 2000; 61 FR 53070; K. Wood, pers. comm., 2001).

Competition with nonnative plants, such as *Erigeron karvinskianus*, *Kalanchoe pinnata* (air plant), *Lantana camara*, *Psidium cattleianum*, *Rubus argutus*, and *Rubus rosifolius* and habitat degradation by feral pigs and goats are the major threats to *Myrsine linearifolia* (61 FR 53070).

Nothoestrum peltatum (aiea)

Nothoestrum peltatum, a member of the nightshade family (Solanaceae), is a small tree with ash-brown bark and woolly stems. The usually peltate (leaf stem attached to the center) leaves and shorter leaf stalks separate this species from others in the genus (Symon 1999).

Although plants of this long-lived perennial species have been observed flowering, they rarely set fruit. This could be the result of a loss of pollinators, reduced genetic variability, or an inability to fertilize itself. Little else is known about the life history of

Nothoestrum peltatum. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (59 FR 9304).

Historically, *Nothoestrum peltatum* was known from Kauai at Kumuwela, Kaholuamanu, and the region of Nualolo. This species is now known from a total of 10 occurrences with 20 individuals, located at Kahuamaa Flats, Awaawapuhi Trail, Awaawapuhi Valley, Kawaiula Valley, and Makaha Valley on State-owned land within the Kokee State Park, Kuia NAR, Na Pali Coast State Park, Na Pali-Kona Forest Reserve, and Puu Ka Pele Forest Reserve (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

This species generally grows in rich soil on steep slopes in mesic or wet forest dominated by *Acacia koa* or a mixture of *A. koa* and *Metrosideros polymorpha*, at elevations between 581 and 1,290 m (1,906 and 4,232 ft). Associated native plants include *Alphitonia ponderosa*, *Antidesma* spp., *Bobea brevipes*, *Broussaisia arguta*, *Cheiodendron trigynum*, *Claoxylon sandwicense*, *Coprosma* spp., *Cryptocarya mannii*, *Dianella sandwicensis*, *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Ilex anomala*, *Melicope anisata*, *M. barbigera*, *M. haupuensis*, *Perrottetia sandwicensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Tetraplasandra kawaiensis*, or *Xylosma* spp. (HINHP Database 2000; K. Wood, pers. comm., 2001).

Competition with nonnative plants (such as *Erigeron karvinskianus*, *Lantana camara*, *Passiflora tarminiana*, or *Rubus argutus*), and habitat degradation by feral pigs, deer, and red jungle fowl (*Gallus gallus*) constitute the major threats to *Nothoestrum peltatum*. This species is also threatened by fire, risk of extinction from naturally occurring events (e.g., landslides or hurricanes), and reduced reproductive vigor due to the small number of existing individuals (HINHP Database 2000; 59 FR 9304).

Panicum niihauense (lau ehu)

Panicum niihauense, a member of the grass family (Poaceae), is a perennial bunchgrass with unbranched culms (aerial stems). This short-lived perennial species is distinguished from others in the genus by the erect inflorescence branches and the densely clustered spikelets (Davidse 1999).

Little is known about the life history of this species. Reproductive cycles,

longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Panicum niihauense was known historically from Niihau and one location on Kauai. Currently, this species is only known from one occurrence of 23 individuals at the Polihale State Park area of Kauai on State-owned land (GDSI 2000; HINHP Database 2000).

Panicum niihauense is found scattered in sand dunes in coastal shrubland at elevations between 0 and 103 m (0 and 337 ft). Associated native plant species include *Cassytha filiformis* (kaunaoa pehu), *Chamaesyce celastroides*, *Dodonaea viscosa*, *Nama sandwicensis* (hinahina kahakai), *Ophioglossum pendulum* ssp. *falcatum* (puapua moa), *Scaevola sericea* (naupaka kahakai), *Sida fallax*, *Sporobolus virginicus* (akiaki), or *Vitex rotundifolia* (kolokolo kahakai) (HINHP Database 2000; K. Wood, pers. comm., 2001).

Primary threats to *Panicum niihauense* are destruction by off-road vehicles, competition with nonnative plant species, and a risk of extinction from naturally occurring events (e.g., landslides or hurricanes) and reduced reproductive vigor due to the small number of individuals in the one remaining population (HINHP Database 2000; 61 FR 53108).

Phyllostegia knudsenii (NCN)

Phyllostegia knudsenii, a nonaromatic member of the mint family (Lamiaceae), is an erect herb or vine. This short-lived perennial species is distinguished from others in the genus by its specialized flower stalk; it differs from the closely related *P. floribunda* by often having four flowers per group (Wagner *et al.* 1999).

Little is known about the life history of *Phyllostegia knudsenii*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998a).

Until 1993, *Phyllostegia knudsenii* was only known from the site of its original discovery made in the 1800s from the woods of Waimea on Kauai. There is currently one known occurrence with a total of 4 to 13 individuals on State-owned land in Koaie Canyon within the Alakai Wilderness Preserve (GDSI 2000; HINHP Database 2000; Wagner *et al.* 1999; K. Wood, *in litt.* 1999).

Phyllostegia knudsenii is found in *Metrosideros polymorpha* lowland mesic or wet forest at elevations between 399 and 1,059 m (1,309 and

3,475 ft). Associated native plant species include *Bobea timonioides* (ahakea), *Claoxylon sandwicense*, *Cryptocarya mannii*, *Cyrtandra kauaiensis*, *Cyrtandra paludosa* (moa), *Diospyros sandwicensis*, *Elaeocarpus bifidus*, *Ilex anomala*, *Myrsine linearifolia*, *Perrottetia sandwicensis*, *Pittosporum kauaiense* (hoawa), *Pouteria sandwicensis*, *Pritchardia minor*, *Selaginella arbuscula* (lepelepe moa), *Tetraplasandra oahuensis* (ohe mauka), or *Zanthoxylum dipetalum* (61 FR 53070; K. Wood, pers. comm., 2001).

Major threats to *Phyllostegia knudsenii* include habitat degradation by feral pigs and goats, competition with nonnative plants, and a risk of extinction from naturally occurring events (e.g., landslides and hurricanes) and reduced reproductive vigor due to the small number of individuals in the only known population (61 FR 53070; Service 1998a).

Phyllostegia waimeae (NCN)

Phyllostegia waimeae, a nonaromatic member of the mint family (Lamiaceae), is a climbing perennial plant. Characteristics that distinguish this species from others in the genus are the nearly stalkless bracts that partially overlap and cover the flowers, and relatively fewer oil glands on the leaves (Wagner *et al.* 1999).

Little is known about the life history of *Phyllostegia waimeae*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Phyllostegia waimeae* was known from Kaholuamanu and Kaaha on Kauai. Currently, one occurrence with six individuals persists on State land in Kawaiiki Valley within the Na Pali-Kona Forest Reserve (K. Wood, *in litt.* 2001).

This species typically grows in *Acacia koa-Metrosideros polymorpha* dominated wet or mixed mesic forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominants at elevations between 655 and 1,224 m (2,149 and 4,016 ft). Associated native plant species include *Broussaisia arguta*, *Claoxylon sandwicense*, *Diplazium sandwichianum*, *Dubautia knudsenii*, *Elaphoglossum* spp., *Gunnera kauaiensis*, *Hedyotis* spp., *Myrsine lanaiensis*, *Pleomele aurea*, *Psychotria* spp., *Sadleria* spp., *Scaevola procera* (naupaka kuahiwi), *Syzygium sandwicensis*, or *Vaccinium* spp. (K. Wood, pers. comm., 2001).

Habitat destruction by feral goats, erosion, and competition with

introduced grasses are the major threats to *Phyllostegia waimeae*. The species is also threatened by over-collecting for scientific purposes; extinction from naturally occurring events, such as hurricanes; and/or reduced reproductive vigor due to the small number of existing individuals (Service 1995).

Phyllostegia wawrana (NCN)

Phyllostegia wawrana, a nonaromatic member of the mint family (Lamiaceae), is a perennial vine that is woody toward the base and has long, crinkly hairs along the stem. This short-lived perennial species can be distinguished from the related *P. floribunda* and *P. knudsenii* by its less specialized flower stalk (Wagner *et al.* 1999).

Seeds were observed in the wild in August 1993. No additional life history information for this species is currently known (Service 1998a).

Phyllostegia wawrana was reported to be found at Hanalei on Kauai in the 1800s and along Kokee Stream in 1926. Currently, four occurrences with approximately 34 to 54 individuals are reported from Koaie Canyon, Moaalele, Awaawapuhi Valley, and Makaleha on State-owned land within the Alakai Wilderness Preserve, Hono o Na Pali NAR, and Kokee State Park (GDSI 2000; HINHP Database 2000).

This species grows at elevations between 398 and 1,284 m (1,306 and 4,212 ft) in *Acacia koa-Metrosideros polymorpha-Cheirodendron* mixed mesic forest. Associated native plant species include *Alectryon macrococcus*, *Asplenium polyodon*, *Athyrium microphyllum*, *Carex* spp., *Claoxylon sandwicense*, *Cyanea fissia* (haha), *Delissea rivularis*, *Dianella sandwicensis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Doodia kunthiana*, *Dryopteris wallichiana*, *Dubautia knudsenii*, *Dubautia laevigata*, *Hedyotis tryblum*, *Machaerina angustifolia*, *Panicum nephelophilum*, *Peperomia* spp., *Perrottetia sandwicensis*, *Pleomele aurea*, *Poa sandwicensis*, *Pteridium aquilinum* var. *decompositum*, *Sadleria pallida*, *Scaevola procera*, *Schiedea stellarioides*, *Syzygium sandwicensis*, *Touchardia latifolia*, or *Vaccinium dentatum* (HINHP Database 2000; 61 FR 53070; K. Wood, pers. comm., 2001).

Major threats to *Phyllostegia wawrana* include habitat degradation by feral pigs and competition with nonnative plant species, such as *Erechtites valerianifolia*, *Erigeron karvinskianus*, *Melastoma candidum*, *Passiflora tarminiana*, *Rubus argutus*, and *Rubus rosifolius* (61 FR 53070; Service 1998a).

Poa mannii (Mann's bluegrass)

Poa mannii, a member of the grass family (Poaceae), is a perennial grass with short rhizomes (underground stems) and erect, tufted culms. All three native species of *Poa* in the Hawaiian Islands are endemic to the island of Kauai. *Poa mannii* is distinguished from both *P. siphonoglossa* and *P. sandvicensis* by its fringed ligule (an appendage on the leaf sheath) and from *P. sandvicensis* by its shorter panicle (a flower cluster) branches (O'Connor 1999).

Little is known about the life history of *Poa mannii*. Flowering cycles, pollination vectors, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, this species was found in Olokele Gulch on Kauai. Currently, there is a total of six occurrences with approximately 268 individuals on State-owned land in the right and left branches of Kalalau Valley, Awaawapuhi Valley, Kuia Valley, and Kauhao Valley within the Kuia NAR, Na Pali Coast State Park, Na Pali-Kona Forest Reserve, and Waimea Canyon State Park (GDSI 2000; HINHP Database 2000; O'Connor 1999; K. Wood, *in litt.* 1999).

This species typically grows on cliffs or rock faces in lowland or montane mesic *Metrosideros polymorpha* or *Acacia koa*-*M. polymorpha* forest at elevations between 327 and 1,222 m (1,072 and 4,009 ft). Associated native plant species include *Antidesma platyphyllum*, *Artemisia australis*, *Bidens cosmoides*, *Bidens sandvicensis*, *Carex meyenii*, *Carex wahuensis*, *Chamaesyce celastroides* var. *hanapepensis*, *Cyperus phleoides* (NCN), *Diospyros sandwicensis*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Hedyotis terminalis*, *Lobelia niihauensis*, *Lobelia yuccoides* (panaunau), *Luzula hawaiiensis* (wood rush), *Melicope anisata*, *M. barbigera*, *M. pallida*, *Nototrichium* spp., *Panicum lineale*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Schiedea* spp., or *Wilkesia gymnoxiphium* (HINHP Database 2000; 59 FR 56330; K. Wood, pers. comm., 2001).

Poa mannii survives only in very steep areas that are inaccessible to goats, suggesting that goat herbivory may have eliminated this species from more accessible locations, as is the case for other rare plants from northwestern Kauai. Threats to *P. mannii* include habitat damage, trampling, and browsing by feral goats, and competition with invasive nonnative plants. *Erigeron*

karvinskianus has invaded Kalalau, Koaie, and Waialae Valleys, three of the areas where *P. mannii* occurs. *Lantana camara* threatens all known populations, and *Rubus argutus* threatens the populations in Kalalau and Waialae Valleys. *Poa mannii* is also threatened by fire and reduced reproductive vigor and/or extinction from naturally occurring events, such as landslides or hurricanes, due to the small number of existing populations and individuals (59 FR 56330).

Poa sandvicensis (Hawaiian bluegrass)

Poa sandvicensis is a perennial grass (Poaceae) with densely tufted, mostly erect culms. It is distinguished from closely related species by its shorter rhizomes and culms which do not become rush-like with age, closed and fused sheaths, relatively even-edged ligules, and longer panicle branches (O'Connor 1999).

Little is known about the life history of *Poa sandvicensis*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, this species was known from the following areas on the island of Kauai: the rim of Kalalau Valley; Halemanu Ridge, Kumuwela Ridge, and Kauaikanana drainage; Awaawapuhi Trail; Kohua Ridge/Mohihi drainage; and Kaholuamanu. Hillebrand's (1888) reference to a Maui locality is most likely an error. Currently, there is a total of nine occurrences with 1,321 individuals on State-owned land. *Poa sandvicensis* is known to be extant at Alealau, Keanapuka, Awaawapuhi Trail, Kumuwela Ridge, Maile Flat Trail, Mohihi Stream, Mohihi-Waialae Trail, Kawaiiki Valley, and Waialae Valley in the Alakai Wilderness Preserve, Hono o Na Pali NAR, Kokee State Park, Na Pali Coast State Park, and Na Pali-Kona Forest Reserve (GDSI 2000; HINHP Database 2000; 57 FR 20580; K. Wood, *in litt.* 1999).

Poa sandvicensis grows on wet, shaded, gentle to steep slopes, ridges, and rock ledges of streambanks in semi-open to closed, wet, diverse *Acacia koa*-*Metrosideros polymorpha* montane forest, at elevations between 473 and 1,290 m (1,553 and 4,232 ft). Associated native plant species include *Alyxia oliviformis*, *Bidens sandvicensis*, *Cheirodendron* spp., *Claoxylon sandwicense*, *Coprosma* spp., *Dianella sandwicensis*, *Dicranopteris linearis*, *Dodonaea viscosa*, *Dubautia* spp., *Hedyotis* spp., *Melicope* spp., *Peperomia* spp., *Psychotria* spp., *Scaevola procera*, *Schiedea*

stellarioides, or *Syzygium sandwicensis* (HINHP Database 2000; 57 FR 20580; K. Wood, pers. comm., 2001).

The greatest immediate threats to the survival of *Poa sandvicensis* are competition from nonnative plants, such as *Erigeron karvinskianus*, *Hedychium* spp., *Passiflora tarminiana*, or *Rubus argutus*; erosion caused by feral pigs and goats; and State Forest Reserve trail maintenance activities and human recreation. In addition, naturally occurring events, such as landslides and hurricanes, constitute a threat of extinction or reduced reproductive vigor due to the species' small population size (Service 1995; 57 FR 20580).

Poa siphonoglossa (NCN)

Poa siphonoglossa is a perennial grass (Poaceae) with extensive tufted and flattened culms that cascade from banks in masses. It differs from related species by its longer culms and lack of a prominent tooth on the ligule. In addition, its shorter panicle branches distinguish it from *P. sandvicensis*, and its short rhizomes and closed and fused sheaths separate it from *P. mannii* (O'Connor 1999).

Little is known about the life history of *Poa siphonoglossa*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Poa siphonoglossa* was known from five sites on the island of Kauai: Kohua Ridge, near Kaholuamanu, Kaulaula Valley, Kuia Valley, and Kalalau. Currently, there are a total of five occurrences with a total of 50 individuals on State-owned land at Kahuamaa Flats, Mohihi-Waialae Trail, Kuia Valley, Makaha Ridge, and Kaulaula Valley in the Alakai Wilderness Preserve, Kuia NAR, Na Pali Coast State Park, Na Pali-Kona Forest Reserve, and Puu Ka Pele Forest Reserve (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

Poa siphonoglossa typically grows on shady banks on steep slopes in mesic *Metrosideros polymorpha*-*Acacia koa* forests at elevations between about 480 and 1,296 m (1,573 and 4,251 ft). Associated native plant species include *Alphitonia ponderosa*, *Alyxia oliviformis*, *Bobea brevipes*, *Carex meyenii*, *Carex wahuensis*, *Coprosma waimeae*, *Dianella sandwicensis*, *Dodonaea viscosa*, *Dubautia* spp., *Hedyotis* spp., *Leptocophylla tameiameia*, *Lobelia yuccoides*, *Melicope* spp., *Microlepia strigosa*, *Myrsine* spp., *Panicum nephelophilum*, *Poa sandvicensis*, *Psychotria* spp., *Scaevola procera*, *Tetraplasandra*

kavaiensis, *Vaccinium* spp., *Wilkesia gymnoxiphium*, *Xylosma* spp., or *Zanthoxylum dipetalum* (57 FR 20580; K. Wood, pers. comm., 2001).

The primary threat to the survival of *Poa siphonoglossa* is habitat degradation and/or herbivory by feral pigs and deer. The nonnative plant *Rubus argutus* invading Kohua Ridge constitutes a probable threat to that population. Small population size and the potential for one disturbance event to destroy the majority of known individuals are also serious threats to this species (HINHP Database 2000; Service 1995; 57 FR 20580).

Pritchardia aylmer-robinsonii (wahane)

Pritchardia aylmer-robinsonii, a member of the palm family (Arecaceae) is a fan-leaved tree about 7 to 15 m (23 to 50 ft) tall. This species is distinguished from others of the genus by the thin leaf texture and drooping leaf segments, tan woolly hairs on the underside of the petiole and the leaf blade base, stout hairless flower clusters that do not extend beyond the fan-shaped leaves, and the smaller spherical fruit (Read and Hodel 1999).

Little is known about the life history of *Pritchardia aylmer-robinsonii*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (61 FR 41020).

Historically, *Pritchardia aylmer-robinsonii* was found at three sites in the eastern and central portions of the island of Niihau. Trees were found on Kaali Cliff and in Mokouia and Haao Valleys at elevations between 70 and 270 m (230 and 885 ft) on privately owned land. The most recent observations indicate that two plants still remain on Kaali Cliff (GDSI 2000; HINHP Database 2000; Read and Hodel 1999).

Pritchardia aylmer-robinsonii typically grows on rocky talus in seepage areas within coastal dry forest at elevations between 91 to 259 m (300 to 850 ft). Associated native plant species include *Brighamia insignis*, *Cyperus trachysanthos*, *Lipochaeta lobata* var. *lobata* (nehe), or *Lobelia niihauensis*. Originally a component of the coastal dry forest, this species now occurs only in a rugged and steep area where it receives some protection from grazing ungulates (HINHP Database 2000; 61 FR 41020).

The species is threatened by habitat degradation and/or herbivory by cattle, feral pigs, and feral goats and seed predation by rats. Small population size, limited distribution, and reduced reproductive vigor makes this species

particularly vulnerable to extinction (61 FR 41020).

Pritchardia napaliensis (loulou)

Pritchardia napaliensis, a member of the palm family (Arecaceae), is a small tree with about 20 leaves and an open crown. This species is distinguished from others of the genus that grow on Kauai by having about 20 flat leaves with pale scales on the lower surface that fall off with age, inflorescences with hairless main axes, and globose round fruits less than 3 cm (1.2 in) long (Read and Hodel 1999).

Little is known about the life history of *Pritchardia napaliensis*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998a).

Pritchardia napaliensis has only been known from five occurrences with 155 individuals on State-owned land in Pohakuao, Alealau, Waiahuakua, and Hoolulu Valley within the Hono o Na Pali NAR and Na Pali Coast State Park (GDSI 2000; HINHP Database 2000; K. Wood, in litt. 1999).

Pritchardia napaliensis typically grows in areas between elevations of 152 and 1,158 m (500 and 3,800 ft) in a wide variety of habitats ranging from lowland dry to diverse mesic forests dominated by *Diospyros* spp. or montane wet forests dominated by *Metrosideros polymorpha* and *Dicranopteris linearis*. Associated native plant species include *Alsinidendron lychnoides*, *Alyxia oliviformis*, *Boehmeria grandis*, *Cheirodendron trigynum*, *Cibotium* spp., *Dubautia knudsenii*, *Elaeocarpus bifidus*, *Hibiscus kokio* ssp. *saintjohnianus* (kokio), *Lipochaeta connata* var. *acris* (nehe), *Melicope peduncularis* (alani), *Nesoluma polynesianum* (keahi), *Ochrosia kauaiensis* (holei), *Phyllostegia electra* (NCN), *Pleomele aurea*, *Poa sandwicensis*, *Pouteria sandwicensis*, *Psychotria* spp., *Psydrax odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Santalum freycinetianum* var. *pyrularium*, *Stenogyne purpurea* (NCN), *Syzygium sandwicensis*, *Vaccinium dentatum*, *Wilkesia gymnoxiphium*, or *Xylosma hawaiiense* (HINHP Database 2000; Service 1998a; 61 FR 53070).

Major threats to *Pritchardia napaliensis* include habitat degradation and grazing by feral goats and pigs; seed predation by rats; and competition with nonnative plants such as *Erigeron karvinskianus*, *Kalanchoe pinnata*, *Lantana camara*, *Psidium guajava*, or possibly *Cordyline fruticosa*. The species is also threatened by vandalism

and over-collection. In 1993, near the Wailua River, the State Division of Forestry and Wildlife (DOFAW) constructed a fenced enclosure around 39 recently planted *P. napaliensis* individuals. Shortly after planting, the fence was vandalized and the 39 plants were removed. Also, because of the small number of remaining populations and individuals, this species is susceptible to a risk of extinction from naturally occurring events, such as landslides or hurricanes, and from reduced reproductive vigor (61 FR 53070; Craig Koga, DOFAW, in litt. 1999; A. Kyono, pers. comm., 2000).

Pritchardia viscosa (loulou)

Pritchardia viscosa, a member of the palm family (Arecaceae), is a small tree 3 to 8 m (10 to 26 ft) tall. This species differs from others of the genus that grow on Kauai by the degree of hairiness of the lower surface of the leaves and main axis of the flower cluster, and length of the flower cluster (Read and Hodel 1999).

Historically, *Pritchardia viscosa* was known only from a 1920 collection from Kalihiwai Valley. It was not seen again until 1987, when Robert Read observed it in the same general area as the type locality, off the Powerline Road at 512 m (1,680 ft) elevation (HINHP Database 2000). Currently, there is one occurrence with three individuals on State-owned land within the Halelea Forest Reserve (GDSI 2000; HINHP Database 2000; 61 FR 53070).

This species is found in *Metrosideros polymorpha*-*Dicranopteris linearis* lowland wet forest at elevations between 488 and 518 m (1,600 and 1,700 ft). Associated native species include *Antidesma* spp., *Bobea* spp., *Cibotium* spp., *Cyanea fissa*, *Cyrtandra kauaiensis*, *Cyrtandra longiflora*, *Dubautia knudsenii*, *Nothocestrum* spp., *Perrottetia sandwicensis*, *Psychotria* spp., *Sadleria pallida*, or *Syzygium sandwicensis* (Service 1998a; 61 FR 53070).

Pritchardia viscosa is threatened by *Psidium cattleianum*, nonnative grasses such as *Paspalum conjugatum*, and seed predation by rats. At least one of the remaining mature trees has been damaged by spiked boots used either by a botanist or seed collector to scale the tree. In mid-1996, a young plant and seeds from mature *Pritchardia viscosa* plants were removed from the only known location of this species. Because of this past activity, it is reasonable to assume that these plants are threatened by over-collection and vandalism. Also, because of the small numbers of individuals in the only known population, this species is susceptible to

extinction since a single naturally occurring event (e.g., a hurricane) could destroy all remaining plants (61 FR 53070; C. Koga, in litt. 1999; A. Kyono, pers. comm., 2000).

Pteralyxia kauaiensis (kaulu)

Pteralyxia kauaiensis, a member of the dogbane family (Apocynaceae), is a long-lived perennial tree 3 to 8 m (10 to 26 ft) tall. The leaves are dark green and shiny on the upper surfaces, but pale and dull on the lower surfaces. This species differs from the only other species of this endemic Hawaiian genus in having reduced lateral wings on the seed (Wagner *et al.* 1999).

Little is known about the life history of *Pteralyxia kauaiensis*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Pteralyxia kauaiensis* was known from the Wahiawa Mountains in the southern portion of Kauai. This species is now known from 39 occurrences, with a total of 1,124 to 1,161 individuals in the following scattered locations on State land: Limahuli Valley, the left and right branches of Kalalau Valley, Pohakuao, Makaha Valley, Kuia Valley, Haeleele Valley, Koaie Canyon, Kawaiiki Valley, Hipalau, Haupu, Blue Hole, Poomau Valley, and Kapaliikea within the Lihue-Koloa Forest Reserve, Na Pali Coast State Park, Na Pali-Kona Forest Reserve, and Puu Ka Pele Forest Reserve. There is also an undocumented sighting of one individual at Makaleha, above the town of Kapaa (HINHP Database 2000; Wagner *et al.* 1999; 59 FR 9304; K. Wood, in litt. 1999).

This species is typically found in diverse mesic or *Diospyros sandwicensis* mixed mesic forests with *Pisonia* spp. between elevations of 127 and 1,563 m (418 and 5,128 ft). Associated native plant species include *Acacia koa*, *Alectryon macrococcus*, *Alphitonia ponderosa*, *Antidesma platyphyllum* var. *hillebrandii*, *Bobea brevipes*, *Carex* spp., *Charpentiera elliptica*, *Claoxylon sandwicense*, *Cyanea* spp., *Dianella sandwicensis*, *Diospyros* spp. (lama), *Diplazium sandwichiianum*, *Dodonaea viscosa*, *Euphorbia haeleeleana*, *Freycinetia arborea*, *Gahnia* spp., *Gardenia remyi* (nanu), *Hedyotis terminalis*, *Hibiscus kokio*, *Kokia kauaiensis*, *Leptecophylla tameiameia*, *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Neraudia* spp. (NCN), *Nesoluma polynesicum*, *Nestegis sandwicensis*, *Peperomia* spp., *Pipturus* spp., *Pisonia sandwicensis*, *Pleomele aurea*, *Poa sandwicensis*, *Pouteria*

sandwicensis, *Pritchardia* spp., *Psychotria* spp., *Psydrax odorata*, *Rauvolfia sandwicensis*, *Santalum freycinetianum* var. *pyrarium*, *Schiedea* spp., *Syzygium sandwicensis*, *Tetraplasandra* spp., *Xylosma hawaiiense*, or *Zanthoxylum dipetalum* (HINHP Database 2000; 59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to *Pteralyxia kauaiensis* are habitat destruction by feral animals and competition with introduced plants. Animals affecting the survival of this species include feral goats and pigs, and possibly rats, which may eat the fruit. Fire could threaten some populations. Introduced plants competing with this species include *Aleurites moluccana*, *Cordyline fruticosa*, *Erigeron karvinskianus*, *Lantana camara*, *Psidium cattleianum*, or *Psidium guajava* (HINHP Database 2000; Service 1995; 59 FR 9304).

Remya kauaiensis (NCN)

Remya kauaiensis, one of three species of a genus endemic to the Hawaiian Islands, is in the aster family (Asteraceae). *Remya kauaiensis* is a small short-lived perennial shrub, about 1 m (3 ft) tall, with many sprawling branches covered with a fine tan fuzz near their tips. The lower surface of the leaves is covered with fine white hairs. This species is distinguished from the other Kauai species in the genus by being hairy, having shorter flower head stalks, and having narrower tips on the floral bracts (Wagner *et al.* 1999).

Seedlings of this species have not been observed. Flowers have been observed in April, May, June, and August, and are probably insect-pollinated. Seeds are probably wind or water-dispersed. *Remya kauaiensis* may be self-incompatible (Herbst 1988; Service 1995; 56 FR 1450).

Historically, this species was found at Koaie, Mohihi, Kalalau, Makaha, Nualolo, Kawaiula, Kuia, Honopu, Awaawapuhi, Kopakaka, and Kauhao on Kauai. There are currently 17 known occurrences with a total of 106 to 114 individuals on State-owned land. They occur in Hipalau Valley, Awini Valley, Koaie Canyon, Mohihi Stream, the left branch of Kalalau Valley, Awaawapuhi and Nualolo Valleys, Kuia and Kawaiula Valleys, Makaha Valley, Kauhao Valley, and Kaulaula Valley within the Alakai Wilderness Preserve, Kuia NAR, Na Pali Coast State Park, Na Pali-Kona Forest Reserve, Puu Ka Pele Forest Reserve, and Waimea Canyon State Park (GDSI 2000; HINHP Database 2000; K. Wood, in litt. 1999).

Remya kauaiensis grows chiefly on steep, north or northeast-facing slopes at elevations between 560 and 1,247 m

(1,836 and 4,090 ft). It is found primarily in *Acacia koa*-*Metrosideros polymorpha* lowland mesic forest with *Chamaesyce* spp. (akoko), *Claoxylon sandwicense*, *Dianella sandwicensis*, *Diospyros* spp., *Dodonaea viscosa*, *Hedyotis terminalis*, *Melicope* spp., *Nestegis sandwicensis*, *Pouteria sandwicensis*, *Psychotria* spp., *Schiedea* spp., or *Tetraplasandra* spp. (HINHP Database 2000; Herbst 1988; 56 FR 1450; K. Wood, pers. comm., 2001).

The primary threats to *Remya kauaiensis* include herbivory and habitat degradation by feral goats, pigs, cattle, and deer, and competition from nonnative plant species. Other threats include erosion, fire, and risk of extinction from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor due to the small number of remaining populations and individuals (Service 1995; 56 FR 1450).

Remya montgomeryi (NCN)

Remya montgomeryi in the aster family (Asteraceae) was discovered in 1985 by Steven Montgomery on the sheer, virtually inaccessible cliffs below the upper rim of Kalalau Valley, Kauai. It is a small short-lived perennial shrub, about 1 m (3 ft) tall, with many sprawling to weakly erect, smooth branches. The species is distinguished from *R. kauaiensis* by being hairless, with longer flower head stalks and broader floral bract tips (Wagner *et al.* 1999).

Seedlings of this species have not been observed. Flowers have been observed in April through August and are probably insect-pollinated. Seeds are probably wind or water-dispersed. *Remya montgomeryi* may be self-incompatible (Herbst 1988; 56 FR 1450).

Remya montgomeryi is known only from Kauai. Six occurrences with 143 individuals are reported on State-owned land in the left and right branches of Kalalau Valley, Koaie Canyon, and Kuia Valley within the Alakai Wilderness Preserve and Na Pali Coast State Park (GDSI 2000; HINHP Database 2000; Herbst 1988; K. Wood, in litt. 1999).

Remya montgomeryi grows at elevations between 336 and 1,344 m (1,102 and 4,411 ft), primarily on steep, north or northeast-facing slopes or cliffs in transitional wet or *Metrosideros polymorpha*-dominated mixed mesic forest. Associated native plant species include *Artemisia australis*, *Bobea* spp., *Boehmeria grandis*, *Cheirodendron* spp., *Claoxylon sandwicense*, *Cyrtandra* spp., *Dubautia* spp., *Ilex anomala*, *Lepidium serra*, *Lysimachia* spp. (kolokolo kuahiwi), *Myrsine linearifolia*, *Nototrichium* spp., *Pleomele aurea*, *Poa*

mannii, *Sadleria* spp., *Scaevola* spp., *Stenogyne campanulata*, *Tetraplasandra* spp., or *Zanthoxylum dipetalum* (HINHP Database 2000; K. Wood, pers. comm., 2001).

The primary threats to *Remya montgomeryi* are herbivory and habitat degradation by feral goats, pigs, cattle, and deer, and competition from nonnative plant species. Other threats include erosion, fire, and an increased risk of extinction from naturally occurring events (e.g., landslides or hurricanes) because of the small size of the populations and their limited distribution (Service 1995; 56 FR 1450).

Schiedea apokremnos (maolioli)

Schiedea apokremnos, a member of the pink family (Caryophyllaceae), is a low, branching short-lived perennial shrub 20 to 51 cm (8 to 20 in) tall with leaves that are somewhat fleshy. *Schiedea apokremnos* is distinguished from related species by shorter sepals, nectaries, and capsules (Wagner *et al.* 1999).

Some individuals of *Schiedea apokremnos* are functionally female and must be cross-pollinated to set seed. This reproductive strategy may be ineffective in populations with few individuals. Little is known about the life history of *Schiedea apokremnos*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Schiedea apokremnos has been collected from Nualolo Kai, Kaaweiki Ridge, and along a 10.5 km (6.5 mi) long section of the Na Pali coast including Milolii Valley, Kalalau Beach, Kaalahina and Manono Ridges, Haeleele Ridge, and as far north as Pohakuao Valley, all on the island of Kauai. There is currently a total of five occurrences containing 201 individuals on State-owned lands. The species is extant at Nakeikionaiwi, Pohakuao, Nualolo Valley, Haeleele Valley, and Kawaiiki Valley within the Na Pali Coast State Park and Puu Ka Pele Forest Reserve (GDSI 2000; HINHP Database 2000; 56 FR 49639).

Schiedea apokremnos grows in the crevices of near-vertical basalt coastal cliff faces, at elevations between 11 and 538 m (35 and 1,765 ft). The species grows in sparse dry coastal cliff shrub vegetation along with *Artemisia australis*, *Bidens* spp., *Carex meyenii*, *Chamaesyce celastroides*, *Eragrostis variabilis*, *Lepidium serra*, *Lipochaeta connata*, *Lobelia niihauensis*, *Myoporum sandwicense*, *Peperomia* spp., *Pleomele aurea*, *Psydrax odorata*, or *Wilkesia* spp. (HINHP Database 2000;

56 FR 49639; K. Wood, pers. comm., 2001).

The restriction of this species to inaccessible cliffs suggests that goat herbivory may have eliminated it from more accessible locations. The greatest current threat to the survival of *Schiedea apokremnos* is still herbivory and habitat degradation by feral goats, as well as competition from the nonnative plants *Leucaena leucocephala* and *Hyptis pectinata* (comb hyptis), and trampling by humans. Given the small size of most populations and restricted distribution, depressed reproductive vigor may be a serious threat to the species. In addition, a single environmental disturbance (such as a landslide or fire) could destroy a significant percentage of the extant individuals (Service 1995; 56 FR 49639).

Schiedea helleri (NCN)

Schiedea helleri, a member of the pink family (Caryophyllaceae), is a short-lived perennial vine. The stems are usually prostrate and at least 15 cm (6 in) long. This species is the only member of the genus on Kauai that grows as a vine (Wagner *et al.* 1999).

Three plants have been observed flowering in February. No additional life history information for this species is currently known (Service 1998a).

Schiedea helleri was originally found only at a single location at Kaholuamano over 100 years ago. There is currently a total of three occurrences with 50 to 60 individuals on State-owned land at Mohihi Stream, Nawaimaka Valley, and Mohihi-Waialae Trail within the Alakai Wilderness Preserve and Na Pali-Kona Forest Reserve (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

Schiedea helleri is found on ridges and steep cliffs in closed *Metrosideros polymorpha*-*Dicranopteris linearis* montane wet forest, *M. polymorpha*-*Cheirodendron* spp. montane wet forest, or *Acacia koa*-*M. polymorpha* montane mesic forest at elevations between 664 and 1,361 m (2,178 and 4,464 ft). Other native plants growing in association with this species include *Broussaisia arguta*, *Cheirodendron* spp., *Cibotium* spp., *Cyanea* spp., *Dianella sandwicensis*, *Dubautia* spp., *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Melicope* spp., *Myrsine* spp., *Poa sandwicensis*, *Scaevola procera*, *Syzygium sandwicensis*, or *Viola wailenalenae* (pamakani) (HINHP Database 2000; K. Wood, pers. comm., 2001).

Competition with the nonnative plant *Rubus argutus*, a risk of extinction from naturally occurring events (e.g.,

landslides or hurricanes), and reduced reproductive vigor due to the small number of extant individuals are serious threats to *Schiedea helleri* (61 FR 53070).

Schiedea kauaiensis (NCN)

Schiedea kauaiensis, a member of the pink family (Caryophyllaceae), is an erect subshrub. This short-lived perennial species is distinguished from others in this endemic Hawaiian genus by its habit, larger leaves, the hairiness of the inflorescence, the number of flowers in each inflorescence, larger flowers, and larger seeds (Wagner *et al.* 1999).

Little is known about the life history of this taxon. Fruit and flowers have been observed in July through September. There is no evidence of regeneration from seed under field conditions. Reproductive cycles, longevity, specific environmental requirements and limiting factors are unknown (Service 1998a).

Historically, *Schiedea kauaiensis* was known from the northwestern side of Kauai, from Papaa to Mahanaloa. It was thought to be extinct until the five currently known occurrences in Mahanaloa and Kalalau Valleys, with a total of 22 individuals, were found. All occurrences are on State land within the Kuia NAR and Na Pali Coast State Park (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

Schiedea kauaiensis typically grows in diverse mesic to wet *Acacia koa*-*Metrosideros polymorpha* forest on steep slopes at elevations between 117 and 1,290 m (385 and 4,232 ft). Associated native plant species include *Alphitonia ponderosa*, *Cryptocarya mannii*, *Diospyros* spp., *Dodonaea viscosa*, *Euphorbia haeleeleana*, *Exocarpos luteolus*, *Leptocophylla tameiameia*, *Microlepia strigosa*, *Nestegis sandwicensis*, *Pisonia* spp., *Peucedanum sandwicense* (makou), *Psychotria* spp., or *Psydrax odorata* (HINHP Database 2000; 61 FR 53108; K. Wood, pers. comm., 2001).

Threats to *Schiedea kauaiensis* include habitat degradation and/or destruction by feral goats, pigs, and cattle; competition from several nonnative plant species; predation by introduced slugs and snails; and a risk of extinction from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor due to the low number of individuals in only two known populations. *Schiedea kauaiensis* is also potentially threatened by fire (HINHP Database 2000; Service 1998a; 61 FR 53108).

Schiedea membranacea (NCN)

Schiedea membranacea, a member of the pink family (Caryophyllaceae), is a short-lived perennial herb. This species differs from other *Schiedea* species on Kauai by having five-to seven-veined leaves and an herbaceous habit (Wagner *et al.* 1999).

Research suggests that this species largely requires outcrossing for successful germination and survival to adulthood. Pollinators for *Schiedea membranacea* are unknown, since none have been seen during the daytime, and none were observed during one set of night observations. Little else is known about the life history of *S. membranacea*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998a).

Schiedea membranacea is currently known from the western side of the island of Kauai, on State and privately owned lands at Poopooiki Valley, Milolii Ridge, Kuia Valley, Awaawapuhi Valley, Nualolo Valley, Kahuamaa Flats, Waialae Falls, Koaie Canyon, and the right branch of Wainiha Valley. On State lands it occurs within the Alakai Wilderness Preserve, Halelea Forest Reserve, Kuia NAR, Na Pali Coast State Park, and Na Pali-Kona Forest Reserve. There are currently 10 occurrences containing 344 to 348 individuals (GDSI 2000; HINHP Database 2000; Wood and Perlman 1993; 61 FR 53070; K. Wood, *in litt.* 1999;).

This species is typically found on cliffs and cliff bases in mesic or wet habitats in lowland or montane shrubland or forest communities dominated by *Acacia koa*, *Pipturus* spp. and *Metrosideros polymorpha* or *Urticaceae* shrubland on talus slopes at elevations between 422 and 1,259 m (1,386 and 4,131 ft). Associated native plant species include *Alphitonia ponderosa*, *Alyxia oliviformis*, *Asplenium* spp., *Athyrium sandwicensis* (akolea), *Bobea brevipes*, *Boehmeria grandis*, *Cyrtandra* spp., *Diplazium sandwichianum*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Hedyotis terminalis*, *Hibiscus waimeae*, *Joinvillea ascendens* ssp. *ascendens* (ohe), *Labordia helleri* (kamakahala), *Lepidium serra*, *Lysimachia kalalauensis* (NCN), *Machaerina angustifolia*, *Mariscus pennatifolius*, *Melicope* spp., *Myrsine* spp., *Perrottetia sandwicensis*, *Pisonia* spp., *Pleomele aurea*, *Poa mannii*, *Poa sandwicensis*, *Pouteria sandwicensis*, *Psychotria* spp., *Psydrax odorata*, *Remya kauaiensis*, *Sadleria cyatheoides* (amau), *Scaevola procera*, *Thelypteris*

cyatheoides (kikawaio), *Thelypteris sandwicensis* (palapalaia), or *Touchardia latifolia* (HINHP Database 2000; 61 FR 53070; K. Wood, pers. comm., 2001).

Habitat degradation by feral goats, pigs, and deer; competition with the nonnative plant species *Ageratina riparia* (Hamakua pamakani), *Erigeron karvinskianus*, *Lantana camara*, *Passiflora tarminiana*, *Psidium cattleianum*, *Rubus argutus*, or *R. rosifolius*; loss of pollinators; and landslides are the primary threats to *Schiedea membranacea*. Based on observations indicating that snails and slugs may consume seeds and seedlings, it is likely that introduced molluscs also represent a major threat to this species (Service 1998a; Wood and Perlman 1993; 61 FR 53070).

Schiedea spergulina var. *leiopoda* and *Schiedea spergulina* var. *spergulina* (NCN)

Schiedea spergulina, a member of the pink family (Caryophyllaceae), is a short-lived perennial subshrub. Of the 22 species in this endemic genus, only two other species have smooth seeds. *Schiedea spergulina* differs from those two in having very compact flower clusters. The two weakly defined varieties differ primarily in the degree of hairiness of the inflorescences, with *S. spergulina* var. *leiopoda* being the less hairy of the two (Wagner *et al.* 1999).

Little is known about the life histories of either *Schiedea spergulina* var. *leiopoda* or *S. spergulina* var. *spergulina*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Schiedea spergulina* var. *leiopoda* was found on a ridge on the east side of Hanapepe on Kauai. One occurrence with approximately 135 to 150 individuals is now known to grow in Lawai Valley on Kauai on privately owned land (GDSI 2000; HINHP Database 2000).

Schiedea spergulina var. *spergulina* was historically found in Olokele Canyon, but is now known only from the right branch of Kalalau Valley, Koaie Canyon, and Waimea Canyon. A total of three occurrences numbering approximately 208 individuals is reported on State-owned land within the Na Pali Coast State Park, Na Pali-Kona Forest Reserve, and the Puu Ka Pele Forest Reserve. However, it has been estimated that this species may number in the thousands on Kauai (GDSI 2000; HINHP Database 2000; Service 1995).

Both varieties of *Schiedea spergulina* are usually found on bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic forests at elevations between 21 and 90 m (69 and 294 ft) for *S. spergulina* var. *leiopoda* and elevations between 144 and 828 m (474 and 2,718 ft) for *S. spergulina* var. *spergulina*. Associated native plant species include *Acacia koa*, *Artemisia australis*, *Bidens sandwicensis*, *Carex meyenii*, *Chamaesyce celastroides*, *Dianella sandwicensis*, *Doryopteris* spp. (kumuniu), *Eragrostis variabilis*, *Erythrina sandwicensis* (wiliwili), *Gahnia* spp., *Heliotropium* spp. (ahinahina), *Lepidium serra*, *Lipochaeta connata*, *Microlepis strigosa*, *Nestegis sandwicensis*, *Nototrichium sandwicense*, *Panicum lineale*, *Peucedanum sandwicense*, or *Wilkesia gymnoxiphium* (HINHP Database 2000; Lorence and Flynn 1991; Service 1995; 59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to *Schiedea spergulina* var. *leiopoda* are habitat destruction by feral goats and competition with nonnative plants such as *Furcraea foetida* (Mauritius hemp), *Lantana camara*, or *Leucaena leucocephala*. Individuals have also been damaged and destroyed by rock slides. This variety is potentially threatened by pesticide use in nearby sugarcane fields, as well as being at risk of extinction from naturally occurring events (e.g., hurricanes) and/or reduced reproductive vigor due to the small number of existing individuals (Lorence and Flynn 1991; Service 1995; 59 FR 9304).

Schiedea spergulina var. *spergulina* is threatened by competition with nonnative plant species, including *Erigeron karvinskianus*, *Lantana camara*, *Melia azedarach*, or *Triumfetta semitriloba* (Sacramento bur). The area in which this variety grows is used heavily by feral goats, and there is evidence that plants are being browsed and trampled (HINHP Database 2000; Lorence and Flynn 1991; 59 FR 9304).

Schiedea stellarioides (lauililihi)

Schiedea stellarioides, a member of the pink family (Caryophyllaceae), is a slightly erect to prostrate subshrub with branched stems. The opposite leaves are very slender to oblong-elliptic, and one-veined. This short-lived perennial species is distinguished from other *Schiedea* species on Kauai by the number of veins in the leaves, shape of the leaves, presence of a leaf stalk, length of the flower cluster, and shape of the seeds (Wagner *et al.* 1999).

Plants have been observed flowering in February. Little else is known about the life history of *Schiedea stellarioides*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Schiedea stellarioides* was found at the sea cliffs of Hanakapiai Beach, Kaholuamano-Opaewela region, the ridge between Waialae and Nawaimaka Valleys, and Haupu Range on the island of Kauai. Currently it is found in Kawaiiki Valley and Waialae Falls within the Na Pali-Kona Forest Reserve. There is a total of three occurrences with 1,500 individuals on State-owned land (GDSI 2000; HINHP Database 2000; K. Wood, *in litt.* 1999).

Schiedea stellarioides is found on steep slopes in closed *Acacia koa*-*Metrosideros polymorpha* lowland to montane mesic forest or shrubland at elevations between 376 and 1,251 m (1,135 and 4,102 ft). Associated native plant species include *Alsinidendron viscosum*, *Artemisia australis*, *Bidens cosmoides*, *Chenopodium* spp. (aheahea), *Dianella sandwicensis*, *Dodonaea viscosa*, *Leptecophylla tameiameia*, *Mariscus* spp., *Melicope* spp., *Nototrichium sandwicense*, *Pipturus* spp., *Syzygium sandwicensis*, or *Zanthoxylum dipetalum* (HINHP Database 2000; 61 FR 53070; K. Wood, pers. comm., 2001).

The primary threats to this species include habitat degradation and herbivory by feral pigs and goats, competition with the nonnative plants *Melinis minutiflora* and *Rubus argutus*, and a risk of extinction of the two remaining populations from naturally occurring events, such as landslides or hurricanes (61 FR 53070).

Stenogyne campanulata (NCN)

Stenogyne campanulata, a member of the mint family (Lamiaceae), is a vine with four-angled, hairy stems. A short-lived perennial species, *Stenogyne campanulata* is distinguished from closely related species by its large and very broadly bell-shaped calyces that nearly enclose the relatively small, straight corollas, and by small calyx teeth that are half as long as wide (Weller and Sakai 1999).

Little is known about the life history of *Stenogyne campanulata*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Stenogyne campanulata is known from three occurrences with 66 individuals which were originally

discovered in the left branch of Kalalau Valley on State-owned land in the Na Pali Coast State Park (GDSI 2000; HINHP Database 2000).

Stenogyne campanulata grows on the rock face of a nearly vertical, north-facing cliff in diverse lowland or montane mesic forest at elevations between 335 and 1,290 m (1,100 and 4,232 ft). The associated native plant species include *Lepidium serra*, *Lobelia niihauensis*, *Lysimachia* spp., *Melicope pallida*, *Metrosideros polymorpha*, *Neraudia kauaiensis*, *Nototrichium divaricatum* (kului), *Poa mannii*, *Remya montgomeryi*, or *Wilkesia gymnoxiphium* (Weller and Sakai 1999; 57 FR 20580; K. Wood, pers. comm., 2001).

The restriction of this species to virtually inaccessible cliffs suggests that herbivory by feral goats may have eliminated it from more accessible locations. Goat herbivory and habitat degradation remain the primary threat. Feral pigs have disturbed vegetation in the vicinity of these plants. Erosion caused by feral goats or pigs exacerbates the potential threat of landslides. *Erigeron karvinskianus* and *Rubus argutus* are the primary nonnative plants threatening *Stenogyne campanulata*. The small number of individuals and its restricted distribution are serious potential threats to the species. The limited population size may depress reproductive vigor, or a single environmental disturbance, such as a landslide, could destroy all known extant individuals (57 FR 20580).

Viola helenae (NCN)

Viola helenae is a small, unbranched perennial subshrub with an erect stem in the violet family (Violaceae). It is distinguished from other Kauai species of *Viola* by the leaf shape and width, woody stems, and strictly chasmogamous (open at maturity for access by pollinators) flowers (Wagner *et al.* 1999).

Little is known about the life history of *Viola helenae*. Wagner *et al.* (1999) state that the flowers are all chasmogamous and not cleistogamous (remain closed and self-fertilize in the bud) as in certain other violet species. Therefore, it is likely that its flowers require pollination by insects for seed set. Mature flowering plants do produce seed; however, seed viability may be low and microhabitat requirements for germination and growth may be very specific. Seeds planted at NTBG on Kauai failed to germinate, although they may not have been sufficiently mature when collected and violet seeds are often very slow to germinate. The seeds

are jettisoned when the capsule splits open, as in most species of the genus (Service 1994).

Historically, *Viola helenae* was known from four populations, two along either branch of Wahiawa Stream on Kauai. Currently, there is one known occurrence with a total of 137 plants, on privately owned land within the Wahiawa drainage (GDSI 2000; HINHP Database 2000; Service 1994; 56 FR 47695).

This species is found in *Metrosideros polymorpha*-*Dicranopteris linearis* lowland wet forest or *M. polymorpha*-*Cheirodendron* wet forest growing on stream drainage banks or adjacent valley bottoms in light to moderate shade at elevations between 522 and 1,006 m (1,712 and 3,301 ft). Associated native plant species include *Antidesma platyphyllum* var. *hillebrandii*, *Broussaisia arguta*, *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dubautia* spp., *Freycinetia arborea*, *Hesperomannia lydgatei*, *Melicope* spp., or *Pritchardia* spp. (HINHP Database 2000; Service 1994; K. Wood, pers. comm., 2001).

Threats to *Viola helenae* include competition from nonnative plant species, including *Elephantopus mollis*, *Erechtites valerianifolia*, *Melastoma candidum*, *Psidium cattleianum*, *Rubus rosifolius*, *Stachytarpheta australis*, various nonnative grasses, or potentially *Melaleuca quinquenervia*; trampling and browsing damage by feral pigs; landslides and erosion; and hurricanes (Service 1994; 56 FR 47695).

Viola kauaiensis var. *wahiawaensis* (nani waialeale)

Viola kauaiensis, a member of the violet family (Violaceae), is a short-lived perennial herb with upward curving or weakly rising, hairless, lateral stems. The species is distinguished from others of the genus by its non-woody habit, widely spaced kidney-shaped leaves, and by having two types of flowers: conspicuous, open flowers and smaller, unopened flowers. Two varieties of the species are recognized, both occurring on Kauai: var. *kauaiensis* and var. *wahiawaensis*. *Viola kauaiensis* var. *wahiawaensis* is distinguished by having broadly wedge-shaped leaf bases (Service 1998a; Wagner *et al.* 1999).

Viola kauaiensis var. *wahiawaensis* has been observed in flower in December. Little else is known about the life history of *V. kauaiensis* var. *wahiawaensis*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998a).

Viola kauaiensis var. *wahiawaensis* is known only from two occurrences in the Wahiawa Mountains of Kauai with a total of 13 individual plants, on privately owned land. This taxon is not known to have occurred beyond its current range (GDSI 2000; HINHP Database 2000).

Viola kauaiensis var. *wahiawaensis* is found in *Machaerina angustifolia*-*Rhynchospora rugosa* (kuolohia) lowland bog or mixed wet shrubland and adjacent *Metrosideros polymorpha* wet forest at elevations between 393 and 1,006 m (1,291 and 3,301 ft). Associated native plant species include *Antidesma platyphyllum* var. *hillebrandii*, *Bidens forbesii* (kookoolau), *Chamaesyce remyi* (akoko), *Chamaesyce sparsiflora* (akoko), *Coprosma* spp., *Cyanea fissa*, *Dicranopteris linearis*, *Diplopterygium pinnatum* (uluhe lau nui), *Dubautia imbricata* (naenae), *Dubautia railardioides*, *Gahnia vitiensis* (NCN), *Leptechophylla tameiameia*, *Lobelia kauaensis* (NCN), *Machaerina angustifolia*, *Machaerina mariscoides*, *Melicope* spp., *Psychotria wawrae*, *Sadleria pallida*, *Scaevola gaudichaudii*, *Sphenomeris chinensis*, *Syzygium sandwicensis*, *Tetraplasandra oahuensis*, or *Vaccinium dentatum* (HINHP Database 2000; Lorence and Flynn 1991; Service 1998a; 61 FR 53070; K. Wood, pers. comm., 2001).

The primary threats to *Viola kauaiensis* var. *wahiawaensis* are a risk of extinction from naturally occurring events, such as landslides or hurricanes, and reduced reproductive vigor due to the small number of existing populations and individuals; habitat degradation through the rooting activities of feral pigs; and competition with nonnative plants, such as *Juncus planifolius* (NCN) or *Pterolepis glomerata* (NCN) (HINHP Database 2000; Lorence and Flynn 1991; Service 1994; 61 FR 53070).

Wilkesia hobdyi (dwarf iliau)

Wilkesia hobdyi, a member of an endemic Hawaiian genus in the aster family (Asteraceae), is a short-lived perennial shrub which branches from the base. The tip of each branch bears a tuft of narrow leaves growing in whorls joined together into a short sheathing section at their bases. The cream-colored flower heads grow in clusters. It is distinguished from the other species of *Wilkesia* by having shorter branched stems and fewer shorter leaves per whorl (Carr 1982a, 1999b).

This species is probably pollinated through outcrossing and is probably self-incompatible. Insects are the most likely pollinators. In 1982, Carr reported

that reproduction and seedling establishment were occurring and appeared sufficient to sustain the populations. Flowering has been observed most often in the winter months, but also during June. Fruits may be dispersed when they stick to the feathers of birds. Densities reach one plant per sq m (approximately one sq yard) in localized areas, and hybridization with *Wilkesia gymnoxiphium* may be occurring (Carr 1982a).

First collected in 1968 on Polihale Ridge, Kauai, this species was not formally described until 1971 (St. John 1971). Currently, there are nine occurrences with a total of 406 to 471 individuals. This species occurs on State-owned lands within the Hono o Na Pali NAR, Na Pali Coast State Park, and Puu Ka Pele Forest Reserve and on land under Federal jurisdiction within the Pacific Missile Range Facility (PMRF) at Makaha Ridge. The plants occur in Milolii Valley, Makaha Ridge, Haelele Ridge, Kaaweiki Ridge, Polihale Spring, Pohakumano, and Pohakuao (GDSI 2000; HINHP Database 2000).

Wilkesia hobdyi grows on coastal dry cliffs or very dry ridges at elevations between 12 and 685 m (40 and 2,246 ft). The associated native plant species include *Artemisia australis*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Hibiscus kokio* ssp. *saint johnianus*, *Lipochaeta connata*, *Lobelia niihauensis*, *Myoporum sandwicense*, *Peperomia blanda* (ala ala wai nui), *Peperomia tetraphylla* (ala ala wai nui), *Peperomia* spp., *Peucedanum sandwicense*, *Psydrax odorata*, *Sida fallax*, *Waltheria indica* (uhaloa), or *Wilkesia gymnoxiphium* (Service 1995; Wagner *et al.* 1999; 57 FR 27859; K. Wood, pers. comm., 2001).

The greatest immediate threats to the survival of this species are habitat disturbance and browsing by feral goats. Although the low number of individuals and their restricted habitat could be considered a potential threat to the survival to the species, the plant appears to have vigorous reproduction and may survive indefinitely if goats were eliminated from its habitat. Fire and extinction through naturally occurring events, such as landslides or hurricanes, could also be threats to the survival of the species (Service 1995; 57 FR 27859).

Xylosma crenatum (NCN)

Xylosma crenatum is a dioecious (plant bears only male or female flowers, and must cross-pollinate with another plant to produce viable seed) long-lived perennial tree in the

flacourtia family (Flacourtiaceae). The tree grows up to 14 m (45 ft) tall and has dark gray bark. More coarsely toothed leaf edges and hairy undersides of the leaves distinguish *X. crenatum* from the other Hawaiian member of this genus (Wagner *et al.* 1999).

Little is known about the life history of *Xylosma crenatum*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Xylosma crenatum* was known from three occurrences on Kauai: along upper Nualolo Trail and along Mohihi Road between Waiakoali and Mohihi drainages. Currently, this species is extant on State-owned land in Kainamanu, Nualolo Trail, and Mohihi Valley within Kokee State Park, Kuia NAR, and Na Pali-Kona Forest Reserve. There are three occurrences with a total of 16 individual plants (GDSI 2000; HINHP Database 2000; Service 1995; 57 FR 20580).

Xylosma crenatum is known from diverse *Acacia koa*-*Metrosideros polymorpha* montane mesic or wet forest, or *M. polymorpha*-*Dicranopteris linearis* montane wet forest, at elevations between 936 and 1,284 m (3,070 and 4,212 ft). Associated native plant species include *Athyrium sandwicensis*, *Cheirodendron* spp., *Claoxylon sandwicense*, *Coprosma* spp., *Cyanea* spp. (haha), *Diplazium sandwichianum*, *Dubautia knudsenii*, *Hedyotis* spp., *Ilex anomala*, *Lobelia yuccoides*, *Myrsine* spp., *Nestegis sandwicensis*, *Perrottetia sandwicensis*, *Pleomele aurea*, *Poa sandwicensis*, *Pouteria sandwicensis*, *Psychotria* spp., *Scaevola procera*, *Streblus pendulinus*, *Tetraplasandra* spp., *Touchardia latifolia*, or *Zanthoxylum dipetalum* (HINHP Database 2000; Service 1995; 57 FR 20580; K. Wood, pers. comm., 2001).

The small number of individuals and scattered distribution make this species vulnerable to human or natural environmental disturbance. *Xylosma crenatum* is also threatened by competition from nonnative plants, particularly *Psidium guajava*. In addition, feral pigs may threaten this species (HINHP Database 2000; Service 1995; 57 FR 20580).

Multi-Island Species

Acaena exigua (liliwai)

Acaena exigua is a small perennial rosette herb in the rose family (Rosaceae) with narrow, fern-like, divided leaves. It is distinguished from the other Hawaiian rose family members by its lack of petals and by its urn-

shaped, constricted receptacle (top of flower stem where floral parts are attached) that encloses the carpels (ovule-bearing floral part) (Wagner *et al.* 1999).

Little is known about the life history of *Acaena exigua*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1997).

Historically, *Acaena exigua* was known from Puu Kukui on West Maui and from Mount Waialeale on Kauai. On Kauai, *A. exigua* was last collected between 1869 and 1870, and has not been seen in the wild since (Wagner *et al.* 1999).

Acaena exigua is known only from sites with extensive cloud cover and moderate to strong winds in wet montane shrub bog or bog margins characterized by a thick peat substrate overlying an impervious clay substrate, with hummocks of sedges and grasses, stunted trees, and shrubs and elevations between 666 and 1,598 m (2,185 and 5,244 ft). Associated native plant species include *Deschampsia nubigena* (hair grass), *Dichanthelium cynodon* (NCN), *Dichanthelium hillebrandianum* (NCN), *Dichanthelium isachnoides* (NCN), *Dubautia* spp., *Melicope* spp., *Metrosideros polymorpha*, *Oreobolus furcatus* (NCN), or *Vaccinium* spp. (K. Wood, pers. comm., 2001).

The reason for the disappearance of this species is not known. Although impacts from herbivory and rooting by pigs are assumed and often cited, feral pigs have become established at Waialeale (Kauai) only within the past two decades. The main current threats to *Acaena exigua*, if it exists, are believed to include small population size; human impacts (collecting and site degradation); potentially consumption of vegetative or floral parts of this species by nonnative slugs and/or rats; predation and habitat disturbance by feral pigs; and nonnative plant species, especially *Juncus planifolius* (57 FR 20772).

Achyranthes mutica (NCN)

Achyranthes mutica, a member of the amaranth family (Amaranthaceae) and a short-lived perennial, is a many-branched shrub with egg-shaped leaves and stalkless flowers. This species is distinguished from others in the genus by the shape and size of the sepals and by characteristics of the spike, which is short and congested (Wagner *et al.* 1999).

Historically, *Achyranthes mutica* was known from three collections from opposite ends of the main archipelago:

Kauai and Hawaii. Currently, this species is known only from Hawaii Island, from Kilohana Gulch on private land. It was last observed on Kauai in the 1850s (GDSI 2000; HINHP Database 2000; 61 FR 53108).

Nothing is known of the preferred habitat of or native plant species associated with *Achyranthes mutica* on the island of Kauai.

Nothing is known of the threats to *Achyranthes mutica* on the island of Kauai.

Adenophorus periens (pendent kihi fern)

Adenophorus periens, a member of the grammitis family (Grammitidaceae), 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 (a leaflet) margins, by the pinnae being at right angles to the midrib axis, by the placement of the sori on the pinnae, and 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, 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 known (Linney 1989).

Historically, *Adenophorus periens* was reported from Kauai, Oahu, Lanai, Maui, and the island of Hawaii. Currently, it is known from several locations on Kauai, Molokai, and Hawaii (HINHP Database 2000). On Kauai, there is a total of seven occurrences on private and State-owned lands (Halelea Forest Reserve, Hono o Na Pali NAR, and Kealia Forest Reserve), with approximately 59 individuals, that occur at Pihea, Pali Elele, Waioli Valley, Mount Namahana, Lumahai Valley, Wainiha Valley, and Kapalaoa (GDSI 2000; HINHP Database 2000; 59 FR 56333;).

This epiphytic species usually growing on *Metrosideros polymorpha* trunks, is found in riparian banks of stream systems in well-developed, closed canopy that provides deep shade or high humidity in *M. polymorpha*-

Cibotium glaucum lowland wet forests, open *M. polymorpha* montane wet forest, or *M. polymorpha-Dicranopteris linearis* lowland wet forest at elevations between 107 and 1,593 m (351 and 5,228 ft). Associated native plant species include *Antidesma platyphyllum*, *Athyrium sandwichianum*, *Broussaisia arguta*, *Cheirodendron trigynum*, *Cyanea* spp., *Cyrtandra* spp., *Dicranopteris linearis*, *Freycinetia arborea*, *Hedyotis terminalis*, *Labordia hirtella*, *Machaerina angustifolia*, *Psychotria hexandra*, *Psychotria* spp., *Syzygium sandwicensis*, or *Tetraplasandra oahuensis* (Linney 1989; 59 FR 56333; K. Wood, pers. comm., 2001).

The threats to this species on Kauai include habitat degradation by feral pigs and goats and competition with the nonnative plant *Psidium cattleianum* (HINHP Database 2000; 59 FR 56333).

Alectryon macrococcus var. *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. The underside of the leaf has dense brown hairs, persistent in *A. macrococcus* var. *auwahiensis*, but only on leaves of young *A. macrococcus* var. *macrococcus* plants. 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 2.3 cm (0.9 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 *Alectryon macrococcus*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, and specific environmental requirements are unknown (Service 1997).

Alectryon macrococcus var. *macrococcus* historically and currently occurs on Kauai, Oahu, Molokai and Maui. On Kauai, *A. macrococcus* var. *macrococcus* occurs on State-owned land in the Alakai Wilderness Preserve, Na Pali Coast State Park, Na Pali-Kona Forest Reserve, and Puu Ka Pele Forest Reserve. A total of 18 occurrences of 159 to 174 individuals is known from Kalalau Valley, Kipalau Valley, Haeleele Valley, Waimea Canyon, Hipalau Valley, and Kawaiiki Falls (GDSI 2000; K. Wood, *in litt.* 1999). *Alectryon macrococcus* var. *auwahiensis* is found

only on leeward east Maui (HINHP Database 2000; Medeiros *et al.* 1986).

The habitat of *Alectryon macrococcus* var. *macrococcus* on Kauai is *Diospyros* spp.-*Metrosideros polymorpha* lowland mesic forest, *M. polymorpha* mixed mesic forest, or *Diospyros* spp. mixed mesic forest on dry slopes or in gulches, at elevations between 341 and 954 m (1,120 and 3,129 ft). Associated native plant species include *Acacia koa*, *Alyxia oliviformis*, *Antidesma* spp., *Bobea timonioides*, *Caesalpinia kavaense* (uhiuhi), *Canavalia* spp. (awikiwiki), *Carex meyenii*, *Carex wahuensis*, *Doodia kunthiana*, *Hibiscus waimeae*, *Kokia kauaiensis*, *Melicope knudsenii* (alani), *Microlepia strigosa*, *Munroidendron racemosum*, *Myrsine lanaiensis*, *Nesoluma polynesicum*, *Nestegis sandwicensis*, *Pisonia* spp., *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria* spp., *Psydrax odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Streblus pendulinus*, *Tetraplasandra* spp., *Xylosma* spp., or *Zanthoxylum* spp. (HINHP Database 2000; 57 FR 20772; K. Wood, pers. comm., 2001).

Alectryon macrococcus var. *macrococcus* on Kauai is threatened by feral goats and pigs; the nonnative plant species *Melinis minutiflora*, *Psidium cattleianum*, or *Schinus terebinthifolius* (Christmasberry); damage from the black twig borer; seed predation by rats and mice; fire; depressed reproductive vigor; seed predation by insects (probably the endemic microlepidopteran *Prays* cf. *fulvocanella*); loss of pollinators; and, due to the small remaining number of individuals and their limited distribution, natural or human-caused environmental disturbances that could easily be catastrophic (57 FR 20772).

Bonamia menziesii (NCN)

Bonamia menziesii, a member of the morning-glory family (Convolvulaceae), 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*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically, *Bonamia menziesii* was known from the following general areas: scattered locations on Kauai, the Waianae Mountains of Oahu, scattered locations on Molokai, one location on

West Maui, and eastern Hawaii.

Currently, it is known from Kauai, Oahu, Lanai, Maui, and Hawaii. On Kauai, there are nine occurrences with 36 individuals on State (Alakai Wilderness Preserve, Hono o Na Pali NAR, Lihue-Koloa Forest Reserve, Na Pali Coast State Park, and Na Pali-Kona Forest Reserve) and privately owned lands in Waiahuakua, Kalalau Valley, Awaawapuhi Valley, Paaiki Valley, Kipalau Valley, Hulua, Wahiawa Falls, and Laauhihaihai (GDSI 2000; HINHP Database 2000; Service 1999; K. Wood, *in litt.* 1999).

Bonamia menziesii is found in dry, mesic, or wet *Metrosideros polymorpha*-*Cheirodendron-Dicranopteris* forest at elevations between 351 and 1,415 m (1,151 and 4,644 ft). Associated native plant species include *Acacia koa*, *Alphitonia ponderosa*, *Antidesma platyphyllum*, *Cyanea* spp., *Cyrtandra limahuliensis*, *Cyrtandra pickeringii*, *Dianella sandwicensis*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Dubautia knudsenii*, *Hedyotis terminalis*, *Isodendron longifolium*, *Labordia hirtella*, *Melicope anisata*, *Melicope barbiger* (uahiapele), *Myoporum sandwicense*, *Nestegis sandwicensis*, *Pisonia* spp., *Pittosporum* spp., *Pouteria sandwicensis*, *Psychotria hexandra*, *Psychotria mariniana*, *Psydrax odorata*, *Sapindus oahuensis*, *Scaevola procera*, or *Syzygium sandwicensis* (HINHP Database 2000; Service 1999; K. Wood, pers. comm., 2001).

The primary threats to this species on Kauai include habitat degradation and possible predation by feral pigs and goats, deer, and cattle; competition with a variety of nonnative plants; and fire (59 FR 56333).

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. It is possible that heavy rainfall induces flowering. Populations are found in dry areas, and plants are more likely to be found following heavy rains. Little else is known about the life history of *C. sebaeoides*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically and currently, *Centaurium sebaeoides* is known from scattered localities on the islands of Kauai, Oahu, Molokai, Lanai, and Maui. Currently on Kauai, there are a total of three occurrences with approximately 22 to 52 individuals on State-owned land. This species is found at Punaiea Point, the caves at Nakeikionaiwi, and Pohakuao within the Na Pali Coast State Park (GDSI 2000; HINHP Database 2000).

Centaurium sebaeoides typically grows in volcanic or clay soils or on cliffs in arid coastal areas at elevations between 0 and 147 m (0 and 483 ft). Associated native plant species include *Artemisia* spp. (hinahina), *Bidens* spp., *Chamaesyce celastroides*, *Cyperus phleoides*, *Dodonaea viscosa*, *Fimbristylis cymosa* (mauu akiaki), *Heteropogon contortus*, *Jacquemontia ovalifolia* (pauohiika), *Lipochaeta* spp., *Lycium sandwicense*, *Lysimachia mauritiana* (kolokolo kuahiwi), *Melanthera integrifolia* (nehe), *Panicum fauriei* (NCN), *P. torridum* (kakonakona), *Scaevola sericea*, *Sida fallax*, or *Wikstroemia uva-ursi* (akia) (56 FR 55770; K. Wood, pers. comm., 2001).

The major threats to this species on Kauai include habitat degradation by feral goats and cattle; competition from the nonnative plant species *Casuarina equisetifolia* (ironwood), *Casuarina glauca* (saltmarsh), *Leucaena leucocephala*, *Prosopis pallida* (kiawe), *Schinus terebinthifolius*, *Syzygium cumini* (Java plum), and *Tournefortia argentea* (tree heliotrope); trampling by humans on or near trails; and fire (Medeiros *et al.* 1999; Service 1999; 56 FR 55770).

Ctenitis squamigera (pauoa)

Ctenitis squamigera is a short-lived perennial fern of the spleenwort family (Aspleniaceae). *Ctenitis squamigera* 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 is known about the life history of *Ctenitis squamigera*. Its reproduction cycles, dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998c).

Historically, *Ctenitis squamigera* was recorded from the islands of Kauai, Oahu, Molokai, Lanai, Maui, and Hawaii. It is currently found on Oahu, Lanai, Molokai, and Maui. It was last seen on Kauai in 1896 (HINHP Database 2000).

This species is found on rock faces in gulches in the forest understory at

elevations between 538 and 1,069 m (1,765 and 3,507 ft), in *Metrosideros polymorpha-Diospyros* spp. mesic forest and diverse mesic forest. Associated native plant species include *Myrsine* spp., *Psychotria* spp., and *Xylosma* spp. (HINHP Database 2000; Service 1998a; K. Wood, pers. comm., 2001).

The primary threats to *Ctenitis squamigera* are habitat degradation by feral pigs and goats, competition with nonnative plant species, especially *Psidium cattleianum* or *Schinus terebinthifolius*; fire; and extinction from naturally occurring events due to the small number of existing populations and individuals (Service 1998a).

Cyperus trachysanthos (puukaa)

Cyperus trachysanthos, a member of the sedge family (Cyperaceae), is a perennial grass-like plant with a short rhizome. The culms 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 (bract below each flower), and the length of the culms (Koyama 1999).

Little is known about the life history of *Cyperus trachysanthos*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically, *Cyperus trachysanthos* was known on Niihau, Kauai, and scattered locations on Oahu, Molokai, and Lanai. It was last observed on Molokai in 1912 and on Lanai in 1919. Currently, this species is reported from Nualolo Valley on Kauai on State-owned land and west of Mokouia Valley on the privately owned island of Niihau. There is one known occurrence with about 300 individuals on the island of Kauai and an unknown number of individuals on Niihau (GDSI 2000; HINHP Database 2000).

Cyperus trachysanthos is usually found in wet sites (mud flats, wet clay soil, or wet cliff seeps) on seepy flats or talus slopes at elevations between 0 and 235 m (0 and 771 ft). *Talipariti tiliaceum* (hau) is often found in association with this species (Koyama 1999; 61 FR 53108; K. Wood, pers. comm., 2001).

On Kauai, the threats to this species are the loss of wetlands and a risk of extinction from naturally occurring events, such as landslides or hurricanes, due to the small number of populations. The threats on Niihau are unknown (Service 1999; 61 FR 53108).

Delissea undulata (NCN)

Delissea undulata, a member of the bellflower family (Campanulaceae), is an unbranched, palm-like, woody-stemmed perennial tree, with a dense cluster of leaves at the tip of the stem. One or two knob-like structures often occur on the back of the flower tube. The three recognized subspecies are distinguishable on the basis of leaf shape and margin characters: in *D. undulata* ssp. *kauaiensis*, the leaf blades are oval and have a flat margin with sharp teeth; in *D. undulata* ssp. *niihauensis*, the leaf blades are heart-shaped and have a flat margin with shallow, rounded teeth; and in *D. undulata* ssp. *undulata*, the leaf blades are elliptic to lance-shaped and have a wavy margin with small, sharply pointed teeth. This species is separated from the other closely related members of the genus by its large flowers and berries and broad leaf bases (Lammers 1990).

On the island of Hawaii, *Delissea undulata* ssp. *undulata* has been observed in flower and fruit (immature) in August and outplanted individuals have been observed in flower in July. Little else is known about the life history of *Delissea undulata*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1996; 61 FR 53124).

Historically and currently, *Delissea undulata* ssp. *kauaiensis* is known only from Kauai. Currently, there is one known occurrence of three individuals on State-owned land in Kuia Valley within the Kuia NAR. *Delissea undulata* ssp. *niihauensis* was known only from Niihau, but has not been seen since 1865. *Delissea undulata* ssp. *undulata* was known from southwestern Maui and western Hawaii. Currently, this variety occurs only on the island of Hawaii (GDSI 2000; HINHP Database 2000; Lammers 1999; 61 FR 53124; K. Wood, in litt. 1999).

Delissea undulata ssp. *kauaiensis* occurs in dry or open *Acacia koa*-*Metrosideros polymorpha* mesic forests or *Alphitonia ponderosa* montane forest at elevations between 139 and 1,006 m (456 and 3,299 ft). Associated native species include *Diospyros sandwicensis*, *Dodonaea viscosa*, *Doodia kunthiana*, *Eragrostis variabilis*, *Euphorbia haeleeleana*, *Kokia kauaiensis*, *Microlepia strigosa*, *Panicum* spp., *Pleomele aurea*, *Psychotria greenwelliae*, *Psychotria mariniana*, and *Santalum freycinetianum* (K. Wood, pers. comm., 2001).

The threats to this subspecies on Kauai are feral goats, pigs, and cattle; small population size; competition with the nonnative plants *Delairea odorata* (German ivy) and *Passiflora tarminiana*; fire; introduced slugs; seed predation by rats and introduced game birds; and a risk of extinction due to random naturally occurring events, such as landslides or hurricanes (Service 1996).

Diellia erecta (asplenium-leaved diellia)

Diellia erecta, a short-lived perennial fern in the spleenwort family (Aspleniaceae), grows in tufts of three to nine lance-shaped fronds emerging from a rhizome covered with brown to dark gray scales. This species differs from other members of the genus in having large 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*. Its reproduction cycles, dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically, *Diellia erecta* was known on Kauai, Oahu, Molokai, Lanai, scattered locations on Maui, and various locations on the island of Hawaii. Currently, it is known from Molokai, Maui, and Hawaii and has recently been rediscovered on Kauai. On Kauai there is one known occurrence with 30 individuals in Kawaiiki Valley on State-owned land within the Na Pali-Kona Forest Reserve (Service 1999; HINHP Database 2000).

This species is found in brown granular soil with leaf litter and occasional terrestrial moss on north-facing slopes in deep shade on steep slopes or gulch bottoms in *Metrosideros polymorpha*-*Dicranopteris linearis* wet forest or *M. polymorpha* mixed mesic forest with *Acacia koa* and *Acacia koaia* as co-dominants, at elevations between 655 and 1,224 m (2,149 and 4,016 ft). Associated native plant species include *Asplenium aethiopicum* (NCN), *Asplenium contiguum* (NCN), *Asplenium macraei* (NCN), *Coprosma* spp., *Dodonaea viscosa*, *Dryopteris fusco-atra* (ii), *Dryopteris unidentata*, *Hedyotis terminalis*, *Leptecophylla tameiameia*, *Melicope* spp., *Microlepia strigosa*, *Myrsine* spp., *Nestegis sandwicensis*, *Psychotria* spp., *Syzygium sandwicensis*, or *Wikstroemia* spp. (HINHP Database 2000; Service 1999; K. Wood, pers. comm., 2001).

The major threats to *Diellia erecta* on Kauai are habitat degradation by pigs and goats; competition with nonnative

plant species, including *Blechnum occidentale*, *Cyperus meyenianus* (NCN), *Grevillea robusta* (silk oak), *Lantana camara*, *Morella faya*, *Passiflora tarminiana*, *Rubus argutus*, or *Setaria palmifolia* (palm grass); and random naturally occurring events that could cause extinction and/or reduced reproductive vigor due to the small number of existing individuals (Service 1996; 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).

Little is known about the life history of *Diplazium molokaiense*. Its reproductive cycles, dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998c).

Historically, *Diplazium molokaiense* was found on Kauai, Oahu, Molokai, Lanai, and Maui. Currently, this species is only known from Maui. It was last seen on Kauai in 1909 (HINHP Database 2000).

This species occurs in brown soil with basalt outcrops near waterfalls in lowland or montane mesic *Metrosideros polymorpha*-*Acacia koa* forest at elevations between 476 and 1,284 m (1,562 and 4,212 ft) (HINHP Database 2000; Service 1998a; K. Wood, pers. comm., 2001).

The primary threats on Kauai are habitat degradation by feral goats and pigs and competition with nonnative plant species (HINHP Database 2000; Service 1998a; 59 FR 49025).

Euphorbia haeleeleana (akoko)

Euphorbia haeleeleana, a member of the spurge family (Euphorbiaceae), is a dioecious tree with alternate papery leaves. This short-lived perennial 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. *Euphorbia haeleeleana* sets fruit between August and October. Little else is known about the life history of this species. Reproductive cycles, longevity,

specific environmental requirements, and limiting factors are unknown (Service 1999; Wagner *et al.* 1999).

Euphorbia haeleeleana is known historically and currently from northwestern Kauai and the Waianae Mountains of Oahu. On Kauai, there is a total of 23 occurrences with 597 individuals occurring on State-owned land. It is found at Pohakuao, Kalalau Valley, Hipalau Valley, Koaie Canyon, Mahanaloa Valley, Kuia Valley, Poopooiki Valley, Nualolo Trail, Makaha Valley, and Haeleele Valley within the Kuia NAR, Na Pali Coast State Park, Na Pali-Kona Forest Reserve, and Puu Ka Pele Forest Reserve (HINHP Database 2000; Service 1999; 61 FR 53108; K. Wood, *in litt.* 1999;).

Euphorbia haeleeleana is usually found in lowland mixed mesic or dry *Diospyros* forest that is often codominated by *Metrosideros polymorpha* and *Alphitonia ponderosa*. This plant is typically found at elevations between 284 and 1,178 m (931 and 3,866 ft). Associated native plant species include *Acacia koa*, *Antidesma platyphyllum*, *Carex meyenii*, *Carex wahuensis*, *Claoxylon sandwicense*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Erythrina sandwicensis*, *Kokia kauaiensis*, *Pisonia sandwicensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Sapindus oahuensis*, *Tetraplasandra kawaiensis*, or *Xylosma* spp. (61 FR 53108; K. Wood, pers. comm., 2001).

Threats to this species on Kauai include habitat degradation and destruction by deer, feral goats, and pigs; seed predation by rats; fire; and competition with nonnative plants (Service 1999; 61 FR 53108).

Flueggea neowawraea (mehamehame)

Flueggea neowawraea, a member of the spurge family (Euphorbiaceae), is a large dioecious tree with white oblong pores covering its scaly, pale brown bark. This long-lived perennial 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; Linney 1982; Neal 1965; 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 the life history of this species. Reproductive cycles, longevity, specific environmental requirements, and

limiting factors are unknown (Hayden 1999).

Historically, *Flueggea neowawraea* was known from Kauai, Oahu, Maui, Molokai, and the island of Hawaii. Currently, it is known from Kauai, Oahu, east Maui, and Hawaii. On Kauai, this species is reported from Limahuli Valley, Pohakuao, the left branch of Kalalau Valley, Kuia and Paaiki Valleys, Kipalau Valley, Koaie Falls, Kawaiiki Valley, and Waimea Canyon. There are 10 occurrences with 62 known individuals occurring on State (Alakai Wilderness Preserve, Na Pali Coast State Park, and Na Pali-Kona Forest Reserve) and privately owned lands. However, it has been estimated that the total number of individuals may be slightly over 100 (GDSI 2000; HINHP Database 2000; Hayden 1999; Service 1999; K. Wood, *in litt.* 1999).

Flueggea neowawraea occurs in dry or mesic forests at elevations between 210 and 1,178 m (689 and 3,865 ft). Associated native plant species include *Alectryon macrococcus*, *Antidesma platyphyllum*, *Bidens sandwicensis*, *Bobea timonioides*, *Caesalpinia kawaiensis*, *Charpentiera* spp., *Diospyros* spp., *Diplazium sandwichianum*, *Freycinetia arborea*, *Hibiscus* spp., *Isodendron laurifolium*, *Kokia kauaiensis*, *Melicope* spp., *Metrosideros polymorpha*, *Munroidendron racemosum*, *Myrsine lanaiensis*, *Nesoluma polynesianum*, *Nestegis sandwicensis*, *Tetraplasandra* spp., *Pittosporum* spp., *Pouteria sandwicensis*, *Pritchardia minor*, *Psychotria* spp., *Psydrax odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Streblus pendulinus*, *Xylosma crenatum*, or *Xylosma hawaiiense* (HINHP Database 2000; Service 1999; 59 FR 56333; K. Wood, pers. comm., 2001).

The threats to this species on Kauai include the black twig borer; habitat degradation by feral pigs, goats, deer, and cattle; competition with nonnative plant species; fire; small population size; depressed reproductive vigor; and a potential threat of fruit predation by rats (HINHP Database 2000; Service 1999; 59 FR 56333).

Gouania meyenii (NCN)

Gouania meyenii, a member of the buckthorn family (Rhamnaceae), is a shrub with papery leaves with smooth margins. This short-lived perennial species is distinguished from the two other Hawaiian species of *Gouania* by its lack of tendrils on the flowering branches, the absence of teeth on the leaves, and the lack or small amount of hair on the fruit (Wagner *et al.* 1999).

Gouania meyenii flowers from March to May. Seed capsules develop in about 6 to 8 weeks. Plants appear to live about 10 to 18 years in the wild. Little else is known about the life history of *Gouania meyenii*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998b).

Historically, *Gouania meyenii* was known only from Oahu. It was discovered on Kauai in 1993. Currently, this species is found on Oahu and on Kauai on State-owned land within the Na Pali Coast State Park and the Na Pali-Kona Forest Reserve. There is a total of three occurrences on Kauai with nine individuals found in Kalalau and Hipalau valleys (GDSI 2000; HINHP Database 2000; Wagner *et al.* 1999; 56 FR 55770).

This species typically grows on rocky ledges, cliff faces, and ridge tops in dry shrubland or *Metrosideros polymorpha* lowland diverse mesic forest at elevations between 375 and 1,179 m (1,231 and 3,867 ft). Associated native plant species include *Bidens* spp., *Carex meyenii*, *Chamaesyce* spp., *Diospyros* spp., *Dodonaea viscosa*, *Eragrostis variabilis*, *Euphorbia haelealeana*, *Hedyotis* spp., *Hibiscadelphus* spp., *Lysimachia* spp., *Melicope pallida*, *Neraudia kauaiensis*, *Nestegis sandwicensis*, *Nototrichium divaricatum*, *Panicum lineale*, *Poa mannii*, *Psychotria* spp., *Senna gaudichaudii* (kolomona), or *Wilkesia gymnoxiphium* (HINHP Database 2000; 56 FR 55770; K. Wood, pers. comm., 2001).

Threats to *Gouania meyenii* on Kauai include competition from the nonnative plants *Melinis minutiflora*, *Psidium cattleianum*, or *Schinus terebinthifolius*; fire; habitat degradation by feral pigs and goats; and the small number of extant populations and individuals (Service 1998b; 56 FR 55770).

Hedyotis cookiana (awiwi)

Hedyotis cookiana, a member of the coffee family (Rubiaceae), is a small shrub with many branches and papery-textured leaves which are fused at the base to form a sheath around the stem. This short-lived perennial species is distinguished from other species in the genus that grow on Kauai by being entirely hairless (Wagner *et al.* 1999).

Little is known about the life history of *Hedyotis cookiana*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically, *Hedyotis cookiana* was known from the islands of Hawaii, Kauai, Molokai, and Oahu. Currently, it is only known from one occurrence of 60 to 80 individuals on State-owned land within Hono O Na Pali NAR in Waiahuakua Valley on Kauai (GDSI 2000; HINHP Database 2000).

This species generally grows in streambeds or on steep cliffs close to water sources in relict *Metrosideros polymorpha* lowland mesic and lowland wet forest communities at elevations between 119 and 553 m (392 and 1,814 ft). Associated native plant species include *Boehmeria grandis*, *Chamaesyce celastroides* var. *hanapepensis*, *Hibiscus kokio* ssp. *saintjohnianus*, *Machaerina angustifolia*, *Nototrichium sandwicense*, *Pipturus kauaiensis* (mamaki), *Pleomele aurea*, *Pouteria sandwicensis*, *Psydrax odorata*, or *Rauvolfia sandwicensis* (Wagner *et al.* 1999; K. Wood, pers. comm., 2001).

The threats to this species on Kauai are risk of extinction from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor due to the small number of individuals in the only known population; flooding; competition with nonnative plants; and habitat modification by feral pigs and goats (HINHP Database 2000; Service 1995; 59 FR 9304).

Hibiscus brackenridgei (mao hau hele)

Hibiscus brackenridgei, a short-lived perennial and a 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. Two subspecies are currently recognized, *Hibiscus brackenridgei* ssp. *brackenridgei* and *H. brackenridgei* ssp. *mokuleianus* (Bates 1990).

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 tied to day length. Little else is known about the life history of this plant. Pollination biology, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically, *Hibiscus brackenridgei* was known from the islands of Kauai, Oahu, Lanai, Maui, Molokai, Hawaii, and possibly Kahoolawe. Currently, *Hibiscus brackenridgei* ssp.

mokuleianus is only known from Oahu. *Hibiscus brackenridgei* ssp. *brackenridgei* is currently known from Lanai, Maui, and the island of Hawaii (Bates 1990; HINHP Database 2000; Service 1999).

Nothing is known of the preferred habitat of or native plant species associated with *Hibiscus brackenridgei* on the island of Kauai.

Nothing is known of the threats to *Hibiscus brackenridgei* on the island of Kauai.

Ischaemum byrone (Hilo ischaemum)

Ischaemum byrone, a short-lived perennial member of the grass family (Poaceae), has creeping underground and erect stems. *Ischaemum byrone* can be distinguished from other Hawaiian grasses by its tough outer flower bracts, dissimilar basic flower units, which are awned and two-flowered, and a two-or three-tiered inflorescence (O'Connor 1999).

Additional information on the life history of this plant, its reproductive cycles, longevity, specific environmental requirements, and limiting factors is generally unknown (Service 1996).

Historically, *Ischaemum byrone* was reported from Oahu, Molokai, East Maui, Kauai and the island of Hawaii. Currently, this species is found on Molokai, Hawaii, Maui, and recently rediscovered on the north shore of Kauai. On Kauai, there are two occurrences with at least two individuals at Kaweonui Point and Kauapea Beach on privately owned land (HINHP Database 2000; 59 FR 10305).

The habitat of *Ischaemum byrone* is coastal shrubland, near the ocean among rocks and seepy cliffs at elevations between 0 and 297 m (0 and 975 ft). Associated native plant species include *Bidens* spp., *Chamaesyce celastroides*, *Fimbristylis cymosa*, *Lipochaeta succulenta*, *Lysimachia mauritiana*, or *Scaevola sericea* (HINHP Database 2000; K. Wood, pers. comm., 2001).

Threats to *Ischaemum byrone* include the invasion of nonnative plants, fire, grazing and browsing by feral goats and pigs. Disturbance incurred from these ungulates further promotes the introduction and establishment of nonnative weeds. Some populations are also threatened from residential development (HINHP Database 2000; Service 1996; 59 FR 10305).

Isodendron laurifolium (aupaka)

Isodendron laurifolium, a member of the violet family (Violaceae), is a slender, erect shrub with few branches. The short-lived perennial species is distinguished from others in the genus

by its leathery, oblong-elliptic or narrowly elliptic, lance-shaped leaves (Wagner *et al.* 1999).

Little is known about the life history of *Isodendron laurifolium*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically, *Isodendron laurifolium* is known from scattered locations on Kauai and Oahu. Currently, on Kauai, this species is found on State-owned land within the Alakai Wilderness Preserve, Kuia NAR, Na Pali-Kona Forest Reserve, and Puu Ka Pele Forest Reserve in the following locations: Paaiki, Poopooiki, Kawaiula Valley, Mahanaloa Valley, Makaha Valley, Haelele Valley, Kipalau Valley, Kawaiiki Valley and Kaluahaulu Ridge. There are a total of 13 occurrences with 142 to 154 individuals (GDSI 2000; HINHP Database 2000; Service 1999).

Isodendron laurifolium is usually found at elevations between 376 and 1,163 m (1,233 and 3,817 ft) in diverse mesic forest dominated by *Metrosideros polymorpha*, *Acacia koa* or *Diospyros* spp. Associated native species include *Alphitonia ponderosa*, *Antidesma* spp., *Claoxylon sandwicense*, *Dodonaea viscosa*, *Dubautia* spp., *Elaeocarpus bifidus*, *Euphorbia haeleleana*, *Hedyotis terminalis*, *Kokia kauaiensis*, *Melicope anisata*, *Melicope barbigera*, *Melicope ovata* (alani), *Melicope peduncularis*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pisonia* spp., *Pittosporum glabrum* (hoawa), *Pleomele aurea*, *Pouteria sandwicensis*, *Psychdrax odorata*, *Streblus pendulinus*, or *Xylosma hawaiiense* (HINHP Database 2000; K. Wood, pers. comm., 2001).

The primary threats to *Isodendron laurifolium* on Kauai are habitat degradation by feral goats, pigs and deer and competition with nonnative plants (HINHP Database 2000; Service 1999; 61 FR 53108).

Isodendron longifolium (aupaka)

Isodendron longifolium, a member of the violet family (Violaceae), is a slender, erect shrub. Hairless, leathery, lance-shaped leaves distinguish this species from others in the genus (Wagner *et al.* 1999).

Little is known about the life history of *Isodendron longifolium*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically and currently, *Isodendron longifolium* is known from scattered locations on Kauai and Oahu.

On Kauai, this species is reported from Limahuli Valley, Hanakapiai, Pohakea, Waioli Valley, the left branch of Kalalau Valley, Honopu Valley, Kawaiula Valley, and Haupu. There is a total of 15 occurrences on Kauai containing approximately 804 to 854 individual plants on State (Halelea Forest Reserve, Hono o Na Pali NAR, Kokee State Park, Na Pali Coast State Park, and Na Pali-Kona Forest Reserve) and privately owned lands (GDSI 2000; HINHP Database 2000; Lorence and Flynn 1991, 1993; Service 1999; 61 FR 53108).

Isodendron longifolium is found on steep slopes, gulches, or streambanks and some flats in certain undisturbed areas in mesic or wet *Metrosideros polymorpha*-*Acacia koa* forests, usually at elevations between 38 and 1,541 m (125 and 5,057 ft). Associated native plant species include *Antidesma* spp., *Bidens* spp., *Bobea brevipes*, *Cheirodendron* spp., *Cibotium* spp., *Cyanea hardyi*, *Cyrtandra* spp., *Dicranopteris linearis*, *Diospyros* spp., *Eugenia reinwardtiana*, *Hedyotis* spp., *Ilex anomala*, *Melicope* spp., *Nestegis sandwicensis*, *Peperomia* spp., *Perrottetia sandwicensis*, *Pipturus* spp., *Pittosporum* spp., *Pritchardia* spp., *Psychotria* spp., *Psychdrax odorata*, or *Syzygium sandwicensis* (HINHP Database 2000; Service 1999; 61 FR 53108; K. Wood, pers. comm., 2001).

The major threats to *Isodendron longifolium* on Kauai are habitat degradation or destruction by feral goats and pigs, and competition with various nonnative plants (HINHP Database 2000; Lorence and Flynn 1993; Service 1999; 61 FR 53108).

Isodendron pyrifolium (wahine noho kula)

Isodendron pyrifolium, a short-lived perennial of the violet family (Violaceae), is a small, branched shrub. It is distinguished from other species in the genus by its smaller, green-yellow flowers, and hairy stipules and leaf veins (Wagner *et al.* 1999).

During periods of drought, this species drops all but the newest leaves. After sufficient rain, the plants produce flowers with seeds ripening one to two months later. No other life history information is currently known for this species (Service 1996).

Isodendron pyrifolium is known historically from Niihau, Oahu, Molokai, Lanai, Maui, and Hawaii. It is currently found only on the island of Hawaii. It was last seen on Niihau in the 1850s (GDSI 2000; HINHP Database 2000; Service 1996; 59 FR 10305; Marie Brueggemann, U.S. Fish and Wildlife Service, pers. comm., 2000).

Information on the physical and biological features that are essential to the conservation of *Isodendron pyrifolium* on the island of Niihau is not known.

Information on the threats of *Isodendron pyrifolium* on the island of Niihau is not known.

Lobelia niihauensis (NCN)

Lobelia niihauensis, a member of the bellflower family (Campanulaceae), is a small, branched shrub. This short-lived perennial species is distinguished from others in the genus by lacking or nearly lacking leaf stalks, the width of the leaf, and length of the magenta-colored flowers (Lammers 1999).

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 the life history of *Lobelia niihauensis*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998b).

Historically, *Lobelia niihauensis* was known from Oahu, Niihau, and Kauai. It is now known to be extant only on Kauai and Oahu. On Kauai, 13 occurrences containing 284 to 2,134 individuals are found on State (Hono o Na Pali NAR, Na Pali Coast State Park, Na Pali-Kona Forest Reserve, and Puu Ka Pele Forest Reserve) and privately owned lands in Limahuli Valley, Hoolulu Valley, Hanakoa Valley, Pohakua, the left and right branches of Kalalau Valley, Koaie Canyon, Kipalau Valley, Polihale Spring, Kaaweiki Valley, and Keopaweo (GDSI 2000; HINHP Database 2000; Service 1998b).

Lobelia niihauensis typically grows on exposed, mesic mixed shrubland or coastal dry cliffs at elevations between 11 and 887 m (37 and 2,911 ft). Associated native plant species include *Artemisia australis*, *Bidens sandwicensis*, *Chamaesyce celastroides*, *Charpentiera* spp., *Eragrostis variabilis*, *Hibiscus kokio* ssp. *saint-johnianus*, *Lipochaeta connata* var. *acris*, *Lythrum* spp. (pukamole), *Nototrichium* spp., *Plectranthus parviflorus*, *Schiedea apokremnos*, or *Wilkesia hobbeyi* (HINHP Database 2000; Lammers 1999; Service 1998b; K. Wood, pers. comm., 2001).

On Kauai, the major threats to this species are habitat degradation and browsing by feral goats and competition from nonnative plants (56 FR 55770).

Lysimachia filifolia (NCN)

Lysimachia filifolia, a member of the primrose family (Primulaceae), is a

small shrub. This short-lived perennial species is distinguished from other species of the genus by its leaf shape and width, calyx lobe shape, and corolla length (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 1995).

Historically, *Lysimachia filifolia* was known only from the upper portion of Olokele Valley on Kauai. This species is now also known from Oahu, and the "Blue Hole" area of Waialeale, Kauai. There is currently one occurrence containing a total of 20 to 75 individuals on State-owned land on Kauai within the Lihue-Koloa Forest Reserve (GDSI 2000; HINHP Database 2000; Service 1995).

This species 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 between 177 and 1,308 m (581 and 4,290 ft). Associated native plant species include *Antidesma platyphyllum*, *Bidens valida* (kookoolau), *Bobea elatior* (ahakea lau nui), *Chamaesyce remyi* var. *kauaiensis* (akoko), *Cyanea asarifolia*, *Dubautia plantaginea* ssp. *magnifolia* (naenae), *Eragrostis variabilis*, *Machaerina angustifolia*, *Melicope* spp., *Metrosideros polymorpha*, or *Panicum lineale* (HINHP Database 2000; Service 1995; Wagner *et al.* 1999; 59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to *Lysimachia filifolia* on Kauai include competition with nonnative plant species; habitat degradation by feral pigs; and the risk of extinction on Kauai from naturally occurring events (e.g., landslides and hurricanes), due to the small number of individuals in the only known population (HINHP Database 2000; 59 FR 9304).

Mariscus pennatiformis (NCN)

Mariscus pennatiformis, a short-lived member of the sedge family (Cyperaceae), is a perennial plant with a woody root system covered with brown scales. *Mariscus pennatiformis* is divided into two subspecies, ssp. *bryanii* and ssp. *pennatiformis*, which are distinguished by the length and width of the spikelets; color, length, and width of the glume; and by the shape and length of the fruit. 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 (Koyama 1990).

Mariscus pennatiformis is known to flower from November to December after heavy rainfall. Additional information on the life history of this plant, reproductive cycles, longevity, specific environmental requirements, and limiting factors is generally unknown (Service 1999).

Historically, *Mariscus pennatiformis* was known from Kauai, Oahu, East Maui, the island of Hawaii, and from Laysan Island in the Northwestern Hawaiian Islands). *Mariscus pennatiformis* ssp. *bryanii* is only known from Laysan Island. *Mariscus pennatiformis* ssp. *pennatiformis* is currently found only on East Maui. It was last seen on Kauai in 1927 (GDSI 2000; HINHP Database 2000; K. Wood, in litt. 1999;).

Mariscus pennatiformis is found at elevations between 544 and 1,104 m (1,785 and 3,621 ft) in open sites in *Metrosideros polymorpha*-*Acacia koa* mixed mesic forest. Associated native plant species include *Alsinidendron viscosum*, *Antidesma platyphyllum* var. *hillebrandii*, *Carex alligata* (NCN), *Cyperus laevigatus* (makaloa), *Dianella sandwicensis*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Leptecophylla tameiameia*, *Myrsine linearifolia*, *Nestegis sandwicensis*, *Panicum nephelophilum*, *Poa sandwicensis*, *Psydrax odorata*, *Schiedea stellarioides*, or endemic ferns (HINHP Database 2000; Koyama 1990; K. Wood, pers. comm., 2001).

Threats to *Mariscus pennatiformis* on Kauai include grazing and habitat destruction caused by ungulates; competition from nonnative plant species; and extinction from random naturally occurring events (e.g., landslides or hurricanes) (Service 1999; 59 FR 56333).

Melicope knudsenii (alani)

Melicope knudsenii, a member of the rue family (Rutaceae), is a tree with smooth gray bark and yellowish brown to olive-brown hairs on the tips of the branches. This long-lived perennial species is distinguished from *M. haupuensis* and other members of the genus by the distinct carpels present in the fruit, a hairless endocarp, a larger number of flowers per cluster, and the distribution of hairs on the underside of the leaves (Stone *et al.* 1999).

Little is known about the life history of *Melicope knudsenii*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1995).

Historically and currently, *Melicope knudsenii* is known from Maui and

Kauai. On Kauai, this species is known from 10 occurrences on State-owned land, with a total of 10 individuals, in Poopooiki Valley, Kuia Valley, Mahanaloa Valley, Makaha Ridge, Koaie Canyon, Koaie Falls, and Kawaiiki Valley within Kuia NAR and Na Pali-Kona Forest Reserve (GDSI 2000; HINHP Database 2000; Service 1995; 59 FR 9304; K. Wood, pers. comm., 2001).

Melicope knudsenii grows on forested flats with brown granular soil in lowland dry to montane mesic forests at elevations between 111 and 1,141 m (364 and 3,745 ft) with *Alectryon macrococcus*, *Antidesma platyphylla*, *Bobea brevipes*, *Carex meyenii*, *Cryptocarya mannii*, *Diospyros sandwicensis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Euphorbia haeleeleana*, *Gahnia bechei* (NCN), *Hedyotis* spp., *Hibiscus waimeae*, *Isodendron laurifolium*, *Leptecophylla tameiameia*, *Melicope* spp., *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Panicum nephelophilum*, *Peucedanum sandwicense*, *Pisonia sandwicensis*, *Pittosporum kauaiensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Pritchardia minor*, *Psychotria hobdyi*, *Psydrax odorata*, *Rauvolfia sandwicensis*, *Remya kauaiensis*, *Scaevola procera*, or *Xylosma hawaiiense* (HINHP Database 2000; Service 1995; K. Wood, pers. comm., 2001).

The major threats to *Melicope knudsenii* on Kauai include competition with the nonnative plant *Lantana camara*; habitat degradation by feral goats and pigs; fire; black twig borer; and the risk of extinction on Kauai from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor due to the small number of existing individuals and populations (Service 1995; 59 FR 9304).

Melicope pallida (alani)

Melicope pallida, a member of the rue family (Rutaceae), is a tree with grayish white hairs and black, resinous new growth. The long-lived perennial species differs from *M. haupuensis*, *M. knudsenii*, and other members of the genus by the presence of resinous new growth, leaves folded 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 1995).

Historically and currently, *Melicope pallida* is known from Oahu and Kauai. On Kauai, the species is currently known from the following locations: Pohakuao, the left branch of Kalalau Valley, Honopu Trail, Awaawapuhi Valley, and Koaie Canyon. There is a total of six occurrences with 181 individuals on State-owned land within the Alakai Wilderness Preserve, Na Pali Coast State Park, and Na Pali-Kona Forest Reserve (GDSI 2000; HINHP Database 2000; D.W. Mathias, U.S. Navy (Navy), *in litt.* 1999; K. Wood, *in litt.* 1999).

Melicope pallida usually grows on steep rock faces in lowland to montane mesic to wet forests or shrubland at elevations between 359 and 1,081 m (1,179 and 3,546 ft). Associated native plant species include *Alyxia oliviformis*, *Artemisia australis*, *Boehmeria grandis*, *Carex meyenii*, *Chamaesyce celastroides* var. *hanapeensis*, *Coprosma kauensis* (koi), *Coprosma waimeae*, *Dodonaea viscosa*, *Dryopteris* spp., *Hedyotis terminalis*, *Lepidium serra*, *Melicope* spp., *Metrosideros polymorpha*, *Nototrichium* spp., *Pipturus albidus* (mamaki), *Pleomele aurea*, *Poa mannii*, *Pritchardia minor*, *Psychotria mariniana*, *Sapindus oahuensis*, *Schiedea membranacea*, *Tetraplasandra waialealae*, or *Xylosma hawaiiense* (HINHP Database 2000; K. Wood, pers. comm., 2001).

The major threats to *Melicope pallida* are habitat destruction by feral goats and pigs; the black twig borer; fire; susceptibility to extinction from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor due to the small number of existing populations; and competition with nonnative plant species (Hara and Beardsley 1979; HINHP Database 2000; Medeiros *et al.* 1986; Service 1995; 59 FR 9304).

Peucedanum sandwicense (makou)

Peucedanum sandwicense, a member of the parsley family (Apiaceae), is a parsley-scented, sprawling herb. Hollow stems arise from a short, vertical stem with several fleshy roots. This short-lived perennial species is the only member of the genus in the Hawaiian Islands, one of three genera of the family with species endemic to the island of Kauai. This species differs from the other Kauai members of the parsley family in having larger fruit and pinnately compound leaves with broad leaflets (Constance and Affolter 1999).

Little is known about the life history of *Peucedanum sandwicense*. Flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and

limiting factors are unknown (Service 1995).

Historically and currently, *Peucedanum sandwicense* is known from Molokai, Maui, and Kauai. In 1990, it was discovered on Oahu. On Kauai, there are 15 occurrences on State (Haena State Park, Hono o Na Pali and Kuia NARs, Na Pali Coast State Park, and Na Pali-Kona Forest Reserve) and privately owned lands, containing approximately 156 to 256 individuals, in Maunahou Valley, Limahuli Valley, Hoolulu, Hanakoa, Pohakuao, Kanakou, the left branch of Kalalau Valley, Nualolo Valley, Kuia Valley, Mahanaloa Valley, Koaie Canyon, and Haupu (GDSI 2000; HINHP Database 2000; Service 1995; 59 FR 9304; K. Wood, *in litt.* 1999).

This species grows on cliff habitats in mixed shrub coastal dry cliff communities or diverse mesic forest at elevations between 0 and 1,232 m (0 and 4,041 ft). Associated native plant species include *Acacia koa*, *Artemisia australis*, *Bidens* spp., *Brighamia insignis*, *Carex meyenii*, *Chamaesyce celastroides*, *Diospyros* spp., *Dodonaea viscosa*, *Eragrostis variabilis*, *Hibiscus kokio*, *Lobelia niihauensis*, *Metrosideros polymorpha*, *Panicum lineale*, *Psychotria* spp., *Psydrax odorata*, or *Wilkesia* spp. (Constance and Affolter 1999; HINHP Database 2000; 59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to *Peucedanum sandwicense* on Kauai include competition with introduced plants; habitat degradation and browsing by feral goats and deer; and trampling and trail clearing (Hanakapiai population) (HINHP Database 2000; Service 1995; 59 FR 9304).

Phlegmariurus mannii (wawaeiole)

Phlegmariurus mannii, a member of the clubmoss family (Lycopodiaceae) and a short-lived perennial, is a pendent epiphyte with clustered, delicate red stems and forked reproductive spikes. These traits distinguish it from others in the genus in Hawaii (Holub 1991).

Little is known about the life history of *Phlegmariurus mannii*. Reproductive cycles, dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1997).

Historically, *Phlegmariurus mannii* was known from Kauai, West Maui, and Hawaii island. Currently, this species is extant on Maui and Hawaii island. It was last observed on Kauai in 1900 (HINHP Database 2000).

Nothing is known of the preferred habitat of or native plant species associated with *Phlegmariurus mannii* on the island of Kauai.

Nothing is known of the threats to *Phlegmariurus mannii* on the island of Kauai.

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 (Wagner and Wagner 1987).

Phlegmariurus nutans has been observed fertile, with spores, in May and December. Little else is known about the life history of *Phlegmariurus nutans*. Its reproductive cycles, dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1998b).

Historically, *Phlegmariurus nutans* was known from the island of Kauai and from scattered locations in the Koolau Mountains of Oahu. It is currently only known from Oahu. It was last observed on Kauai in 1900 (HINHP Database 2000; Service 1998b).

Phlegmariurus nutans grows on tree trunks, usually on open ridges and slopes in *Metrosideros polymorpha*-*Dicranopteris linearis* wet forests and occasionally mesic forests at elevations between 601 and 1,594 m (1,971 and 5,228 ft). The vegetation in those areas typically includes *Antidesma platyphyllum*, *Broussaisia arguta*, *Cheirodendron fauriei*, *Cibotium* spp., *Diplopterygium pinnatum*, *Hedyotis terminalis*, *Hibiscus kokio* ssp. *kokio*, *Melicope waialealae* (alani wai), *Scaevola gaudichaudii*, *Syzygium sandwicensis*, *Perrottetia sandwicensis*, *Psychotria hexandra*, *Psychotria mariniana*, or *Psychotria wawrae* (K. Wood, pers. comm., 2001).

The primary threat to *Phlegmariurus nutans* is extinction due to naturally occurring events and/or reduced reproductive vigor because of the small number of remaining individuals and limited distribution. Additional threats to this species are feral pigs and the nonnative plants *Clidemia hirta* or *Psidium cattleianum* (Service 1998b).

Plantago princeps (laukahi kuahiwi)

Plantago princeps, a member of the plantain family (Plantaginaceae), is a small shrub or robust perennial herb. This short-lived perennial 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).

Little is known about the life history of this plant. Reproductive cycles, longevity, specific environmental requirements, and limiting factors are generally unknown. However, individuals have been observed in fruit from April through September (Service 1999).

Historically, *Plantago princeps* was found on the islands of Hawaii, Kauai, Maui, Molokai, and Oahu. It no longer occurs on the island of Hawaii. Two varieties of the species, totaling seven occurrences, with 542 to 670 individuals, are extant on the island of Kauai, on both State (Halelea Forest Reserve, Lihue-Koloa Forest Reserve, and Na Pali Coast State Park) and privately owned lands. Historically on Kauai, *Plantago princeps* var. *anomala* was reported from a ridge west of Hanapepe River. Currently, this variety is found in the left branch of Kalalau Valley and Puu Ki. *Plantago princeps* var. *longibracteata* was historically known from Hanalei, the Wahiawa Mountains, and Hanapepe Falls. Currently, five occurrences are known from Waioli Valley, Alakai Swamp, the left branch of Wainiha Valley, and Blue Hole (GDSI 2000; HINHP Database 2000; Service 1999; 59 FR 56333).

Plantago princeps var. *longibracteata* is found in windswept areas near waterfalls in *Metrosideros polymorpha*-*Cheirodendron* montane wet forest with riparian vegetation at elevations between 347 and 1,598 m (1,139 and 5,244 ft). Associated native plant species include *Antidesma platyphyllum* var. *hillebrandii*, *Bidens forbesii*, *Bobea elatior*, *Boehmeria grandis*, *Cyrtandra* spp., *Diplazium sandwichianum*, *Freycinetia arborea*, *Gunnera kauaiensis*, *Hedyotis centranthoides*, *Hedyotis elatior*, *Huperzia* spp., *Isachne pallens* (NCN), *Machaerina angustifolia*, *Perrottetia sandwicensis*, *Pilea peploides* (NCN), *Pipturus* spp., *Sadleria cyatheoides* (amau), or *Tetraplasandra* spp. (K. Wood, pers. comm., 2001).

Plantago princeps var. *anomala* is found in *Metrosideros polymorpha* lowland to montane transitional wet forest on cliffs and ridges, growing on basalt rocky outcrops. Associated native plant species include *Bidens sandwicensis*, *Carex meyenii*, *Carex wahuensis*, *Charpentiera elliptica*, *Hedyotis* spp., *Lipochaeta connata*, *Lysimachia glutinosa*, *Lysimachia kalalauensis*, *Melicope* spp., *Myrsine*

linearifolia, *Poa mannii*, or *Wilkesia gymnoxiphium* (K. Wood, pers. comm., 2001).

The primary threats to both species of *Plantago princeps* on Kauai are herbivory and habitat degradation by feral pigs and goats and competition with various nonnative plant species. Ungulate herbivory is especially severe, with numerous observations of *P. princeps* individuals exhibiting browse damage (Service 1999; 61 FR 53108).

Platanthera holochila (NCN)

Platanthera holochila, a 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 short-lived perennial is the only species of this genus that occurs in the Hawaiian Islands. It is distinguished from other Hawaiian orchids by its underground tubers that lack roots at the nodes or pseudobulbs, and the shape and length of its dorsal sepal (Wagner *et al.* 1999).

Little is known about the life history of *Platanthera holochila*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically, *Platanthera holochila* was known from the Alakai Swamp, Kaholuamano area, and the Wahiawa Mountains on Kauai, and scattered locations on Oahu, Molokai, and Maui. Currently, *P. holochila* is extant on Kauai, Molokai, and Maui. On Kauai, there are two occurrences with 24 to 34 individuals reported on State-owned lands (Alakai Wilderness Preserve) at Kilohana and the Alakai Swamp (GDSI 2000; HINHP Database 2000).

Platanthera holochila is found in montane *Metrosideros polymorpha*-*Dicranopteris linearis* wet forest or *M. polymorpha* mixed bog at elevations between 803 and 1,563 m (2,635 and 5,128 ft). Associated native plant species include grammitid ferns, *Carex montis-eeka* (NCN), *Cibotium* spp., *Clermontia fauriei* (oha wai), *Coprosma elliptica* (pilo), *Dichantheium* spp., *Leptecophylla tameiameia*, *Lobelia kauaensis*, *Machaerina angustifolia*, *Myrsine denticulata* (kolea), *Oreobolus furcatus*, *Rhynchospira* spp. (kuolohia), *Vaccinium* spp., or *Viola kauaensis* (Service 1999; 61 FR 53108; K. Wood, pers. comm., 2001).

The primary threats to *Platanthera holochila* on Kauai are habitat degradation and destruction by pigs; competition with nonnative plants; and a risk of extinction on Kauai from

naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor, due to the small number of remaining populations and individuals. Predation by introduced slugs may also be a potential threat to this species (Service 1999; 61 FR 53108).

Schiedea nuttallii (NCN)

Schiedea nuttallii, a member of the pink family (Caryophyllaceae), is a generally hairless, erect subshrub. This long-lived perennial 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).

Little is known about the life history of *Schiedea nuttallii*. Based on field and greenhouse observations, it is hermaphroditic (flowers contain both male and female sexual parts). Plants on Oahu have been under observation for 10 years, and they appear to be long-lived. *Schiedea nuttallii* appears to be an outcrossing species. Under greenhouse conditions, plants fail to set seed unless hand-pollinated, suggesting that this species requires insects for pollination. Fruits and flowers are abundant in the wet season but can be found throughout the year (Service 1999).

Historically, *Schiedea nuttallii* was known from Kauai and Oahu and was reported from Maui. Currently, it is found on Kauai, Oahu, and Molokai. On Kauai, one occurrence with 10 to 50 individuals is found on Haupu Peak on privately owned land. The status of individuals previously found in Limahuli Valley is currently unknown (GDSI 2000; HINHP Database 2000; Service 1999; 1 FR 53108).

Schiedea nuttallii typically grows on cliffs in lowland diverse mesic forest dominated by *Metrosideros polymorpha* at elevations between 37 and 702 m (120 and 2,303 ft). Associated native plant species include *Antidesma platyphyllum* var. *hillebrandii*, *Bidens valida*, *Chamaesyce celastroides*, *Eragrostis variabilis*, *Hedyotis acuminata*, *Hedyotis fluvialtilis* (kamapuaa), *Heteropogon contortus*, *Lepidium* spp. (anaunau), *Lobelia niihauensis*, *Perrottetia sandwicensis*, *Pisonia* spp., or *Psychotria* spp. (Service 1999; K. Wood, pers. comm., 2001).

Schiedea nuttallii is threatened on Kauai by habitat degradation and/or destruction by feral pigs, goats, and possibly deer; competition with several nonnative plants; landslides; predation by the black twig borer; and a risk of extinction from naturally occurring

events (e.g., landslides or hurricanes) and/or reduced reproductive vigor, due to the small number of individuals in the only known population. Based on observations that indicate that introduced snails and slugs may consume seeds and seedlings, it is likely that introduced molluscs also represent a major threat to this species (Service 1999; 61 FR 53108).

Sesbania tomentosa (ohai)

Sesbania tomentosa, a member of the pea family (Fabaceae), is typically a sprawling short-lived perennial shrub, but may also be a small tree. Each compound leaf consists of 18 to 38 oblong to elliptic leaflets which are usually sparsely to densely covered with silky hairs. The flowers are salmon colored, tinged with yellow, orange-red, scarlet or, rarely, pure yellow coloration. *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 populations 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 islands). Although once found on Niihau and Lanai, it is no longer extant on those islands. On Kauai, *S. tomentosa* is known from one occurrence, with 11 individuals, on State-owned land at Polihale State Park (GDSI 2000; HINHP Database 2000; 59 FR 56333).

Sesbania tomentosa is found on sandy beaches, dunes, or pond margins at elevations between 0 and 212 m (0 and 694 ft). It commonly occurs in coastal dry shrublands or mixed coastal dry cliffs with the associated native plant species *Chamaesyce celastroides*, *Cuscuta sandwichiana* (kaunaoa), *Dodonaea viscosa*, *Heteropogon contortus*, *Myoporum sandwicense*, *Nama sandwicensis*, *Scaevola sericea*, *Sida fallax*, *Sporobolus virginicus*, *Vitex rotundifolia*, or *Waltheria indica*

(HINHP Database 2000; Service 1999; K. Wood, pers. comm., 2001).

The primary threats to *Sesbania tomentosa* on Kauai are habitat degradation caused by competition with various nonnative plant species; lack of adequate pollination; seed predation by rats, mice, and, potentially, nonnative insects; fire; and destruction by off-road vehicles and other human disturbances (Service 1999; 59 FR 56333).

Silene lanceolata (NCN)

Silene lanceolata, a member of the pink family (Caryophyllaceae), is an upright, short-lived perennial plant with stems 15 to 51 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 *Silene* species by its erect stem, terminal inflorescence, and the length of the calyx, clawed petals, and carpophore (ovary structure) (Wagner *et al.* 1999).

Little is known about the life history of *Silene lanceolata*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1996; 57 FR 46325).

The historical range of *Silene lanceolata* includes five Hawaiian Islands: Kauai, Oahu, Molokai, Lanai, and Hawaii. *Silene lanceolata* is presently extant on the islands of Molokai, Oahu, and Hawaii. It was last observed on Kauai in the 1850s (GDSI 2000; Service 1996; 57 FR 46325).

Nothing is known of the preferred habitat of or native plant species associated with *Silene lanceolata* on the island of Kauai.

Nothing is known of the threats to *Silene lanceolata* on the island of Kauai.

Solanum incompletum (popolo ku mai)

Solanum incompletum, a short-lived perennial member of the nightshade family (Solanaceae), is a woody shrub. Its stems and lower leaf surfaces are covered with prominent reddish prickles or sometimes with yellow fuzzy hairs on young plant parts and lower leaf surfaces. This species differs from other native members of the genus by being generally prickly and having loosely clustered white flowers, curved anthers about 2 mm (0.08 in) long, and berries 1 to 2 cm (0.4 to 0.8 in) in diameter (Symon 1999).

Little is known about the life history of *Solanum incompletum*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (59 FR 56333).

Historically, *Solanum incompletum* was known from Lanai, Maui, and the island of Hawaii. According to David Symon (1999), the known distribution of *S. incompletum* also extended to the islands of Kauai and Molokai. Currently, the species is only known from the island of Hawaii. The reported presence on Kauai may be erroneous (HINHP Database 2000; Christopher Puttock, Bernice P. Bishop Museum, pers. comm., 2001).

Nothing is known of the preferred habitat of or native plant species associated with *Solanum incompletum* on the island of Kauai.

Nothing is known of the threats to *Solanum incompletum* on the island of Kauai.

Solanum sandwicense (aiakeakua, popolo)

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 4 lobes along the margins. This short-lived perennial species differs from others of the genus in 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 1995).

Historically, *Solanum sandwicense* was known from both Oahu and Kauai. Currently, this species is only known from Kauai. On Kauai, this species was historically reported from locations in the Kokee region bounded by Kalalau Valley, Milolii Ridge, and extending to the Hanapepe River. Currently, *S. sandwicense* is only known from eight occurrences of 14 individual plants on private and State lands (Kokee State Park, Kuia NAR, and Na Pali-Kona Forest Reserve) at Kahuamaa Flats, Awaawapuhi Valley, Kumuwela Ridge, Waialae Valley, and Mokuone Stream (GDSI 2000; HINHP Database 2000; Service 1995; 59 FR 9304; K. Wood, *in litt.* 1999; Joan Yoshioka, The Nature Conservancy of Hawaii (TNCH), pers. comm., 2000).

This species is typically found under forest canopies at elevations between 445 and 1,290 m (1,460 and 4,232 ft) in diverse lowland or montane *Acacia koa* or *A. koa*-*Metrosideros polymorpha* mesic forests or occasionally in wet forests. Associated native plant species include *Alphitonia ponderosa*, *Athyrium sandwicensis*, *Bidens* spp.,

Carex meyenii, *Coprosma* spp., *Cryptocarya mannii*, *Dianella sandwicensis*, *Dicranopteris linearis*, *Dubautia* spp., *Hedyotis* spp., *Ilex anomala*, *Melicope* spp., *Poa* spp., *Pouteria sandwicensis*, *Psychotria* spp., *Syzygium sandwicensis*, or *Xylosma hawaiiense* (HINHP Database 2000; Service 1995; 59 FR 9304; K. Wood, pers. comm., 2001).

The major threats to populations of *Solanum sandwicense* on Kauai are habitat degradation by feral pigs, and competition with nonnative plant species (*Hedychium gardnerianum* (kahili ginger), *Lonicera japonica* *Passiflora tarminiana*, *Psidium cattleianum*, or *Rubus argutus*); fire; human disturbance and development; and a risk of extinction from naturally occurring events (e.g., landslides or hurricanes) and/or reduced reproductive vigor due to the small number of existing individuals (HINHP Database 2000; Service 1995; 59 FR 9304).

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 non-succulent annual with an umbrella-shaped inflorescence (Constance and Affolter 1999).

Little is known about the life history of *Spermolepis hawaiiensis*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically, *Spermolepis hawaiiensis* was known from Kauai, Oahu, Lanai, and the island of Hawaii. Currently, it is found on Kauai, Oahu, Molokai, Lanai, West Maui, and Hawaii. On Kauai, this species is known from State-owned land at Koaie Canyon, the rim of Waimea Canyon, and Kapahili Gulch within the Na Pali-Kona Forest Reserve. There are two known occurrences with five individuals total on Kauai (GDSI 2000; HINHP Database 2000; Service 1999; 59 FR 56333).

Spermolepis hawaiiensis is known from *Metrosideros polymorpha* forest and *Dodonaea viscosa* lowland dry shrubland, at elevations between 56 and 725 m (184 and 2,377 ft). Associated native plant species include *Bidens sandwicensis*, *Doryopteris* spp., *Eragrostis variabilis*, *Erythrina sandwicensis*, *Lipochaeta* spp., *Schiedea spargulina*, or *Sida fallax* (HINHP Database 2000; Service 1999; K. Wood, pers. comm., 2001).

The primary threats to *Spermolepis hawaiiensis* on Kauai are habitat degradation by feral goats; competition with various nonnative plants; and erosion, landslides, and rock slides due to natural weathering, which result in the death of individual plants as well as habitat destruction (Service 1999; 59 FR 56333).

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 which 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, which may or may not be slightly inflated (Geesink *et al.* 1999).

Little is known about the life history of *Vigna o-wahuensis*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1999).

Historically, *Vigna o-wahuensis* was known from Niihau, Oahu, Molokai, Lanai, Kahoolawe, Maui, and the island of Hawaii. Currently, *Vigna o-wahuensis* is known from Molokai, Lanai, Kahoolawe, Maui, and the island of Hawaii. It was last observed on Niihau in 1912 (GDSI 2000; HINHP Database 2000; 59 FR 56333).

Nothing is known of the preferred habitat of or native plant species associated with *Vigna o-wahuensis* on the island of Niihau.

Nothing is known of the threats to *Vigna o-wahuensis* on the island of Niihau.

Zanthoxylum hawaiiense (ae)

Zanthoxylum hawaiiense is a medium-sized tree with pale to dark

gray bark and lemon-scented leaves in the rue family (Rutaceae). A long-lived perennial tree, *Z. hawaiiense* is distinguished from other Hawaiian members of the genus by several characteristics: three leaflets all of similar size, one joint on the lateral leaf stalk, and sickle-shaped fruits with a rounded tip (Stone *et al.* 1999).

Little is known about the life history of *Zanthoxylum hawaiiense*. Its flowering cycles, pollination vectors, seed dispersal agents, longevity, specific environmental requirements, and limiting factors are unknown (Service 1996).

Historically, *Zanthoxylum hawaiiense* was known from five islands: Kauai, Molokai, Lanai, Maui, and Hawaii. Currently, *Zanthoxylum hawaiiense* is found on Kauai, Molokai, Maui, and Hawaii. On Kauai, this species is only known from three occurrences with three individuals on State-owned land in Kawaiiki and Kipalau Valleys within the Alakai Wilderness Preserve and Na Pali-Kona Forest Reserve (GDSI 2000; HINHP Database 2000).

Zanthoxylum hawaiiense is reported from lowland dry or mesic forests, at elevations between 332 and 1,151 m (1,089 and 3,774 ft). This species is typically found in forests dominated by *Metrosideros polymorpha* or *Diospyros sandwicensis* with associated native plant species including *Alectryon macrococcus*, *Antidesma platyphyllum*, *Charpentiera elliptica*, *Dodonaea viscosa*, *Melicope* spp., *Myrsine lanaiensis*, *Pisonia* spp., *Pleomele aurea*, *Streblus pendulinus*, or *Zanthoxylum dipetalum* (HINHP Database 2000; K. Wood, pers. comm., 2001).

The threats to *Zanthoxylum hawaiiense* on Kauai include competition with the nonnative plant species *Lantana camara* and *Melia azedarach*; fire; human disturbance; and risk of extinction from naturally occurring events, such as landslides or hurricanes, and/or reduced reproductive vigor due to the small number of existing individuals (Service 1996; 59 FR 10305).

A summary of occurrences and landownership for the 95 plant species reported from the islands of Kauai and Niihau is given in Table 2.

TABLE 2.—SUMMARY OF EXISTING OCCURRENCES ON KAUAI AND NIIHAU, AND LANDOWNERSHIP FOR 95 SPECIES REPORTED FROM KAUAI

Species	Number of current occurrences	Landownership		
		Federal	State	Private
<i>Acaena exigua</i>	0	.....	.....	.....

TABLE 2.—SUMMARY OF EXISTING OCCURRENCES ON KAUAI AND NIIHAU, AND LANDOWNERSHIP FOR 95 SPECIES REPORTED FROM KAUAI—Continued

Species	Number of current occurrences	Landownership		
		Federal	State	Private
<i>Achyranthes mutica</i>	0	.....	.....	.....
<i>Adenophorus periens</i>	7	.....	X	X
<i>Alectryon macrococcus</i>	18	.....	X	.....
<i>Alsinidendron lychnoides</i>	4	.....	X	.....
<i>Alsinidendron viscosum</i>	7	.....	X	.....
<i>Bonamia menziesii</i>	9	.....	X	X
<i>Brighamia insignis</i>	4	.....	X	X
<i>Centaurium sebaeoides</i>	3	.....	X	.....
<i>Chamaesyce halemanui</i>	9	.....	X	.....
<i>Ctenitis squamigera</i>	0	.....	.....	.....
<i>Cyanea asarifolia</i>	2	.....	X	.....
<i>Cyanea recta</i>	8	.....	X	X
<i>Cyanea remyi</i>	7	.....	X	X
<i>Cyanea undulata</i>	1	.....	.....	X
<i>Cyperus trachysanthos</i>	1	.....	.....	X
<i>Cyrtandra cyaneoides</i>	5	.....	X	X
<i>Cyrtandra limahuliensis</i>	13	.....	X	X
<i>Delissea rhytidosperma</i>	3	.....	X	X
<i>Delissea rivularis</i>	2	.....	X	.....
<i>Delissea undulata</i>	1	.....	X	.....
<i>Diellia erecta</i>	1	.....	X	.....
<i>Diellia pallida</i>	6	.....	X	.....
<i>Diplazium molokaiense</i>	0	.....	.....	.....
<i>Dubautia latifolia</i>	26	.....	X	.....
<i>Dubautia pauciflora</i>	4	.....	X	X
<i>Euphorbia haeleeleana</i>	23	.....	X	.....
<i>Exocarpos luteolus</i>	9	.....	X	X
<i>Flueggea neowawraea</i>	10	.....	X	X
<i>Gouania meyenii</i>	3	.....	X	.....
<i>Hedyotis cookiana</i>	1	.....	X	.....
<i>Hedyotis st. johnii</i>	11	.....	X	.....
<i>Hesperomannia lydgatei</i>	4	.....	X	X
<i>Hibiscadelphus woodii</i>	2	.....	X	.....
<i>Hibiscus brackenridgei</i>	0	.....	.....	.....
<i>Hibiscus clayi</i>	1	.....	X	.....
<i>Hibiscus waimeae</i> ssp. <i>hannerae</i>	2	.....	X	X
<i>Ischaemum byrone</i>	2	.....	.....	X
<i>Isodendron laurifolium</i>	13	.....	X	.....
<i>Isodendron longifolium</i>	15	.....	X	X
<i>Isodendron pyriformis</i>	0	.....	.....	.....
<i>Kokia kauaiensis</i>	21	.....	X	.....
<i>Labordia lydgatei</i>	6	.....	X	X
<i>Labordia tinifolia</i> var. <i>wahiawaensis</i>	1	.....	.....	X
<i>Lipochaeta fauriei</i>	5	.....	X	.....
<i>Lipochaeta micrantha</i>	5	.....	X	X
<i>Lipochaeta waimeae</i>	1	.....	X	.....
<i>Lobelia niihauensis</i>	13	.....	X	X
<i>Lysimachia filifolia</i>	1	.....	X	.....
<i>Mariscus pennatifolius</i>	0	.....	.....	.....
<i>Melicope haupuensis</i>	4	.....	X	.....
<i>Melicope knudsenii</i>	10	.....	X	.....
<i>Melicope pallida</i>	6	.....	X	.....
<i>Melicope quadrangularis</i>	0	.....	.....	.....
<i>Munroidendron racemosum</i>	17	.....	X	X
<i>Myrsine linearifolia</i>	12	.....	X	X
<i>Nothocestrum peltatum</i>	10	.....	X	.....
<i>Panicum niihauense</i>	1	.....	X	.....
<i>Peucedanum sandwicense</i>	15	.....	X	X
<i>Phlegmariurus mannii</i>	0	.....	.....	.....
<i>Phlegmariurus nutans</i>	0	.....	.....	.....
<i>Phyllostegia knudsenii</i>	3	.....	X	.....
<i>Phyllostegia waimeae</i>	1	.....	X	.....
<i>Phyllostegia wawrana</i>	4	.....	X	X
<i>Plantago princeps</i>	7	.....	X	X
<i>Platanthera holochila</i>	2	.....	X	.....
<i>Poa mannii</i>	6	.....	X	.....
<i>Poa sandwicensis</i>	9	.....	X	.....
<i>Poa siphonoglossa</i>	5	.....	X	.....
<i>Pritchardia aylmer-robinsonii</i>	1	.....	.....	X

TABLE 2.—SUMMARY OF EXISTING OCCURRENCES ON KAUAI AND NIIHAU, AND LANDOWNERSHIP FOR 95 SPECIES REPORTED FROM KAUAI—Continued

Species	Number of current occurrences	Landownership		
		Federal	State	Private
<i>Pritchardia napaliensis</i>	5	.....	X	.....
<i>Pritchardia viscosa</i>	1	.....	X	.....
<i>Pteralyxia kauaiensis</i>	39	.....	X	.....
<i>Remya kauaiensis</i>	17	.....	X	.....
<i>Remya montgomeryi</i>	6	.....	X	.....
<i>Schiedea apokremnos</i>	5	.....	X	.....
<i>Schiedea helleri</i>	3	.....	X	.....
<i>Schiedea kauaiensis</i>	5	.....	X	.....
<i>Schiedea membranacea</i>	10	.....	X	X
<i>Schiedea nuttallii</i>	1	.....	.....	X
<i>Schiedea spergulina</i> var. <i>leiopoda</i>	1	.....	.....	X
<i>Schiedea spergulina</i> var. <i>spergulina</i>	3	.....	X	.....
<i>Schiedea stellarioides</i>	3	.....	X	.....
<i>Sesbania tomentosa</i>	1	.....	X	.....
<i>Silene lanceolata</i>	0	.....	.....	.....
<i>Solanum incompletum</i>	0	.....	.....	.....
<i>Solanum sandwicense</i>	8	.....	X	X
<i>Spermolepis hawaiiensis</i>	2	.....	X	.....
<i>Stenogyne campanulata</i>	3	.....	X	.....
<i>Vigna o-wahuensis</i>	0	.....	.....	.....
<i>Viola helenae</i>	1	.....	.....	X
<i>Viola kauaiensis</i> var. <i>wahiawaensis</i>	2	.....	.....	X
<i>Wilkesia hobdyi</i>	9	X*	X	.....
<i>Xylosma crenatum</i>	3	.....	X	.....
<i>Zanthoxylum hawaiiense</i>	3	.....	X	.....

*Pacific Missile Range Facility at Makaha Ridge.

Previous Federal Action

Federal action on these plants began as a result of section 12 of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*), which directed the Secretary of the Smithsonian Institution to prepare a report on plants considered to be endangered, threatened, or extinct in the United States. This report, designated as House Document No. 94-51, was presented to Congress on January 9, 1975. In that document, *Adenophorus periens*, *Alectryon macrococcus* (as *A. macrococcus* var. *macrococcus* and *A. mahoe*), *Bonamia menziesii*, *Brighamia insignis* (as *B. citrina* var. *napaliensis* and *B. insignis*), *Chamaesyce halemanui* (as *Euphorbia halemanui*), *Delissea rhytidosperra*, *Dubautia latifolia* (as *D. latifolia* var. *latifolia*), *Exocarpos luteolus*, *Flueggea neowawraea* (as *Drypetes phyllanthoides*), *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscus clayi* (as *H. clayi* and *H. newhousei*), *H. waimeae* ssp. *hannerae* (as *H. waimeae*), *Kokia kauaiensis*, *Lipochaeta fauriei*, *L. micrantha* (as *L. exigua*), *Lobelia niihauensis*, *Melicope haupuensis* (as *Pelea haupuensis*), *M. knudsenii* (as *P. multiflora*), *M. pallida* (as *P. leveillei* and *P. pallida*), *Melicope quadrangularis* (*Pelea quadrangularis*), *Myrsine linearifolia* (as *M. linearifolia* var. *linearifolia*), *Nothocestrum*

peltatum, *Peucedanum sandwicense* (as *P. kauaiense*), *Phyllostegia knudsenii*, *Plantago princeps* (as *P. princeps* var. *elata*, *P. var. laxifolia*, and *P. var. princeps*), *Poa sandwicensis*, *Pritchardia aylmer-robinsonii*, *Sesbania tomentosa* (as *S. hobdyi* and *S. tomentosa* var. *tomentosa*), *Solanum sandwicense* (as *S. hillebrandii* and *S. kauaiense*), *Viola helenae*, *V. kauaiensis* var. *wahiawaensis*, *Wilkesia hobdyi*, *Xylosma crenatum* (as *Antidesma crenatum*), and *Zanthoxylum hawaiiense* (as *Z. hawaiiense* var. *citidiora*), were considered to be endangered; *Delissea rivularis*, *Diellia pallida* (as *Diellia laciniata*), *Labordia lydgatei*, *Lipochaeta micrantha*, *L. waimeae*, *Lysimachia filifolia*, *Schiedea membranacea*, and *Zanthoxylum hawaiiense* (as *Z. hawaiiense* var. *hawaiiense* and *Z. hawaiiense* var. *velutinosum*) were considered to be threatened; and *Delissea undulata* (as *D. undulata* var. *argutidentata* and *D. undulata* var. *undulata*), *Gouania meyenii*, *Hedyotis cookiana*, *Melicope knudsenii* (as *Pelea knudsenii* and *P. tomentosa*), *Munroidendron racemosum* (as *M. racemosum* var. *macdanielsii*), *Plantago princeps* (as *P. princeps* var. *acaulis*, *P. princeps* var. *denticulata*, and *P. princeps* var. *queleniana*), and *Remya kauaiensis* were considered to be extinct. On July 1, 1975, we published

a notice in the **Federal Register** (40 FR 27823) of our acceptance of the Smithsonian report as a petition within the context of section 4(c)(2) (now section 4(b)(3)) of the Act, and gave notice of our intention to review the status of the plant taxa named therein. As a result of that review, on June 16, 1976, we published a proposed rule in the **Federal Register** (41 FR 24523) to determine endangered status pursuant to section 4 of the Act for approximately 1,700 vascular plant taxa, including all of the above taxa except for *Diellia pallida*. The list of 1,700 plant taxa was assembled on the basis of comments and data received by the Smithsonian Institution and the Service in response to House Document No. 94-51 and the July 1, 1975, **Federal Register** publication (40 FR 27823).

General comments received in response to the 1976 proposal were summarized in an April 26, 1978, **Federal Register** publication (43 FR 17909). In 1978, amendments to the Act required that all proposals over 2 years old be withdrawn. A 1-year grace period was given to proposals already over 2 years old. On December 10, 1979, we published a notice in the **Federal Register** (44 FR 70796) withdrawing the portion of the June 16, 1976, proposal that had not been made final, along with four other proposals that had expired. We published updated Notices of

Review for plants on December 15, 1980 (45 FR 82479), September 27, 1985 (50 FR 39525), February 21, 1990 (55 FR 6183), and September 30, 1993 (58 FR

51144). We listed the 95 species as endangered or threatened between 1991 and 1996. A summary of the listing actions can be found in Table 3(a). A

summary of the critical habitat actions can be found in Table 3(b).

TABLE 3(a).—SUMMARY OF LISTING ACTIONS FOR 95 PLANT SPECIES FROM KAUAI AND NIIHAU

Species	Federal status	Proposed listing rule		Final listing rule	
		Date	Federal Register	Date	Federal Register
<i>Acaena exigua</i>	E	5/24/1991	56 FR 23842	5/15/1992	57 FR 20772
<i>Achyranthes mutica</i>	E	10/2/1995	60 FR 51417	10/10/1996	61 FR 53108
<i>Adenophorus periens</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Alectryon macrococcus</i>	E	5/24/1991	56 FR 23842	5/15/1992	57 FR 20772
<i>Alsinidendron lychnoides</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Alsinidendron viscosum</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Bonamia menziesii</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Brighamia insignis</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Centaurium sebaeoides</i>	E	9/28/1990	55 FR 39664	10/29/1991	56 FR 55770
<i>Chamaesyce halemanui</i>	E	9/21/1990	55 FR 39301	5/13/1992	57 FR 20580
<i>Ctenitis squamigera</i>	E	6/24/1993	58 FR 34231	9/9/1994	59 FR 49025
<i>Cyanea asarifolia</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 09304
<i>Cyanea recta</i>	T	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Cyanea remyi</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Cyanea undulata</i>	E	9/17/1990	55 FR 38242	9/20/1991	56 FR 47695
<i>Cyperus trachysanthos</i>	E	10/2/1995	60 FR 51417	10/10/1996	61 FR 53108
<i>Cyrtandra cyaneoides</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Cyrtandra limahuliensis</i>	T	10/30/1991	56 FR 55862	2/25/1994	59 FR 09304
<i>Delissea rhytidosperra</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 09304
<i>Delissea rivularis</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Delissea undulata</i>	E	6/27/1994	59 FR 32946	10/10/1996	61 FR 53124
<i>Diellia erecta</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Diellia pallida</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Diplazium molokaiense</i>	E	6/24/1993	58 FR 34231	9/9/1994	59 FR 49025
<i>Dubautia latifolia</i>	E	9/21/1990	55 FR 39301	5/13/1992	57 FR 20580
<i>Dubautia pauciflorula</i>	E	9/17/1990	55 FR 38242	9/20/1991	56 FR 47695
<i>Euphorbia haeleeleana</i>	E	10/2/1995	60 FR 51417	10/10/1996	61 FR 53108
<i>Exocarpos luteolus</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Flueggea neowawraea</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Gouania meyenii</i>	E	9/28/1990	55 FR 39664	10/29/1991	56 FR 55770
<i>Hedyotis cookiana</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 09304
<i>Hedyotis st. johnii</i>	E	8/3/1990	55 FR 31612	9/30/1991	56 FR 49639
<i>Hesperomannia lydgatei</i>	E	9/17/1990	55 FR 38242	9/20/1991	56 FR 47695
<i>Hibiscadelphus woodii</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Hibiscus brackenridgei</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Hibiscus clayi</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Hibiscus waimeae</i> ssp.	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Ischaemum byrone</i>	E	12/17/1992	57 FR 59951	3/4/1994	59 FR 10305
<i>Isodendron laurifolium</i>	E	10/2/1995	60 FR 51417	10/10/1996	61 FR 53108
<i>Isodendron longifolium</i>	T	10/2/1995	60 FR 51417	10/10/1996	61 FR 53108
<i>Isodendron pyrifolium</i>	E	12/17/1992	57 FR 59941	3/4/1994	59 FR 10305
<i>Kokia kauaiensis</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Labordia lydgatei</i>	E	9/17/1990	55 FR 38242	9/20/1991	56 FR 47695
<i>Labordia tinifolia</i> var.	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Lipochaeta fauriei</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Lipochaeta micrantha</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 09304
<i>Lipochaeta waimeae</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 09304
<i>Lobelia niihauensis</i>	E	9/28/1990	55 FR 39664	10/29/1991	56 FR 55770
<i>Lysimachia filifolia</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 09304
<i>Mariscus pennatifolius</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Melicope haupuensis</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Melicope knudsenii</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Melicope pallida</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Melicope quadrangularis</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Munroidendron racemosum</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Myrsine linearifolia</i>	T	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Nothocestrum peltatum</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Panicum niihauense</i>	E	10/2/1995	60 FR 51417	10/10/1996	61 FR 53108
<i>Peucedanum sandwicense</i>	T	10/30/1991	56 FR 55862	2/25/1994	59 FR 09304
<i>Phlegmariurus mannii</i>	E	5/24/1991	56 FR 23842	5/15/1992	57 FR 20772
<i>Phlegmariurus nutans</i>	E	9/28/1990	55 FR 39664	10/29/1991	56 FR 55770
<i>Phyllostegia knudsenii</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Phyllostegia waimeae</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 09304
<i>Phyllostegia wawrana</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070

TABLE 3(a).—SUMMARY OF LISTING ACTIONS FOR 95 PLANT SPECIES FROM KAUAI AND NIIHAU—Continued

Species	Federal status	Proposed listing rule		Final listing rule	
		Date	Federal Register	Date	Federal Register
<i>Plantago princeps</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Platanthera holochila</i>	E	10/2/1995	60 FR 51417	10/10/1996	61 FR 53108
<i>Poa mannii</i>	E	4/7/1993	58 FR 18073	11/10/1994	59 FR 56330
<i>Poa sandvicensis</i>	E	9/21/1990	55 FR 39301	5/13/1992	57 FR 20580
<i>Poa siphonoglossa</i>	E	9/21/1990	55 FR 39301	5/13/1992	57 FR 20580
<i>Pritchardia aylmer-robinsonii</i>	E	12/17/1992	57 FR 59970	8/7/1996	61 FR 41020
<i>Pritchardia napaliensis</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Pritchardia viscosa</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Pteralyxia kauaiensis</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Remya kauaiensis</i>	E	10/2/1989	54 FR 40447	1/14/1991	56 FR 1450
<i>Remya montgomeryi</i>	E	10/2/1989	54 FR 40447	1/14/1991	56 FR 1450
<i>Schiedea apokremnos</i>	E	8/3/1990	55 FR 31612	9/30/1991	56 FR 49639
<i>Schiedea helleri</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Schiedea kauaiensis</i>	E	10/2/1995	60 FR 51417	10/10/1996	61 FR 53108
<i>Schiedea membranacea</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Schiedea nuttallii</i>	E	10/2/1995	60 FR 51417	10/10/1996	61 FR 53108
<i>Schiedea spergulina</i> var. <i>leiopoda</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Schiedea spergulina</i> var. <i>spergulina</i>	T	10/30/1991	56 FR 55862	2/25/1994	59 FR 9304
<i>Schiedea stellarioides</i>	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Sesbania tomentosa</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Silene lanceolata</i>	E	9/20/1991	56 FR 47718	10/8/1992	57 FR 46325
<i>Solanum incompletum</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Solanum sandwicense</i>	E	10/30/1991	56 FR 55862	2/25/1994	59 FR 09304
<i>Spermolepis hawaiiensis</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Stenogyne campanulata</i>	E	9/21/1990	55 FR 39301	5/13/1992	57 FR 20580
<i>Vigna o-wahuensis</i>	E	9/14/1993	58 FR 48012	11/10/1994	59 FR 56333
<i>Viola helenae</i>	E	9/17/1990	55 FR 38242	9/20/1991	56 FR 47695
<i>Viola kauaiensis</i> var.	E	9/25/1995	60 FR 49359	10/10/1996	61 FR 53070
<i>Wilkesia hobdyi</i>	E	10/2/1989	54 FR 40444	6/22/1992	57 FR 27859
<i>Xylosma crenatum</i>	E	9/21/1990	55 FR 39301	5/13/1992	57 FR 20580
<i>Zanthoxylum hawaiiense</i>	E	12/17/1992	57 FR 59951	3/4/1994	59 FR 10305

Key: E = Endangered T = Threatened

TABLE 3(b).—SUMMARY OF CRITICAL HABITAT ACTIONS FOR 95 PLANT SPECIES FROM KAUAI AND NIIHAU

Species	Proposed critical habitat designation or nondesignation		Final critical habitat	
	Date(s)	Federal Register	Date(s)	Federal Register
<i>Acaena exigua</i>	12/18/2000	65 FR 79192	NA	NA
<i>Achyranthes mutica</i>	5/28/2002	67 FR 36968	NA	NA
<i>Adenophorus periers</i>	11/7/2000	65 FR 66808	NA	NA
	12/29/2000	65 FR 83157		
	1/28/2002	67 FR 3940		
	3/4/2002	67 FR 9806		
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 36968		
	5/28/2002	67 FR 37108		
<i>Alectryon macrococcus</i>	11/7/2000	65 FR 66808	NA	NA
	12/18/2000	65 FR 79192		
	12/29/2000	65 FR 83157		
	1/28/2002	67 FR 3940		
	4/3/2002	67 FR 15856		
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 37108		
<i>Alsinidendron lychnoides</i>	11/7/2000	65 FR 66808	NA	NA
<i>Alsinidendron viscosum</i>	11/7/2000	65 FR 66808	NA	NA
<i>Bonamia menziesii</i>	11/7/2000	65 FR 66808	NA	NA
	12/18/2000	65 FR 79192		
	12/27/2000	65 FR 82086		
	1/28/2002	67 FR 3940		
	3/4/2002	67 FR 36968		
	4/3/2002	67 FR 15856		
	5/28/2002	67 FR 9806		
	5/28/2002	67 FR 37108		
<i>Brighamia insignis</i>	11/7/2000	65 FR 66808	NA	NA
<i>Centaurium sebaeoides</i>	11/7/2000	65 FR 66808	NA	NA

TABLE 3(b).—SUMMARY OF CRITICAL HABITAT ACTIONS FOR 95 PLANT SPECIES FROM KAUAI AND NIIHAU—Continued

Species	Proposed critical habitat designation or nondesignation		Final critical habitat	
	Date(s)	Federal Register	Date(s)	Federal Register
	12/18/2000	65 FR 79192		
	12/27/2000	65 FR 82086		
	12/29/2000	65 FR 83157		
	1/28/2002	67 FR 3940		
	3/4/2002	67 FR 9806		
	4/3/2002	67 FR 15856		
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 37108		
<i>Chamaesyce halemanui</i>	11/7/2000	65 FR 66808	NA	NA
<i>Ctenitis squamigera</i>	12/18/2000	65 FR 79192	NA	NA
	12/27/2000	65 FR 79192		
	12/29/2000	65 FR 83157		
	1/28/2002	67 FR 3940		
	3/4/2002	67 FR 9806		
	4/3/2002	67 FR 15856		
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 36968		
<i>Cyanea asarifolia</i>	11/07/2000	65 FR 66808	NA	NA
<i>Cyanea recta</i>	11/07/2000	65 FR 66808	NA	NA
<i>Cyanea remyi</i>	11/7/2000	65 FR 66808	NA	NA
<i>Cyanea undulata</i>	11/7/2000	65 FR 66808	NA	NA
<i>Cyperus trachysanthos</i>	11/7/2000	65 FR 66808	NA	NA
	1/28/2002	67 FR 3940		
	3/4/2002	67 FR 9806		
	5/28/2002	67 FR 37108		
<i>Cyrtandra cyaneoides</i>	11/7/2000	65 FR 66808	NA	NA
<i>Cyrtandra limahuliensis</i>	11/7/2000	65 FR 66808	NA	NA
<i>Delissea rhytidosperra</i>	11/7/2000	65 FR 66808	NA	NA
<i>Delissea rivularis</i>	11/7/2000	65 FR 66808	NA	NA
<i>Delissea undulata</i>	11/7/2000	65 FR 66808	NA	NA
<i>Diellia erecta</i>	12/18/2000	65 FR 79192	NA	NA
	12/29/2000	65 FR 83158		
	1/28/2002	67 FR 3940		
	3/4/2002	67 FR 9806		
	4/3/2002	67 FR 15856		
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 36968		
	5/28/2002	67 FR 37108		
<i>Diellia pallida</i>	11/7/2000	65 FR 66808	NA	NA
<i>Diplazium molokaiense</i>	12/18/2000	65 FR 79192	NA	NA
	01/28/2002	67 FR 3940		
	4/3/2002	67 FR 15856		
	3/4/2002	67 FR 9806		
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 37108		
<i>Dubautia latifolia</i>	11/07/2000	65 FR 66808	NA	NA
<i>Dubautia pauciflora</i>	11/07/2000	65 FR 66808	NA	NA
<i>Euphorbia haeleeleana</i>	11/07/2000	65 FR 66808	NA	NA
	01/28/2002	67 FR 3940		
	05/28/2002			
<i>Exocarpos luteolus</i>	11/07/2000	65 FR 66808	NA	NA
<i>Flueggea neowawraea</i>	11/07/2000	65 FR 66808	NA	NA
	12/18/2000	65 FR 79192		
	1/28/2002	67 FR 3940		
	4/3/2002	67 FR 15856		
	04/5/2002	67 FR 16492		
	5/28/2002	67 FR 36968		
	5/28/2002	67 FR 37108		
<i>Gouania meyenii</i>	11/07/2000	65 FR 66808	NA	NA
	1/28/2002	67 FR 3940		
<i>Hedyotis cookiana</i>	11/07/2000	65 FR 66808	NA	NA
<i>Hedyotis st. johnii</i>	11/7/2000	65 FR 66808	NA	NA
<i>Hesperomannia lydgatei</i>	11/07/2000	65 FR 66808	NA	NA
<i>Hibiscadelphus woodii</i>	11/7/2000	65 FR 66808	NA	NA
<i>Hibiscus brackenridgei</i>	12/18/2000	65 FR 79192	NA	NA
	12/27/2000	65 FR 82086		
	3/4/2002	67 FR 9806		
	4/3/2002	67 FR 15856		

TABLE 3(b).—SUMMARY OF CRITICAL HABITAT ACTIONS FOR 95 PLANT SPECIES FROM KAUAI AND NIIHAU—Continued

Species	Proposed critical habitat designation or nondesignation		Final critical habitat	
	Date(s)	Federal Register	Date(s)	Federal Register
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 36968		
	5/28/2002	67 FR 37108		
<i>Hibiscus clayi</i>	11/07/2000	65 FR 66808	NA	NA
<i>Hibiscus waimeae</i> ssp. <i>hannerae</i>	11/07/2000	65 FR 66808	NA	NA
<i>Ischaemum byrone</i>	12/18/2000	65 FR 79192	NA	NA
	12/29/2000	65 FR 83158		
	1/28/2002	67 FR 3940		
	4/3/2002	67 FR 15856		
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 36968		
<i>Isodendron laurifolium</i>	11/07/2000	65 FR 66808	NA	NA
	1/28/2002	67 FR 3940		
	5/28/2002	67 FR 37108		
<i>Isodendron longifolium</i>	11/07/2000	65 FR 66808	NA	NA
	1/28/2002	67 FR 3940		
	5/28/2002	67 FR 37108		
<i>Isodendron pyrifolium</i>	3/4/2002	67 FR 9806	NA	NA
	4/3/2002	67 FR 15856		
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 36968		
	5/28/2002	67 FR 37108		
<i>Kokia kauaiensis</i>	11/07/2000	65 FR 66808	NA	NA
<i>Labordia lydgatei</i>	11/07/2000	65 FR 66808	NA	NA
<i>Labordia tinifolia</i> var. <i>wahiawaensis</i>	11/07/2000	65 FR 66808	NA	NA
<i>Lipochaeta fauriei</i>	11/07/2000	65 FR 66808	NA	NA
<i>Lipochaeta micrantha</i>	11/07/2000	65 FR 66808	NA	NA
<i>Lipochaeta waimeae</i>	11/07/2000	65 FR 66808	NA	NA
<i>Lobelia niihauensis</i>	11/07/2000	65 FR 66808	NA	NA
	1/28/2002	67 FR 3940		
	5/28/2002	67 FR 37108		
<i>Lysimachia filifolia</i>	11/07/2000	65 FR 66808	NA	NA
	1/28/2002	67 FR 3940		
	5/28/2002	67 FR 37108		
<i>Mariscus pennatifolius</i>	12/18/2000	65 FR 79192	NA	NA
	1/28/2002	67 FR 3940		
	4/3/2002	67 FR 15856		
	5/14/2002	67 FR 34522		
	5/28/2002	67 FR 37108		
<i>Melicope haupuensis</i>	11/07/2000	65 FR 66808	NA	NA
<i>Melicope knudsenii</i>	11/07/2000	65 FR 66808	NA	NA
	12/18/2000	65 FR 79192		
	1/28/2002	67 FR 3940		
	4/3/2002	67 FR 15856		
<i>Melicope pallida</i>	11/07/2000	65 FR 66808	NA	NA
	1/28/2002	67 FR 3940		
	5/28/2002	67 FR 37108		
<i>Melicope quadrangularis</i>	11/07/2000	65 FR 66808	NA	NA
<i>Munroidendron racemosum</i>	11/07/2000	65 FR 66808	NA	NA
<i>Myrsine linearifolia</i>	11/07/2000	65 FR 66808	NA	NA
<i>Nothocestrum peltatum</i>	11/7/2000	65 FR 66808	NA	NA
<i>Panicum niihauense</i>	11/7/2000	65 FR 66808	NA	NA
<i>Peucedanum sandwicense</i>	11/7/2000	65 FR 66808	NA	NA
	12/18/2000	65 FR 79192		
	12/29/2000	65 FR 83157		
	1/28/2002	67 FR 3940		
	4/3/2002	67 FR 15856		
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 37108		
<i>Phlegmariurus mannii</i>	12/18/2000	65 FR 79192	NA	NA
	4/3/2002	67 FR 15856		
<i>Phlegmariurus nutans</i>	1/28/2002	67 FR 3940	NA	NA
	5/28/2002	67 FR 37108		
<i>Phyllostegia knudsenii</i>	11/7/2000	65 FR 66808	NA	NA
<i>Phyllostegia waimeae</i>	11/7/2000	65 FR 66808	NA	NA
<i>Phyllostegia wawrana</i>	11/7/2000	65 FR 66808	NA	NA
<i>Plantago princeps</i>	11/7/2000	65 FR 66808	NA	NA
	12/18/2000	65 FR 79192		

TABLE 3(b).—SUMMARY OF CRITICAL HABITAT ACTIONS FOR 95 PLANT SPECIES FROM KAUAI AND NIIHAU—Continued

Species	Proposed critical habitat designation or nondesignation		Final critical habitat	
	Date(s)	Federal Register	Date(s)	Federal Register
<i>Platanthera holochila</i>	12/29/2000 1/28/2002 4/3/2002 4/5/2002 11/07/2000 12/18/2000 12/29/2000 1/28/2002 4/3/2002 4/5/2002 5/28/2002	65 FR 83158 67 FR 3940 67 FR 15856 67 FR 16492 65 FR 66808 65 FR 79192 65 FR 83158 67 FR 3940 67 FR 15856 67 FR 16492 67 FR 37108	NA	NA
<i>Poa mannii</i>	11/7/2000	65 FR 66808	NA	NA
<i>Poa sandvicensis</i>	11/7/2000	65 FR 66808	NA	NA
<i>Poa siphonoglossa</i>	11/7/2000	65 FR 66808	NA	NA
<i>Pritchardia aylmer-robinsonii</i>	11/7/2000	65 FR 66808	NA	NA
<i>Pritchardia napaliensis</i>	11/7/2000	65 FR 66808	NA	NA
<i>Pritchardia viscosa</i>	11/7/2000	65 FR 66808	NA	NA
<i>Pteralyxia kauaiensis</i>	11/7/2000	65 FR 66808	NA	NA
<i>Remya kauaiensis</i>	11/7/2000	65 FR 66808	NA	NA
<i>Remya montgomeryi</i>	11/7/2000	65 FR 66808	NA	NA
<i>Schiedea apokremnos</i>	11/7/2000	65 FR 66808	NA	NA
<i>Schiedea helleri</i>	11/7/2000	65 FR 66808	NA	NA
<i>Schiedea kauaiensis</i>	11/7/2000	65 FR 66808	NA	NA
<i>Schiedea membranacea</i>	11/7/2000	65 FR 66808	NA	NA
<i>Schiedea nuttallii</i>	11/7/2000	65 FR 66808	NA	NA
<i>Schiedea spergulina</i> var. <i>leiopoda</i>	12/29/2000 1/28/2002 4/5/2002 5/28/2002	65 FR 83158 67 FR 3940 67 FR 16492 67 FR 37108	NA	NA
<i>Schiedea spergulina</i> var. <i>spergulina</i>	11/7/2000	65 FR 66808	NA	NA
<i>Schiedea stellarioides</i>	11/7/2000	65 FR 66808	NA	NA
<i>Sesbania tomentosa</i>	11/7/2000	65 FR 66808	NA	NA
<i>Silene lanceolata</i>	12/18/2000 12/29/2000 1/28/2002 3/4/2002 4/3/2002 4/5/2002 5/14/2002 5/28/2002 5/28/2002	65 FR 79192 65 FR 83158 67 FR 3940 67 FR 9806 67 FR 15856 67 FR 16492 67 FR 34522 67 FR 36968 67 FR 37108	NA	NA
<i>Solanum incompletum</i>	4/4/2002	67 FR 9806	NA	NA
<i>Solanum sandwicense</i>	5/28/2002 11/7/2000	67 FR 36968 65 FR 66808	NA	NA
<i>Spermolepis hawaiiensis</i>	1/28/2002 5/28/2002 11/7/2000	67 FR 3940 67 FR 37108 65 FR 66808	NA	NA
<i>Stenogyne campanulata</i>	12/29/2000 1/28/2002 3/4/2002 4/3/2002 4/5/2002 5/28/2002 5/28/2002	65 FR 83158 67 FR 3940 67 FR 9806 67 FR 15856 67 FR 16492 67 FR 36968 67 FR 37108	NA	NA
<i>Vigna o-wahuensis</i>	11/7/2000 12/18/2000 12/27/2000 12/29/2000 3/4/2002 4/3/2002 4/5/2002 5/28/2002 5/28/2002	65 FR 66808 65 FR 79192 65 FR 82086 65 FR 83158 67 FR 9806 67 FR 15856 67 FR 16492 67 FR 36968 67 FR 37108	NA	NA

TABLE 3(b).—SUMMARY OF CRITICAL HABITAT ACTIONS FOR 95 PLANT SPECIES FROM KAUAI AND NIIHAU—Continued

Species	Proposed critical habitat designation or nondesignation		Final critical habitat	
	Date(s)	Federal Register	Date(s)	Federal Register
<i>Viola helenae</i>	11/7/2000	65 FR 66808	NA	NA
<i>Viola kauaiensis</i> var. <i>wahiawaensis</i>	11/7/2000	65 FR 66808	NA	NA
<i>Wilkesia hobbdi</i>	11/7/2000	65 FR 66808	NA	NA
<i>Xylosma crenatum</i>	11/7/2000	65 FR 66808	NA	NA
<i>Zanthoxylum hawaiiense</i>	11/7/2000	65 FR 66808	NA	NA
	12/18/2000	65 FR 79192		
	12/29/2000	65 FR 83158		
	1/28/2002	67 FR 3940		
	4/3/2002	67 FR 15856		
	4/5/2002	67 FR 16492		
	5/28/2002	67 FR 36968		

At the time each of the 95 plants was listed, we determined that designation of critical habitat was not prudent because it would not benefit the plant or would increase the degree of threat to the species. The “not prudent” determinations for these species, along with others, were challenged in *Conservation Council for Hawaii v. Babbitt*, 2 F. Supp. 2d 1280 (D. Haw. 1998). On March 9, 1998, the United States District Court for the District of Hawaii directed us to review the prudence determinations for 245 listed plant species in Hawaii, including the 95 species reported from Kauai. Among other things, the court held that in most cases we did not sufficiently demonstrate that the species are threatened by human activity or that such threats would increase with the designation of critical habitat. The court also held that we failed to balance any risks of designating critical habitat against any benefits (*id.* at 1283–85).

On August 10, 1998, the court ordered us to publish proposed critical habitat designations or nondesignations for at least 100 species by November 30, 2000, and to publish proposed designations or nondesignations for the remaining 145 species by April 30, 2002 (*Conservation Council for Hawaii v. Babbitt*, 24 F. Supp. 2d 1074 (D. Haw. 1998)).

On November 30, 1998, we published a notice in the **Federal Register** requesting public comments on our reevaluation of whether designation of critical habitat is prudent for the 245 Hawaiian plants at issue (63 FR 65805). The comment period closed on March 1, 1999, and was reopened from March 24, 1999, to May 24, 1999 (64 FR 14209). We received more than 100 responses from individuals, non-profit organizations, the DOFAW, county governments, and Federal agencies (U.S. Department of Defense-Army, Navy, Air Force). Only a few responses offered

information on the status of individual plant species or on current management actions for one or more of the 245 Hawaiian plants. While some of the respondents expressed support for the designation of critical habitat for 245 Hawaiian plants, more than 80 percent opposed the designation of critical habitat for these plants. In general, these respondents opposed designation because they believed it would cause economic hardship, discourage cooperative projects, polarize relationships with hunters, or potentially increase trespass or vandalism on private lands. In addition, commenters also cited a lack of information on the biological and ecological needs of these plants which, they suggested, may lead to designation based on guesswork. The respondents who supported the designation of critical habitat cited that designation would provide a uniform protection plan for the Hawaiian Islands, promote funding for management of these plants, educate the public and State government, and protect partnerships with landowners and build trust.

On October 5, 1999, we contacted landowners on the islands of Kauai and Niihau, notifying them of our requirement to designate critical habitat for 95 plant species. We included a copy of the November 30, 1998, **Federal Register** notice, a map showing the general locations of the species that may be on his/her property, and a handout containing general information on critical habitat. We held three open houses on the island of Kauai, at the Waimea Community Center, the Kauai War Memorial Convention Hall in Lihue, and the Kilauea Neighborhood Center, on October 19, 20, and 21, 1999, respectively, to meet one-on-one with local landowners and other interested members of the public. In addition, we met with Kauai County DOFAW staff

and Kauai State Parks staff to discuss their management activities on Kauai.

On November 7, 2000, we published the first of the court-ordered proposed critical habitat designations or nondesignations for 76 Kauai and Niihau plants (65 FR 66808). The proposed critical habitat designations for Maui and Kahoolawe plants were published on December 18, 2000 (65 FR 79192), for Lanai plants on December 27, 2000 (65 FR 82086), and for Molokai plants on December 29, 2000 (65 FR 83158). All of these proposed rules had been sent to the **Federal Register** by or on November 30, 2000, as required by the court's order. In those proposals, we proposed that critical habitat was prudent for 85 species (*Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Bonamia menziesii*, *Brighamia insignis*, *Centaurium sebaeoides*, *Chamaesyce halemanui*, *Ctenitis squamigera*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyperus trachysanthos*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rhytidosperra*, *Delissea rivularis*, *Delissea undulata*, *Diellia erecta*, *Diellia pallida*, *Diplazium molokaiense*, *Dubautia latifolia*, *Dubautia pauciflorula*, *Euphorbia haeleeleana*, *Exocarpos luteolus*, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis cookiana*, *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscadelphus woodii*, *Hibiscus brackenridgei*, *Hibiscus clayi*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Labordia tinifolia* var. *wahiawaensis*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeae*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope*

haupuensis, *Melicope knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothocestrum peltatum*, *Panicum niihauense*, *Peucedanum sandwicense*, *Phlegmariurus mannii*, *Phyllostegia knudsenii*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandwicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea apokremnos*, *Schiedea helleri*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea nuttallii*, *Schiedea spergulina* var. *leiopoda*, *Schiedea spergulina* var. *spergulina*, *Schiedea stellarioides*, *Sesbania tomentosa*, *Silene lanceolata*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne campanulata*, *Vigna o-wahuensis*, *Viola helenae*, *Viola kauaiensis* var. *wahiawaensis*, *Wilkesia hobdyi*, *Xylosma crenatum*, and *Zanthoxylum hawaiiense*) that are reported from Kauai and/or Niihau as well as on Maui, Kahoolawe, Lanai, and Molokai. We proposed that critical habitat was not prudent for two species, *Phyllostegia waimeae* and *Melicope quadrangularis*, because they had not been seen recently in the wild, and no genetic material of these species was known to exist. We also proposed that critical habitat was not prudent for three species, *Pritchardia aylmer-robinsonii*, *Pritchardia napaliensis*, and *Pritchardia viscosa*, because it would increase the threat of vandalism to these species.

In the November 7, 2000 proposed rule, we proposed designation of critical habitat on approximately 24,539 ha (60,636 ac) of land on the islands of Kauai and Niihau. The publication of the proposed rule opened a 60-day public comment period, which closed on January 7, 2001. On January 18, 2001, we published a notice (66 FR 4782) announcing the reopening of the comment period until February 19, 2001, on the proposed rule and a notice of a public hearing. On February 6, 2001, we held a public hearing at the Radisson Kauai Beach Resort in Lihue, Kauai. On March 7, 2001, we published a notice (66 FR 13691) announcing the reopening of the comment period and the availability of the draft economic analysis for the proposed rule. This third public comment period was open until April 6, 2001.

On October 3, 2001, we submitted a joint stipulation with Earthjustice to the U.S. District Court requesting extension of the court order for the final rules to designate critical habitat for plants from Kauai and Niihau (July 30, 2002), Maui and Kahoolawe (August 23, 2002), Lanai (September 16, 2002), and Molokai

(October 16, 2002), citing the need to revise the proposals to incorporate or address new information and comments received during the comment periods. The joint stipulation was approved and ordered by the court on October 5, 2001.

On January 28, 2002, in the revised proposed rule, we published proposed prudency determinations for 95 plant species from Kauai and Niihau (67 FR 3940). Many of these proposed prudency determinations were incorporated from previous proposals. We also proposed that critical habitat is prudent for four species (*Achyranthes mutica*, *Isodendron pyriformis*, *Phlegmariurus nutans*, and *Solanum incompletum*) for which a prudency determination had not been made previously and that no longer occur on Kauai or Niihau but are reported from one or more of the other islands.

In addition, critical habitat for 83 (*Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Bonania menziesii*, *Brighamia insignis*, *Centaurium sebaeoides*, *Chamaesyce halemanui*, *Ctenitis squamigera*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyperus trachysanthos*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rhytidosperra*, *Delissea rivularis*, *Delissea undulata*, *Diellia erecta*, *Diellia pallida*, *Diplazium molokaiense*, *Dubautia latifolia*, *Dubautia pauciflora*, *Euphorbia haeleleana*, *Exocarpos luteolus*, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis cookiana*, *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscadelphus woodii*, *Hibiscus clayi*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Labordia tinifolia* var. *wahiawaensis*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeae*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope haupuensis*, *Melicope knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothocestrum peltatum*, *Panicum niihauense*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia knudsenii*, *Phyllostegia waimeae*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandwicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea apokremnos*, *Schiedea helleri*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea nuttallii*, *Schiedea spergulina* var. *leiopoda*,

Schiedea spergulina var. *spergulina*, *Schiedea stellarioides*, *Sesbania tomentosa*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne campanulata*, *Viola helenae*, *Viola kauaiensis* var. *wahiawaensis*, *Wilkesia hobdyi*, *Xylosma crenatum*, and *Zanthoxylum hawaiiense*) of the 95 plant species was proposed on approximately 40,147 ha (99,206 ac) of land on Kauai and 282 ha (697ac) of land on Niihau (67 FR 3940). Critical habitat was not proposed for *Achyranthes mutica*, *Hibiscus brackenridgei*, *Phlegmariurus mannii*, *Silene lanceolata*, and *Solanum incompletum* on the island of Kauai and for *Isodendron pyriformis* and *Vigna o-wahuensis* on the island of Niihau because these plants no longer occur on Kauai or Niihau, and we were unable to identify habitat essential to their conservation on these two islands.

Because *Phyllostegia waimeae* had been rediscovered, we revised an earlier proposal to suggest that critical habitat would be prudent and propose critical habitat for this species in the revised proposed rule.

The publication of the revised proposed rule opened a 60-day public comment period, which closed on March 29, 2002. On February 11, 2002, we published a correction notice (67 FR 6214) correcting information contained in the January 28, 2002, revised proposal pertaining to the notice of a public hearing. On February 13, 2002, we held a public hearing at the Radisson Kauai Beach Resort in Lihue, Kauai. On May 28, 2002, we published a notice (67 FR 36851) announcing the availability of the draft economic analysis for the designation of critical habitat for 83 Kauai plants and reopening the public comment period until June 27, 2002. On August 26, 2002, we published a notice (67 FR 54766) reopening the public comment period until September 30, 2002. On July 11, 2002, we submitted joint stipulations with Earthjustice to the U.S. District Court 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 to conduct a series of public workshops on the proposals. The joint stipulations were approved and ordered by the court on July 12, 2002. On September 3 and 4,

2002, we held public meetings at the Waimea Community Center, Waimea, Kauai, and the War Memorial Convention Center, Lihue, Kauai, respectively.

On January 9, 2003, we determined that critical habitat was prudent for the following 15 species: *Adenophorus periens*, *Bonamia menziesii*, *Centaurium sebaeoides*, *Ctenitis squamigera*, *Cyperus trachysanthos*, *Diellia erecta*, *Diplazium molokaiense*, *Hibiscus brackenridgei*, *Isodendron pyriformis*, *Sesbania tomentosa*, *Silene lanceolata*, *Solanum incompletum*, *Spermolepis hawaiiensis*, *Vigna owahuensis* and *Zanthoxylum hawaiiense* (68 FR 1220), which also occur on Kauai or Niihau.

Summary of Comments and Recommendations

We received a total of 20 oral and 2,740 written comments during the three comment periods. These included responses from 7 State offices, 5 public officials, and 70 private organizations or individuals. Of the written comments, we received approximately 680 letters by facsimile and 1,998 electronic letters by e-mail, which stated general support for the proposed critical habitat designations, but that did not provide substantive comments. Of the other 82 comments, nine supported the designation, 60 were opposed to it, and 13 provided information but did not state a position on the designation. We reviewed all comments received for substantive issues and new information regarding critical habitat and the Kauai and Niihau plants. Similar comments were grouped into nine 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 23 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 incorporated into the final rule.

Issue 1: Biological Justification and Methodology

(1) *Comment:* One peer reviewer commented that there is no easy way to assess the match between the Service's proposed boundaries and the summation of habitat requirements of the individual taxa in each unit. Specifically, the intermediate step of indicating the species models for each of the listed taxa that is combined into the aggregate polygons that form the basis for the unit boundaries is not well documented. This leaves the reviewer with little basis to assess the match between habitat of the listed taxa and inclusion of such habitat in the critical habitat units. Species should be addressed individually, but the designation of conservation areas (or critical habitat) can and should consider the use of common areas to provide for multiple species. Another commenter stated that the Service's analysis has not demonstrated that inclusion of controversial areas has been minimized. There is no way to tell whether all of a given unit is necessary for that subset of taxa, which absolutely require the habitat found in that unit. The discussion of how each critical habitat unit provides for individual species helps one understand the reason for proposing the unit. However, additional information is needed in some instances (e.g., units J and N). The Service must justify every acre of land proposed for critical habitat designation, identify the specific species scheduled for recovery on that land, and explain why specific acreages are needed to do so.

Our Response: In response to these concerns, we have included the critical habitat maps and unit justifications for each species in the final rule, as well as descriptions of primary constituent elements and a composite map showing the overlap of the areas for all of the species combined.

(2) *Comment:* The majority of our peer reviewers agreed that the methodology is appropriate, scientifically well-grounded and conceptually sound. The approach of mapping the elevation, moisture, and habitat type for the listed taxa to the landscape is a sound approach to designating critical habitat. It seems that there is a good match of habitat identified long-term conservation of multiple populations of the listed species. The methodology uses information on species elevation range, vegetation type, associated species, physical location, and community type. It will allow the Service to revise or update habitat units as new information becomes available. This is more likely to provide habitat for

the recovery of these species. The proposed rulemaking represents the best scientific information available and is a scientifically appropriate technique for determining critical habitat on Kauai. On the other hand, some commenters felt that the proposed rule was an overly broad approach to designating critical habitat not based on scientific principles and knowledge of the needs of these plant species unique to the island State of Hawaii, but on litigation and the threat of future litigation. Additional consultation with academic and professional experts was recommended. 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 needs to allow peer review by a panel of unbiased scientists. Other commenters felt the data on which the proposed critical habitat is based is 30 years-old and may need updating. The proposed critical habitat covers too much acreage and was put together too quickly, using obsolete data, sloppy science, and lots of guess work.

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 designation methodology of critical habitat of Kauai 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 the peer reviewers support our methodology. All data and information on species status received in preparation of this rule was equally weighted and considered to come from reliable sources. Where

discrepancies existed between different data sources, the most current data were used. Changes in this final rule that decrease the boundaries of many units are based on additional information received during the public comment period and in meetings with additional species experts and land managers who were not available for comment during the preparation of the proposals. The changes in boundaries reflected in this final rule are based on additional information about areas lacking primary constituent elements or those that are too degraded to be restored. While we agree that additional time would be beneficial for the preparation of these final rules, we are required under the court-approved stipulation to finalize this designation by January 31, 2003. If provided with new information, we may revise the critical habitat designation in the future.

(3) *Comment:* One peer reviewer asked if the Service considered modeling the potential distribution based on known habitat correlates, as in Elith and Burgman (2002). Another peer reviewer stated that the Service should use spatial modeling of estimated values of selected habitat parameters for each species (such as elevation, median annual rainfall, vegetation units) as a first step in the process, rather than screen-digitizing. Some of the data on primary constituent elements (e.g., breeding system, dispersal mechanisms) can be inferred from similar species, but other pieces of critical information may not be currently available and should be the subject of further research. After the preliminary habitat polygons are identified, historic range can be determined either objectively or subjectively based on the known location points for a particular species. The steps going from narrative descriptions of habitat elements to geographical units are not well documented. The Service should elaborate on its methodology for defining the primary constituent elements for each species and the subsequent critical habitat.

Our Response: We agree that modeling of potential distribution within historic range is important, and have used this type of modeling, based on the limited available information. We did not feel that valid habitat parameters for each species could be developed without first digitizing known current and historic range and using that information, along with available digitized information on elevation, rainfall, and vegetation units, to determine potential habitat. Using the information from existing and historically known plant locations, we

used available digitized information on elevation, rainfall, and vegetation units, as well as advice from species experts, to model the potentially suitable habitat for each species. The critical habitat designated is the subset of suitable habitat that was determined to be essential to the conservation of each species (see the "Methods" section for more detail).

(4) *Comment:* Some reviewers commented that deletion of significant portions of any of the proposed critical 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 can't be maintained. The new proposal indicates that a wide range of habitats are covered in the areas proposed by the Service as critical habitat units. Units have been expanded to provide contiguous blocks of habitat that will reduce fragmentation and edge effects and are large enough to offer a variety of microsites. This will also improve the ability of listed species to maintain gene flow, reestablish populations following population declines or catastrophes, and to colonize new areas. However, the amount of dry and mesic forest included in proposed critical habitat is still very limited. Protecting critical habitat is essential not only for the recovery of threatened and endangered plant species, but also to protect the ecosystems on which these species rely for their long-term survival and recovery. Management actions for critical habitat need to allow for the expansion of populations and include the ecological matrix in which critical habitat is embedded. It is important that the adjacent noncritical habitat areas be managed for control or elimination of nonnative species, if recovery is to be achieved for the areas of less than 1,000 acres. On the other hand, some commenters felt that the increase in acreage from the first to the second proposal was the Service's attempt to get the community to be willing to go back to the original proposal. One commenter asked what the Service would do if newly obtained, good quality, scientific information proves the current best scientific knowledge is totally inaccurate.

Our Response: The Act requires us to use the best available scientific and commercial information 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 many areas were not essential for the conservation of the Kauai plant species, based on newly available information

concerning status of the species in specific areas and level 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. We determined them to be non-essential due to their lacking primary constituent elements, or having primary constituent elements but 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 Revised Proposed Rule" section for the justification for each unit's changes.

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 for each species. We concur on 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 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 critical habitat, and making them larger would add areas that lack the primary constituent elements. All of the changes in critical habitat from the first proposal, through the second, to this final, are based on the best available information received during comment periods, and are based on biological issues, not political or social issues. If new information becomes available indicating the existing critical habitat designations are not essential for the conservation of the species and/or that other areas are, we may propose revised designations for those species at that time.

(5) *Comment:* Critical habitat designation should be primarily directed toward areas that are currently being intensively managed or may be the subject of conservation agreements in the future for those species that are known to naturally occur in these habitats. A suggested method is that once realistic management units have been identified based on the management factors to address limiting factors (e.g. fence lines, fire control), the

next step is to see how many distinct populations of each plant species exists or can be established within those units to meet the species overall habitat needs to support eight to ten populations. Only after this analysis has been made and found to be lacking, would you start looking outside these management units for other lands needed. The commenter believes that this approach not only meets the legal requirements for critical habitat designation, but provides the best approach for recovery of the species.

Our Response: We agree that managed areas containing current or historic populations are vitally important to the conservation of the species, and have included managed areas on Kauai with appropriate primary constituent elements in critical habitat. Managed lands are not included only if management is sufficient to demonstrate that special management considerations or protection are not required, pursuant to 16 U.S.C. 1532(5)(A)(i). See "Managed Lands." However, these areas alone or in conjunction with other areas that may be managed in the future do not include all of the habitat essential for the Kauai and Niihau species. Therefore, we have designated these managed areas along with additional areas outside of managed units as critical habitat. In our final analysis, for each species, we ranked areas of the proposed critical habitat by the quality of the primary constituent elements, potential as a recovery area, and current or expected management of known threats. Areas that contain high quality primary constituent elements, are zoned for conservation, and have on-going or expected threat abatement actions were given high ranks. Of these highly-ranked areas, we selected adequate area for 8 to 10 populations distributed among the islands of each species' historical range. Of the proposed critical habitat for a species, areas that were not highly ranked and that may provide habitat for populations above the recovery goal of 8 to 10, were determined not essential for the conservation of the species and were excluded from the final designation (see "Criteria Used to Identify Critical Habitat").

(6) *Comment:* Designate critical habitat for Federal lands only.

Our Response: Federal lands on the island of Kauai include the Navy's Pacific Missile Range Facility (PMRF) at Barking Sands and Makaha Ridge and the Service's Kilauea Point National Wildlife Refuge, Hanalei National Wildlife Refuge, and Huleia National Wildlife Refuge. In this final rule, we are designating critical habitat for *Panicum niihauense* at Barking Sands,

as this dune habitat is essential for the conservation of this species. This dune habitat is not essential for the conservation of the other 82 species at issue on Kauai. In this final rule, we are not designating critical habitat for *Wilkesia hobbii* at Makaha Ridge, as this habitat is not essential for the conservation of this species. This habitat is not essential for the conservation of the other 82 species at issue on Kauai. None of the 83 species at issue on Kauai are known currently or historically from the Service's refuges at Kilauea Point, Hanalei, or Huleia, and these Federal lands are not essential for the conservation of the 83 species at issue on Kauai.

(7) *Comment:* The Service cannot lawfully exclude areas from critical habitat based on a finding that they currently are adequately managed or protected. To do so would violate the mandatory duty to designate critical habitat to the maximum extent prudent and determinable. The commenter urges the Service not to exclude any areas from designation on this basis (already managed or protected), since doing so would violate the mandatory duty to designate critical habitat "to the maximum extent prudent and determinable."

Our Response: We disagree as "special management considerations or protection" is part of the definition of critical habitat and must be given meaning when designating critical habitat. Specifically, we believe that adequate special management consideration or protection could be provided by a legally operative plan or agreement that addresses the maintenance and improvement of the primary constituent elements important to the species and manages for the long-term conservation of the species. However, for this designation we did not identify essential habitat features that already have adequate management and would not be included on that basis.

(8) *Comment:* Several commenters supported the Hawaii Division of Forestry and Wildlife proposal for designating critical habitat on existing managed areas as these areas are where the limiting factors for species conservation can be addressed. Furthermore, one landowner noted that a large portion of his/her lands are managed by the Hawaii Division of Forestry and Wildlife.

Our Response: We agree that the State DOFAW staff have valuable on the ground experience and scientific information that has been essential to our critical habitat decision making process. However, we did not adopt

DOFAW's first proposal (January 11, 2001) as it did not adequately address all of the conservation needs of the species in accordance with the Act. After publication of the January 28, 2002, revised proposed critical habitat rule, we met several times with Kauai DOFAW staff and conducted several site assessment surveys. As a result of the assessment surveys and information provided to us by Kauai DOFAW staff, we were able to better identify areas that did not contain primary constituent elements. In addition, we received important information from Kauai DOFAW staff that enabled us to refine the final critical habitat designations to better meet the conservation needs of the species.

(9) *Comment:* One commenter stated that it is extremely difficult to come up with a biologically sound definition of a population that can be realistically applied to the distribution and abundance of a rare species in the wild. However, the commenter noted that defining separate populations as being more than 1,000 meters apart is both biologically meaningful and operationally useful and serves as the focus of the Army's species stabilization efforts in the Waianae Mountains of Oahu. A commenter noted that the separation distance of 1,000 meters is probably adequate for most small-scale disturbance events, but will be inadequate for large-scale disturbances. The problem of defining populations requires knowledge of gene-flow patterns. The commentor recognizes that the proposed targets for population recovery are initial and not derived from any detailed understanding of genetic architecture. The commentor recommends altering these objectives, but would suggest that the Service state the need for more studies on population genetics. In addition, the targets present a demographic challenge to achieve a population of 100 mature individuals and will require massive plantings to counteract mortality. These practical challenges should be made clear.

Our Response: We agree that the operational definition of 1,000 meters between separate populations is adequate in the absence of information on the specific biological requirements of a population for each species. The need for genetic and demographic studies and the understanding of challenges to reintroduction are addressed in the species' recovery plans.

(10) *Comment:* Many commenters stated that a multi-population approach is essential for the conservation of many of the rare Hawaiian plant species, since the purpose of critical habitat and

recovery in general is to eventually have wild populations that are self-sustaining and no longer in need of protection under the Act. The strongest argument for this strategy is the fact that these populations are subject to many types of catastrophic events, ranging from widespread phenomena such as hurricanes, wildfire, or ungulates, to localized events like landslides, predators, or even disease outbreaks. The multi-population approach offers the opportunity to protect wider latitude of genetic variability for the species as a whole, rather than concentrating on a single or small number of areas with genetically more similar individuals. The Service's use of Hawaii and Pacific Plant Recovery Coordinating Committee (HPPRCC) guidelines for population size and numbers of populations needed to maintain Hawaiian plant taxa are probably the best general guide, since the general tenets of minimum viable population size and numbers are not defined for Hawaiian taxa. The targets (8 to 10 from 100 to 500) used in the critical habitat designations are generally lower than those used by the HPPRCC to identify essential habitat for listed plants and should be considered as the "low end" of what is likely needed for recovery.

Our Response: We agree that the multi-population approach to conservation is necessary for the recovery of Hawaii's endangered plants. We have used the lower end of the HPPRCC guidelines, as that is what the Service believes is essential to the conservation of the species, based on the current conservation literature (see "Criteria Used to Identify Critical Habitat" section).

(11) *Comment:* Two peer reviewers stated that just because a species is found in a certain habitat now does not mean that this habitat is the best place for it to thrive and reproduce. For example, repeated references to steep slopes as being primary constituent elements of critical habitat should not be construed as representing optimum habitat; they are likely remnant populations. The current distribution of a species today may not be a good indication of its optimal habitat, for example dry and mesic forest plants that are historically known only from lowland areas and not high elevation areas (where relatively more complete data are found); areas that were extremely degraded before good records were kept on species distribution and habitat needs.

Our Response: 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. In our designation, we used the best scientific and commercial data available, both historic and current, from a variety of sources (see "Methods" section) to specify any particular area as critical habitat (section 4(b)(2) of the Act) and to determine the physical or biological features essential to the conservation of the species (section 3(5)(A) of the Act). As pointed out by reviewers, biological information is extremely limited for many species, and therefore the only information available may indicate the species is restricted to a particular topography, soil or forest type. No critical habitat was designated for a species outside of its known historic range or known suitable habitat.

(12) *Comment:* Several comments were received in support of the designation of unoccupied habitat. Unoccupied habitat within critical habitat is important for natural dispersal of plant populations beyond their current distribution as well as providing sites for reintroduction of new populations if needed. The biological needs of the species are well enough known to warrant the protection of unoccupied habitat. These unoccupied areas will be especially important to dry and mesic forest species. Protecting unoccupied habitat is essential since currently occupied areas are inadequate for recovery. On the other hand, several comments were also received against the designation of unoccupied habitat. Some felt that at least 70 percent of the proposed critical habitat is not really habitat at all, in that it is not inhabited by any of the species but is unoccupied. Because there is no data to show that excluding these areas will result in the extinction of the species, the Service should omit them from consideration. Several areas do not contain listed species or do not contain records of historic sightings and so do not appear to be warranted as essential for the conservation of any species. The lands that could be excluded from critical habitat without causing the species to go extinct include Unit D1, D2, N, L, and private lands. Other commenters were concerned that is difficult for the Service to justify its expanded proposed designation if it does not know what physical and biological features are essential to the species' growth, germination or methods of seed dispersal as required by its own rules. The vast majority of the proposed areas are presently unoccupied by the species in question and their successful

introduction to and survival in these areas is speculative. These commenters believe that the first proposed designation was correct.

Our Response: Our recovery plans for these species (Service 1994, 1995, 1996, 1997, 1998a, 1998b, 1998c, 1999) identify the need to expand existing populations and reestablish wild populations within historic range. We have revised the designated critical habitat in the final rule to incorporate new information and/or address comments and new information received during the comment periods, including information on areas of potentially suitable unoccupied habitat for some of these species. Many of the units have been reduced based on this newly available information. However, for most of the species, there are not enough existing populations and most of them are not currently viable. While they may continue to exist at their current low numbers until a catastrophic event causes their extinction, the Service's goal, as stated in section 2(b) of the Act, is to recover the species. Therefore, the protection of additional unoccupied critical habitat is essential to ensure the recovery of these species through reintroduction. We also realize that, although propagation and reintroduction are difficult for some species, both are vitally important to their recovery. Many recovery plans therefore include research into best methods of propagation and reintroduction as important tasks prior to attempting reintroduction.

(13) *Comment:* Some commenters stated that good quality habitat should be designated in lieu of more degraded habitat. However, degraded areas should only be excluded from proposed critical habitat if they lack the ability to become habitat in the future. On the other hand, some commenters said that they see little on-the-ground logic to defend designations of unoccupied habitat and believe the Service must have other strategies rather than just carving out land areas, especially in highly degraded or altered habitats. In some instances, all potential habitats for a species have been degraded to the point that alien species dominate the site. Recovery efforts in these situations need to include both species management, coupled with habitat restoration efforts.

Our Response: We agree that recovery of a species is more likely in higher quality habitat containing the physical or biological features essential to the conservation of the species. To this end, several units have been excluded for some species, as sufficient area is available in less degraded areas. However, for some species, particularly

those only known from low elevation areas, only degraded habitat remains. Therefore, some units still contain degraded habitat, but only if experts agreed that the areas could be restored. Management for the restoration of these habitats is addressed in the species' recovery plans.

(14) *Comment:* The recovery effort in Hawaii will not be effective without a well-developed and implemented management strategy. The designation of critical habitat without adequate management does not necessarily ensure benefit or recovery to a plant species. Some of the critical habitat units cannot sustain the projected recovered populations at current levels of habitat management and investment. Control of key threats such as feral ungulates, alien weeds, and wild fires is crucial to the recovery of listed plants. Alien species are significant problem that need to be addressed in order to be effective in the conservation of Hawaiian plants and animals. However, the land managers have not been able to control some invasive weeds, such as banana poka and lantana. There are workable methodologies for dealing with some of the factors that affect listed species and critical habitat (e.g., fencing and removal of ungulates). For other factors, such as lost pollinators, dispersers, or climate change, effective and appropriate techniques are still being sought. However, from a practical standpoint, if efforts to save threatened and endangered species were dependent on full knowledge of all factors relating to their survival, few if any would have a chance. This lack of knowledge or control tools should not be a reason to give up on recovery efforts for the native species that are affected. Waiting for all factors to be identified and validated would perpetuate current levels of habitat loss and/or management inaction.

Our Response: Critical habitat designation is one of a number of conservation tools established in the Act that can play an important role in the recovery of the species, and the Service is directed to designate critical habitat based on the best available scientific and commercial information. The management of alien species is an important conservation issue that is addressed in the recovery plans for these species. Other, less understood issues are identified in the recovery plans as requiring research to determine appropriate actions. The Service's role in the recovery of these species is to work with other agencies, organizations, and individuals to coordinate the implementation of the recovery plans in a strategic manner.

(15) *Comment:* "Reduced reproductive vigor due to small numbers of extant individuals" or inbreeding depression should not be cited as potential problems unless species-specific information is available. Hawaii's endangered species are biologically incompetent, and totally unable to repopulate the vast areas you are proposing as critical habitat. They should just be grown in a garden setting, since that is the only way they will survive. Extinction is a natural part of evolution.

Our Response: We are required under section 4 of the Act to designate critical habitat based on the best available information we have at the time of designation. In addition, we are directed by the Act to recover the species and the ecosystems on which they depend, not just preserve them in a horticulture facility. We realize that designation of critical habitat alone will not achieve recovery. 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. We also realize that management of the habitat is essential to the species' recovery. All of these issues are addressed in the species' recovery plans. And, while extinction is a natural part of evolution, there are numerous references in the conservation literature that the rate of extinction today is unprecedented.

(16) *Comment:* It should be noted that in many cases disturbance has been shown to contribute to the survival of species when it occurs at an appropriate level and at appropriate intervals.

Our Response: For some species it may be true that disturbance was a natural process that may have benefitted the species in the past. Today, however, many listed species are greatly reduced in numbers and occur in fragmented habitats that have been highly altered by alien species, to the point that the natural disturbance process is no longer present. When disturbances, such as hurricanes, do occur now, the most likely result is an increase in alien species, rather than native habitat. In addition, the small numbers of remaining individuals in greatly reduced ranges are far more vulnerable

to extinction from one disturbance event, whether natural or human-caused.

(17) *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 proposal. The following endangered plant species lack critical habitat on Kauai and/or Niihau: *Caesalpinia kavaensis*, *Haplostachys haplostachya*, *Hibiscadelphus distans*, *Marsilea villosa*, and *Scaevola coriacea*.

Our Response: These species were not part of the lawsuit and subsequent stipulations, and therefore were not included in this rulemaking. Critical habitat for these species may be considered in the future if warranted and funding and resources are available.

(18) *Comment:* One peer reviewer stated that the Service did consider the entire range of plants found on multiple islands, particularly since they are going through the same process of designation of critical habitat on all of the Hawaiian Islands. On the other hand, some commenters stated that the revised proposal's treatment of "multi-island" plants historically, but not currently, found on Kauai or Niihau makes it impossible to determine whether the Service is complying with its statutory duty to identify adequate habitat for these species' recovery. By proposing critical habitat island-by-island, rather than species-by-species, there is no way for reviewers to know what areas statewide ultimately will be proposed for the multi-island species. The revised proposal's treatment of "multi-island" plants historically, but not currently, found on Kauai or Niihau makes it impossible to determine whether the Service is complying with its statutory duty to identify adequate habitat for these species' recovery.

Our Response: In response to this concern, the Service reopened the comment periods for the proposed designations and nondesignations of critical habitat for plant species on the islands of Kauai, Niihau, Molokai, Maui, Kahoolawe, northwestern Hawaiian Islands, Hawaii, and Oahu after these proposals were published. This comment period, which was open from August 26, 2002 to September 30, 2002, allowed all interested parties to submit written comments on these proposals simultaneously and address issues associated with multi-island species.

(19) *Comment:* The boundaries of critical habitat should follow elevation contours, ridge lines, and other natural

features that naturally delineate the units, rather than long, straight-line segments.

Our Response: The boundaries of the proposed critical habitat designations were generalized for ease of mapping. With this final rule, the new units are separately mapped for each species and are more true to the elevation contours, the distribution of habitat, and other natural features.

(20) *Comment:* The agricultural and grazing lands proposed for designation will never contribute to the conservation of these species, they are certainly not essential, and it is doubtful that listed species still occur on these lands.

Our Response: When delineating critical habitat units, we made an effort to avoid developed areas such as towns, agricultural lands, and other lands with similar features that do not contain the primary constituent elements. Less than one percent of the critical habitat designated in this final rule is within lands districted as agricultural lands, with most of the designated critical habitat in lands districted as conservation lands. However, some species, such as *Ischaemum byrone* and *Sesbania tomentosa*, only occur in low elevation areas where agriculture is most common, and enough habitat necessary for the conservation of the species that contains some of the primary constituent elements and can be restored to have all of the primary constituent elements is not available outside of agriculturally zoned lands.

(21) *Comment:* One commenter asked if "historical" equals post-Polynesian, or post-European, or is it defined by the prevailing climate. The dates of population extirpations should be provided (e.g., *Delissea rhytidosperma*). These dates are important in defining "historical" sightings.

Our Response: The Service's definition of the term "historical" is any plant location information gathered prior to the 1970s. The term does not refer to post-Polynesian or post-European time periods, and is not defined by the prevailing climate. Documented botanical collections in the Hawaiian Islands began in the late 1700s and continued intermittently through the early half of the 20th century. In the early 1970's there was a renaissance in Hawaiian botanical surveys that continues today. This included the establishment of several botanical gardens (e.g. National Tropical Botanical Garden in 1970; Lyon Arboretum in the early 1970s), which have served as an important source of information on native plant species status and locations. The passage of the

National Environmental Policy Act in 1969 also encouraged increased surveys of areas as part of the EA/EIS process and thus provided support for private contract botanists whose work entered the public arena as addenda to EAs and EISs. This invigorated effort to document the occurrences of Hawaiian plants was also accompanied by observations on the loss of plant populations from previously known locations due to habitat loss and impacts of free ranging ungulates. These observations lead to a more regular documentation of the causes of decline of Hawaiian plants. Prior to the 1970s, such impacts were rarely recorded even though declines in Hawaiian plant populations were noted. Also at this time there was a growing national recognition that species of plants and animals were being threatened by extinction due to human activities. This concern led to the passage of the U.S. Endangered Species Act in 1973.

(22) *Comment:* *Phlegmariurus nutans* has survived for at least a century without having any habitat on Kauai. If these plants could grow or be cultivated anywhere else, the designated area is not essential. Designating more such areas as critical habitat would not improve that species' chances of survival. Much of the area that would be restricted from human use by the critical habitat designation may be useless to the species that the Service is trying to protect. Four of the plants have not been seen in more than 30 years, and two others were reported as having been seen within the past 30 years on Kauai. Critical habitat should only be designated for areas that host existing populations of the designated species. If a species is gone from an area, it could mean that the designated area is no longer ideally suited to support that species for one reason or another (water table may have changed, ground may have become more saline, animal or insect encroachment, etc.) so no matter what actions are prescribed, the species will most likely not return and successfully thrive in that environment. A critical habitat area should not be designated for a species that does not already live in it if there is no reasonable way for the species to get to that area under its own power. If it has to be artificially transported, then that area should not be designated. On the other hand, two of the plantiffs supported the Service's inclusion of critical habitat designation for seven species not currently known from Kauai: *Ctenitis squamigera*, *Diellia erecta*, *Diplazium molokaiense*, *Ischaemum byrone*, *Mariscus*

pennatiformis, *Phlegmariurus nutans*, and *Phyllostegia waimeae*.

Our Response: We designated critical habitat for those species not recently seen on Kauai only if historic information was available on the primary constituent elements for those species on Kauai and if such areas still exist with those primary constituent elements or in which the primary constituent elements can be restored. We agree that the species will most likely not disperse to these sites under natural circumstances, because the intervening areas are often not suitable habitat for the species or have become too degraded, or because the pollinator may be lacking in those areas. Therefore, recovery plans include propagation and reintroduction into currently unoccupied but historical habitat. While not all designated critical habitat may contain all the primary constituent elements in their present condition, we believe that they can be restored with management actions.

(23) *Comment:* The Service has undertaken a detailed evaluation of the proposed critical habitat areas on State lands on Kauai to assess how much of the unoccupied habitat is really essential and which lands can be effectively managed for the benefit of the species. The Service should extend its evaluation to private land and land on other islands.

Our Response: We agree, and have met with any landowner who has requested to discuss and visit their lands. Many of those discussions have resulted in changes to some of the critical habitat units, as described in the "Summary of Changes from the Revised Proposed Rule" section.

(24) *Comment:* The hunters, hikers, and local people are the first line resources in protecting these plants, and at no cost to the government. Spend Federal monies to educate and teach the local people, rather than on critical habitat designation.

Our Response: We agree that the local people are an excellent resource to aid in the management of endangered species. For example, the Service has funded for several years a weed control project in the Kokee area of Kauai which operates largely on local volunteer efforts. While these management efforts are extremely beneficial for endangered species protection, section 4 of the Act still requires the Service to designate critical habitat.

(25) *Comment:* The statement that designating critical habitat would not provide significant benefits to the *Pritchardia* species is flawed because critical habitat designation would help them to recover to a non-imperiled

status. The Service did not base its original "not prudent" finding on the likelihood that designation would increase threats, as it now attempts to do. Nor does it explain why designating critical habitat on the privately owned island of Niihau would increase collecting beyond current levels.

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. We have revised critical habitat designations based on additional information received during comment periods. However, 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 these three species of *Pritchardia*.

(26) *Comment:* The revised proposal identifies as critical habitat only the habitat that *Hibiscus clayi* currently occupies, despite the Service biologist's concession that this area alone is inadequate to support the recovery of the species.

Our Response: We agree that the area proposed as critical habitat for *Hibiscus clayi* is inadequate for the recovery of the species. During the public comment period, we received additional information, and have designated five other units of critical habitat for this species within the previously proposed unit M (now Unit 4), based on the presence of primary constituent elements. Habitat has been designated for six populations, however we do not have information on other locations or additional areas that are suitable or essential for this species.

(27) *Comment:* The expansion of the area in the revised proposal raises concerns about the limited data used in the mapping process.

Our Response: When developing the proposal to designate critical habitat for 83 plants from Kauai and Niihau, we used the best scientific and commercial data available, including but not limited to, information from 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; the final listing rules for these species; information received at the three informational open houses held on Kauai at the Waimea Community Center, the Kauai War Memorial Convention Hall in Lihue, and the Kilauea Neighborhood Center, on October 19 to 21, 1999, respectively; recent biological surveys and reports; our recovery plans for these species; information received in response to outreach materials and requests for species and management information we sent to all landowners, land managers, and interested parties on the islands of Kauai and Niihau; discussions with botanical experts; recommendations from the Hawaii Pacific Plant Recovery Coordinating Committee (HPPRCC) (Service 1994, 1995, 1996, 1997, 1998a, 1998b, 1998c, 1999; HPPRCC 1998; HINHP Database 2000; CPC *in litt.* 1999); Geographic Information System (GIS) coverages (e.g. vegetation, soils, annual rainfall, elevation contours, land ownership); new information; completed recovery plans; and information received during the public comment periods and public hearings.

(28) *Comment:* What would make sense is for the Service to develop a plan for human intervention, including the required funding, and then designate selected areas as critical habitat.

Our Response: Recovery plans, in which human intervention actions are recommended for the conservation of all of the 83 plants that are the subject of this critical habitat rulemaking, have already been developed (Service 1994, 1995, 1996, 1997, 1998a, 1998b, 1998c, 1999). In the recovery plans we identified habitat areas deemed essential to the recovery of these plant species and referred to these areas during our development of the critical habitat designations.

(29) *Comment:* The designation of critical habitat in unoccupied habitat is particularly important, since this may be the only mechanism available to ensure that Federal actions do not eliminate the habitat needed for the survival and recovery of extremely endangered species.

Our Response: We agree. Our recovery plans for these species (Service 1994, 1995, 1996, 1997, 1998a, 1998b, 1998c, 1999) identify the need to expand existing populations and reestablish wild populations within historic range.

(30) *Comment:* There cannot be adequate assessment of possible impacts by a proposed Federal action to a species that is not there any more. Such

an assessment is impossible without a total analysis of why a plant species no longer occurs in a region.

Our Response: In cases where a proposed Federal action takes place in unoccupied critical habitat, we will assess whether the proposed action is likely to destroy or adversely modify the primary constituent elements that are needed for the future conservation of the species in question. If we find that the proposed action will appreciably diminish the habitat's value for both survival and recovery of the species, we will recommend reasonable and prudent alternatives.

Issue 2: Site-Specific Biological Comments

(31) *Comment:* The proposed rule could and should have included a more detailed discussion of why the revision included an expansion of critical habitat units in northwestern Kauai (*i.e.*, units O and I).

Our Response: We agree that a more detailed discussion of why areas are included and excluded from each unit would be helpful. Therefore, in "Summary of Changes from the Revised Proposed Rule" section, we have given detailed descriptions for each species of why the units have changed.

(32) *Comment:* Unit D does not contain any listed species and so does not appear to be warranted as essential for the conservation of the species. Areas in units D1, D2, and E that do not contain the primary constituent elements should be remapped in the final rule. The critical habitat area on the beach was proposed to be limited to the dunes on the southern portion of the parcel, to what is commonly known as "Long Beach." The lower slopes of the Haupu range and the Kipu/Kipukai/Hoary Head range in Unit E are covered by *Eucalypts robusta*, *Melaleuca*, *Grevillea*, *Casuarina*, mango, Java plum, catclaw vine, *Rhodomyrtus*, *Ficus benjamina*, and other introduced plants and animals, especially below 1,500 feet elevation. These areas do not contain suitable habitat for listed species and should not be critical habitat.

Our Response: We agree that proposed unit D1 is not essential for the conservation of *Sesbania tomentosa*, and have excluded it from critical habitat designation. We agree that parts of proposed units D2 and E do not contain the physical and biological features essential to the conservation of *Brighamia insignis*, *Delissea rhytidosperra*, *Isodendron longifolium*, *Lipochaeta micrantha*, *Melicope haupuensis*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Peucedanum sandwicense*, *Pteralyxia*

kauaiensis and *Schiedea nuttallii* and have modified these proposed units to exclude areas which are not essential to the conservation of these species.

(33) *Comment*: From the large scale map of the proposed area on Niihau provided in the Department of the Interior correspondence it is impossible to determine the exact boundaries of the proposed critical habitat. The commenter felt that creating this entity on Niihau is somewhat arbitrary.

Our Response: More detailed maps are available on request (see **ADDRESSES** section). We used the best available information to determine these boundaries, and based on new information made available during the comment period, *Cyperus trachysanthos* was removed from the low, wetland area of Niihau. More appropriate habitat to reach our recovery goals was available on other islands in areas that are less degraded and already being managed for conservation. However, *Brighamia insignis* needed more critical habitat than was available on Kauai, the only other island on which it is currently or historically known.

(34) *Comment*: It is unclear why the areas between Wahiawa Bog and Waialeale (unit N) or the central portion of unit J are necessary for either connectivity purposes or as needed unoccupied habitat. While these areas may be in a relatively good condition and may benefit other listed species (such as forest birds), it is not clear what additional value they contribute to listed plants. It is unclear why some critical habitat units (L, J, and N) need to be so large. The portion of this unit between Wahiawa Bog and Waialeale should be re-evaluated to clarify its value to target plant species. Portions of the wet forest in Unit J may potentially be deleted without compromising the recovery of target plant species. The landowner questioned the new information available for designating the entire Wainiha Valley as critical habitat. At minimum, the proposed critical habitat in Wainiha Valley should be restricted to the upper portion of the valley where occupied endangered plant habitat has been identified. This area is not an inconsiderable amount and may be sufficient to provide for any additional unoccupied habitat necessary for the conservation of the affected species.

Our Response: We agree, and have modified the units L, J, and N to exclude areas without primary constituent elements, including the lower reaches of Wainiha Valley. Other more intact areas are being designated on Kauai or proposed on other islands for those species as identified in the "Summary

of Changes from the Revised Proposed Rule" section.

(35) *Comment*: If Wainiha is excluded from critical habitat designation, the entire ecosystem would receive protection. The Nature Conservancy of Hawaii (TNCH) would work with partners from the National Tropical Botanical Garden and the Service concerning the area, including specific endangered species habitat protection. In addition, the landowner may enter into a perpetual conservation easement with TNCH and support species management on a long term basis. On the other hand, designating Wainiha as critical habitat will likely bring about actions detrimental to the preservation of the area and its endangered species. The landowner may react to critical habitat designation by closing up all access to the valleys for survey and data collection, conservation efforts, and management of endangered species.

Our response: We have evaluated the proposed critical habitat for the species in Wainiha Valley and have reduced the area based on the biological needs of the species and their recovery goals (see "Summary of Changes from the Revised Proposed Rule: Kauai J").

(36) *Comment*: No information is available, currently or historically, for the designation of critical habitat in the lower elevation areas of unit M. Because none of these species currently exist on the land, based on a survey by a botanical consultant in 1998, there is seemingly no reason to believe that excluding the area would lead to their extinction. The landowner is unaware of any other reliable scientific data on this area and is unaware of any attempts by the Service to enter the property to gather such data.

Our Response: We have revised the units for the species in unit M to eliminate much of the area in the lower elevations of unit M to exclude areas without primary constituent elements, based on new information received during the public comment period. In addition, other more intact areas are being designated or proposed on Kauai or on other islands for those species as identified in the "Summary of Changes from the Revised Proposed Rule" section.

(37) *Comment*: Some areas of Unit O are overgrown with Java plum, monkeypod or kukui and have no endangered plant species and should not be designated as critical habitat.

Our Response: We agree, and have modified the units to exclude areas without primary constituent elements. Other more intact areas are being designated or proposed on Kauai or on other islands for those species as

identified in the "Summary of Changes from the Revised Proposed Rule" section.

(38) *Comment*: There is no indication that the Navy parcels are, in fact, critical to the survival of these species. The military has numerous structures and activities that are within proposed critical habitat but are unsuitable for listed species. Without confirmation of an actual link between these specific areas and the survival of *Panicum niihauense* or *Wilkesia hobbdi*, designation of these areas as critical habitat would be imprudent. The following should be removed from the critical habitat designation: a 750 buffer area from the center of the runway; which is continually mowed, restrooms, pavilion, and unpaved parking area at Majors Bay Recreation Area; the antennae fields and associated ground radial systems, which are continually mowed; Amphibious Assault Training/RIMPAC Staging Area that disturb the vegetation and substrate; other structures such as buildings, roads, aqueducts, telecommunications equipment, telemetry antennae, radars, missile launch sites, and other manmade features; ground hazard areas established as safety zones around each missile launch site and launch pads; northernmost property line where "Smokey SAMs" are launched; other planned launch sites; Boresighting Tower, which is continually mowed; Borrow Pit site, which is mined; Composting Facility; and the Small Arms Firing Range and Construction Debris Stockpile, which will require the removal of vegetation and sand.

Our Response: We have had numerous discussions with the Navy regarding these areas, and as a result, have removed some sections of the units for these species, based on the lack of primary constituent elements. However, other areas could not be excluded because they do contain the primary constituent elements for these species, as described for each in the "Hawaiian plants—Constituent elements" section. These areas are necessary for the recovery of the species, and not enough other areas are available containing these primary constituent elements outside of the PMRF.

(39) *Comment*: The Navy has recently completed and begun implementing their Integrated Natural Resources Management Plan (INRMP) for the Pacific Missile Range Facility (PMRF). The Service has indicated an apparent willingness to reassess the critical habitat boundaries in light of this INRMP.

Our Response: We have reviewed the existing INRMP for PMRF. It is currently

not adequate to find that the designated areas in PMRF are no longer in need of special management considerations or protection and thus do not meet the definition of critical habitat because it does not include enough specific information on the conservation of *Panicum niihauese*. As far as the Service is aware, this INRMP has not yet been updated to address management needs of this species.

(40) *Comment*: Additional dry and mesic areas should be considered for critical habitat designations, including Olokeke Canyon.

Our Response: Olokeke Canyon was not included in any critical habitat designations because no data was available on the historic or current primary constituent elements or current species locations within those lands.

(41) *Comment*: One commenter would like to see Haena State Park removed from the critical habitat designation, because it is a high use visitor area, wall to wall historic and cultural landscape, and very degraded habitat with very few native plants. The cultural sites are currently being restored by the Hawaiian community.

Our Response: Information received during the public comment period informed us of the lack of primary constituent elements for the species in this area. Therefore, we revised the lines for the final designation to start around the 200-foot elevation line where a higher density of primary constituent elements exist for the species at issue.

Issue 3: Legal Issues

(42) *Comment*: Critical habitat designation and the underlying decision to list as endangered the species that are the subject of the designation, exceed the constitutional limits of the Service's delegated authority. Congress enacted the ESA as an exercise of its Commerce Clause power and delegated exercise of that Commerce Clause power to the Service to apply the ESA by regulation. The listed species are not interstate. They exist only in Hawaii and do not cross State lines. Nor are they in commerce as the subject of any economic endeavor. They lack any commercial value. Therefore, the Service's regulations listing these species and designating critical habitat for them within Hawaii exceed the federal power to regulate interstate commerce under the governing precedents interpreting the Commerce Clause.

Our Response: The Federal government has the authority under the Commerce Clause of the U.S. Constitution to protect this species, for the reasons given in Judge Wald's

opinion and Judge Henderson's concurring opinion in *National Association of Homebuilders v. Babbitt*, 130 F. 3d 1041 (D.C. Cir. 1997), *cert. denied*, 1185 S.Ct. 2340 (1998). See also *Gibbs v. Babbitt*, No. 99-1218 (4th Cir. 2000). The *Home Builders* case involved a challenge to application of ESA prohibitions to protect the listed Delhi Sands flower-loving fly. As with the species at issue here, the Delhi Sands flower-loving fly is endemic to only one state. Judge Wald 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.

(43) *Comment*: Since concerns were raised from the hunting community and local government officials, a fair approach to resolving this issue may be through mediation, using the State's Judiciary Center for Alternative Dispute Resolution. To date, this will be the second recommendation made on this issue that still has not been taken under advisement.

Our Response: We have held several meetings with the hunting community and local government officials to promote information exchange and open dialogue. These meetings have served to alleviate some of the controversy and contention that have surrounded the issue of critical habitat designation on Kauai and other Hawaiian Islands. However, this is a rulemaking process governed by the ESA and the Administrative Procedures Act and not easily resolved thru mediation. We have tried our best to have an open process with an opportunity for all interested parties to participate, while complying with our statutory responsibilities and court-ordered deadlines.

(44) *Comment*: Any activity that may 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 (Hawaii Revised Statutes (HRS) 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 endangered species laws.

Our Response: Possible costs resulting from interplay of the Federal Endangered Species Act and Hawaii State law were discussed in the economic analysis under indirect costs (e.g., possible conservation management

mandate for the private landowner and reduction in game mammal populations). The economic analysis considers the economic impacts of section 7 consultations related to critical habitat even if they are attributable co-extensively to the listed status of the species. In addition, the economic analysis examines any indirect costs of critical habitat designation, such as where critical habitat triggers the applicability of a State or local statute. However, where it is the listing of a species that prompts action at the State or local level, the impacts are not attributable to critical habitat designation. Take prohibitions under Hawaii law are purely attributable to a listing decision and do not co-extensively occur because of critical habitat designations. There are no take prohibitions associated with critical habitat.

(45) *Comment*: One commenter stated that the Service should do a better job of communicating what critical habitat does and does not do, including a review of recent "Federal monies and Federal approvals," and which of those programs might even remotely be affected by designations of critical habitat.

Our Response: We have made a concerted effort to provide the public with information on what critical habitat does and does not do, through a series of public workshops and meetings, correspondence, news releases, and publications. A detailed review of Federal activities that may be affected by the critical habitat designations on Kauai and Niihau may be found in the economic analysis section of this rule. The public could also refer to the Service's National website <http://www.fws.gov>.

Issue 4: Section 7 Consultation

(46) *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 of 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 consultation result in when a proposed Federal action is being compared to the activities not affected by critical habitat

designation, such as, grazing, farming, hunting or recreational use?

Our Response: The term “consult” refers to consultation between the Service and other Federal agencies under the provisions of section 7 of the Act. Under this provision 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 on the proposed activity and the status of the species and its critical habitat at the time of the consultation.

Issue 5: Mapping and PCEs

(47) *Comment:* Although the text in the proposed rule appears to indicate that unit F in Lawai Valley is restricted to land owned by the National Tropical Botanical Garden, a map provided by the Service shows some overlap between this unit and McBryde land above Lawai Stream, near Luawai Reservoir. The Service should clarify whether unit F is intended to include portions of the McBryde land, as suggested by the map, or if any overlap is purely due to mapping inaccuracies. If the proposal is intended to include McBryde land in this area, the Service should consider conducting a biological survey of the area to confirm whether the area in question actually contain any individuals of *Schiedea spergulina* var. *leipoda* and/or whether this area is essential.

Our Response: The majority of the unit is within the lands owned by the National Tropical Botanical Garden. However, some of the McBryde land does fall within the unit. Efforts were made to exclude lands currently used for cultivation. This unit is important to the conservation of *Schiedea spergulina* var. *leipoda* because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are important for this

species include, but are not limited to, bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic forests. Although we do not feel that there is enough habitat designated to reach the recovery goal of 8 to 10 populations, this species is a very narrow endemic and probably never naturally occurred in more than a single or a few populations.

(48) *Comment:* The draft economic analysis dismisses concerns about impacts on the use of structures and features already placed in areas to be designated as critical habitat. Although manmade features and structures are excluded from critical habitat because they lack the primary constituent elements, greater precision in pinning down these “unmapped holes” is needed to avoid a chilling effect on legitimate uses that necessarily approach a fuzzy boundary line.

Our Response: Existing features and structures within critical habitat areas, buildings; roads; aqueducts and other water system features—including but not limited to pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks, gaging stations, intakes, reservoirs, diversions, flumes, and wells; existing trails; campgrounds and their immediate surrounding landscaped area; scenic lookouts; remote helicopter landing sites; existing fences; telecommunications equipment towers and associated structures and equipment; electrical power transmission lines and distribution, and communication facilities and regularly maintained associated rights-of-way and access ways; radars, telemetry antennas; missile launch sites; arboreta and gardens; heiau (indigenous places of worship or shrines) and other archaeological sites; airports; other paved areas; and lawns and other rural residential landscaped areas and other manmade features 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. We have attempted to exclude manmade structures using aerial photos, our own field experience on Kauai and that of other expert field botanists from DOFAW and the University of Hawaii at Manoa. However, we were not always able to successfully exclude these structures from the critical habitat maps

because the resolution of our imagery does not allow us to locate small structures. Higher resolution imagery is currently unavailable on a State-wide basis.

Issue 6: Effects of Designation

(49) *Comment:* One commenter stated that the designation of critical habitat would almost certainly make its private endangered species reserve the target of a government takeover attempt.

Our Response: Section 3(5) of the Act defines critical habitat as those specific areas which contain physical or biological features essential to the conservation of the species and which may require special management considerations or protection (16 U.S.C. 1532(5)). Designations of critical habitat are to be made on the basis of the best scientific and commercial data available, after taking into account the economic and other relevant impacts of specifying any area as critical habitat (16 U.S.C. 1533(b)(2)). An area may be excluded from designation as critical habitat if the Secretary determines the benefits of excluding the area outweigh the benefits of designating the area as critical habitat (and provided the exclusion would not result in the extinction of the species).

To a property owner, the designation of critical habitat becomes important when viewed in the context of section 7 of the Act, which requires all Federal agencies to ensure, in consultation with the Service, that any action authorized, funded, or carried out by the agency does not result in the destruction or adverse modification of designated critical habitat. If, after consultation, our biological opinion concludes that a proposed action is likely to result in the destruction or adverse modification of critical habitat, we are required to suggest reasonable and prudent alternatives to the action which would avoid the destruction or adverse modification of the critical habitat (16 U.S.C. 1536(b)(3)(A)). If we cannot suggest acceptable reasonable and prudent alternatives, the agency (or the applicant) may apply for an exemption from the Endangered Species Committee under section 7(e)–(p) of the Act.

The mere promulgation of a regulation, like the enactment of a statute, does not take private property unless the regulation on its face denies the property owners all economically beneficial or productive use of their land (*Agins v. City of Tiburon*, 447 U.S. 255, 260–263 (1980); *Hodel v. Virginia Surface Mining and Reclamation Ass’n*, 452 U.S. 264, 195 (1981); *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1014 (1992)). The designation of

critical habitat alone does not deny anyone economically viable use of their property. The Act does not automatically restrict all uses of critical habitat, but only imposes restrictions under section 7(a)(2) on Federal agency actions that may result in destruction or adverse modification of designated critical habitat. Furthermore, as discussed above, if a biological opinion concludes that a proposed action is likely to result in destruction or modification of critical habitat, we are required to suggest reasonable and prudent alternatives.

We are aware of relatively few activities in the proposed critical habitat areas for these 83 plants that have Federal involvement, and thus, would require consultation or reinitiation of already completed consultations for on-going projects. We are not aware of any commercial activities on the Federal lands included in these proposed critical habitat designations.

(50) *Comment:* If endangered species are dying through no fault of the landowner, then the landowner should not be penalized with onerous and costly regulations. What incentives are being provided private landowners to act on behalf of listed plants?

Our Response: Critical habitat designation does not impose additional regulatory requirements upon non-Federal landowners unless they are receiving funding or authorization from a Federal agency for a proposed action that is likely to destroy or adversely modify critical habitat. Many threatened and endangered species occur on private lands and the Service recognizes 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 Kauai, in the State of Hawaii, and throughout the nation.

The Service administers several programs aimed at providing incentives for landowners to conserve endangered and threatened species on their lands, one of which is the Endangered Species Landowner Incentive Program, which was first funded by Congress in fiscal year 1999. Under this program, the Service provides 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 landowner incentive programs administered by the Service

may be found on our website <http://endangered.fws.gov/landowner/index.html>.

(51) *Comment:* The Service has tried to reassure the public that the wholesale dedication of land as critical habitat will not result in restrictions of public access and that most land use proposals will be approved. One commenter said that this is probably not true, based on what has happened in other parts of the country.

Our Response: Undoubtedly, human activities have had a negative impact to many species in Hawaii. However, numerous threatened and endangered species are currently on the road to recovery through the direct intervention of humans. These include marine and terrestrial vertebrates, plants, and invertebrates. The designation of an area as critical habitat does not in itself restrict public access. The regulatory effect of critical habitat designation is limited to requiring consultation under section 7 of the Act for Federal actions. Since few, if any, Federal actions affect public access to the State and private lands designated as critical habitat for these plants, it is unlikely that public access to these areas will be altered.

(52) *Comment:* By setting aside so many acres of land with no guarantee that the plan will work it will rob the Hawaiian people of their culture and lifestyle. Critical habitat designation should accommodate the traditional cultural gathering rights of Native Hawaiians as reflected in Article XII of the State Constitution and upheld by the Hawaii Supreme Court in PASH and Ka Paakai o Ka Aina decisions. Native Hawaiian issues should be handled by the native Hawaiian people. The Service should make a plan to save plants where the Hawaiian people would have a say.

Our Response: Critical habitat designation does not affect activities, including human access, on State or private lands unless some sort of Federal permit, license, or funding is involved and the activities may affect endangered or threatened species. It imposes no regulatory prohibitions on State or other non-Federal lands, nor does it impose any restrictions on State or non-Federal activities that are not funded or authorized by any Federal agencies.

Access to Federal lands that are designated as critical habitat is not restricted unless access is determined to result in the destruction or adverse modification of the critical habitat. If we determine that access will result in such destruction or adverse modification, we will suggest reasonable or prudent alternatives.

Activities of the State or private landowner or individual, such as

farming, grazing, logging, and gathering, generally are not affected by a critical habitat designation, even if the property is within the geographical boundaries of the critical habitat. A critical habitat designation has no regulatory effect on access to State or private lands. Recreational, commercial, and subsistence activities, including hunting, on non-Federal lands are not regulated by this critical habitat designation, and may be impacted only where there is Federal involvement in the action and the action is likely to destroy or adversely modify critical habitat.

The Service actively seeks input and participation from the public in development and implementation of recovery plans for endangered and threatened species and believes that it is only through such active participation by the public that we will be able to recover these plants.

(53) *Comment:* The critical habitat initiative is generating an unwelcome degree of rift between the State Department of Land and Natural Resources (DLNR) and the Service, and may erode public support for needed recovery efforts. The Service should withdraw their plans for critical habitat designation on Kauai, and instead, work with existing agencies on their current efforts at conservation and preservation. The testimony presented by DLNR at the February 2001 hearing recommends suggestions for working together and cites specific methods for its implementation. They deserve the Service's utmost attention.

Our Response: We agree that the Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) comments and suggestions should be given the utmost attention. During the public comment periods for the November 7, 2000, proposal for plants from Kauai and Niihau, we received written comments and a map showing the DOFAW's vegetation classes and recommended critical habitat units. We evaluated DOFAW's comments on a species by species basis and incorporated their information into the revised proposal published on January 28, 2002. DOFAW recommended deletion of some of the proposed critical habitat units as they do not believe these areas are suitable for the recovery of some species because they would not be able to manage these areas with their limited staff and funding. Because the basis for identifying areas by DOFAW was made on the manageability of the area, their mapping of habitat is distinct from the regulatory designation of critical habitat as defined by the Act.

Following publication of the revised proposal in January 2002, we met with DOFAW on numerous occasions and conducted several site assessment surveys to evaluate habitat that meets the legal requirements of the Act and takes into account the on-the-ground knowledge of DOFAW's biologists and land managers. As a result of the assessment surveys and information provided to us by Kauai DOFAW staff we excluded non-essential areas that did not contain primary constituent elements. In addition, we received important information from Kauai DOFAW staff that enabled us to refine the final critical habitat designations to meet the conservation needs of the species.

Issue 7: Policy and Regulations

(54) *Comment:* Prudence cannot be determined without an analysis of the economic impacts of critical habitat.

Our Response: The Service makes an initial determination on the prudence of designating critical habitat according to regulations found at 50 CFR 424.12(a). In accordance with these regulations, critical habitat designation is not prudent only when one or both of the following two situations exist: (1) 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, (2) such designation would not be beneficial to the species. The economic analysis is conducted after critical habitat has been proposed in a given area, as set forth in regulations found at 50 CFR 424.19. If the Service finds that economic and other impacts outweigh the benefit of designating critical habitat in a given area, that area will be excluded from critical habitat designation unless such exclusion will result in the extinction of the species concerned.

(55) *Comment:* The prudence of critical habitat designation is a final conclusion based on weighing all relevant factors, including economic factors. While the Service promised to complete its economic impact analysis before it promulgates its final determination of critical habitat, it risks putting the decision before the analysis. The prior determination that critical habitat is prudent and therefore required, is treated as a given, even though it ignored economic factors.

Our Response: An economic analysis of the impact of critical habitat cannot be done without knowing the location of the critical habitat. This fact is easily realized by considering the difference of proposed critical habitat on land zoned for protective conservation versus land

zoned for urban development. These types of zoning issues as well as other issues will greatly affect any economic analysis of critical habitat and cannot be taken into consideration until a proposal of critical habitat is put forth. The proposed prudence finding is not a final prudence finding since it has not considered the economic issues. The fact that the proposed critical habitat is published in a proposed rule emphasizes that no final decision has been made on location or extent of critical habitat. The final designation of critical habitat occurs after public comments have been received and the economic analysis on the proposed critical habitat has been completed. The effects of the public comments and the economic analysis are then reflected in the final rulemaking.

(56) *Comment:* The proposed rule unfairly transfers the Service's obligations to determine "prudent and determinable" areas for designation as critical habitat from itself to the owners of the designated lands. This action could potentially violate Section 3(5)(c) of the ESA, which specifically provides that "except in those circumstances determined by the Secretary, critical habitat shall not include the entire geographical area which can be occupied by the threatened or endangered species."

Our Response: All areas designated as critical habitat are determined by the Service, after taking into account the economic analyses and public comments. As established by the Congress of the United States, the Secretary of the Interior or the Secretary of Commerce has the responsibility for designation of critical habitat areas. This responsibility has been delegated to the U.S. Fish and Wildlife Service for listed fish, wildlife and plants and cannot be transferred to any other party. Proposing areas for designation as critical habitat does not transfer any of the designation responsibilities of the Service. As part of the Service's designation process, the entire geographic area that could be occupied by the threatened or endangered species is *never* put forth as proposed or final critical habitat, unless circumstances unique to the species require such a designation and only after approval by the Secretary of the Interior (or the Secretary of Commerce).

Issue 8: Economic Issues

(57) *Comment:* Some reviewers commented that the DEA did not address or did not adequately consider a variety of costs and benefits that they believe could occur due to the implementation of section 7 for the plants.

Our Response: Many of these possible costs were, in fact, considered and some were addressed in the DEA. In many cases, however, potential costs were purposely not addressed in the DEA because they are not expected to occur. In other cases, it is impossible for them to occur. In still other cases, the concerns no longer have substance given the Service's modifications to the proposed critical habitat.

(58) *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 Kauai. 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: The possible costs associated with redistricting land proposed for critical habitat designation were discussed in the DEA under indirect costs. The final rule removes most of the land in the Agricultural and Urban Districts from the critical habitat designation. Redistricting the remaining privately owned parcels to the Conservation District could result in a small probability of: (1) Approximately \$178,500 in lost property values; (2) \$3,570 in an annual loss of economic activity associated with ranching; and (3) \$500 in increased property taxes.

(59) *Comment:* One commenter said that estimated management costs needed to recover a species should be part of an economic analysis associated with critical habitat designation. Another commenter said that management costs for the recovery of listed species are not appropriate costs to assign to critical habitat designation.

Our Response: The Act does not obligate landowners to manage their land to protect critical habitat, nor would landowners and managers be obligated under the Act to participate in projects to recover a species for which critical habitat has been established. However, Chapter VI, section 4.d. of the DEA and section 4.c. of the Addendum does discuss landowners' concerns that the interplay between the state's prohibition on take and critical habitat could result in a potential mandate for conservation management pursuant to litigation and the resulting costs for the proposed designation on Kauai. As noted in Section 4.c. of the Addendum, the costs of conservation management for critical habitat as modified could reach \$1.8 million per year. However, the likelihood of this result is estimated to be low and such costs would not

necessarily be assigned to critical habitat.

(60) *Comment:* Several commenters stated the following: The Service fails to adequately analyze the economic impact to small entities under the Regulatory Flexibility Act, and the Small Business Regulatory Enforcement Fairness Act. Given Kaua'i's small population, a large proportion of firms in the agricultural sector may well be affected and could suffer severe impact. In addition, the prospect of indirect costs mounting into the tens of millions of dollars on a small island requires the Service to reconsider its blithe assumption that there will be no significant impact on small businesses. Having mentioned huge potential losses to landowners and the county economy, the DEA fails to carefully consider the sum of the many "indirect" effects of critical habitat designation, ignoring all but direct costs of consultation.

Our Response: Section 5 of the addendum presents a regulatory flexibility analysis that is consistent with the RFA/SBREFA. Federal courts and Congress have indicated that an RFA/SBREFA analysis should be limited to the impacts to entities 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 the RFA/SBREFA analysis. Based on the analysis, there are no small entities that may be impacted by the implementation of the Act's section 7 provisions for the plants on Kauai. Therefore, the plants' critical habitat designation, as modified, will not have a significant economic impact on a substantial number of small entities.

(61) *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: The analysis in the DEA, as revised by the Addendum, is based on a review of all projects, activities, and land uses that may be directly affected by the implementation of section 7 for the listed plants. The DEA and the Addendum present any reasonably foreseeable Federal

involvement (Federal permit, license, or other authorization, or Federal funding) for these projects, activities, and land uses. These results of this analysis are presented in Table ES-1 in the DEA and Table Add-2 in the Addendum.

(62) *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: Possible costs resulting from interplay of Federal Endangered Species Act and Hawaii State law are already discussed in the DEA and Addendum under indirect costs (e.g., possible conservation management mandate for the private landowner and reduction in game mammals population). The lack of experience with critical habitat on private land in Hawaii is reflected in the uncertainty regarding the probabilities that certain indirect costs will occur.

(63) *Comment:* Several commenters stated the following: The DEA fails to consider economic impacts of listing and critical habitat that result through interaction with State law, specifically Hawaii's Endangered Species Act. *New Mexico Cattlegrowers Association v. U.S. Fish and Wildlife Service* requires consideration of the impact of listing as well as the impact of designating an area as critical habitat. Instead, the analysis is expressly limited to the impact of Federal agency consultation under the jeopardy standard. However, since listing triggers listing under State law, the Service must consider the impact of take prohibitions under State law (and consequently Federal law which

prohibits destruction of plants in knowing violation of State law).

Our Response: The DEA and Addendum consider the economic impacts of section 7 consultations related to critical habitat even if they are attributable co-extensively to the listed status of the species. In addition, they examine any indirect costs of critical habitat designation such as where critical habitat triggers the applicability of a State or local statute. However, where it is the listing of a species that prompts action at the State or local level, the impacts are not attributable to critical habitat designation. Take prohibitions under Hawaii law are purely attributable to a listing decision and do not co-extensively occur because of critical habitat designations. There are no take prohibitions associated with critical habitat.

(64) *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. 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 may initiate such changes, or they may be forced by citizen suits. 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 "minor" and with the statement that the probabilities of redistricting as "slight to small."

Our Response: About 370 acres of privately owned agricultural lands and 12 acres of privately owned urban lands are included in the final designation. Most of the agricultural land is on Niihau and all of the urban land is on steep ocean cliffs. The potential economic costs discussed in the DEA of over \$10 million associated with urban Land in Unit D1 are no longer anticipated because Unit D1 has been removed from the final critical habitat designation for biological reasons. Reduction in land values due to redistricting land from Agricultural or

Urban District to Conservation District could result in a loss of \$178,500 in property values on Niihau. The loss of the economic activity from ranching and the increase in property taxes is estimated at \$4,070 per year. Under this scenario, even if a landowner has no plans to sell the land, the loss in land value could reduce potential mortgage financing.

(65) *Comment:* One commenter stated the following: The State currently leases some of its lands for agriculture or ranching uses. There is uncertainty whether any endangered plant species exists on these lands, which have historically been used for agricultural and ranching purposes, and have been subject to grazing and cultivation activities. If such species do exist, State law would completely prohibit or substantially restrict the continued use of these lands for agriculture or ranching purposes and would clearly have an adverse impact on the operations of the lessees and lease revenues. The DEA fails to establish that the benefits of including specific leased parcels outweigh the costs.

Our Response: Approximately 37 acres of State owned land are included in critical habitat Units H1 and M, as modified in the final rule. The 33 acres in Unit H1 comprise a sliver of land that is makai (toward the ocean) of the existing road in the northern portion of the unit and does not include any fields or grazing land. The State does not have any agricultural leases for the four acres of Agricultural land in Unit M. As such, the designation of critical habitat is not anticipated to have adverse effects on agricultural activities on State land.

(66) *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 HAR 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 Kauai County as required by Hawaii's Coastal Zone

Management Act will be harder to get, will result in delays, will cause a decline in property values and may make it impossible to develop. This economic impact disappears because the DEA's bottom line erroneously counts only so-called "direct" costs of consultation.

Several commenters also stated the following: 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.f.(2) of the DEA discusses State and county environmental review, with and emphasis on Hawaii's Environmental Impact Statement Law. This section indicates that if a project is required to do an Environmental Assessment (EA) and is located in critical habitat, a more expensive EIS may have to be prepared. The estimated increase in costs to prepare an EIS is \$25,000 to \$75,000 per project. There is one project that may require an EA and is located in critical habitat, as modified. As such, the additional environmental review cost potentially attributable to critical habitat is \$25,000 to \$75,000.

However, there are no planned development projects that will require State and county development approvals and are located in critical habitat, as modified in this final rule. The following factors make future development projects in the proposed critical habitat highly unlikely: (1) As modified, 99 percent of the proposed critical habitat is in Conservation District where development is severely limited; (2) almost all of the remaining agricultural land is on Niihau in an area not subject to development pressure; and (3) all of the land in the Urban District is on steep ocean cliffs that cannot support development. Thus, the probability that the Service will intervene in State and county development approvals is regarded as negligible because there is no development planned and almost no development potential in critical habitat.

(67) *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 may 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 element for species that do not physically reside in the area but may 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. Water sources and irrigation ditches that are part of the former Kekaha irrigation system for the former Kekaha Sugar Plantation should be removed from designation. At minimum, portions of specific parcels that include water sources or water systems should be removed.

Our Response: No costs are expected to occur from such impacts to water systems, because none of the listed plants are aquatic and therefore would not cause a reduction in water diversion. In addition, water infrastructure, including the Kekaha irrigation system, is considered a manmade feature and therefore would not be included in critical habitat pursuant to the rule, because these features and structures normally do not contain, and are not likely to develop, any primary constituent elements. Thus, unless its operation and maintenance would indirectly affect critical habitat, which is not anticipated, it should not be affected by section 7 of the Act. (See comment 7.m. of the Economic Analysis for a discussion of the impacts of the proposed designation on potential new water diversions.)

(68) *Comment:* Several commenters stated the following: The irrigation system stemming from the North Fork diversion of the Wailua River and the hydropower plant located in Wainiha Valley are necessary for the continued viability and possible expansion of agricultural activities on Kauai.

Continued operation of the systems require registration permits from the State and, depending on the nature of the maintenance, may require Army Corps of Engineers (COE) permits. These uses should not be burdened with the threat of potential Federal or civil action prohibiting or delaying their continued or expanded use. Furthermore, any additional requirement brought about by a critical habitat designation would be borne by the system's end users. Similarly, restoration of the taro fields in Haena State Park would require a COE permit. The designation of this area as critical habitat would make it unlikely that this permit would be approved, thus frustrating the efforts and development of the park. Additional analysis of costs associated with hydropower development is warranted. Such analysis would indicate that agricultural lands and hydropower development should be excluded from designation of critical habitat because benefits of exclusion would far outweigh the benefits of designation and the exclusion would not result in the extinction of the species.

Our Response: The irrigation system stemming from the North Fork diversion of the Wailua River, the diversion and hydropower plant located in Wainiha Valley, the taro fields in Haena State Park, and all areas downstream from these water systems/improvements have been removed from the critical habitat as modified in this final rule. In addition, as noted in responses to other comments, none of the listed plants are aquatic and therefore would not cause a reduction in water diversion. Thus, no costs are expected from continued operation of these water systems.

Chapter VI, section 3.i. of the DEA discusses the potential for additional hydropower development in the areas proposed as critical habitat. Since the publication of the DEA, information regarding a hydropower diversion and powerhouse in the upper Wainiha Valley was made available. This hydropower plant was proposed in the 1980's, but due to the landowner's capital limitations at the time, it was not constructed. There are no current plans to continue to investigate the feasibility of the project, but the potential for future development adds to the land value of the Upper Wainiha Valley. However, the area planned for the diversion, powerhouse, and other project elements are no longer included in critical habitat as modified. As such, no costs associated with future hydropower development potential are anticipated.

(69) *Comment:* One commenter stated the following: In discussing possible future hydropower facilities, the DEA appears to contradict itself by saying that in May 2001 a company filed an application with the Federal Energy Regulation Commission for a preliminary permit and then saying it is "highly unlikely" that any additional hydro plants will be built. If critical habitat designations make it all but impossible to build a new hydropower facility, which seems to be the implication of the DEA, then the designations contradict the State and national policies of promoting energy independence.

Our Response: Chapter VI, Section 3.i. of the DEA does mention that in May 2001, a company filed an application with the Federal Energy Regulatory Commission (FERC) to build a dam on the lower Wailua River and that the area affected by this project is outside of critical habitat. The DEA also states that "it is highly unlikely that additional plants will be built in the next 10 years in areas that could impact the proposed critical habitat." This statement is supported by studies performed by the State Department of Business, Economic Development, and Tourism (DBEDT) of the areas in critical habitat, and current plans of those who own land in critical habitat. In addition, the planned generating capacity on Kauai is sufficient to supply projected demand over the 10-year period of the analysis. Since the proposed critical habitat does not cover the entire island of Kauai, these two statements are not contradictory.

Furthermore, development of a new hydropower plant would still be possible even if the hydropower plant was located upstream or within critical habitat. If the project had Federal involvement, and the Federal action agency determined the project may affect critical habitat or listed species, the Federal action agency would enter into section 7 consultation with the Service. The section 7 consultation process is described in detail in Chapter III of the DEA.

(70) *Comment:* One commenter stated the following: On Maui, there is an administrative contested case proceeding pending before the Board of Land and Natural Resources that involves the diversion of millions of gallons of water. Any 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: Chapter VI, section 3.j.(2). of the DEA states that it is highly unlikely that a new ditch system or major expansion to an existing one (including new diversions) would be proposed or approved in the proposed critical habitat. This assessment is made due to the existing protections provided by the baseline environmental regulations (described in Chapter IV of the DEA), the projected demand for additional diversions for irrigation above and beyond the existing supply, and current environmental concerns, as well as likely public opposition to stream diversions.

None of the plants for which critical habitat is designated on Kauai or Niihau in this final rule are aquatic. These plants rely on rainwater that percolates down through the substratum and is absorbed by the plant's roots. Thus, local rainfall and localized surface runoff are the critical factors that affect the habitat of the listed plants. In addition, water infrastructure, including irrigation systems, are considered manmade features and therefore would not be included in critical habitat pursuant to the rule, because these features and structures normally do not contain, and are not likely to develop, any primary constituent elements. Thus, unless its operation and maintenance would indirectly affect critical habitat, which is not anticipated, it should not be affected by section 7 of the Act. (See comment 7.m. of the Economic Analysis for a discussion of the impacts of the proposed designation on potential new water diversions.)

We are unable to find documentation of extinction of Hawaiian plants due to water diversions and are unable to comment on the speculation that people who oppose all water diversions on principle will challenge any future or current diversions by contending that diverting water from endangered plants risks driving them to extinction.

(71) *Comment:* Two commenters stated the following: The estimated total costs of designating critical habitat are deceptively low because they exclude costs that "are difficult to estimate." However, the costs of conservation management are quantifiable and examples of cost per acre are available from watershed management projects around the State. There is no reason why these costs should be ignored in the DEA. If included, these costs will certainly outweigh the benefits of designation. The DEA also underestimates the economic costs because they are limited to what is

likely to occur within 10 years even though critical habitat designation is permanent and not automatically revised if there is new evidence of the benefits of non-designation, or if the species is delisted.

Our Response: As noted above, the illustrative cost of conservation management of the entire critical habitat as modified is \$1.8 million per year. In addition, as discussed in the economic analysis, while there is no existing obligation to proactively manage lands in critical habitat to control threats, there is an undetermined probability that a State or Federal court could mandate conservation management.

A listed species is delisted when it is recovered or has gone extinct. Recovery is defined as no longer needing the protections provided by the Endangered Species Act, including critical habitat. As such, when a species is delisted, its critical habitat would also be "undesigned." Furthermore, as indicated by the DEA, many landowners and managers do not have specific plans for projects beyond 10 years, and forecasts of future economic activity are based on current socio-economic trends and the current level of technology, both of which are likely to change over the long term. However, information available in documents with planning horizons that are longer than 10 years such as the Kauai Planning Department's Kauai General Plan (2002), and the State Department of Transportation Kauai Long Range Land Transportation Plan (1997) are considered in the preparation of the DEA and the Addendum.

(72) *Comment:* One commenter stated the following: The conclusion under E.O. 12866 that the rule will not have an annual economic effect of \$100 million or more, or adversely affect in a material way any sector of the economy or State or local governments or communities, is flawed because it does not consider the major adverse impacts from secondary effects.

Our Response: For the reasons explained in the economic analysis, the rule is not expected to have an annual economic effect of \$100 million or more. As indicated in Table Add-2, the annualized direct costs of the implementation of section 7 for the listed plants ranges from approximately \$17,800 to \$112,500. While the probability that many of the indirect effects will occur is low or unknown, the total worst case scenario for the indirect costs of critical habitat, as modified, includes (1) \$513,000 in direct and indirect annual sales from the loss of economic activity associated with hunting (however, the decrease in

expenditures by the displaced hunters would probably be spent on other recreational activities, goods and services, so this figure is likely to overstate the economic costs); (2) \$149,000 per year in the loss of hunter benefits (however, as above, some of this loss will be offset by benefits derived from alternative recreational activity); (3) \$1.8 million in annual conservation management costs (some of which may be in the form of new Federal funds to Hawaii and thus represent an increase the regional economy instead of a loss); (4) approximately \$178,500 in lost property values; (5) \$3,570 in an annual loss of economic activity associated with ranching; (6) \$500 in increased property taxes; (7) \$25,000 to \$75,000 in the additional cost to prepare an EIS; and (8) \$53,000 to \$169,000 in the costs to investigate the implications of critical habitat. Annualized, these indirect costs amount to \$2.49 million to \$2.51 million per year. The sum of the direct and indirect costs, annually, ranges from \$2.51 million to \$2.62 million, significantly less than the \$100 million level of significance.

(73) *Comment:* Several commenters stated the following: Critical habitat designation could indirectly result in limitations or special management requirements, such as fencing or control of invasive species, being established on private lands. These requirements could result in considerable cost to both the State and private landowners. The DEA estimates that the Palila case may be interpreted to mandate private conservation and could cost Kauai landowners \$3 million or more per year. These costs should be considered. Where such costs are likely to outweigh the benefits, the Service should determine that critical habitat designation is not prudent. At minimum, areas proposed for designation should be significantly reduced so that any special management measures that may eventually be mandated through litigation are of a scale that is reasonable and cost effective to implement.

Our Response: Section 4(a)(3)(A) of the Act directs the Secretary to designate critical habitat to the "maximum extent prudent and determinable." Critical habitat is not prudent when one or both of the following situations exist: (i) A species is threatened by taking or other human activity and identification of critical habitat would increase the degree of threat; or (ii) designation would not be beneficial to the species. 50 CFR 424.12(a)(1). Thus the costs of designation are not considered in

analyzing whether critical habitat is prudent. However, such costs are considered under section 4(b)(2) of the Act, which directs the Secretary to take into consideration the economic and other impacts of designation and authorizes the Secretary to exclude any area if she determines that the benefits of exclusion outweigh the benefits of designating it as critical habitat, unless it will result in extinction of the species.

The Act does not obligate landowners to manage their land to protect critical habitat, nor would landowners and managers be obligated under the Act to participate in projects to recover a species for which critical habitat has been established. However, the DEA and the Addendum discuss the potential mandate for conservation management pursuant to litigation and the resulting costs for the proposed designation on Kauai. The cost of conservation management for the critical habitat as modified could be approximately \$1.8 million per year. However, there is an undetermined probability that this impact will occur.

(74) *Comment:* Several commenters stated the following: The cost of potential citizen suits preventing certain activities or requiring some sort of management in critical habitat was not discussed in the DEA. Litigation regarding land management requirements is not only foreseeable, but likely. The proposals will give the government and the environmental groups a legal excuse to attack and severely damage anyone who grows endangered Hawaiian plants, and also anyone whose land is listed as critical habitat. Human freedom and constitutional principles are far more important than biologically incompetent plants. Critical habitat designation will bring unnecessary and costly litigation, thus creating an economic disaster that would severely challenge one private landowner's economic viability. These official listings will also give the government and the environmental groups a legal excuse to meddle destructively in the affairs of Niihau.

Our Response: As discussed in the DEA and in the Addendum, an undetermined probability exists that a Federal or State court could mandate certain indirect impacts as a result of critical habitat. However, it is beyond the scope of the economic analysis to assess the legal merits of the arguments for or against the various indirect impacts, the probability that a lawsuit will be filled, and, if filed, to identify possible outcomes of a court decision and the associated probabilities. However, whenever possible, the DEA and the Addendum present the worst-

case scenario of the costs associated with the potential outcomes of third party lawsuits.

(75) *Comment:* Several commenters stated the following: A strip of Grove Farm-owned land along the coastline from the Poipu Bay Golf Course to Kaweliko Point is being proposed for critical habitat. Although much of this land is within the Conservation District and development, if any, is expected to be minimal, critical habitat designations may affect current activities that exist in this area, as well as possible future activities, such as, hiking, kayaking or horseback riding. The Poipu Mahaulepu property also has future potential as a quality resort development, with potential construction valued in the hundreds of millions of dollars and employment and housing for over a thousand residents. The U.S. Navy currently has 14 beach cottages and an officers beach facility within its Pacific Missile Range Facility (PMRF). Funding has been appropriated to add six cottages and future plans provide for additional cottages to follow. Completed documents also identify construction plans for other new facilities and structures on PMRF. The economic analysis does not adequately consider such future costs.

Our Response: Activities such as hiking, kayaking, and horseback riding are not identified as threats to critical habitat in the proposed rule. As such, any additional environmental review or modification to these activities directly or indirectly attributable to critical habitat is anticipated to be negligible. The planned site for the Poipu Mahaulepu resort and the 14 beach cottages at PMRF are not included in critical habitat as modified. The potential costs associated with other planned construction at PMRF are discussed in Chapter VI, section 3.m. of the DEA and in section 3.b. of the Addendum.

(76) *Comment:* Several commenters stated the following: Portions of the proposed critical habitat designations are within the Conservation District. Although there are no intense activities occurring on these lands, roadway and water systems traverse some of these lands. Critical habitat designations may affect operations and maintenance of these systems as well as any future change in use of the lands.

Our Response: As mentioned in the proposed rule and in Chapter I of the DEA, existing manmade features and structures do not contain, and are not likely to develop, primary constituent elements essential for the conservation of the listed species. These features and structures are considered "unmapped

holes" that are found within the boundaries of critical habitat units but are not considered by the Service to be part of critical habitat. As such, there are unlikely to be any direct section 7 related costs to the operation and maintenance (O&M) of existing features and structures.

The inclusion of these features and structures in the critical habitat boundaries could indirectly affect the activities associated with the existing features due to an increase in State and county environmental review. However, any additional delays or modifications as a result of the increased State and county review are anticipated to be negligible because manmade features and structures do not contain the primary constituent elements for the listed plants.

The DEA and the Addendum present all of the reasonably foreseeable projects, land uses, and activities that could occur within critical habitat over the next ten years. While there may be some unknown future change in the use of the land in the Conservation District in critical habitat, there is insufficient information to assess the potential indirect or direct effects critical habitat will have on the land use. However, any impact attributable to critical habitat is anticipated to be minor due to the existing protections provided by Conservation District and other baseline regulations discussed in Chapter IV of the DEA.

(77) *Comment:* Several commenters stated the following: Kauai's economy is far from robust and serious consideration must be given to the economic consequences of designating critical habitat. The total designation of 99,206 acres on Kauai and 697 acres on Niihau encompass approximately one-fourth of the total land area of Kauai County and is of grave concern.

Our Response: Critical habitat, as modified, includes roughly 15 percent of the island of Kauai and less than one percent of the island of Niihau. The economic costs to the economy of Kauai County (which includes both Kauai and Niihau) are expected to be minimal because (1) as modified, 99 percent of the proposed critical habitat is in Conservation District where development and other economic activity is severely limited; (2) almost all of the remaining agricultural land is on Niihau in an area not subject to development pressure; and (3) all of the land in the Urban District is on steep ocean cliffs that cannot support development.

(78) *Comment:* Several commenters stated the following: All Hawaiian plant recovery plans call for fencing to keep

feral animals away from the plants. Yet the Service has stated that the 99,000 acres being designated as critical habitat on Kauai will have no impact on the hunters. Clarification of this statement is needed. Critical habitat designation will greatly impact the public hunting program and deprive hunters access to lands they have used for generations for recreation as well as food supplement for their families. This loss is of further significance, given Kauai's hard-pressed economy and the recent closures of Amfac and Kekaha Sugar plantations. The State could also lose much needed revenues to continue its game and area management services as sales of hunting licenses would decrease. This, in turn, would result in the overgrowth of non-endangered plant species that will eventually overrun the protected endangered species population. Also, limitations on game hunting in areas of critical habitat may lead to an increase in the numbers of wild pigs and goats, which would feed on the endangered plant species.

Our Response: Chapter VI, sections 3.a. and 4.b. of the DEA and section 4.a. of the Addendum discuss the potential effects the implementation of section 7 for the listed plants will likely have on hunting, as well as the potential indirect effect critical habitat could have on hunting. The direct effects include costs ranging from \$9,000 to \$17,600 for two section 7 consultation between the Service and DLNR and costs ranging from \$50,000 to \$100,000 for project modifications associated with State game management activities. The indirect effects include a slight probability of a change in State game management policy and an undetermined probability of a successful third party lawsuit to mandate conservation management of State and private lands, which could include fencing to exclude feral ungulates. The potential drop in hunting activity translates into a decrease in annual economic activity related to hunting on Kauai of about \$297,000 in direct sales (a figure that includes expenditures on hunting licenses); \$513,000 in total direct and indirect sales; nine jobs; and \$176,000 in income, as well as a loss of \$149,000 in hunter benefits. However, the decrease in expenditures and hunter benefits would probably be off-set by expenditures and benefits associated with other recreational activities, so these figures are likely to overstate the economic costs. If the critical habitat, as modified, is fenced to exclude ungulates, the annual cost of conservation management for the listed

plants would be approximately \$1.8 million.

A critical habitat designation does not in any way create a wilderness area, preserve or wildlife refuge, nor does it close an area to human access or use. It applies only to activities sponsored at least in part by Federal agencies. Land uses such as logging, grazing and recreation that may require Federal permits may take place if they do not adversely modify critical habitat. Critical habitat designations do not constitute land management plans. A designation of critical habitat does not require a private or State landowner to fence the designated area and/or remove game mammals. However, feral ungulates have been extremely important causes of vegetation decline in Hawaii (Cuddihy and Stone 1990) and have been identified as a primary threat to many of the listed plant species on Kauai. The Service recognizes that populations of many game mammal species affect the distribution and abundance of many listed endangered plant and animal species to varying degrees, either directly or indirectly. We also recognize that game mammal hunting is a highly valued activity to a portion of the present-day Hawaiian culture. We recognize hunting as an important tool to manage wild populations of game and support hunting as a recreational activity and the maintenance of game mammal hunting programs within the State of Hawaii. However, Federal and State law dictate that hunting programs should be designed and executed in a way that is compatible with endangered species conservation. Game mammal hunting programs should not only prevent extinction, but allow for the recovery of federally listed endangered and threatened species. The Service also recognizes that under certain circumstances, removal of ungulates can result in an increase in weedy growth and associated fire risk, and we recommend that ungulate management programs assess and address this issue.

(79) *Comment:* The Navy commented that: There is no indication that the specific Navy parcels are, in fact, critical to the survival of these species; the vast majority of the proposed areas to be designated are presently unoccupied by the species in question and their successful introduction to and survival in these areas is speculative; and the proposed areas are presently utilized for national defense operations that may present incompatibilities with the objective of species preservation. Therefore, the benefits of excluding the areas outweigh the benefits of specifying these areas as part of the critical habitat.

Our Response: We have had numerous discussions with the Navy regarding these areas, and as a result, have removed some sections of the units for these species, based on either the lack of primary constituent elements or the presence of structures and areas used for Navy training operations. The remaining areas are not excluded because they contain at least one of the primary constituent elements for *Panicum niahauense* as described in the "Hawaiian plants—Constituent elements" section. These areas are essential to the recovery of *Panicum niahauense* because not enough other areas that contain these primary constituent elements outside of the PMRF are known to exist in order to meet our goals of 8 to 10 populations.

(80) *Comment:* One commenter stated the following: It is not prudent to designate critical habitat on Niihau as it may serve to restrict Federal actions that promote the readiness of our nation's fighting forces. The operations most likely to be impacted would be the Special Warfare and the downed pilot recovery training exercised by the U.S. Marine Corps and U.S. Navy. Disruption of these activities may also result in negative economic impact to Niihau residents.

Our Response: The potential project modifications as a result of the implementation of section 7 for the plants on military activities on Niihau are discussed in Chapter VI, section 3.m. of the DEA. These project modifications include placing stakes in the ground to mark the boundaries of the areas which should be avoided. The Navy may also give maps to military personnel before they are deployed to the area to delineate these areas. The total cost of these project modifications is estimated at \$6,000. Given that the proposed critical habitat as modified covers less than one percent of Niihau, and the military uses much of the island for Special Warfare and the downed pilot recovery training, the avoidance of the areas in critical habitat is not anticipated to have an effect on the readiness of our nation's fighting forces or Niihau residents.

(81) *Comment:* One commenter stated 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. In addition, 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: Chapter VI, Sections 6 and 7 of the DEA discusses the potential benefits addressed in the above comments. However, the DEA also indicates 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 which will occur due to other existing protections, and over and above the benefits from other conservation projects). In addition, 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 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 used in the DEA as a resource document for concepts, and for identifying documents that report the original research on certain subjects.

However, the UH study has limited applicability for valuing the benefits of plants critical habitat designation for a number of reasons. First, the UH study had a different purpose which was to estimate the total value of environmental benefits provided by the entire Koolau Mountains on the island of Oahu versus the value of the more limited benefits provided by the proposed plants critical habitat on the island of Kauai. Consistent with its purpose, the UH study provides no estimates of the changes in environmental conditions resulting from changes in land management due to critical habitat designations.

Furthermore, many of the assumptions and much of the analysis in the UH study are not transferable to the economic analysis for the plants critical habitat. For example, the value of water recharge in the UH study reflects projected water supply and demand conditions on Oahu—an island which is nine percent larger than Kauai but has a population of more than 12 times that of Kauai. Also, the UH benefit analysis of reducing soil runoff is unique to three valleys that drain through partially channelized streams in urban areas into the manmade Ala Wai Canal. Since this canal was designed with inadequate flushing from stream or ocean currents, it functions as an unintended settling basin so must be dredged periodically. In addition, the recreational and ecotourism values provided in the UH study apply to areas that are accessible to most hikers, which is not the case with most of the plants critical habitat. As mentioned in the DEA, most of the plants critical habitat units are located in the mountainous interior of Kauai. Much of the proposed critical habitat has steep slopes, remote locations, and difficult access; some of the units are accessible only by helicopter and are rarely visited.

Chapter VI, section 6.c. of the DEA discusses a potential benefit of critical habitat to developers. By knowing the critical habitat boundaries, developers can site projects outside the boundaries, thereby avoiding certain issues related to threatened and endangered species. As such, the benefit is not circular, because, as a result of critical habitat, developers can avoid take issues associated with section 9 of the Act and the other baseline regulations protecting listed species discussed in Chapter IV of the DEA.

(82) *Comment:* Several commenters stated the following: Existence values should be quantified. Studies referenced in the analysis contain information about how much people would be willing to pay to save various species. Even assuming plants are non-charismatic and therefore would justify lower values, there would still be a value of \$6 per household per year. If the study is able to take values for a day of hunting from the State of Idaho and apply them to Hawaii, it should be equally able to take values from studies which have looked at other species to get some sense of what people would pay to make sure these species recover and do not go extinct.

Our Response: When primary research on benefits is not feasible, economists frequently rely on the method of benefits transfer. Benefits transfer involves application of results

of existing valuation studies to a new policy question. Two core principals of defensible benefits transfer are (1) the use of studies that apply acceptable techniques to generate welfare values, and (2) similarity between the good being valued in the literature and the good being valued in the policy context to which the transfer is being made (i.e., the protection afforded the plants by critical habitat). No known studies exist on quantified data on the value of plants. Therefore, applying results of existing valuation studies on non-plants to the Kauai plants is not feasible.

(83) *Comment:* Several commenters stated the following: Active management by private landowners would be more beneficial than critical habitat designations because private landowners can carry out conservation actions that might otherwise not happen. The proposal fails to properly consider the importance of cooperation and goodwill between the Service and private landowners, and the impact critical habitat designations will have in discouraging voluntary partnerships on private lands.

Our Response: Chapter VI, section 4.j. of the DEA discusses the potential for reduced cooperation on conservation projects as a result of critical habitat. The DEA determines that a modest but undetermined reduction in cooperation may occur, along with a corresponding but undetermined environmental loss to society.

Summary of Changes From the Revised 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) The scientific names changed for the following associated species with the listed species found in the “Supplementary Information: Discussion of the Plant Taxa” section: *Lipochaeta integrifolia* changed to *Melanthera integrifolia* for *Centaurium sebaeoides*; *L. subcordata* changed to *Melanthera subcordata* for *Lipochaeta fauriei*; *Styphelia tameiameia* changed to *Leptocophylla tameiameia* for *Chamaesyce halemanui*, *Delissea rhytidosperra*, *Diellia erecta*, *Diellia pallida*, *Exocarpos luteolus*, *Mariscus pennatifolius*, *Melicope knudsenii*, *Platanthera holochila*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Schiedea kauaiensis*, *Schiedea stellarioides*, *Viola kauaiensis* var. *wahiawaensis*, and *Xylosma*

hawaiiense; *Hibiscus tiliaceus* changed to *Talipariti tiliaceus* for *Cyperus trachysanthos*; *Myrica faya* changed to *Morella faya* for *Diellia erecta* and *Exocarpos luteolus*; *Stachytarpheta dichotoma* changed to *S. australis* for *Brighamia insignis*, *Cyanea undulata*, *Dubautia pauciflora*, *Lipochaeta micrantha*, and *Viola helenae*; *Mariscus meyenianus* changed to *Cyperus meyenianus* for *Diellia erecta* and *Poa mannii*; *Mariscus phleoides* changed to *Cyperus phleoides* for *Centaurium sebaeoides*; *Pluchea symphytifolia* changed to *P. carolinensis* for *Cyanea undulata*, *Dubautia pauciflora*, *Hedyotis st.-johnii*, and *Lipochaeta micrantha*; *Athyrium sandwichianum* changed to *Diplazium sandwichianum* for *Plantago princeps*, *Melicope knudsenii*, *Flueggea neowawraea*, *Euphorbia haelealeana*, *Xylosma crenatum*, *Viola helenae*, *Schiedea membranacea*, *Pteralyxia kauaiensis*, *Phyllostegia wawrana*, *Phyllostegia waimeae*, *Nothocestrum peltatum*, *Dubautia latifolia*, *Delissea rivularis*, *Cyrtandra limahuliensis*, *Cyrtandra cyaneoides*, *Cyanea undulata*, *Cyanea remyi*, and *Alsinidendron lychnoides*; and *Setaria gracilis* changed to *Setaria parviflora* for *Brighamia insignis*, *Cyanea undulata*, and *Dubautia pauciflora*.

(2) We corrected the misidentification of *Passiflora mollissima* to *P. tarminiana* which is an associated species found with the following listed species: *Delissea rhytidosperra*, *Dubautia latifolia*, *Nothocestrum peltatum*, *Phyllostegia wawrana*, *Poa sandwicensis*, *Schiedea membranacea*, *Delissea undulata*, *Diellia erecta*, and *Solanum sandwicense* in the threat section of the species descriptions in the “Supplementary Information: Discussion of the Plant Taxa”.

(3) We changed “spp.” to the specific species which are associated with the following listed species found on Kauai in the “Supplementary Information: Discussion of the Plant Taxa” and section 17.99: *Touchardia* spp. changed to *Touchardia latifolia* for *Cyanea remyi*; *Syzygium* spp. changed to *Syzygium sandwicensis* for *Isodendron longifolium*; *Gunnera* spp. changed to *Gunnera kauaiensis* for *Cyrtandra cyaneoides*, *Plantago princeps*, and *Phyllostegia waimeae*; *Eugenia* spp. changed to *Eugenia reinwardtiana* for *Cyrtandra limahuliensis* and *Isodendron longifolium*; *Pteralyxia* spp. changed to *Pteralyxia kauaiensis* for *Alectryon macrococcus*, *Delissea rhytidosperra*, and *Euphorbia haelealeana*; *Alectryon* spp. changed to *Alectryon macrococcus* for *Phyllostegia wawrana*; *Broussaisia* spp. changed to

Broussaisia arguta for *Adenophorus periens*; *Pleomele* spp. changed to *Pleomele aurea* for *Alsinidendron viscosum*, *Dubautia latifolia*, *Pritchardia napaliensis*, and *Alectryon macrococcus*; and *Antidesma* spp. changed to *Antidesma platyphyllum* for *Cyanea remyi*, *Cyanea undulata*, *Cyrtandra limahuliensis*, *Dubautia latifolia*, *Hesperomannia lydgatei*, *Hibiscus waimeae* ssp. *hannerae*, *Kokia kauaiensis*, *Lipochaeta micrantha*, *Nothocestrum peltatum*, *Pritchardia viscosa*, *Alectryon macrococcus*, *Flueggea neowawraea*, *Isodendron laurifolium*, and *Isodendron longifolium*.

(4) For species associated with listed species, we replaced specific species names for those that do not exist on Kauai with “spp.” for genera with multiple species on Kauai in the “Supplementary Information: Discussion of the Plant Taxa” and section 17.99 as follows: *Cibotium chamissoi* changed to *Cibotium* spp. for *Phlegmariurus nutans*; *Peperomia leptostachya* changed to *Peperomia* spp. for *Wilkesia hobdyi*; *Lipochaeta succulenta* and *Lipochaeta heterophylla* changed to *Lipochaeta* spp. for *Centaurium sebaeoides*; *Coprosma grayana* changed to *Coprosma* spp. for *Viola kauaiensis* var. *wahiawaensis*; *Peperomia macraeana* changed to *Peperomia* spp. for *Exocarpos luteolus* and *Phyllostegia wawrana*; *Schiedea lydgatei* var. *attenuata* changed to *Schiedea* spp. for *Poa mannii*; *Adenophorus oligadenus* changed to *Adenophorus* spp. for *Delissea rhytidosperra*; and *Cyanea hirta* changed to *Cyanea* spp. for *Xylosma crenatum*.

(5) We corrected the species name to the species that occurs on Kauai for species associated with listed species in the “Supplementary Information: Discussion of the Plant Taxa” and section 17.99 as follows: *Santalum ellipticum* changed to *Santalum freycinetianum* for *Lipochaeta waimeaeensis* and *Delissea undulata*; and *Pteralyxia sandwicensis* changed to *Pteralyxia kauaiensis* for *Delissea rhytidosperra* and *Euphorbia haeleeleana*.

(6) We removed the following species from the list of associated species from the “Supplementary Information: Discussion of the Plant Taxa” and section 17.99 as they do not occur on Kauai: *Abutilon sandwicense* was removed from *Melicope pallida*; *Reynoldsia sandwicensis* was removed from *Euphorbia haeleeleana*; *Rhynchospora laxa* was removed from *Platanthera holochila*; and *Antidesma*

pulvinatum was removed from *Flueggea neowawraea*.

(7) In order to avoid confusion regarding the number of location occurrences for each species (that does not necessarily 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” 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 2.—Summary of existing occurrences on Kauai and Niihau, and landownership for 95 species reported from Kauai and Niihau”: *Adenophorus periens* changed from 80 individuals to 59; *Alectryon macrococcus* changed from six populations to 18 occurrences and from 204 individuals to 159–174; *Alsinidendron lychnoides* changed from two populations to four occurrences and from 10 individuals to eight; *Alsinidendron viscosum* changed from five populations to seven occurrences and from 263 individuals to 319; *Bonamia menziesii* changed from eight populations to nine occurrences and from 62 individuals to 36; *Brighamia insignis* changed from 65 individuals to 42–62; *Centaurium sebaeoides* changed from 52 individuals to 22–52; *Chamaesyce halemanui* changed from six populations to nine occurrences and from 143 individuals to 85–135; *Cyanea asarifolia* changed from one population to two occurrences and from five individuals to 4–5; *Cyanea recta* changed from seven populations to eight occurrences and from 609 individuals to 198–208; *Cyanea remyi* changed from 374 individuals to 394–484; *Cyperus trachysanthos* changed from two populations to one occurrence; *Cyrtandra cyaneoides* changed from 404 individuals to 354–454; *Cyrtandra limahuliensis* changed from 11 populations to 13 occurrences and from 822 individuals to 2,746–3,024; *Delissea rhytidosperra* changed from 19 individuals to 11; *Diellia pallida* changed from four populations to six occurrences and from 20–25 individuals to 43–48; *Dubautia latifolia* changed from nine populations to 26 occurrences and from 80 individuals to 65–84; *Dubautia pauciflora* changed from two populations to four occurrences; *Euphorbia haeleeleana* changed from seven populations to 23 occurrences; *Exocarpos luteolus* changed from eight populations to nine occurrences; *Flueggea neowawraea* changed from eight populations to 10 occurrences and from 85 individuals to 62; *Hedyotis st.-*

johnii changed from four populations to 11 occurrences and from 296 individuals to 227–292; *Hesperomannia lydgatei* changed from three populations to four occurrences and from 295 individuals to 298; *Hibiscadelphus woodii* changed from one population to two occurrences; *Hibiscus clayi* changed from six individuals to four; *Hibiscus waimeae* ssp. *hannerae* changed from three populations to two occurrences; *Isodendron laurifolium* changed from five populations to 13 occurrences and from 151 individuals to 142–154; *Isodendron longifolium* changed from nine populations to 15 occurrences and from 521 individuals to 804–854; *Kokia kauaiensis* changed from five populations to 21 occurrences and from 166 individuals to 166–171; *Labordia tinifolia* var. *wahiawaensis* changed from 100 individuals to 20–30; *Lipochaeta fauriei* changed from four populations to five occurrences and from 183 individuals to 82; *Lipochaeta micrantha* changed from 231 individuals to 171; *Lobelia niihauensis* changed from 11 populations to 13 occurrences and from 1,106 individuals to 284–2,134; *Lysimachia filifolia* changed from 75 individuals to 20–75; *Melicope haupuensis* changed from five individuals to 13; *Melicope knudsenii* changed from seven populations to 10 occurrences; *Melicope pallida* changed from five populations to six occurrences; *Munroidendron racemosum* changed from 14 populations to 17 occurrences and from 101 individuals to 59–99; *Myrsine linearifolia* changed from eight populations to 12 occurrences and from 522 individuals to 490–564; *Nothocestrum peltatum* changed from six populations to 10 occurrences and from 19 individuals to 20; *Peucedanum sandwicense* changed from 14 populations to 15 occurrences and from 340 individuals to 156–256; *Phyllostegia knudsenii* changed from one population to three occurrences and from 17 individuals to 4–13; *Phyllostegia wawrana* changed from 49 individuals to 34–54; *Plantago princeps* changed from six populations to seven occurrences and from 471 individuals to 542–670; *Platanthera holochila* changed from 28 individuals to 24–34; *Poa sandwicensis* changed from 1,740 individuals to 1,321; *Pritchardia napaliensis* changed from three populations to five occurrences; *Pteralyxia kauaiensis* changed from 15 populations to 39 occurrences and from 807 individuals to 1,124–1,161; *Remya kauaiensis* changed from 12 populations to 17 occurrences and from 124 individuals to 106–114; *Remya*

montgomeryi changed from three populations to six occurrences and from 113 individuals to 143; *Schiedea apokremnos* changed from 751 individuals to 819–1,751; *Schiedea helleri* changed from 63 individuals to 50–60; *Schiedea kauaiensis* changed from two populations to five occurrences; *Schiedea membranacea* changed from seven populations to 10 occurrences and from 195 individuals to 344–348; *Schiedea nuttallii* changed from 50 individuals to 10–50; *Schiedea spergulina* var. *leiopoda* changed from 50 individuals to 135–150; *Schiedea spergulina* var. *spergulina* changed from 206 individuals to 208; *Schiedea stellarioides* changed from two populations to three occurrences and from 400 individuals to 1,500; *Sesbania tomentosa* changed from 18 individuals to 11; *Solanum sandwicense* changed from six populations to eight occurrences; *Spermolepis hawaiiensis* changed from three populations to two occurrences; *Stenogyne campanulata* changed from two populations to three occurrences; *Wilkesia hobbeyi* changed from six populations to nine occurrences and from 491 individuals to 406–471; *Xylosma crenatum* changed from 8 individuals to 16; and *Zanthoxylum hawaiiense* changed from two populations to three occurrences.

(8) We changed “flowering cycles, pollination vectors, seed dispersal agents” to “reproduction cycles,

dispersal agents” in the life history portion of the “Supplementary Information: Discussion of the Plant Taxa” section for the fern species *Adenophorus periens*, *Ctenitis squamigera*, *Diellia erecta*, *Diellia pallida*, *Diplazium molokaiense*, and *Phlegmariurus nutans*.

(9) We revised the list of excluded, manmade features in the “Criteria Used to Identify Critical Habitat” and section 17.99 to include additional features based on information received during the public comment periods.

(10) We updated the elevation ranges in section 17.99 for *Adenophorus periens*, *Alectryon macrococcus*, *Alsindendron lychnoides*, *Bonamia menziesii*, *Chamaesyce halemui*, *Ctenitis squamigera*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyperus trachysanthos*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rivularis*, *Diellia pallida*, *Diplazium molokaiense*, *Dubautia latifolia*, *Dubautia pauciflora*, *Euphorbia haeleeleana*, *Exocarpos luteolus*, *Gouania meyenii*, *Hesperomannia lydgatei*, *Hibiscus clayi*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeaensis*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope haupuensis*, *Melicope*

knudsenii, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothocestrum peltatum*, *Panicum niihauense*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia knudsenii*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa sandwicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Schiedea apokremnos*, *Schiedea helleri*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea nuttallii*, *Schiedea spergulina* var. *leiopoda*, *Schiedea stellarioides*, *Sesbania tomentosa*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Xylosma crenatum*, and *Zanthoxylum hawaiiense*.

(11) 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.

A brief summary of the modifications made to each unit is given below (see also Figure 1).

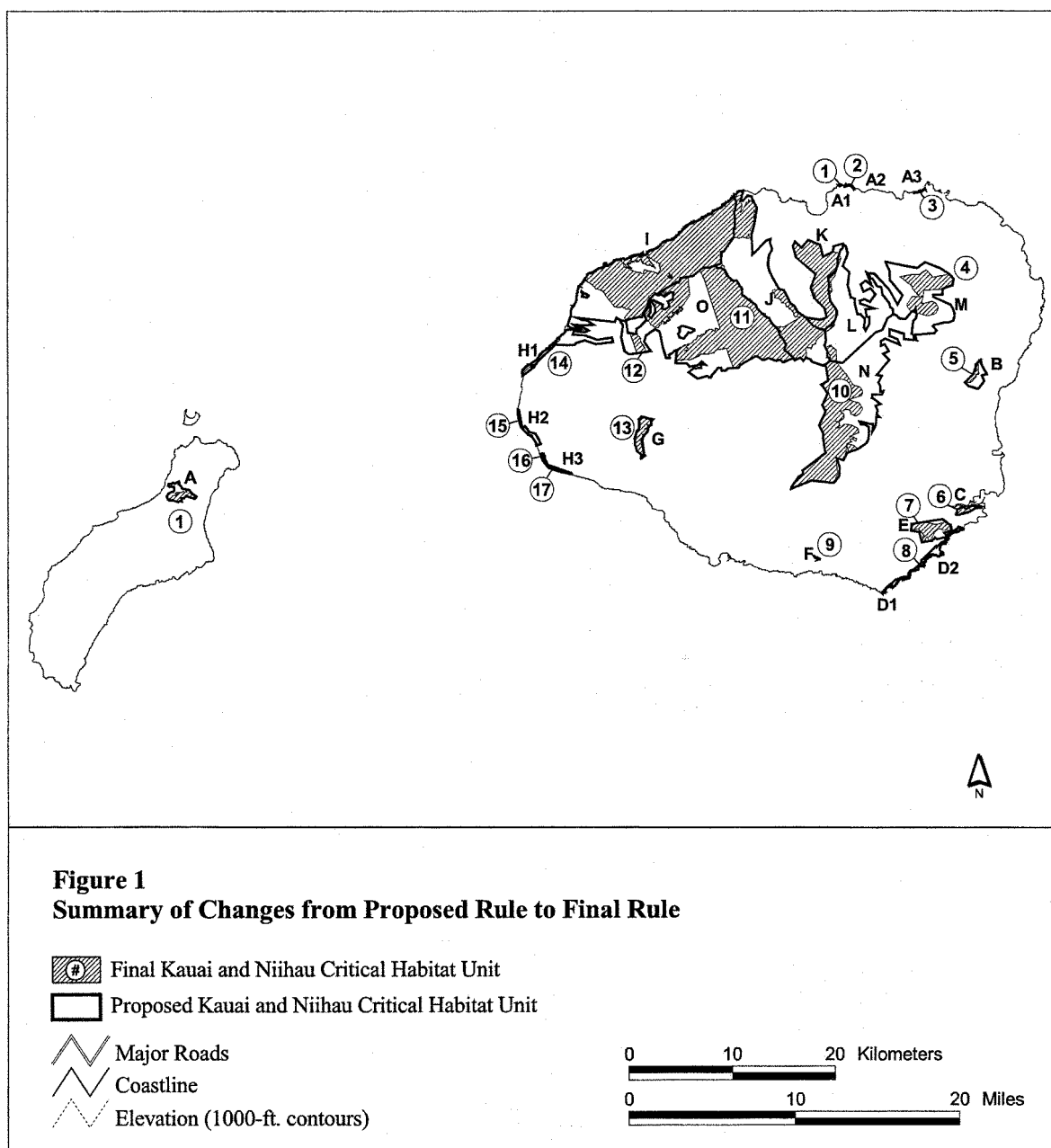
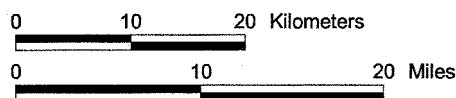


Figure 1
Summary of Changes from Proposed Rule to Final Rule

-  Final Kauai and Niihau Critical Habitat Unit
-  Proposed Kauai and Niihau Critical Habitat Unit
-  Major Roads
-  Coastline
-  Elevation (1000-ft. contours)



Kauai A

This unit was proposed as critical habitat for two multi-island species: *Centaurium sebaeoides* and *Ischaemum byrone*. We excluded the proposed critical habitat for *Centaurium sebaeoides*. This area is not essential for the conservation of *Centaurium sebaeoides* 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 *Centaurium sebaeoides*, is not currently managed for the conservation of this species, and there are at least 10 other locations in its historical range on Kauai and other islands which provide habitat

for this species and which are either designated as critical habitat in this rule or have been proposed for designation in other rules.

Modifications were made to this unit to exclude areas that do not contain the primary constituent elements for *Ischaemum byrone*. The area designated as critical habitat for this species provides habitat within its historical range for two populations.

This modification resulted in the reduction from 15 ha (38 ac) to 13 ha (32 ac). This unit was renamed Kauai 1—*Ischaemum byrone*—a, Kauai 2—*Ischaemum byrone*—b, and Kauai 3—*Ischaemum byrone*—c.

Kauai B

This unit was proposed as critical habitat for two species: *Hibiscus clayi* and *Munroidendron racemosum*. Modifications were made to this unit to exclude areas that do not contain the primary constituent elements essential to the conservation of *Hibiscus clayi* and *Munroidendron racemosum*. The area designated as critical habitat for these two Kauai endemic species provides habitat within their historical ranges for one population of each species.

This modification resulted in the reduction from 271 ha (669 ac) to 60 ha (148 ac). This unit was renamed Kauai 5—*Hibiscus clayi*—f and Kauai 5—*Munroidendron racemosum*—a.

Kauai C

This unit was proposed as critical habitat for two species: *Brighamia insignis* and *Lobelia niihauensis*. We excluded the proposed critical habitat for *Lobelia niihauensis*. This area is not essential for the conservation of *Lobelia niihauensis* because it has a lower proportion of associated native species than other areas we consider to be essential for the conservation of *Lobelia niihauensis*, and there are 10 other locations within its historical range on Kauai and Oahu which provide habitat for two species and which are either designated as critical habitat in this rule or have been proposed for designation in other rules.

Modifications were made to this unit to exclude degraded areas not essential to the conservation of *Brighamia insignis*. The remaining area designated as critical habitat for this endemic species provides habitat within its historical range for one population.

This modification resulted in the reduction from 97 ha (239 ac) to 63 ha (156 ac). This unit was renamed Kauai 6—*Brighamia insignis*—a.

Kauai D

This unit was proposed as critical habitat for the multi-island species *Sesbania tomentosa*. Modifications were made to this unit to exclude degraded areas not essential to the conservation of *Sesbania tomentosa*, including the removal of subunit D1. The remaining area designated as critical habitat for this species provides habitat within its historical range for one population.

This modification resulted in the reduction from 255 ha (629 ac) to 47 ha (117 ac). This unit was renamed Kauai 8—*Sesbania tomentosa*—a.

Kauai E

This unit was proposed as critical habitat for 10 species: *Brighamia insignis*, *Delissea rhytidosperma*, *Isodendron longifolium*, *Lipochaeta micrantha*, *Melicope haupuensis*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Peucedanum sandwicense*, *Pteralyxia kauaiensis* and *Schiedea nuttallii*. Modifications were made to this unit to exclude areas that do not contain the primary constituent elements essential to the conservation of these 10 species.

The area designated as critical habitat for the Kauai and Niihau endemic species *Brighamia insignis* provides habitat within its historical range for one population. The area designated as critical habitat provides habitat within the historical ranges for two populations each of *Delissea rhytidosperma*,

Lipochaeta micrantha, and *Melicope haupuensis*, and one population each of *Munroidendron racemosum*, *Myrsine linearifolia*, and *Pteralyxia kauaiensis*, all Kauai endemic species.

The area designated as critical habitat for the multi-island species *Isodendron longifolium* and *Peucedanum sandwicense* provides habitat within their historical ranges for one population each and for two populations of *Schiedea nuttallii*.

This modification resulted in the reduction from 563 ha (1,390 ac) to 349 ha (862 ac). This unit was renamed Kauai 7—*Brighamia insignis*—b, Kauai 7—*Delissea rhytidosperma*—a, Kauai 7—*Isodendron longifolium*—a, Kauai 7—*Lipochaeta micrantha*—a, Kauai 7—*Melicope haupuensis*—a, Kauai 7—*Munroidendron racemosum*—b, Kauai 7—*Myrsine linearifolia*—a, Kauai 7—*Peucedanum sandwicense*—a, Kauai 7—*Pteralyxia kauaiensis*—a, and Kauai 7—*Schiedea nuttallii*—a.

Kauai F

No changes were made to Kauai F. However, due to revising the polygon to more closely follow geographical and topographical features, a correction has been made to the total acreage. The reduction in area does not affect the ability of this unit to provide habitat for one population of *Schiedea spergulina* var. *leiopoda* in this unit.

The area designated as critical habitat for the Kauai endemic species *Schiedea spergulina* var. *leiopoda* provides habitat within its historical range for one population. The correction resulted in a total of 5 ha (11 ac). This unit was renamed Kauai 9—*Schiedea spergulina* var. *leiopoda*—a.

Kauai G

This unit was proposed as critical habitat for three species: *Lipochaeta waimeaensis*, *Schiedea spergulina* var. *spergulina*, 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 these three species. The reduction in area does not affect the ability of this unit to provide for one to two populations of these three species.

The area designated as critical habitat provides habitat for one population of *Lipochaeta waimeaensis* and two populations of *Schiedea spergulina* var. *spergulina* within the historical ranges of these Kauai endemic species. The area designated as critical habitat for the multi-island species *Spermolepis hawaiiensis* provides habitat within its historical range for one population.

This modification resulted in the reduction from 317 ha (784 ac) to 289 ha (713 ac). This unit was renamed Kauai 13—*Lipochaeta waimeaensis*—a, Kauai 13—*Schiedea spergulina* var. *spergulina*—c, Kauai 13—*Spermolepis hawaiiensis*—b, and Kauai 13—*Spermolepis hawaiiensis*—c.

Kauai H

This unit was proposed as critical habitat for two species, *Panicum niihauense* (a Kauai and Niihau endemic) and *Sesbania tomentosa*. Modifications were made to this unit to exclude areas that do not contain the primary constituent elements essential to the conservation of *Panicum niihauense* based on a site visit conducted during the public comment period. This reduction in area did not affect the ability of this unit to provide habitat for seven populations of this species in this unit. The remaining area designated as critical habitat for *Panicum niihauense* provides habitat within its historical range for seven populations.

Modifications were made to this unit to exclude degraded areas not essential to the conservation of the multi-island species *Sesbania tomentosa*. The area designated as critical habitat for this species provides habitat within its historical range for one population.

These modifications resulted in the reduction from 329 ha (812 ac) to 175 ha (431 ac). This unit was renamed Kauai 14—*Panicum niihauense*—a, Kauai 14—*Sesbania tomentosa*—b, Kauai 15—*Panicum niihauense*—b, Kauai 16—*Panicum niihauense*—c, and Kauai 17—*Panicum niihauense*—d.

Kauai I

This unit was proposed as critical habitat for 60 species: *Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Bonamia menziesii*, *Brighamia insignis*, *Centaurium sebaeoides*, *Chamaesyce halemanui*, *Ctenitis squamigera*, *Cyanea recta*, *Cyanea remyi*, *Cyperus trachysanthos*, *Cyrtandra limahuliensis*, *Delissea rhytidosperma*, *Delissea rivularis*, *Delissea undulata*, *Diellia pallida*, *Diplazium molokaiense*, *Dubautia latifolia*, *Euphorbia haeleleana*, *Exocarpos luteolus*, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis cookiana*, *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscadelphus woodii*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Lipochaeta fauriei*, *Lobelia niihauensis*, *Melicope haupuensis*, *Melicope*

knudsenii, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothoecstrum peltatum*, *Panicum niihauense*, *Peucedanum sandwicense*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandwicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea apokremnos*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea spargulina* var. *spargulina*, *Sesbania tomentosa*, *Solanum sandwicense*, *Stenogyne campanulata*, *Wilkesia hobdyi*, and *Xylosma crenatum*.

We excluded the proposed critical habitat for *Bonamia menziesii*. This area is not essential for the conservation of *Bonamia menziesii* because it has a lower proportion of associated native species than other areas we consider to be essential for the conservation of *Bonamia menziesii*, and there are at least 10 other locations within its historical range on Kauai and on other islands that provides habitat for this species and that are either designated as critical habitat in this rule or have been proposed for designation in other rules.

Modifications were made to this unit to exclude degraded areas not essential to the conservation of *Brighamia insignis*, *Cyperus trachysanthos*, *Hedyotis st.-johnii*, *Ischaemum byrone*, *Lobelia niihauensis*, *Melicope knudsenii*, *Munroidendron racemosum*, *Nothoecstrum peltatum*, *Peucedanum sandwicense*, *Poa mannii*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Schiedea apokremnos*, *Schiedea membranacea*, and *Wilkesia hobdyi* and not managed for the conservation of these 15 species. There are other locations that have been identified to meet the recovery goal of 8 to 10 populations throughout their historical ranges on Kauai (*Brighamia insignis*, *Hedyotis st.-johnii*, *Munroidendron racemosum*, *Nothoecstrum peltatum*, *Poa mannii*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Schiedea apokremnos*, *Schiedea membranacea*, and *Wilkesia hobdyi*) and on other islands (*Cyperus trachysanthos*, *Ischaemum byrone*, *Lobelia niihauensis*, *Melicope knudsenii*, and *Peucedanum sandwicense*).

The area designated as critical habitat for the Kauai and Niihau endemic species *Brighamia insignis* provides habitat within its historical range for seven populations. The remaining area designated as critical habitat provides habitat within the historical ranges for six populations of *Alsinidendron lychnoides*, eight populations of *Chamaesyce halemanui*, three

populations each of *Cyanea recta* and *Cyanea remyi*, two populations of *Cyrtandra limahuliensis*, four populations of *Delissea rhytidosperma*, three populations of *Delissea rivularis*, two populations of *Diellia pallida*, one population of *Dubautia latifolia*, eight populations of *Exocarpos luteolus*, seven populations of *Hedyotis st.-johnii*, one population of *Hesperomannia lydgatei*, five populations of *Hibiscadelphus woodii*, eight populations of *Hibiscus waimeae* ssp. *hannerae*, five populations of *Kokia kauaiensis*, one population of *Labordia lydgatei*, four populations of *Lipochaeta fauriei*, three populations of *Melicope haupuensis*, six populations of *Munroidendron racemosum*, three populations of *Myrsine linearifolia*, five populations of *Nothoecstrum peltatum*, four populations of *Phyllostegia wawrana*, seven populations of *Poa mannii*, one population of *Poa sandwicensis*, five populations each of *Poa siphonoglossa* and *Pteralyxia kauaiensis*, six populations of *Remya kauaiensis*, three populations of *Remya montgomeryi*, nine populations of *Schiedea apokremnos*, six populations of *Schiedea kauaiensis*, five populations of *Schiedea membranacea*, two populations of *Schiedea spargulina* var. *spargulina*, three populations of *Stenogyne campanulata*, nine populations of *Wilkesia hobdyi*, and four populations of *Xylosma crenatum*. All of these are Kauai endemic species.

The area designated as critical habitat for the following multi-island species provides habitat within their historical ranges for one population each of *Adenophorus periens* and *Alectryon macrococcus*, four populations of *Centaurium sebaeoides*, one population of *Ctenitis squamigera*, six populations of *Cyperus trachysanthos*, three populations of *Delissea undulata*, one population of *Diplazium molokaiense*, four populations of *Euphorbia haeleeleana*, three populations each of *Flueggea neowawraea* and *Gouania meyenii*, seven populations of *Hedyotis cookiana*, one population of *Ischaemum byrone*, two populations of *Isodendron laurifolium*, three populations of *Isodendron longifolium*, four populations of *Lobelia niihauensis*, three populations each of *Mariscus pennatiformis* and *Melicope knudsenii*, two populations of *Melicope pallida*, three populations of *Peucedanum sandwicense*, two populations of *Plantago princeps*, four populations of *Platanthera holochila*, and five populations of *Solanum sandwicense*.

These modifications resulted in the reduction from 8,238 ha (20,355 ac) to 6,102 ha (15,078 ac). This unit was

renamed Kauai 11—*Adenophorus periens*—d, Kauai 11—*Alectryon macrococcus*—b, Kauai 11—*Alsinidendron lychnoides*—a, Kauai 11—*Brighamia insignis*—c, Kauai 11—*Centaurium sebaeoides*—a, Kauai 11—*Chamaesyce halemanui*—c, Kauai 11—*Ctenitis squamigera*—a, Kauai 11—*Cyanea recta*—d, Kauai 11—*Cyanea remyi*—d, Kauai 11—*Cyperus trachysanthos*—a, Kauai 11—*Cyrtandra limahuliensis*—e, Kauai 11—*Delissea rhytidosperma*—b, Kauai 11—*Delissea rhytidosperma*—c, Kauai 11—*Delissea rivularis*—a, Kauai 11—*Delissea undulata*—a, Kauai 11—*Delissea undulata*—b, Kauai 11—*Diellia pallida*—a, Kauai 11—*Diplazium molokaiense*—a, Kauai 11—*Dubautia latifolia*—b, Kauai 11—*Euphorbia haeleeleana*—a, Kauai 11—*Euphorbia haeleeleana*—b, Kauai 11—*Exocarpos luteolus*—b, Kauai 11—*Exocarpos luteolus*—c, Kauai 11—*Exocarpos luteolus*—e, Kauai 11—*Flueggea neowawraea*—a, Kauai 11—*Flueggea neowawraea*—b, Kauai 11—*Flueggea neowawraea*—d, Kauai 11—*Flueggea neowawraea*—e, Kauai 11—*Flueggea neowawraea*—f, Kauai 11—*Gouania meyenii*—a, Kauai 11—*Gouania meyenii*—b, Kauai 11—*Hedyotis cookiana*—a, Kauai 11—*Hedyotis st.-johnii*—a, Kauai 11—*Hesperomannia lydgatei*—c, Kauai 11—*Hibiscadelphus woodii*—a, Kauai 11—*Hibiscadelphus woodii*—b, Kauai 11—*Hibiscus waimeae* ssp. *hannerae*—a, Kauai 11—*Ischaemum byrone*—d, Kauai 11—*Isodendron laurifolium*—a, Kauai 11—*Isodendron longifolium*—c, Kauai 11—*Isodendron longifolium*—e, Kauai 11—*Kokia kauaiensis*—b, Kauai 11—*Kokia kauaiensis*—c, Kauai 11—*Kokia kauaiensis*—d, Kauai 11—*Labordia lydgatei*—e, Kauai 11—*Lipochaeta fauriei*—b, Kauai 11—*Lobelia niihauensis*—b, Kauai 11—*Mariscus pennatiformis*—a, Kauai 11—*Melicope haupuensis*—b, Kauai 11—*Melicope knudsenii*—a, Kauai 11—*Melicope pallida*—b, Kauai 11—*Munroidendron racemosum*—c, Kauai 11—*Myrsine linearifolia*—d, Kauai 11—*Myrsine linearifolia*—e, Kauai 11—*Nothoecstrum peltatum*—b, Kauai 11—*Nothoecstrum peltatum*—c, Kauai 11—*Peucedanum sandwicense*—b, Kauai 11—*Peucedanum sandwicense*—c, Kauai 11—*Phyllostegia wawrana*—b, Kauai 11—*Phyllostegia wawrana*—d, Kauai 11—*Plantago princeps*—b, Kauai 11—*Plantago princeps*—d, Kauai 11—*Platanthera holochila*—a, Kauai 11—*Poa mannii*—a, Kauai 11—*Poa mannii*—c, Kauai 11—*Poa mannii*—d, Kauai 11—*Poa sandwicensis*—b, Kauai 11—*Poa siphonoglossa*—a, Kauai 11—

Pteralyxia kauaiensis—c, Kauai 11—*Pteralyxia kauaiensis*—d, Kauai 11—*Pteralyxia kauaiensis*—e, Kauai 11—*Pteralyxia kauaiensis*—g, Kauai 11—*Remya kauaiensis*—b, Kauai 11—*Remya kauaiensis*—c, Kauai 11—*Remya montgomeryi*—a, Kauai 11—*Remya montgomeryi*—c, Kauai 11—*Schiedea apokremnos*—a, Kauai 11—*Schiedea apokremnos*—b, Kauai 11—*Schiedea apokremnos*—c, Kauai 11—*Schiedea kauaiensis*—b, Kauai 11—*Schiedea kauaiensis*—c, Kauai 11—*Schiedea kauaiensis*—d, Kauai 11—*Schiedea membranacea*—b, Kauai 11—*Schiedea membranacea*—c, Kauai 11—*Schiedea membranacea*—d, Kauai 11—*Schiedea spargulifolia* var. *spargulifolia*—a, Kauai 11—*Solanum sandwicense*—a, Kauai 11—*Stenogyne campanulata*—a, Kauai 11—*Wilkesia hobbii*—a, Kauai 11—*Xylosma crenatum*—a, Kauai 14—*Panicum niihauense*—a, and Kauai 14—*Sesbania tomentosa*—b.

Kauai J

This unit was proposed as critical habitat for 26 species: *Adenophorus periens*, *Alsinidendron lychnoides*, *Bonamia menziesii*, *Brighamia insignis*, *Cyanea recta*, *Cyanea remyi*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rivularis*, *Delissea undulata*, *Euphorbia haeleeleana*, *Exocarpos luteolus*, *Hesperomannia lydgatei*, *Hibiscus waimeae* ssp. *hannerae*, *Isodendron longifolium*, *Labordia lydgatei*, *Lobelia niihauensis*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Peucedanum sandwicense*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Remya montgomeryi*, *Schiedea kauaiensis* and *Schiedea membranacea*.

We excluded the proposed critical habitat for the Kauai endemic species *Schiedea membranacea*. This area is not essential for the conservation of this species because there are at least 10 other locations throughout its historical range on Kauai that contain a higher quality habitat or are on lands with a management mandate.

We excluded the proposed critical habitat for the Kauai and Niihau endemic species *Brighamia insignis*. This area is not essential for the conservation of this species because there are at least 10 other locations that have been identified to meet the recovery goal of 8 to 10 populations throughout its historical range on Kauai and Niihau that contain a higher quality habitat and/or are on lands with a management mandate.

We excluded the proposed critical habitat for the multi-island species *Bonamia menziesii*, *Euphorbia haeleeleana*, and *Peucedanum*

sandwicense. These areas are not essential for the conservation of these three species because there are at least 10 other locations that have been identified to meet the recovery goal of 8 to 10 populations of each species throughout their historical ranges on Kauai and other islands that contain a higher quality habitat and/or are on lands with a management mandate.

Modifications were made to this unit to exclude degraded areas not essential to the conservation of *Adenophorus periens*, *Alsinidendron lychnoides*, *Cyanea recta*, *Cyanea remyi*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rivularis*, *Delissea undulata*, *Exocarpos luteolus*, *Hesperomannia lydgatei*, *Hibiscus waimeae* ssp. *hannerae*, *Isodendron longifolium*, *Labordia lydgatei*, *Lobelia niihauensis*, *Myrsine linearifolia*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Remya montgomeryi*, and *Schiedea kauaiensis*.

The area designated as critical habitat provides habitat for six populations of *Alsinidendron lychnoides*, three populations each of *Cyanea recta* and *Cyanea remyi*, four populations of *Cyrtandra cyaneoides*, six populations of *Cyrtandra limahuliensis*, three populations of *Delissea rivularis*, four populations of *Exocarpos luteolus*, one population of *Hesperomannia lydgatei*, eight populations of *Hibiscus waimeae* ssp. *hannerae*, one population of *Labordia lydgatei*, four populations of *Remya montgomeryi*, and one population of *Schiedea kauaiensis* within the historical ranges of these Kauai endemic species.

The area designated as critical habitat provides habitat for one population each of *Adenophorus periens* and *Delissea undulata*, two populations of *Isodendron longifolium*, five populations of *Lobelia niihauensis*, six populations of *Munroidendron racemosum*, one population of *Myrsine linearifolia*, three populations of *Phyllostegia wawrana*, one population of *Plantago princeps*, and four populations of *Platanthera holochila* within the historical ranges of these multi-island species.

These modifications resulted in the reduction from 5,536 ha (13,681 ac) to 2,026 ha (5,006 ac). This unit was renamed Kauai 11—*Adenophorus periens*—d, Kauai 11—*Alsinidendron lychnoides*—a, Kauai 11—*Cyanea recta*—d, Kauai 11—*Cyanea remyi*—d, Kauai 11—*Cyrtandra cyaneoides*—c, Kauai 10—*Cyrtandra limahuliensis*—c, Kauai 11—*Cyrtandra limahuliensis*—e, Kauai 11—*Delissea rivularis*—a, Kauai 11—*Delissea undulata*—a, Kauai 11—*Exocarpos luteolus*—b, Kauai 11—

Hesperomannia lydgatei—c, Kauai 11—*Hibiscus waimeae* ssp. *hannerae*—a, Kauai 11—*Isodendron longifolium*—e, Kauai 11—*Labordia lydgatei*—e, Kauai 11—*Lobelia niihauensis*—b, Kauai 11—*Munroidendron racemosum*—c, Kauai 11—*Myrsine linearifolia*—d, Kauai 11—*Phyllostegia wawrana*—b, Kauai 10—*Plantago princeps*—a, Kauai 11—*Platanthera holochila*—a, Kauai 10—*Pteralyxia kauaiensis*—b, Kauai 11—*Remya montgomeryi*—b, and Kauai 11—*Schiedea kauaiensis*—a.

Kauai K

This unit was proposed as critical habitat for 13 species: *Adenophorus periens*, *Alsinidendron lychnoides*, *Bonamia menziesii*, *Cyanea recta*, *Cyanea remyi*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Hesperomannia lydgatei*, *Isodendron longifolium*, *Labordia lydgatei*, *Myrsine linearifolia*, *Plantago princeps*, and *Schiedea membranacea*.

We excluded the proposed critical habitat for *Alsinidendron lychnoides*, and *Schiedea membranacea*, two Kauai endemic species, and for *Bonamia menziesii*, a multi-island species. These areas are not essential for the conservation of these three species because they are more degraded than other areas that have been designated to provide habitat for 8 to 10 populations throughout their historical ranges on Kauai (*Alsinidendron lychnoides* and *Schiedea membranacea*) or proposed on other islands (*Bonamia menziesii*).

Modifications were made to this unit to exclude degraded areas not essential to the conservation of *Adenophorus periens*, *Cyanea recta*, *Cyanea remyi*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Isodendron longifolium*, or *Plantago princeps*. There are other areas that have been identified to meet the recovery goals of 8 to 10 populations of each species throughout their historical ranges on Kauai (*Cyanea recta*, *Cyanea remyi*, *Cyrtandra cyaneoides*, and *Cyrtandra limahuliensis*) and other islands (*Adenophorus periens*, *Isodendron longifolium* and *Plantago princeps*).

The area designated as critical habitat provides habitat for three populations of *Cyanea recta*, one population of *Cyanea remyi*, eight populations of *Cyrtandra cyaneoides*, two populations of *Cyrtandra limahuliensis*, four populations of *Hesperomannia lydgatei*, and one population each of *Labordia lydgatei* and *Myrsine linearifolia* within the historical ranges of these Kauai endemic species.

The area designated as critical habitat provides habitat for one population each of *Adenophorus periens*, *Isodendron*

longifolium, and *Plantago princeps* within the historical ranges for these multi-island species.

These modifications resulted in the reduction from 1,752 ha (4,330 ac) to 1,667 ha (4,119 ac). This unit was renamed Kauai 11—*Adenophorus periens*—c, Kauai 11—*Cyanea recta*—c, Kauai 11—*Cyanea remyi*—c, Kauai 11—*Cyrtandra cyaneoides*—b, Kauai 11—*Cyrtandra cyaneoides*—c, Kauai 11—*Cyrtandra limahuliensis*—d, Kauai 11—*Hesperomannia lydgatei*—b, Kauai 11—*Isodendron longifolium*—d, Kauai 11—*Labordia lydgatei*—c, Kauai 11—*Labordia lydgatei*—d, Kauai 11—*Myrsine linearifolia*—f, and Kauai 11—*Plantago princeps*—c.

Kauai L

This unit was proposed as critical habitat for 13 species: *Adenophorus periens*, *Bonamia menziesii*, *Cyanea recta*, *Cyanea remyi*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Hesperomannia lydgatei*, *Isodendron longifolium*, *Labordia lydgatei*, *Lysimachia filifolia*, *Myrsine linearifolia*, *Plantago princeps* and *Platanthera holochila*.

We excluded the proposed critical habitat for the Kauai endemic species *Hesperomannia lydgatei* and for the multi-island species *Bonamia menziesii*, *Lysimachia filifolia*, and *Platanthera holochila*. These areas are not essential for the conservation of these four species because they are highly degraded and are unlikely to be restored by the State or private landowners (Buck 2002). There are other locations that have been identified to meet the recovery goals of 8 to 10 populations throughout their historical ranges on Kauai (*Hesperomannia lydgatei*) or on other islands (*Bonamia menziesii*, *Lysimachia filifolia*, and *Platanthera holochila*).

Modifications were made to this unit to exclude highly degraded areas not essential to the conservation of *Adenophorus periens*, *Cyanea recta*, *Cyanea remyi*, *Cyrtandra limahuliensis*, *Labordia lydgatei*, *Myrsine linearifolia*, or *Plantago princeps*. In addition, it is unlikely that the State or private landowners will restore these areas (Buck 2002). Other locations are being designated that will provide habitat for 8 to 10 populations of each species throughout their historical ranges on Kauai (*Cyanea recta*, *Cyanea remyi*, *Cyrtandra limahuliensis*, *Labordia lydgatei*, *Myrsine linearifolia*) and on other islands (*Adenophorus periens* and *Plantago princeps*).

The area designated as critical habitat provides habitat for three populations of *Cyanea recta*, one population of *Cyanea*

remyi, eight populations of *Cyrtandra cyaneoides*, six populations of *Cyrtandra limahuliensis*, one population of *Labordia lydgatei*, and one population each of *Myrsine linearifolia* and *Pteralyxia kauaiensis* within the historical ranges for these Kauai and Niihau endemic species.

The area designated as critical habitat provides habitat for one population each of *Adenophorus periens*, *Isodendron longifolium*, and *Plantago princeps* within the historical ranges for these multi-island species.

These modifications resulted in the reduction from 3,407 ha (8,418 ac) to 240 ha (592 ac). This unit was renamed Kauai 11—*Adenophorus periens*—c, Kauai 11—*Cyanea recta*—c, Kauai 11—*Cyanea remyi*—c, Kauai 11—*Cyrtandra cyaneoides*—b, Kauai 11—*Cyrtandra cyaneoides*—c, Kauai 10—*Cyrtandra limahuliensis*—c, Kauai 11—*Cyrtandra limahuliensis*—d, Kauai 11—*Isodendron longifolium*—d, Kauai 11—*Labordia lydgatei*—d, Kauai 11—*Myrsine linearifolia*—f, Kauai 10—*Plantago princeps*—a, Kauai 11—*Plantago princeps*—c, and Kauai 10—*Pteralyxia kauaiensis*—b.

Kauai M

This unit was proposed as critical habitat for nine species: *Adenophorus periens*, *Bonamia menziesii*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Labordia lydgatei*, and *Phyllostegia wawrana*.

We excluded the proposed critical habitat for the multi-island species *Bonamia menziesii*. This area is not essential for the conservation of this species because it is highly degraded and is unlikely to be restored by the State or private landowners (Buck 2002). There are at least 10 other locations that have been designated or proposed for *Bonamia menziesii* throughout its historical range on Kauai and on other islands.

Modifications were made to this unit to exclude highly degraded areas not essential to the conservation of *Adenophorus periens*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyrtandra limahuliensis*, *Labordia lydgatei*, and *Phyllostegia wawrana*. In addition, it is unlikely that the State or private landowners will restore these areas (Buck 2002). There are other locations that have been designated to meet the recovery goals of 8 to 10 populations of each species throughout their historical ranges on Kauai (*Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyrtandra limahuliensis*, *Labordia lydgatei*, and *Phyllostegia wawrana*) and

proposed on other islands (*Adenophorus periens*).

The area designated as critical habitat provides habitat for two populations of *Cyanea asarifolia*, four populations of *Cyanea recta*, two populations of *Cyanea remyi*, two populations each of *Cyrtandra cyaneoides* and *Cyrtandra limahuliensis*, five populations of *Hibiscus clayi*, and two populations each of *Labordia lydgatei* and *Phyllostegia wawrana* within the historical ranges for these Kauai endemic species.

The area designated as critical habitat for the multi-island species *Adenophorus periens* provides habitat within its historical range for one population.

These modifications resulted in the reduction from 3,302 ha (8,160 ac) to 1,040 ha (2,570 ac). This unit was renamed Kauai 4—*Adenophorus periens*—a, Kauai 4—*Cyanea asarifolia*—a, Kauai 4—*Cyanea recta*—a, Kauai 4—*Cyanea recta*—b, Kauai 4—*Cyanea remyi*—a, Kauai 4—*Cyrtandra cyaneoides*—a, Kauai 4—*Cyrtandra limahuliensis*—a, Kauai 4—*Cyrtandra limahuliensis*—b, Kauai 4—*Hibiscus clayi*—a, Kauai 4—*Hibiscus clayi*—b, Kauai 4—*Hibiscus clayi*—c, Kauai 4—*Hibiscus clayi*—d, Kauai 4—*Hibiscus clayi*—e, Kauai 4—*Labordia lydgatei*—a, and Kauai 4—*Phyllostegia wawrana*—a.

Kauai N

This unit was proposed as critical habitat for 23 species: *Adenophorus periens*, *Bonamia menziesii*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rivularis*, *Dubautia pauciflora*, *Exocarpos luteolus*, *Hesperomannia lydgatei*, *Isodendron longifolium*, *Labordia lydgatei*, *Labordia tinifolia* var. *wahiawaensis*, *Lysimachia filifolia*, *Myrsine linearifolia*, *Phlegmariurus nutans*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Viola helenae*, and *Viola kauaiensis* var. *wahiawaensis*.

We excluded the proposed critical habitat for the Kauai endemic species *Cyanea recta*, *Cyrtandra cyaneoides*, *Delissea rivularis*, and *Phyllostegia wawrana*, and for the multi-island species *Platanthera holochila*. These areas are not essential to the conservation of these five species because they are highly degraded and are unlikely to be restored by the State or private landowners (Buck 2002). There are other locations that have been designated to meet the recovery goals of 8 to 10 populations of each species throughout their historical ranges on Kauai (*Cyanea recta*, *Cyrtandra*

cyaneoides, *Delissea rivularis*, and *Phyllostegia wawrana*) or proposed on other islands (*Platanthera holochila*).

Modifications were made to this unit to exclude highly degraded areas not essential to the conservation of *Adenophorus periens*, *Bonamia menziesii*, *Cyanea remyi*, *Cyrtandra limahuliensis*, *Isodendron longifolium*, *Labordia lydgatei*, *Lysimachia filifolia*, and *Plantago princeps*. In addition, it is unlikely that the State or private landowners will restore these areas (Buck 2002). There are other locations that have been designated to meet the recovery goals of 8 to 10 populations of each species throughout their historical ranges on Kauai (*Cyanea remyi*, *Cyrtandra limahuliensis*, and *Labordia lydgatei*) or proposed on other islands (*Adenophorus periens*, *Bonamia menziesii*, *Isodendron longifolium*, *Lysimachia filifolia*, and *Plantago princeps*).

The area designated as critical habitat provides for seven populations of *Cyanea asarifolia*; four populations of *Cyanea remyi*; six populations of *Cyanea undulata*; four populations each of *Cyrtandra limahuliensis* and *Dubautia pauciflora*; one population of *Exocarpos luteolus*; four populations of *Hesperomannia lydgatei*; three populations of *Labordia lydgatei*; four populations of *Labordia tinifolia* var. *wahiawaensis*; one population each of *Myrsine linearifolia* and *Pteralyxia kauaiensis*; and five populations each of *Viola helenae* and *Viola kauaiensis* var. *wahiawaensis* within the historical ranges for these Kauai endemic species.

The area designated as critical habitat provides for one population each of *Adenophorus periens*, *Bonamia menziesii*, and *Isodendron longifolium*, four populations of *Lysimachia filifolia*, three populations of *Phlegmariurus nutans*, and one population of *Plantago princeps* within the historical ranges for these multi-island species.

These modifications resulted in the reduction from 6,599 ha (16,307 ac) to 3,274 ha (8,090 ac). This unit was renamed Kauai 10—*Adenophorus periens*—b, Kauai 10—*Bonamia menziesii*—a, Kauai 10—*Cyanea asarifolia*—b, Kauai 10—*Cyanea remyi*—b, Kauai 10—*Cyanea undulata*—a, Kauai 10—*Cyrtandra limahuliensis*—c, Kauai 10—*Dubautia pauciflora*—a, Kauai 10—*Exocarpos luteolus*—a, Kauai 10—*Hesperomannia lydgatei*—a, Kauai 10—*Isodendron longifolium*—b, Kauai 10—*Labordia lydgatei*—b, Kauai 10—*Labordia tinifolia* var. *wahiawaensis*—a, Kauai 10—*Lysimachia filifolia*—a, Kauai 10—*Myrsine linearifolia*—b, Kauai 10—*Phlegmariurus nutans*—a, Kauai 10—*Plantago princeps*—a, Kauai 10—

Pteralyxia kauaiensis—b, Kauai 10—*Viola helenae*—a, and Kauai 10—*Viola kauaiensis*—a.

Kauai O

This unit was proposed as critical habitat for 51 species: *Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Bonamia menziesii*, *Chamaesyce halemanui*, *Cyanea recta*, *Delissea rivularis*, *Diellia erecta*, *Diellia pallida*, *Diplazium molokaiensis*, *Dubautia latifolia*, *Euphorbia haelealeana*, *Exocarpos luteolus*, *Flueggea neowawraea*, *Gouania meyenii*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lobelia niihauensis*, *Mariscus pennatiformis*, *Melicope haupuensis*, *Melicope knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothocestrum peltatum*, *Peucedanum sandwicense*, *Phyllostegia knudsenii*, *Phyllostegia waimeae*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandvicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea helleri*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea spargulina* var. *spargulina*, *Schiedea stellarioides*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne campanulata*, *Xylosma crenatum*, and *Zanthoxylum hawaiiense*.

We excluded the proposed critical habitat for the Kauai endemic species *Cyanea recta* and for the multi-island species *Adenophorus periens*, *Diplazium molokaiensis*, *Isodendron longifolium*, *Mariscus pennatiformis*, *Peucedanum sandwicense*, and *Plantago princeps*. These areas are not essential for the conservation of these seven species because there are other locations that have been designated to meet the recovery goals of 8 to 10 populations of each species on Kauai (*Cyanea recta*) and proposed on other islands (*Adenophorus periens*, *Diplazium molokaiensis*, *Isodendron longifolium*, *Mariscus pennatiformis*, *Peucedanum sandwicense*, and *Plantago princeps*) that either contain higher quality habitat or have a management mandate.

Modifications were made to this unit to exclude degraded areas not essential to the conservation of *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Chamaesyce halemanui*, *Delissea rivularis*, *Diellia erecta*, *Diellia pallida*, *Dubautia latifolia*, *Euphorbia haelealeana*, *Exocarpos luteolus*,

Flueggea neowawraea, *Gouania meyenii*, *Isodendron laurifolium*, *Kokia kauaiensis*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lobelia niihauensis*, *Melicope haupuensis*, *Melicope knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothocestrum peltatum*, *Phyllostegia knudsenii*, *Platanthera holochila*, *Poa mannii*, *Poa sandvicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea helleri*, *Schiedea membranacea*, *Schiedea spargulina* var. *spargulina*, *Schiedea stellarioides*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Xylosma crenatum*, *Zanthoxylum hawaiiense*.

The area designated as critical habitat provides for ten populations of *Alsinidendron lychnoides*, nine populations of *Alsinidendron viscosum*, two populations of *Chamaesyce halemanui*, three populations of *Delissea rivularis*, one population of *Diellia pallida*, seven populations of *Dubautia latifolia*, eight populations of *Exocarpos luteolus*, three populations of *Kokia kauaiensis*, two populations each of *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Melicope haupuensis*, and *Munroidendron racemosum*, five populations of *Myrsine linearifolia*, nine populations of *Nothocestrum peltatum*, three populations of *Phyllostegia waimeae*, two populations of *Phyllostegia wawrana*, three populations of *Poa mannii*, six populations of *Poa sandvicensis*, ten populations of *Poa siphonoglossa*, two populations of *Pteralyxia kauaiensis*, four populations of *Remya kauaiensis*, six populations of *Remya montgomeryi*, seven populations of *Schiedea helleri*, two populations each of *Schiedea kauaiensis*, *Schiedea membranacea*, and *Schiedea spargulina* var. *spargulina*, six populations of *Schiedea stellarioides*, three populations of *Stenogyne campanulata*, and five populations of *Xylosma crenatum* within the historical ranges for these Kauai endemic species.

The area designated as critical habitat provides for one population each of *Alectryon macrococcus*, *Bonamia menziesii*, and *Diellia erecta*, two populations of *Euphorbia haelealeana*, one population of *Flueggea neowawraea*, two populations each of *Gouania meyenii*, *Isodendron laurifolium*, *Lobelia niihauensis*, and *Melicope knudsenii*, one population of *Melicope pallida*, four populations of *Platanthera holochila*, six populations of *Solanum sandwicense*, one population of *Spermolepis hawaiiensis*, and two populations of *Zanthoxylum*

hawaiiense within the historical range for these multi-island species.

These modifications resulted in the reduction from 9,462 ha (23,382 ac) to 5,933 ha (14,661 ac). This unit was renamed Kauai 11—*Alectryon macroccus*—a, Kauai 11—*Alsinidendron lychnoides*—a, Kauai 11—*Alsinidendron lychnoides*—b, Kauai 11—*Alsinidendron viscosum*—c, Kauai 11—*Alsinidendron viscosum*—a, Kauai 11—*Alsinidendron viscosum*—b, Kauai 11—*Alsinidendron viscosum*—c, Kauai 11—*Alsinidendron viscosum*—d, Kauai 11—*Bonamia menziesii*—b, Kauai 11—*Chamaesyce halemanui*—a, Kauai 11—*Chamaesyce halemanui*—b, Kauai 11—*Delissea rivularis*—a, Kauai 11—*Diellia erecta*—a, Kauai 11—*Diellia pallida*—b, Kauai 11—*Dubautia latifolia*—a, Kauai 11—*Dubautia latifolia*—b, Kauai 11—*Dubautia latifolia*—c, Kauai 11—*Euphorbia haeleeleana*—c, Kauai 11—*Exocarpos luteolus*—b, Kauai 11—*Exocarpos luteolus*—d, Kauai 11—*Exocarpos luteolus*—e, Kauai 11—*Flueggea neowawraea*—c, Kauai 11—*Gouania meyenii*—c, Kauai 11—*Isodendron laurifolium*—b, Kauai 11—*Kokia kauaiensis*—a, Kauai 11—*Lipochaeta fauriei*—a, Kauai 11—*Lipochaeta micrantha*—b, Kauai 11—*Lobelia niihauensis*—a, Kauai 11—*Melicope haupuensis*—c, Kauai 11—*Melicope knudsenii*—b, Kauai 11—*Melicope pallida*—a, Kauai 11—*Munroidendron racemosum*—d, Kauai 11—*Myrsine linearifolia*—c, Kauai 11—*Myrsine linearifolia*—e, Kauai 11—*Nothocestrum peltatum*—a, Kauai 11—*Nothocestrum peltatum*—b, Kauai 11—*Nothocestrum peltatum*—c, Kauai 12—*Nothocestrum peltatum*—d, Kauai 11—*Phyllostegia knudsenii*—a, Kauai 11—*Phyllostegia waimeae*—a, Kauai 11—*Phyllostegia waimeae*—b, Kauai 11—*Phyllostegia wawrana*—c, Kauai 11—*Platanthera holochila*—a, Kauai 11—*Poa mannii*—b, Kauai 11—*Poa sandwicensis*—a, Kauai 11—*Poa siphonoglossa*—a, Kauai 11—*Poa siphonoglossa*—b, Kauai 11—*Pteralyxia kauaiensis*—f, Kauai 11—*Remya kauaiensis*—a, Kauai 11—*Remya kauaiensis*—d, Kauai 11—*Remya kauaiensis*—e, Kauai 12—*Remya kauaiensis*—f, Kauai 11—*Remya montgomeryi*—b, Kauai 11—*Remya montgomeryi*—c, Kauai 11—*Schiedea helleri*—a, Kauai 11—*Schiedea helleri*—b, Kauai 11—*Schiedea helleri*—c, Kauai 11—*Schiedea kauaiensis*—b, Kauai 11—*Schiedea membranacea*—a, Kauai 11—*Schiedea spergulina* var. *spergulina*—b, Kauai 11—*Schiedea stellarioides*—a, Kauai 11—*Schiedea stellarioides*—b, Kauai 11—*Solanum sandwicense*—a,

Kauai 11—*Solanum sandwicense*—b, Kauai 11—*Spermolepis hawaiiensis*—a, Kauai 11—*Stenogyne campanulata*—a, Kauai 11—*Xylosma crenatum*—a, Kauai 12—*Xylosma crenatum*—b, and Kauai 11—*Zanthoxylum hawaiiense*—a.

Niihau A

This unit was proposed as critical habitat for two species, *Brighamia insignis* and *Cyperus trachysanthos*. We excluded the proposed critical habitat for the multi-island species *Cyperus trachysanthos*. This area is not essential for the conservation of *Cyperus trachysanthos* because it is more degraded than other areas and is not managed for the conservation of this species, and there are at least 10 other locations that have been designated to meet the recovery goal of 8 to 10 populations throughout its historical range on Kauai and proposed on other islands.

The area designated as critical habitat for the Kauai and Niihau endemic species *Brighamia insignis* provides habitat within its historical range for one population.

This modification resulted in the reduction from 282 ha (697 ac) to 144 ha (357 ac). This unit was renamed Niihau 1—*Brighamia insignis*—a.

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 “* * * the 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 to 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. U.S. 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 the species.

In order to be included in a critical habitat designation, the habitat must first be “essential to the conservation of the species.” Critical habitat designations identify, to the extent known, using the best scientific and commercial data available, habitat areas that provide essential life-cycle needs of the species (*i.e.*, areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

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. 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 currently known to be essential. Essential areas should already have some of the features and habitat characteristics that are necessary to sustain the species. We will not speculate about what areas might be found to be essential if better information became available, or what areas may become essential over time. 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 eventually 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. Two species, *Acaena exigua*, a multi-island species, and *Melicope quadrangularis*, a Kauai endemic species, are no longer extant in the wild. *Acaena exigua* was last seen in 2000 and no individuals were seen in a subsequent visit in 2001 to the last known location (Oppenheimer, pers. comm. 2002). *Melicope quadrangularis* was last observed in the Wahiawa drainage area in 1991. This species has not been seen in surveys of this area subsequent to Hurricane Iniki in 1992 (S. Perlman and K. Wood, pers. comm. 2000). In addition, neither species is known to be in storage or under propagation. Under these circumstances, designation of critical habitat for *Acaena exigua* and *Melicope quadrangularis* is not prudent because such designation would be of no benefit to these species. If either species is relocated we may revise this final determination to incorporate or address new information as new data 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 93 plants may be vulnerable to unrestricted collection, vandalism, or disturbance. We examined the evidence currently available for each of these taxa and found specific evidence of vandalism, disturbance, and/or the threat of unrestricted collection for three species of *Pritchardia*, the native palm, on Kauai and Niihau. At the time of listing we determined that designation of critical habitat was not prudent for *Pritchardia napaliensis*, *P. aylmer-robinsonii*, and *P. viscosa* because it would increase the degree of threat from vandalism or collecting, and would provide no benefits (60 FR 53070). At

that time, we had information that at least one of the remaining adult plants has been damaged by spiked boots used either by a botanist or seed collector to scale these trees (61 FR 53070). Since publication of the listing rule, we learned of additional instances of vandalism, collection, and commercial trade involving these three species of *Pritchardia*. In 1993, the State's DOFAW planted 39 young *Pritchardia napaliensis* plants within a fenced enclosure near the Wailua River. A short time after this, the fence was vandalized and all 39 plants were removed (A. Kyono, pers. comm. 2000; Craig Koga, DOFAW, *in litt.* 1999). In mid-1996, a young plant and seeds of *Pritchardia viscosa* were removed from the only known location of this species (A. Kyono, pers. comm. 2000; C. Koga, *in litt.* 1999). Recently we received information on the commercial trade in palms conducted through the internet (Grant Canterbury, USFWS, *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 aylmer-robinsonii* and *P. napaliensis*.

In light of this information, we believe that designation of critical habitat would likely increase the threat to these three species of *Pritchardia* on Kauai and Niihau from vandalism or collection. 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). The final listing rules for these three species contained only general information on their distribution, but the publication of precise maps and descriptions of critical habitat in the **Federal Register** would make these species more vulnerable to incidents of vandalism or collection, and, therefore, contribute to the decline of these species and make recovery more difficult (61 FR 53070).

In addition, we believe that designation would not provide significant benefits that would outweigh these increased risks. First, *Pritchardia napaliensis* and *P. viscosa* do not occur on Federal land, and the State lands where they are found are zoned for conservation. Some of the plants are on lands set aside in perpetuity to conserve their natural flora and fauna, or as geological sites (State of Hawaii natural area reserves) (HRS 195-1). In addition, these species are found in areas that are remote and accessible only by four-wheel drive (*Pritchardia viscosa* only), foot, boat, or helicopter. It is, therefore, unlikely that the lands on which these

species are found will be developed. Since there do not appear to be any actions in the future that would involve a Federal agency, designation of critical habitat would not provide any additional protection to the species than they do not already have through listing alone. If, however, in the future any Federal involvement did occur, such as through the permitting process or funding by the U.S. Department of Agriculture, the U.S. Department of Interior, the Corps through section 404 of the Clean Water Act, the U.S. Federal Department of Housing and Urban Development or the Federal Highway Administration, the actions would be subject to consultation under section 7 of the Act.

Pritchardia aylmer-robinsonii is only found on Niihau, which is presently zoned for agriculture. There are no hotels, resorts, or other commercial development on the island. Public access to the island is not generally authorized by the landowner. Most of the people living on this island (fewer than 300) are employed in ranching activities (Department of Geography 1998). While future activities on the island are unknown, it is unlikely that the land on which this species is found will be developed. Future projects that would require Federal permitting or funding such as those mentioned above are particularly unlikely on this privately owned island. Although access to the island has been and continues to be restricted, *P. aylmer-robinsonii* is endemic only to Niihau, so any commercial availability indicates that collection, either with or without the land owner's permission, has occurred in the past and may still be occurring.

We acknowledge that critical habitat designation, in some situations, may provide some value to the species, for example, by identifying areas important for conservation and calling attention to those areas in need of special protection. However, for these three species, 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 aylmer-robinsonii*, *P. napaliensis*, and *P. viscosa* is not prudent.

On January 9, 2003, we found that critical habitat was prudent for the following 15 multi-island species: *Adenophorus periens*, *Bonamia menziesii*, *Centaurium seabaeoides*, *Ctenitis squamigera*, *Cyperus trachysanthos*, *Diellia erecta*, *Diplazium molokaiense*, *Hibiscus brackenridgei*, *Isodendron piriifolium*, *Sesbania*

tomentosa, *Silene lanceolata*, *Solanum incompletum*, *Spermolepis hawaiiensis*, *Vigna o-wahuensis* and *Zanthoxylum hawaiiense* (68 FR 1220), which also occur on Kauai or Niihau.

Four species no longer occur on Kauai or Niihau but are reported from one or more other islands. To find whether critical habitat would be prudent for these four species we analyzed the potential threats and benefits for each species in accordance with the court's orders. These four plants were listed as endangered species under the Act between 1991 and 1996. At the time each plant was listed, we determined that designation of critical habitat was not prudent because designation would increase the degree of threat to the species and/or would not benefit the plant. We examined the evidence available for these four species and have not, at this time, found specific evidence of taking, vandalism, collection, or trade of these species or of similar species. Consequently, while we remain concerned that these activities could potentially threaten *Achyranthes mutica*, *Mariscus pennatifolius*, *Phlegmariurus manni*, and *Phlegmariurus nutans* 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 these species are currently threatened by taking or other human activity, which 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 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 *Achyranthes mutica*, *Mariscus pennatifolius*, *Phlegmariurus manni*, and *Phlegmariurus nutans* there would be some benefits to critical habitat. The primary regulatory effect of critical habitat is the section 7 requirement that Federal agencies refrain from taking any action that destroys or adversely affects critical habitat. None of these four species are reported from Federal lands on Kauai (the entire island of Niihau is privately owned) where actions are subject to section 7 consultation. However, two of

these species, *Phlegmariurus manni*, and *Phlegmariurus nutans* are reported from Federal lands or lands that are administered by a Federal agency on other islands (*Phlegmariurus nutans* is reported from the United States Army's Schofield Barracks Military Reservation and Kawaihoa Training Area, and the Service's Oahu Forest National Wildlife Refuge on Oahu, and *Phlegmariurus manni* is reported from Haleakala National Park on Maui). Although *Achyranthes mutica* and *Mariscus pennatifolius* are located exclusively on non-Federal lands with limited Federal activities on Oahu and Maui, there could be Federal actions affecting these lands in the future. While a critical habitat designation for habitat currently occupied by *Achyranthes mutica*, *Mariscus pennatifolius*, *Phlegmariurus manni*, and *Phlegmariurus nutans* 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 may also be some educational or informational benefits to the designation of critical habitat. Educational benefits include the notification of landowner(s), 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, we find that critical habitat is prudent for these four species (*Achyranthes mutica*, *Mariscus pennatifolius*, *Phlegmariurus manni*, and *Phlegmariurus nutans*).

We examined the evidence available for the other 71 taxa and have not, at this time, found specific evidence of taking, vandalism, collection or trade of these taxa or of similar species. Consequently, while we remain concerned that these activities could potentially threaten these 71 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, which 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 include: (1) Triggering section 7 consultation in new areas where it would not otherwise occur because, for example, it is or has

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

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

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

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

B. Methods

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

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

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

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

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 83 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 and that may require special management considerations or protection. 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 *Adenophorus perienis*, *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Bonania menziesii*, *Brighamia insignis*, *Centaurium sebaeoides*, *Chamaesyce halemanui*, *Ctenitis squamigera*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyperus trachysanthos*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rhytidosperra*, *Delissea rivularis*, *Delissea undulata*, *Diellia erecta*, *Diellia pallida*, *Diplazium molokaiense*,

Dubautia latifolia, *Dubautia pauciflora*, *Euphorbia haeleeleana*, *Exocarpos luteolus*, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis cookiana*, *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscadelphus woodii*, *Hibiscus clayi*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Labordia tinifolia* var. *wahiawaensis*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeae*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope haupuensis*, *Melicope knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothoecium peltatum*, *Panicum niihauense*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia knudsenii*, *Phyllostegia waimeae*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandwicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea apokremnos*, *Schiedea helleri*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea nuttallii*, *Schiedea spargulina* var. *leiopoda*, *Schiedea spargulina* var. *spargulina*, *Schiedea stellarioides*, *Sesbania tomentosa*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne campanulata*, *Viola helenae*, *Viola kauaiensis* var. *wahiawaensis*, *Wilkesia hobdyi*, *Xylosma crenatum*, and *Zanthoxylum hawaiiense* is described in the "Background" section of this final rule.

We are unable to identify these features for *Achyranthes mutica*, *Hibiscus brackenridgei*, *Isodendron pyrifolium*, *Phlegmariurus mannii*, *Silene lanceolata*, *Solanum incompletum*, and *Vigna o-wahuensis*, which no longer occur on the islands of Kauai or Niihau, because information on the physical and biological features (*i.e.*, the primary constituent elements) that are considered essential to the conservation of these seven species is not known.

All areas designated as critical habitat are within the historical range of the 83 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 83 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 Plant Taxa" section above, constitute the primary constituent elements for these species on the islands of Kauai and Niihau.

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; Kariyeva and Wennergren 1995; Menges 1990; Murphy *et al.* 1990; Taylor 1995). At this time, and consistent with the listing of these species and their recovery plans, the best available information leads us to conclude 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. Therefore, we used available information, including expert scientific opinion, to identify potentially suitable habitat within the known historic range of each species.

We considered several factors in the selection and proposal of specific boundaries for critical habitat for these 83 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, 1995, 1996, 1997, 1998a, 1998b, 1998c, 1999). Thus, the long-term recovery of these species is dependent upon the protection of existing population sites and potentially 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 annuals. 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 on a single island and the proposed critical habitat designations reflect this exception for these species. For example, the recovery goals for *Cyanea undulata*, *Dubautia pauciflora*, *Hesperomannia lydgatei*, *Labordia lydgatei*, and *Viola helenae* are five populations for each species with 250 individuals in each population. The numbers of individuals and populations for these five species are based on our current understanding of these species and our current understanding of the unique biological characteristics of Wahiawa Bog. These numbers should provide for the maintenance of the majority of the genetic diversity of each species, and assurances that a single catastrophic event will not destroy all members of a species (Service 1994). To be considered recovered, the populations of a multi-island species should be distributed among the islands of its known historic range (Service 1994, 1995, 1996, 1997, 1998a, 1998b, 1998c, 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 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.

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, that 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 species life history are typically considered to determine guidelines for species' 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 one 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 variability 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 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 the species a reasonable likelihood of long-term survival and recovery, based on currently available information.

In summary, the long-term survival and recovery 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 will be necessary 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 83 plant species.

Our approach to delineating critical habitat units was applied in the following manner:

1. Critical habitat was proposed and will be 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 designated 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 potential, suitable habitat). We refined elevation ranges, and we avoided land 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 designated 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 83 plant species for which critical habitat was proposed on January 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 re-evaluated proposed critical habitat, State-wide, for each species using the recovery guidelines (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 annuals) to determine if we had inadvertently proposed for designation too much or too little habitat to meet the essential recovery goals of 8 to 10 populations per species distributed among the islands of the species' known historic range (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 and had the highest likelihood of conserving the species. We ranked areas of the proposed critical habitat by the quality of the primary constituent elements (*i.e.*, intact native plant communities, predominance of associated native plants versus nonnative plants), potential as a conservation area (*i.e.*, whether the land is zoned conservation and; whether the landowner is already participating in plant conservation or recovery actions), and current or expected management of known threats (*e.g.*, ungulate control; weed control; nonnative insect, slug, and snail control). We ranked as most essential areas that contain high quality primary constituent elements, are zoned for conservation, and have on-going or expected threat abatement actions. This ranking process also included determining which habitats were representative of the historic geographical and ecological distributions of the species (see "Primary Constituent Elements"). Areas that are zoned for conservation or have been identified as a State Forest Reserve, NAR, Wildlife Preserve, State Park, or are managed for conservation by a private landowner have a high likelihood of providing conservation benefit to the species and are therefore more essential than other comparable habitat outside of those types of areas. Of these most essential areas, we selected adequate area for our recovery goals of 8 to 10 populations distributed

among the islands of each species' historical range. 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 were determined not essential for the conservation of the species and were excluded from the final designation. An area that is covered by a plan that meets the criteria as outlined in "Managed Lands" (provides a conservation benefit to the species and assurances that it will be implemented and effective), does not constitute critical habitat as defined by the Act because the primary constituent elements found there are not in need of special management considerations or protection (section 3(5)(a) of the Act).

Within the critical habitat boundaries, section 7 consultation is generally necessary and adverse modification could occur only if the primary constituent elements are affected. Therefore, not all activities within critical habitat would trigger an adverse modification conclusion. 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 83 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. In addition, existing manmade features and structures within the boundaries of the mapped unit, 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; 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 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 habitat necessary on Kauai and Niihau to provide for the recovery of these 83 species.

Managed Lands

Currently occupied and historically known sites containing one or more of the primary constituent elements considered essential to the conservation of these 83 plant species were examined to determine if additional special management considerations or protection are required above those currently provided. 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. Additionally, we contacted the major private landowners on Kauai and Niihau by mail, and we met with several landowners between the publication of the revised proposal on January 28, 2002, and the end of the comment period on September 30, 2002, to discuss their current management for the plants on their lands. We also met with Kauai District DOFAW and State Parks office staff to discuss management activities they are conducting on Kauai. In addition, we reviewed new biological information and public comments received during the public comment periods and at the public hearings.

Pursuant to the definition of critical habitat in section 3 of the Act, the primary constituent elements as found in any area so designated must also require "special management considerations or protections." Adequate special 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 in need of special management.

In determining whether a management plan or agreement provides a conservation benefit to the species, we considered the following:

(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, 1995, 1996, 1997, 1998a, 1998b, 1998c, 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 deer, 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, molluscs, 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 carrying 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

(Bruegmann *et al.* 2001; Cuddihy and Stone 1990; D'Antonio and Vitousek 1992; Howarth 1985; Mack 1992; Scott *et al.* 1986; Service 1994, 1995, 1996, 1997, 1998a, 1998b, 1998c, 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 Hawaii's endangered plants. These actions are described in our recovery plans for these 83 species (Service 1994, 1995, 1996, 1997, 1998a, 1998b, 1998c, 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 addition to monitoring the plant populations, these actions include, but are not limited to: (1) Feral ungulate control; (2) nonnative plant control; (3) rodent control; (4) invertebrate pest control; (5) fire management; (6) maintenance of genetic material of the endangered and threatened plant species; (7) propagation, reintroduction, and augmentation of existing populations into areas deemed essential for the recovery of these species; (8) ongoing management of the wild, outplanted, and augmented populations; and (9) habitat management and restoration in areas deemed essential for the recovery of these species.

In general, taking all of the above recommended management actions into account, the following management actions are important: 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 deemed 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 deemed 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, 1995, 1996, 1997, 1998a, 1998b, 1998c,

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 83 species of plants are found on Federal, State, and private lands on the islands of Kauai and Niihau. Information received in response to our public notices; meetings with landowners of Kauai County and Kauai District DOFAW staff; the November 7, 2000, and January 28, 2002, proposals; public comment periods; and the February 6, 2001, and February 13, 2002, public hearings; as well as information in our files, indicated that there is limited on-going 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 land in question does not require special management or protection.

Federal Lands

The Pacific Missile Range Facility (PMRF) at Barking Sands on Kauai's west side is on federally owned or State-leased lands administered by the Navy for instrumented and multi-environment weapon testing and tracking. *Sesbania tomentosa* and *Panicum niihauense* are reported from the dunes on State lands adjacent to the Barking Sands Facility at Polihale State Park. The dune system extends from Polihale State Park through the PMRF to State-owned lands at Kekaha, and may be one of the best intact coastal dune systems remaining on the main Hawaiian Islands. We evaluated the dune habitat at the Barking Sands Facility for *Sesbania tomentosa* and *Panicum niihauense*, (proposed Unit H), as well as the habitat on Navy lands at Makaha Ridge for *Wilkesia hobdyi* (proposed Unit I), and determined that these lands are not essential for the conservation of *Sesbania tomentosa* or *Wilkesia hobdyi*, although they are essential for *Panicum niihauense*. The Navy completed an Integrated Natural Resources Management Plan (INRMP 2001) that addressed some of the issues concerning maintenance and improvement of the essential elements for listed threatened and endangered species on their lands at PMRF and Makaha Ridge. In 2001, we sent a letter pursuant to section 7 of the Act concurring that the actions in the plan would not have an adverse impact on listed threatened or endangered species, but that the plan did not address the specific needs of *Panicum niihauense*.

Management at the Barking Sands Facility lands currently consists of restricting human access and off-road vehicles from the dune ecosystems and mowing landscaped areas. These actions alone are not sufficient to address the factors inhibiting the long-term conservation of *Panicum niihauense*. Therefore, we cannot at this time find that management on these lands under Federal jurisdiction as sufficient to find that they no longer meet the definition of critical habitat. If the Navy revises and implements an INRMP or other endangered species management plans that address the maintenance and improvement of the essential elements for this plant species and provides for its long-term conservation, we will reassess the critical habitat boundaries in light of these management plans.

State of Hawaii Lands

The State lands on the island of Kauai include ceded and leased lands, and those that are administered by the Department of Land and Natural Resources (DLNR). DLNR lands include State Parks, administered by the State Division of State Parks; and Forest Reserves, NARs, and the Alakai Wilderness Preserve, administered by the DOFAW. The DLNR also manages DHHL lands on the island of Kauai. We determined that habitat that is essential to the conservation of the following 78 of the 83 federally threatened or endangered plant species is found on State lands: *Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Bonamia menziesii*, *Brighamia insignis*, *Centaurium sebaeoides*, *Chamaesyce halemanui*, *Ctenitis squamigera*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyperus trachysanthos*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rhytidosperra*, *Delissea rivularis*, *Delissea undulata*, *Diellia erecta*, *Diellia pallida*, *Diplazium molokaiense*, *Dubautia latifolia*, *Dubautia pauciflora*, *Euphorbia haeleeleana*, *Exocarpos luteolus*, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis cookiana*, *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscadelphus woodii*, *Hibiscus clayi*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeaensis*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope haupuensis*, *Melicope knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine*

linearifolia, *Nothocestrum peltatum*, *Panicum niihauense*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia waimeae*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandwicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea apokremnos*, *Schiedea helleri*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea spargulina* var. *spargulina*, *Schiedea stellarioides*, *Sesbania tomentosa*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne campanulata*, *Viola helenae*, *Viola kauaiensis* var. *wahiawaensis*, *Wilkesia hobdyi*, *Xylosma crenatum*, and *Zanthoxylum hawaiiense*.

Although the State conducts some conservation management actions on these lands and provides access to others who are conducting such activities, these programs do not adequately address the threats to these listed plant species on their lands. In addition, there are no comprehensive management plans for the long-term conservation of endangered and threatened plants on these lands, no updated detailed reports on management actions conducted, and no assurances that management actions will be implemented. Therefore, we cannot at this time find that management on these State lands is sufficient to find that they do not meet the definition of critical habitat. However, we will work with the State in developing conservation planning efforts.

Private Lands

We determined that habitat that is essential to the conservation of 38 of the 83 federally listed plant species is found on privately owned lands on Kauai and Niihau: *Adenophorus periens*, *Alsinidendron lychnoides*, *Bonamia menziesii*, *Brighamia insignis*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rhytidosperra*, *Delissea undulata*, *Dubautia pauciflora*, *Exocarpos luteolus*, *Hesperomannia lydgatei*, *Hibiscus clayi*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron longifolium*, *Labordia lydgatei*, *Labordia tinifolia* var. *wahiawaensis*, *Lipochaeta micrantha*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Melicope haupuensis*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia wawana*, *Plantago princeps*, *Platanthera holochila*, *Pteralyxia kauaiensis*, *Schiedea nuttallii*, *Schiedea spargulina* var. *leiopoda*, *Sesbania*

tomentosa, *Viola helenae*, and *Viola kauaiensis* var. *wahiawaensis*.

Based on current information, the main activities being conducted by several of these landowners are weeding, control of human access, and planting of native species. In addition, responses and comments we received during the three comment periods and the public hearings, and new information used in preparing this final rule, did not adequately address the threats to these listed plant species on private lands on Kauai and Niihau. In addition, none of the private landowners are implementing management actions which would exclude them from critical habitat under 3(5)(A). If the private landowner is managing their lands that address the maintenance and improvement of the essential elements for these plant species and provide for their long-term conservation, we will reassess the critical habitat boundaries in light of this new information.

The critical habitat areas described below constitute our best assessment of the physical and biological features needed for the conservation of the 83 plant species and the special management needs of these species, and are based on the best scientific and commercial information available and 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.

The approximate areas of the designated critical habitat by landownership or jurisdiction are shown in Table 4.

Critical habitat includes habitat for these 83 species primarily in the upland portions of Kauai, and for one species in the northern portion of Niihau. Lands designated as critical habitat have been divided into a total of 217 units. A brief description of each unit is presented below.

Descriptions of Critical Habitat Units

Kauai 4—*Adenophorus periens*—a

This unit is critical habitat for *Adenophorus periens* and is 237 ha (585 ac) on State (Alakai Wilderness Preserve and Kealia, and Moloaa Forest Reserves) and private land. The unit contains a portion of Waioli and Limahuli Valleys, Ke Ana Kolea and Kahili, Kekoiki,

Leleiwi, Mount Namahana, and Puu Eu Summits. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Adenophorus periens* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, *Metrosideros polymorpha* trunks, in riparian banks of stream systems in well-developed, closed, shady canopy. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations on the island from being destroyed by one naturally occurring catastrophic event.

Kauai 10—*Adenophorus periens*—b

This unit is critical habitat for *Adenophorus periens* and is 492 ha (1,215 ac) on State (Lihue-Koloa Forest Reserve) and private land. The unit contains a portion of Kalalau Valley, Limahuli Valley, Kanaele Swamp, and Hulua, Kahili, and Kapalaoa Summits. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Adenophorus periens* and is currently occupied with 50 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, *Metrosideros polymorpha* trunks, in riparian banks of stream systems in well-developed, closed, shady canopy. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations on the island from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Adenophorus periens*—c

This unit is critical habitat for *Adenophorus periens* and is 469 ha (1,160 ac) on State (Halelea Forest Reserve) and private land. The unit contains a portion of Kalalau and

Limahuli Valleys, Waiopa, and Kaliko, Namolokama Mountain, and Puu Manu Summits, and. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Adenophorus periens* and is currently occupied with two plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, *Metrosideros polymorpha* trunks, in riparian banks of stream systems in well-developed, closed, shady canopy. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations on the island from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Adenophorus periens*—d

This unit is critical habitat for *Adenophorus periens* and is 1,007 ha (2,487 ac) on State (Halelea Forest Reserve, Hono o Na Pali NAR, and Na Pali Coast State Park) and private land. The unit contains a portion of Kalalau and Limahuli Valleys, and Hono o Na Pali, Keanapuka, Moaalele, Pali Eleele, and Pihea Summits. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Adenophorus periens* and is currently occupied with six plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, *Metrosideros polymorpha* trunks, in riparian banks of stream systems in well-developed, closed, shady canopy. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations on the island from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Alectryon macrococcus*—a

This unit is critical habitat for *Alectryon macrococcus* and is 382 ha (943 ac) on State land (Alakai Wilderness Preserve). This unit contains portions of Kawaiiki and Kipalau Valleys. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Alectryon macrococcus* and is currently occupied with between 123 and 133 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, dry slopes or gulches in *Diospyros* spp.-*Metrosideros polymorpha* lowland mesic forest, *Metrosideros polymorpha* mixed mesic forest, or *Diospyros* spp. mixed mesic forest. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations on the island from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Alectryon macrococcus*—b

This unit is critical habitat for *Alectryon macrococcus* and is 90 ha (222 ac) on State land (Na Pali Coast State Park) and is completely within the back of Kalalau Valley. The habitat features contained in this unit that are essential for this species include, but are not limited to, dry slopes or gulches in *Diospyros* spp.-*Metrosideros polymorpha* lowland mesic forest, *Metrosideros polymorpha* mixed mesic forest, or *Diospyros* spp. mixed mesic forest. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Alectryon macrococcus* and is currently occupied with between 35 and 40 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species. Critical habitat on this island provides for a recovery population within the historical range of this multi-island species.

Kauai 11—*Alsinidendron lychnoides*—a

This unit is critical habitat for *Alsinidendron lychnoides* and is 994 ha (2,457 ac) on State (Alakai Wilderness Preserve, Halelea Forest Reserve, Hono o Na Pali NAR, and Na Pali Coast State Park) and private land. This unit contains portions of the Alakai Trail and Alealau, Hono o Na Pali, Keanapuka, Moaalele, Pihea, Pohakea, and Waiahuakua Summits. This unit provides habitat for six populations of 100 mature, reproducing individuals of the long-lived perennial *Alsinidendron lychnoides* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep riparian clay or silty soil banks in montane wet forests, and is the area most likely to contain a viable seed bank on this side of the island. 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 catastrophe.

Kauai 11—*Alsinidendron lychnoides*—b

This unit is critical habitat for *Alsinidendron lychnoides* and is 138 ha (340 ac) on State land (Alakai Wilderness Preserve) and contains a portion of the Mohihi-Waialae Trail and the Alakai Swamp. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Alsinidendron lychnoides* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep riparian clay or silty soil banks in montane 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 catastrophe.

Kauai 11—*Alsinidendron lychnoides*—c

This unit is critical habitat for *Alsinidendron lychnoides* and is 55 ha

(136 ac) on State land (Alakai Wilderness Preserve) and contains a portion of the Mohihi Waialai Trail, Mohihi Stream and the Alakai Swamp. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Alsinidendron lychnoides* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is essential to the establishment of additional populations on Kauai 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 riparian clay or silty soil banks in montane 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 catastrophe.

Kauai 11—*Alsinidendron viscosum*—a

This unit is critical habitat for *Alsinidendron viscosum* and is 736 ha (1,820 ac) on State land (Alakai Wilderness Preserve). This unit contains portions of Kaluahaulu and Kawaiiki Ridge. This unit provides habitat for seven populations of 300 mature, reproducing individuals of the short-lived perennial *Alsinidendron viscosum* and is currently occupied with 26 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes in *Acacia koa-Metrosideros polymorpha* lowland or montane mesic forest. This unit is geographically separated from other units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Alsinidendron viscosum*—b

This unit is critical habitat for *Alsinidendron viscosum* and is 17 ha (42 ac) on State land (Kokee State Park) and contains a portion of Kumuela Ridge. This unit, in combination with *Alsinidendron viscosum*—c, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Alsinidendron viscosum* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat

that is essential to the establishment of additional populations on Kauai 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 in *Acacia koa-Metrosideros polymorpha* lowland or montane mesic forest. This unit is geographically separated from other units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Alsinidendron viscosum*—c

This unit is critical habitat for *Alsinidendron viscosum* and is 22 ha (55 ac) on State land (Kokee State Park) and contains a portion of Kauaikinana Stream and Kumuela Trail and Ridge. This unit, in combination with *Alsinidendron viscosum*—b, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Alsinidendron viscosum* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is essential to the establishment of additional populations on Kauai 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 in *Acacia koa-Metrosideros polymorpha* lowland or montane mesic forest. This unit is geographically separated from other units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Alsinidendron viscosum*—d

This unit is critical habitat for *Alsinidendron viscosum* and is 61 ha (150 ac) on State land (Alakai Wilderness Preserve) and contains a portion of Mohihi Waialae Trail and Kohua Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Alsinidendron viscosum* and is currently occupied with 26 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes in *Acacia koa-Metrosideros polymorpha* lowland or montane mesic forest. 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 catastrophe. The 267 other plants on Kauai are not included in critical habitat because the habitat they occupy is not considered essential to the conservation of this species. The more appropriate habitat on Kauai, within its historical range, are being designated as critical habitat.

Kauai 10—*Bonamia menziesii*—a

This unit is critical habitat for *Bonamia menziesii* and is 420 ha (1,038 ac) on State (Lihue-Koloa Forest Reserve) and private land. This unit contains Kahili Summit and portions of Kanaele Swamp. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Bonamia menziesii* and is currently occupied with 25 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species and wet habitat that is unique to the Kauai populations. The habitat features contained in this unit that are essential for this species include, but are not limited to, dry, mesic, or wet *Metrosideros polymorpha-Cheirodendron-Dicranopteris* forest. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Bonamia menziesii*—b

This unit is critical habitat for *Bonamia menziesii* and is 93 ha (229 ac) on State land (Alakai Wilderness Preserve) and contains a portion of Koaie Stream and Kipalau Valley. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Bonamia menziesii* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species and wet habitat that is unique to the Kauai populations. The habitat features contained in this unit that are essential for this species include, but are

not limited to, dry, mesic, or wet *Metrosideros polymorpha-Cheirodendron-Dicranopteris* forest. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 6—*Brighamia insignis*—a

This unit is critical habitat for *Brighamia insignis* and is 63 ha (156 ac) on private land and contains a portion of Keopaweo Summit on the north side of Mount Haupu. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Brighamia insignis* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, rocky ledges with little soil or steep sea cliffs in lowland dry grasslands or shrublands with annual rainfall that is usually less than 170 cm (65 in). This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 7—*Brighamia insignis*—b

This unit is critical habitat for *Brighamia insignis* and is 340 ha (843 ac) on private land. This unit contains the Haupu and Naluakeina Summits and Queen Victoria's Profile. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Brighamia insignis* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, rocky ledges with little soil or steep sea cliffs in lowland dry grasslands or shrublands with annual rainfall that is usually less than 170 cm (65 in). This unit provides for one population within this multi-island

species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Brighamia insignis*—c

This unit is critical habitat for *Brighamia insignis* and is 1,639 ha (4,051 ac) on State land (Hono o Na Pali NAR, Puu Ka Pele Forest Reserve, and Milolii, Nualolo Kai, and Na Pali Coast State Parks). This unit contains Alapii, Mukuaiki, and Puanaiea Points; Awaawapuhi, Honopu, Kalalau, Kawaiula, Makaha, Milolii, Nualolo, Paaiki, and Poopooiki Valleys; Hanakoa, Hoolulu, Kalalau, and Waiahuakua Streams; Kalalau Beach and Trail; Kanakou Summit and Nakeikionaiwi Pillar. The habitat features contained in this unit that are essential for this species include, but are not limited to, rocky ledges with little soil or steep sea cliffs in lowland dry grasslands or shrublands with annual rainfall that is usually less than 170 cm (65 in). This unit provides habitat for seven populations of 300 mature, reproducing individuals of the short-lived perennial *Brighamia insignis* and is currently occupied with between 40 and 60 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. This unit provides for seven populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Niihau 1—*Brighamia insignis*—a

This unit is critical habitat for *Brighamia insignis* and is 144 ha (357 ac) on private land. This unit contains Puu Alala and Mokouia Valley. The habitat features contained in this unit that are essential for this species include, but are not limited to, rocky ledges with little soil or steep sea cliffs in lowland dry grasslands or shrublands with annual rainfall that is usually less than 170 cm (65 in). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Brighamia insignis* and is currently occupied with at least one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important

for the expansion of the present population, which is currently considered non-viable. This unit provides for one population within this multi-island species' historical range on Niihau that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Centaurium sebaeoides*—a

This unit is critical habitat for *Centaurium sebaeoides* and is 155 ha (385 ac) on State land (Hono o Na Pali NAR, Puu Ka Pele Forest Reserve, and Milolii, Nualolo, and Na Pali Coast State Parks). This unit contains Awaawapuhi, Honopu, Kalalau, Milolii, and Nualolo Valleys; Hanakoa, Hoolulu, Kalalau, and Waiahuakua Streams; Mukuaiki and Puanaiea Points; and Kalalau Beach. This unit provides habitat for four populations of 500 mature, reproducing individuals of the annual *Centaurium sebaeoides* and is currently occupied with between 22 and 52 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, volcanic or clay soils or cliffs in arid coastal areas. This unit provides for four populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Chamaesyce halemanui*—a

This unit is critical habitat for *Chamaesyce halemanui* and is 108 ha (267 ac) on State land containing Kawaiiki Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce halemanui* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is essential to the establishment of additional populations on Kauai 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 of gulches in mesic *Acacia koa* 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 catastrophe.

Kauai 11—*Chamaesyce halemanui*—b

This unit is critical habitat for *Chamaesyce halemanui* and is 17 ha (43 ac) on State land (Kokee State Park) and contains a portion of the east-facing side of Halemanu Valley below the National Aeronautics and Space Administration (NASA) Tracking Station. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce halemanui* and is currently occupied with 30 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes of gulches in mesic *Acacia koa* 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 catastrophe.

Kauai 11—*Chamaesyce halemanui*—c

This unit is critical habitat for *Chamaesyce halemanui* and is 1,283 ha (3,172 ac) on State land (Kuia NAR, and Kokee and Na Pali Coast State Parks). This unit contains Mahanaloa Valley, Kainamanu Summit, and Nualolo, Awaawapuhi, and Honopu Trails. This unit provides habitat for eight populations of 300 mature, reproducing individuals of the short-lived perennial *Chamaesyce halemanui* and is currently occupied with between 50 and 100 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes of gulches in mesic *Acacia koa* 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 catastrophe.

Kauai 11—*Ctenitis squamigera*—a

This unit is critical habitat for *Ctenitis squamigera* and is 735 ha (1,817 ac) on State land (Kuia NAR). This unit contains Mahanaloa Valley and Milolii Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Ctenitis squamigera* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 faces in gulches in the understory of *Metrosideros polymorpha*-*Diospyros* spp. mesic forest and diverse mesic forest. It provides habitat for the westernmost range of the species and the rock face habitat requirement that is unique to Kauai. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 4—*Cyanea asarifolia*—a

This unit is critical habitat for *Cyanea asarifolia* and is 656 ha (1,619 ac) on State (Kealia and Moloaa Forest Reserves) and private land. This unit contains Ke Ana Kolea, Mount Namahana, and Anahola, Kekoiki, Leleiwi, and Puu Awa Summits. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea asarifolia* and is currently unoccupied. This unit provides habitat that is essential to the establishment of additional populations on Kauai 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, pockets of soil on sheer, wet rock cliffs and waterfalls in lowland 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 catastrophe.

Kauai 10—*Cyanea asarifolia*—b

This unit is critical habitat for *Cyanea asarifolia* and is 903 ha (2,232 ac) on State (Lihue-Koloa Forest Reserve) and private land. This unit contains Iole, Kalalea, Kamanu, and Palikea Summits. This unit provides habitat for seven populations of 300 mature, reproducing

individuals of the short-lived perennial *Cyanea asarifolia* and is currently occupied with 4 or 5 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, pockets of soil on sheer wet rock cliffs and waterfalls in lowland 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 catastrophe.

Kauai 4—*Cyanea recta*—a

This unit is critical habitat for *Cyanea recta* and is 252 ha (623 ac) on State (Kealia and Moloaa Forest Reserves) and private land. This unit contains Kahili, Kekoiki, Leleiwi, Namahana, and Puu Eu Summits. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea recta* and is currently occupied with 43 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gulches or slopes in lowland wet or mesic *Metrosideros polymorpha* 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 catastrophe.

Kauai 4—*Cyanea recta*—b

This unit is critical habitat for *Cyanea recta* and is 352 ha (868 ac) on State (Kealia Forest Reserve) and private land. This unit contains Makaleha and Leleiwi Summits. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea recta* and is currently occupied with 80 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this

species include, but are not limited to, gulches or slopes in lowland wet or mesic *Metrosideros polymorpha* 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 catastrophe.

Kauai 11—*Cyanea recta*—c

This unit is critical habitat for *Cyanea recta* and is 553 ha (1,367 ac) on State (Halelea Forest Reserve) and private land. This unit contains Puu Manu and Kaliko Summits, and Mount Namolokama. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea recta* and is currently occupied with between 75 and 85 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gulches or slopes in lowland wet or mesic *Metrosideros polymorpha* forest or shrubland. This unit is geographically separated from other units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Cyanea recta*—d

This unit is critical habitat for *Cyanea recta* and is 398 ha (982 ac) on State (Halelea Forest Reserve, Hono o Na Pali NAR, and Na Pali Coast State Park) and private land. This unit contains Pali Elele Summit and Limahuli Falls. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea recta* and is currently unoccupied. This unit provides habitat that is essential to the establishment of additional populations on Kauai 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, gulches or slopes in lowland wet or mesic *Metrosideros polymorpha* forest or shrubland. This unit is geographically separated from other units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 4—*Cyanea remyi*—a

This unit is critical habitat for *Cyanea remyi* and is 354 ha (874 ac) on State (Kealia Forest Reserve) and private land. This unit contains Leleiwi Summit and portions of the Makaleha Mountains. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea remyi* and is currently occupied with between 11 and 51 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, narrow drainages and seepy stream banks in lowland wet forest or shrubland. This unit is geographically separated from other units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 10—*Cyanea remyi*—b

This unit is critical habitat for *Cyanea remyi* and is 1,904 ha (4,706 ac) on private land. This unit contains Ioloe, Kalalea, Kamanu, Kapalaoa and Palikea Summits. This unit provides habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea remyi* and is currently occupied with between 70 and 120 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, narrow drainages and seepy stream banks in lowland wet forest or shrubland. This unit is geographically separated from other units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Cyanea remyi*—c

This unit is critical habitat for *Cyanea remyi* and is 365 ha (902 ac) on State land (Halelea Forest Reserve), containing Puu Manu Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea remyi* and is currently occupied with 12 plants. This unit is essential to the

conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, narrow drainages and seepy stream banks in lowland wet forest or shrubland. This unit is geographically separated from other units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Cyanea remyi*—d

This unit is critical habitat for *Cyanea remyi* and is 664 ha (1,642 ac) on State (Halelea Forest Reserve, Hono o Na Pali NAR, and Haena and Na Pali Coast State Parks) and private land. This unit contains Pohakea and Maunapuluo Summits, Hanakapiai and Limahuli Valleys, and Manoa Stream. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea remyi* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, narrow drainages and seepy stream banks in lowland wet forest or shrubland. This unit is geographically separated from other units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 10—*Cyanea undulata*—a

This unit is critical habitat for *Cyanea undulata* and is 1,006 ha (2,483 ac) on State (Lihue-Koloa Forest Reserve) and private land. This unit contains Kanaele Swamp, Kahili, Kapalaoa, and Puu a Uuka Summits. This unit provides habitat for five populations of 250 mature, reproducing individuals of the short-lived perennial *Cyanea undulata* and is currently occupied with 28 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are

essential for this species include, but are not limited to, narrow drainages and seepy stream banks in *Metrosideros polymorpha* dry to wet montane forest or shrubland. This unit is of an appropriate size so that each potential recovery population on Kauai within the unit is geographically separated enough to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Cyperus trachysanthos*—a

This unit is critical habitat for *Cyperus trachysanthos* and is 272 ha (672 ac) on State land (Na Pali Coast State Park and Puu Ka Pele Forest Reserve) and extends along the coast from Makaha point to Hanakoa Valley. This unit provides habitat for six populations of 300 mature, reproducing individuals of the short-lived perennial *Cyperus trachysanthos* and is currently occupied with over 300 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population. 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, wet sites (mud flats, wet clay soil, or wet cliff seeps) on seepy flats or talus slopes. This unit provides for six populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 4—*Cyrtandra cyaneoides*—a

This unit is critical habitat for *Cyrtandra cyaneoides* and is 376 ha (929 ac) on State (Kealia and Lihue-Koloa Forest Reserves) and private land. This unit contains Leleiwi, Makaleha, Puu Eu, and Wekiu Summits. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra cyaneoides* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, talus rubble on steep slopes or cliffs with water seeps running below, near streams or waterfalls in lowland or montane wet forest or shrubland dominated by *Metrosideros polymorpha* or a mixture of

Metrosideros polymorpha, *Cheirodendron* spp., and *Dicranopteris linearis*. 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 catastrophe.

Kauai 11—*Cyrtandra cyaneoides*—b

This unit is critical habitat for *Cyrtandra cyaneoides* and is 849 ha (2,098 ac) on State (Halelea Forest Reserve) and private land. This unit contains Mount Namolokama and Kaliko and Puu Manu Summits. This unit provides habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra cyaneoides* and is currently occupied with between 51 and 101 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, talus rubble on steep slopes or cliffs with water seeps running below, near streams or waterfalls in lowland or montane wet forest or shrubland dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha*, *Cheirodendron* spp., and *Dicranopteris linearis*. 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 catastrophe.

Kauai 11—*Cyrtandra cyaneoides*—c

This unit is critical habitat for *Cyrtandra cyaneoides* and is 1,117 ha (2,761 ac) on State (Halelea Forest Reserve) and private land. This unit contains Hinaelele Falls and portions of Mahinakehau Ridge. This unit provides habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra cyaneoides* and is currently occupied with over 300 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important 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, talus rubble on steep slopes or cliffs with water seeps running below, near streams

or waterfalls in lowland or montane wet forest or shrubland dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha*, *Cheirodendron* spp., and *Dicranopteris linearis*. 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 catastrophe.

Kauai 4—*Cyrtandra limahuliensis*—a

This unit is critical habitat for *Cyrtandra limahuliensis* and is 501 ha (1,238 ac) on State (Kealia and Moloaa Forest Reserves) and private land. This unit contains portions of Mount Namahana, Leileiwi, Keana Kolea, Puuawa, and Anahola Stream. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra limahuliensis* and is currently occupied with between 51 and 101 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream banks in lowland wet forests. 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 catastrophe. The six to seven other plants on Kauai are not included in critical habitat because the habitat they occupy is not considered essential to the conservation of this species. The more intact and appropriate habitat within its historical range on Kauai, is being designated as critical habitat.

Kauai 4—*Cyrtandra limahuliensis*—b

This unit is critical habitat for *Cyrtandra limahuliensis* and is 354 ha (874 ac) on State (Kealia Forest Reserve) and private land. This unit contains Leleiwi Summit and portions of the Makaleha Mountains. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra limahuliensis* and is currently occupied with 109 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat

features contained in this unit that are essential for this species include, but are not limited to, stream banks in lowland wet forests. 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 catastrophe.

Kauai 10—*Cyrtandra limahuliensis*—c

This unit is critical habitat for *Cyrtandra limahuliensis* and is 2,014 ha (4,975 ac) on State (Halelea and Lihue-Koloa Forest Reserves) and private land. This unit contains Iole, Kalalea, Kamanu, Kapalaoa, and Kawaikini Summits, all within the Waialeale area. This unit provides habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra limahuliensis* and is currently occupied with between 530 and 707 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important 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, stream banks in lowland wet forests. 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 catastrophe.

Kauai 11—*Cyrtandra limahuliensis*—d

This unit is critical habitat for *Cyrtandra limahuliensis* and is 816 ha (2,018 ac) on State (Halelea Forest Reserve) and private land. This unit contains Kapailu, Mamalahoa, and Puu Manu Summits. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra limahuliensis* and is currently occupied with over 2,000 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important 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, stream banks in lowland wet forests. 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 catastrophe.

Kauai 11—*Cyrtandra limahuliensis*—e

This unit is critical habitat for *Cyrtandra limahuliensis* and is 693 ha (1,715 ac) on State (Halelea Forest Reserve, Hono o Na Pali NAR, and Haena and Na Pali Coast State Parks) and private land. This unit contains Hono o Na Pali, Kulanaillia, Maunapuluo, Pali Eleele, Pohakea, Summits, Limahuli Falls, and Pohakukane Cliff. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra limahuliensis* and is currently occupied with between 50 and 100 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream banks in lowland wet forests. 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 catastrophe.

Kauai 7—*Delissea rhytidosperra*—a

This unit is critical habitat for *Delissea rhytidosperra* and is 221 ha (545 ac) on private land. This unit contains Haupu and Naluakeina Summits and Queen Victoria's Profile. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Delissea rhytidosperra* and is currently occupied with four plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, well-drained soils with medium or fine-textured subsoil in *Diospyros* diverse lowland mesic or diverse *Metrosideros polymorpha-Acacia koa* 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 catastrophe.

Kauai 11—*Delissea rhytidosperra*—b

This unit is critical habitat for *Delissea rhytidosperra* and is 258 ha (638 ac) on State land (Kuia NAR and

Puu Ka Pele Forest Reserve). This unit contains portions of Kuia Valley and Milolii Ridge. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Delissea rhytidosperra* and is currently occupied with six plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, well-drained soils with medium or fine-textured subsoil in *Diospyros* diverse lowland mesic or diverse *Metrosideros polymorpha-Acacia koa* 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, the units are of an appropriate distance apart to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Delissea rhytidosperra*—c

This unit is critical habitat for *Delissea rhytidosperra* and is 103 ha (254 ac) on State land (Haena and Na Pali Coast State Parks) within Hanakapiai Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Delissea rhytidosperra* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, well-drained soils with medium or fine-textured subsoil in *Diospyros* diverse lowland mesic or diverse *Metrosideros polymorpha-Acacia koa* 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 catastrophe.

Kauai 11—*Delissea rivularis*—a

This unit is critical habitat for *Delissea rivularis* and is 851 ha (2,102 ac) on State land (Alakai Wilderness Preserve, Halelea Forest Reserve, Hono

o Na Pali NAR, and Na Pali Coast State Park). This unit contains Keanapuka, Moaalele, Pihea, and Waiahuakua Summits. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Delissea rivularis* and is currently occupied with 40 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes near streams in *Metrosideros polymorpha-Cheirodendron trigynum* montane wet or mesic forest. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of an appropriate size so that each potential recovery population on Kauai within the unit is geographically separated enough to avoid destruction by one naturally occurring catastrophic event.

Kauai 11—*Delissea undulata*—a

This unit is critical habitat for *Delissea undulata* and is 256 ha (636 ac) on State (Halelea Forest Reserve, Hono o Na Pali NAR, and Na Pali Coast State Park) and private land. This unit contains Pali Elelee Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Delissea undulata* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai in order to reach recovery goals. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, dry or open *Metrosideros polymorpha-Acacia koa* forest or *Alphitonia ponderosa* forest. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Delissea undulata*—b

This unit is critical habitat for *Delissea undulata* and is 532 ha (1,314 ac) on State land (Kuia NAR). This unit contains portions of Mahanaloa Valley and Milolii Ridge. This unit provides

habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Delissea undulata* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, dry or open *Metrosideros polymorpha-Acacia koa* forest or *Alphitonia ponderosa* forest. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Diellia erecta*—a

This unit is critical habitat for *Diellia erecta* and is 365 ha (901 ac) on State land (Alakai Wilderness Preserve) containing portions of Kawaiiki Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Diellia erecta* and is currently occupied with 30 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, brown granular soil with leaf litter and occasional terrestrial moss on north-facing slopes in deep shade, or on steep slopes or gulch bottoms in *Metrosideros polymorpha-Dicranopteris linearis* wet forest or *Metrosideros polymorpha* mixed mesic forest with *Acacia koa* and *Acacia koaia* as codominants. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. This fern species has wind-blown spores with limited opportunity for germination and growth. Therefore, this species requires large intact areas of land to support a viable population.

Kauai 11—*Diellia pallida*—a

This unit is critical habitat for *Diellia pallida* and is 602 ha (1,487 ac) on State land (Kuia NAR). This unit contains portions of Kuia and Mahanaloa Valleys, and Milolii Ridge. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Diellia pallida* and is currently occupied with between 38 and 43 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, bare granular soil with dry to mesophytic leaf litter with a pH of 6.9 to 7.9 on steep slopes in 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 catastrophe. This fern species has wind-blown spores with limited opportunity for germination and growth. Therefore, this species requires large intact areas of land to support a viable population.

Kauai 11—*Diellia pallida*—b

This unit is critical habitat for *Diellia pallida* and is 55 ha (136 ac) on State land within Koaie Canyon. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Diellia pallida* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, bare granular soil with dry to mesophytic leaf litter with a pH of 6.9 to 7.9 on steep slopes in 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 catastrophe. This fern species has wind-blown spores with limited opportunity for germination and growth. Therefore, this species requires large intact areas of land to support a viable population.

Kauai 11—*Diplazium molokaiense*—a

This unit is critical habitat for *Diplazium molokaiense* and is 430 ha (1,062 ac) on State land (Kuia NAR and Kokee State Park). This unit contains portions of Awaawapuhi, Honopu, and Nualolo Trails. 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 taxon because it supports habitat that is essential to the establishment of additional populations on Kauai 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, brown soil with basalt outcrops near waterfalls in lowland or montane mesic *Metrosideros polymorpha*-*Acacia koa* forest. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. This fern species has wind-blown spores with limited opportunity for germination and growth. Therefore, this species requires large intact areas of land to support a viable population.

Kauai 11—*Dubautia latifolia*—a

This unit is critical habitat for *Dubautia latifolia* and is 31 ha (76 ac) on State land (Kokee State Park). This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Dubautia latifolia* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is essential to the establishment of additional populations on Kauai 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, gentle or steep slopes on well drained soil in semi-open or closed, diverse montane mesic forest dominated by *Acacia koa* and/or *Metrosideros polymorpha*. 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 catastrophe.

Kauai 11—*Dubautia latifolia*—b

This unit is critical habitat for *Dubautia latifolia* and is 1,522 ha (3,764 ac) on State land (Kuia Natural Area Reserve and Kokee State Park). This unit contains portions of Kawaiiki Ridge and Kipalau Valley. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Dubautia latifolia* and is currently occupied with between 50 and 69 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gentle or steep slopes on well drained soil in semi-open or closed, diverse montane mesic forest dominated by *Acacia koa* and/or *Metrosideros polymorpha*. 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 catastrophe.

Kauai 11—*Dubautia latifolia*—c

This unit is critical habitat for *Dubautia latifolia* and is 809 ha (1,999 ac) on State land (Alakai Wilderness Preserve). This unit contains Iole and Kahili Summits. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Dubautia latifolia* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gentle or steep slopes on well drained soil in semi-open or closed, diverse montane mesic forest dominated by *Acacia koa* and/or *Metrosideros polymorpha*. 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 catastrophe.

Kauai 10—*Dubautia pauciflora*—a

This unit is critical habitat for *Dubautia pauciflora* and is 814 ha (2,012 ac) on State (Lihue-Koloa Forest Reserve) and private land. This unit

contains portions of Iole and Kahili Summits. This unit provides habitat for four populations of 250 mature, reproducing individuals of the short-lived perennial *Dubautia pauciflora* and is currently occupied with 42 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream drainages containing *Metrosideros polymorpha*-*Dicranopteris linearis* lowland wet forest. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is an appropriate size so that each potential recovery population on Kauai within the unit is geographically separated enough to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Euphorbia haeleeleana*—a

This unit is critical habitat for *Euphorbia haeleeleana* and is 262 ha (649 ac) on State land (Kuia NAR). This unit contains portions of Milolii Ridge and Mahanaloa Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Euphorbia haeleeleana* and is currently occupied with between 355 and 405 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, lowland mixed mesic or dry *Diospyros* forest that is often co-dominated by *Metrosideros polymorpha* and *Alphitonia ponderosa*. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Euphorbia haeleeleana*—b

This unit is critical habitat for *Euphorbia haeleeleana* and is 193 ha (476 ac) on State land (Na Pali Coast

State Park) within Kalalau Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Euphorbia haeleeleana* and is currently occupied with over 120 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, lowland mixed mesic or dry *Diospyros* forest that is often co-dominated by *Metrosideros polymorpha* and *Alphitonia ponderosa*. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Euphorbia haeleeleana*—c

This unit is critical habitat for *Euphorbia haeleeleana* and is 204 ha (505 ac) on State land, containing portions of Kawaiiki Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Euphorbia haeleeleana* and is currently occupied with two plants. This unit is important to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, lowland mixed mesic or dry *Diospyros* forest that is often co-dominated by *Metrosideros polymorpha* and *Alphitonia ponderosa*. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 10—*Exocarpos luteolus*—a

This unit is critical habitat for *Exocarpos luteolus* and is 401 ha (990 ac) on State (Lihue-Koloa Forest Reserve) and private land. This unit contains Kahili Summit and Kanaele

Swamp. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Exocarpos luteolus* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet places bordering swamps or bogs; open or dry ridges in lowland or montane mesic *Acacia koa*-*Metrosideros polymorpha*-dominated forest communities with *Dicranopteris*. 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 catastrophe.

Kauai 11—*Exocarpos luteolus*—b

This unit is critical habitat for *Exocarpos luteolus* and is 3,800 ha (9,389 ac) on State (Alakai Wilderness Preserve, Halelea Forest Reserve, and Hono o Na Pali NAR) and private land. This unit contains the Alakai Swamp and Trail, Halehaha and Halepaakai Streams, Kaluahaula Ridge, and Kapoki, Kilohana, Koali, and Pihea Summits. This unit provides habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Exocarpos luteolus* and is currently occupied with 19 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet places bordering swamps or bogs; open or dry ridges in lowland or montane mesic *Acacia koa*-*Metrosideros polymorpha*-dominated forest communities with *Dicranopteris*. 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 catastrophe.

Kauai 11—*Exocarpos luteolus*—c

This unit is critical habitat for *Exocarpos luteolus* and is 176 ha (438 ac) on State land (Kokee and Na Pali Coast State Parks) within Kalalau Valley. This unit provides habitat for one population of 300 mature,

reproducing individuals of the short-lived perennial *Exocarpos luteolus* and is currently occupied with over 40 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet places bordering swamps or bogs; open or dry ridges in lowland or montane mesic *Acacia koa*-*Metrosideros polymorpha*-dominated forest communities with *Dicranopteris*. 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 catastrophe.

Kauai 11—*Exocarpos luteolus*—d

This unit is critical habitat for *Exocarpos luteolus* and is 83 ha (206 ac) on State land (Kokee State Park) on Kamuela Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Exocarpos luteolus* and is currently occupied with between five and seven plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet places bordering swamps or bogs; open or dry ridges in lowland or montane mesic *Acacia koa*-*Metrosideros polymorpha*-dominated forest communities with *Dicranopteris*. 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 catastrophe.

Kauai 11—*Exocarpos luteolus*—e

This unit is critical habitat for *Exocarpos luteolus* and is 522 ha (1,290 ac) on State land (Kuiia NAR, Kokee and Na Pali Coast State Parks). This unit contains Awaawapuhi, Honopu, and Nualolo Trails, and Kainamanu and Kalahu Summits. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Exocarpos luteolus* and is currently occupied with six plants. This unit is essential to the conservation of the taxon because it

supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet places bordering swamps or bogs; open or dry ridges in lowland or montane mesic *Acacia koa*-*Metrosideros polymorpha*-dominated forest communities with *Dicranopteris*. 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.

Kauai 11—*Flueggea neowawraea*—a

This unit is critical habitat for *Flueggea neowawraea* and is 51 ha (126 ac) on State land (Na Pali Coast State Park) within Kalalau Valley. This unit, in combination with units 11—*Flueggea neowawraea*—b and 11—*Flueggea neowawraea*—e, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Flueggea neowawraea* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is essential to the establishment of additional populations on Kauai 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, dry or mesic forests. This unit together with the two other units, provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Flueggea neowawraea*—b

This unit is critical habitat for *Flueggea neowawraea* and is 48 ha (117 ac) on State land (Na Pali Coast State Park) within Kalalau Valley. This unit, in combination with units 11—*Flueggea neowawraea*—a and 11—*Flueggea neowawraea*—e, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Flueggea neowawraea* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently

considered non-viable. 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, dry or mesic forests. This unit together with the two other units, provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Flueggea neowawraea*—c

This unit is critical habitat for *Flueggea neowawraea* and is 152 ha (376 ac) on State land (Alakai Wilderness Preserve), containing portions of Kawaiiki Valley. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Flueggea neowawraea* and is currently occupied with 30 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, dry or mesic forests. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Flueggea neowawraea*—d

This unit is critical habitat for *Flueggea neowawraea* and is 77 ha (191 ac) on State land (Hono o Na Pali NAR and Na Pali Coast State Park). This unit contains Puu Ki Summit and Kaalahina Ridge. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Flueggea neowawraea* and is currently occupied with nine plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, dry or mesic forests. This unit provides for one population within this multi-island

species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Flueggea neowawraea*—e

This unit is critical habitat for *Flueggea neowawraea* and is 27 ha (67 ac) on State land (Na Pali Coast State Park) within Kalalau Valley. This unit, in combination with units 11—*Flueggea neowawraea*—a and 11—*Flueggea neowawraea*—b, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Flueggea neowawraea* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, dry or mesic forests. This unit together with the two other units, provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Flueggea neowawraea*—f

This unit is critical habitat for *Flueggea neowawraea* and is 240 ha (594 ac) on State land (Kuia NAR). This unit contains portions of Milolii Ridge, and Kuia and Mahanaloa Valleys. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Flueggea neowawraea* and is currently occupied with four plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, dry or mesic forests. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Gouania meyenii*—a

This unit is critical habitat for *Gouania meyenii* and is 442 ha (1,094 ac) on State land (Kuia NAR), and containing portions of Mahanaloa Valley. 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 taxon because it supports habitat that is important to the establishment of additional populations on Kauai in order to reach recovery goals. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, rocky ledges, cliff faces, and ridge-tops in dry shrubland or *Metrosideros polymorpha* lowland diverse mesic forest. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Gouania meyenii*—b

This unit is critical habitat for *Gouania meyenii* and is 128 ha (316 ac) on State land (Na Pali Coast State Park) within Kalalau Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Gouania meyenii* and is currently occupied with eight plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, rocky ledges, cliff faces, and ridge-tops in dry shrubland or *Metrosideros polymorpha* lowland diverse mesic forest. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Gouania meyenii*—c

This unit is critical habitat for *Gouania meyenii* and is 215 ha (532 ac)

on State land, and containing portions of Kawaiiki Valley. This unit provides habitat for two populations 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 taxon because it supports habitat that is important to the establishment of additional populations on Kauai in order to reach recovery goals. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, rocky ledges, cliff faces, and ridge-tops in dry shrubland or *Metrosideros polymorpha* lowland diverse mesic forest. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Hedyotis cookiana*—a

This unit is critical habitat for *Hedyotis cookiana* and is 772 ha (1,907 ac) on State land (Hono o Na Pali NAR and Na Pali Coast State Park). This unit contains Kanakau Summit. This unit provides habitat for seven populations of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis cookiana* and is currently occupied with between 60 and 80 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, streambeds or steep cliffs close to water sources in relict *Metrosideros polymorpha* low mesic and low wet forest communities. Although we do not believe that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of appropriate size so that each potential recovery population on Kauai within the unit is geographically separated enough to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Hedyotis st.-johnii*—a

This unit is critical habitat for *Hedyotis st.-johnii* and is 238 ha (589 ac) on State land (Hono o Na Pali NAR, Na Pali Coast State Park, and Puu Ka Pele Forest Reserve) Makaha point to Waiahuakua Valley. This unit provides

habitat for seven populations of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis st.-johnii* and is currently occupied with between 227 and 292 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, crevices of north-facing, near-vertical coastal cliff faces within the spray zone in sparse dry coastal shrubland.

Kauai 10—*Hesperomannia lydgatei*—a

This unit is critical habitat for *Hesperomannia lydgatei* and is 646 ha (1,596 ac) on private land, containing Hulua Summit. This unit provides habitat for two populations of 250 mature, reproducing individuals of the long-lived perennial *Hesperomannia lydgatei* and is currently occupied with 296 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream banks and forested slopes with rich brown soil and silty clay in *Metrosideros polymorpha* or *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest. 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 catastrophe.

Kauai 11—*Hesperomannia lydgatei*—b

This unit is critical habitat for *Hesperomannia lydgatei* and is 914 ha (2,258 ac) on State (Halelea Forest Reserve) and private land. This unit contains portions of the Namolokama Mountains and Kaliko Summit. This unit provides habitat for two populations of 250 mature, reproducing individuals of the long-lived perennial *Hesperomannia lydgatei* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this

species include, but are not limited to, stream banks and forested slopes with rich brown soil and silty clay in *Metrosideros polymorpha* or *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest. 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 catastrophe.

Kauai 11—*Hesperomannia lydgatei*—c

This unit is critical habitat for *Hesperomannia lydgatei* and is 180 ha (445 ac) on State and private land, containing Hono o Na Pali Summit. This unit provides habitat for one population of 250 mature, reproducing individuals of the long-lived perennial *Hesperomannia lydgatei* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream banks and forested slopes with rich brown soil and silty clay in *Metrosideros polymorpha* or *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest. 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 catastrophe.

Kauai 11—*Hibiscadelphus woodii*—a

This unit is critical habitat for *Hibiscadelphus woodii* and is 278 ha (687 ac) on State land (Hono o Na Pali NAR and Na Pali Coast State Park). This unit contains portions of Kaaalahina and Manono Ridges and Puu Ki Summit. This unit provides habitat for three populations of 100 mature, reproducing individuals of the long-lived perennial *Hibiscadelphus woodii* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, basalt talus or cliff walls in *Metrosideros polymorpha* montane mesic forest. 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of appropriate size and distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Hibiscadelphus woodii*—b

This unit is critical habitat for *Hibiscadelphus woodii* and is 72 ha (177 ac) on State land (Halelea Forest Reserve, Hono o Na Pali NAR, and Na Pali Coast State Park). This unit contains Kalahu Summit. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Hibiscadelphus woodii* and is currently occupied with six plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, basalt talus or cliff walls in *Metrosideros polymorpha* montane mesic forest. 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of appropriate size and distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 4—*Hibiscus clayi*—a

This unit is critical habitat for *Hibiscus clayi* and is 4 ha (9 ac) on private land near Puu Eu. This unit, in combination with unit 4—*Hibiscus clayi*—d, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus clayi* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is essential to the establishment of additional populations on Kauai 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 in *Acacia koa* or *Diospyros* spp.-*Pisonia* spp.-*Metrosideros polymorpha* lowland dry or mesic forest. This unit is geographically separated from other

critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of an appropriate distance from the other units to avoid their destruction by one naturally occurring catastrophic event.

Kauai 4—*Hibiscus clayi*—b

This unit is critical habitat for *Hibiscus clayi* and is 85 ha (210 ac) on private land on the northeast side of Makaleha Mountain. This unit, in combination with 4—*Hibiscus clayi*—e, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus clayi* and is currently unoccupied. This unit is important to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 in *Acacia koa* or *Diospyros* spp.-*Pisonia* spp.-*Metrosideros polymorpha* lowland dry or mesic forest. This unit is geographically separated from other critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of an appropriate distance from the other units so that each potential recovery population on Kauai within the unit is geographically separated enough to avoid their destruction by one naturally occurring catastrophic event.

Kauai 4—*Hibiscus clayi*—c

This unit is critical habitat for *Hibiscus clayi* and is 590 ha (1,455 ac) on State (Kealia and Moloaa Forest Reserves) and private land. This unit contains Leleiwi and Puu Awa Summits. This unit provides habitat for three populations of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus clayi* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 in

Acacia koa or *Diospyros* spp.-*Pisonia* spp.-*Metrosideros polymorpha* lowland dry or mesic forest. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of an appropriate distance from the other units to avoid their destruction by one naturally occurring catastrophic event.

Kauai 4—*Hibiscus clayi*—d

This unit is critical habitat for *Hibiscus clayi* and is 48 ha (119 ac) on private land. This unit contains Leleiwi and a portion of the northwest side of Makaleha Mountain. This unit, in combination with unit 4—*Hibiscus clayi*—a, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus clayi* and is currently unoccupied. This unit is important to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 in *Acacia koa* or *Diospyros* spp.-*Pisonia* spp.-*Metrosideros polymorpha* lowland dry or mesic forest. This unit is geographically separated from other critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of an appropriate distance from other units to avoid their destruction by one naturally occurring catastrophic event.

Kauai 4—*Hibiscus clayi*—e

This unit is critical habitat for *Hibiscus clayi* and is 19 ha (47 ac) on State land (Kealia Forest Reserve) at the headwaters of Makaleha Stream. This unit, in combination with unit 4—*Hibiscus clayi*—b, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus clayi* and is currently unoccupied. This unit is important to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 in *Acacia koa* or *Diospyros* spp.-*Pisonia* spp.-*Metrosideros polymorpha* lowland dry or mesic forest. This unit is geographically separated from other

critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of an appropriate distance from other units to avoid their destruction by one naturally occurring catastrophic event.

Kauai 5—*Hibiscus clayi*—f

This unit is critical habitat for *Hibiscus clayi* and is 60 ha (148 ac) on State land (Nonou Forest Reserve), containing portions of the Nonou Mountains. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus clayi* and is currently occupied with four plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes in *Acacia koa* or *Diospyros* spp.-*Pisonia* spp.-*Metrosideros polymorpha* lowland dry or 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 from being destroyed by one naturally occurring catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of an appropriate distance from the other units to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Hibiscus waimeae* ssp. *hannerae*—a

This unit is critical habitat for *Hibiscus waimeae* ssp. *hannerae* and is 1,120 ha (2,769 ac) on State (Halelea Forest Reserve, Hono o Na Pali NAR, Haena and Na Pali Coast State Parks) and private land. This unit contains Limahuli Falls and Kulana'ililia, Maunapuluo, and Pali Elelee Summits. This unit provides habitat for eight populations of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus waimeae* ssp. *hannerae* and is currently occupied with 25 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population,

which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, *Metrosideros polymorpha*-*Dicranopteris linearis* or *Pisonia* spp.-*Charpentiera elliptica* lowland wet or mesic forest.

Kauai 1—*Ischaemum byrhone*—a

This unit is critical habitat for *Ischaemum byrhone* and is 0.4 ha (1 ac) on private land at Hanalei Point. This unit, in combination with unit 1—*Ischaemum byrhone*—b, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Ischaemum byrhone* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, coastal shrubland near the ocean among rocks and seepy cliffs. This unit, together with the other unit, provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 2—*Ischaemum byrhone*—b

This unit is critical habitat for *Ischaemum byrhone* and is 6 ha (15 ac) on private land, containing Kaweonui Point. This unit, in combination with unit 1—*Ischaemum byrhone*—a, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Ischaemum byrhone* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, coastal shrubland near the ocean among rocks and seepy cliffs. This unit, together with the other unit, provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by

one naturally occurring catastrophic event.

Kauai 3—*Ischaemum byrone*—c

This unit is critical habitat for *Ischaemum byrone* and is 6 ha (16 ac) on private land along the cliffs of Kauapea Beach. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Ischaemum byrone* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, coastal shrubland near the ocean among rocks and seepy cliffs. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Ischaemum byrone*—d

This unit is critical habitat for *Ischaemum byrone* and is 45 ha (111 ac) on State land (Hono o Na Pali NAR and Na Pali Coast State Park). This unit contains portions of Hanakapiai Beach, Hoolulu and Hanakapiai Streams. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Ischaemum byrone* and is currently unoccupied. This unit is important to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, coastal shrubland near the ocean among rocks and seepy cliffs. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Isodendron laurifolium*—a

This unit is critical habitat for *Isodendron laurifolium* and is 401 ha (991 ac) on State land (Kuia NAR). This

unit contains portions of Mahanaloa Valley and Milolii Ridge. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Isodendron laurifolium* and is currently occupied with between 86 and 96 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse mesic forest dominated by *Metrosideros polymorpha*, *Acacia koa* or *Diospyros* spp. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Isodendron laurifolium*—b

This unit is critical habitat for *Isodendron laurifolium* and is 400 ha (988 ac) on State land (Alakai Wilderness Preserve) containing portions of Kawaiiki Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Isodendron laurifolium* and is currently occupied with between six and eight plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse mesic forest dominated by *Metrosideros polymorpha*, *Acacia koa* or *Diospyros* spp. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 7—*Isodendron longifolium*—a

This unit is critical habitat for *Isodendron longifolium* and is 338 ha (833 ac) on private land. This unit contains Hokulei Peak, Haupū and

Naluakeina Summits, and Queen Victoria's Profile. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Isodendron longifolium* and is currently occupied with two plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, gulches, or stream banks and flats in undisturbed areas, in mesic or wet *Metrosideros polymorpha*-*Acacia koa* forests. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 10—*Isodendron longifolium*—b

This unit is critical habitat for *Isodendron longifolium* and is 142 ha (350 ac) on private land containing Hulua Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Isodendron longifolium* and is currently occupied with between 83 and 103 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, gulches, or stream banks and flats in undisturbed areas, in mesic or wet *Metrosideros polymorpha*-*Acacia koa* forests. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Isodendron longifolium*—c

This unit is critical habitat for *Isodendron longifolium* and is 59 ha (145 ac) on State land (Kokee and Na Pali Coast State Parks), containing Kainamanu Summit. This unit provides habitat for one population of 300

mature, reproducing individuals of the short-lived perennial *Isodendron longifolium* and is currently occupied with 20 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, gulches, or stream banks and flats in undisturbed areas, in mesic or wet *Metrosideros polymorpha-Acacia koa* forests. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Isodendron longifolium*—d

This unit is critical habitat for *Isodendron longifolium* and is 494 ha (1,219 ac) on State land (Halelea Forest Reserve). This unit contains Kaliko and Puu Manu Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Isodendron longifolium* and is currently occupied with between 80 and 90 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, gulches, or stream banks and flats in undisturbed areas, in mesic or wet *Metrosideros polymorpha-Acacia koa* forests. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Isodendron longifolium*—e

This unit is critical habitat for *Isodendron longifolium* and is 381 ha (941 ac) on State (Halelea Forest Reserve, Hono o Na Pali NAR, and Na Pali Coast State Park) and private land. This unit contains Pohahea Summit. This unit provides habitat for two populations of 300 mature, reproducing

individuals of the short-lived perennial *Isodendron longifolium* and is currently occupied with 424 plants. This unit is essential to the conservation of the taxon because it supports extant colonies of this species and includes habitat that is important for the expansion of the present populations, which are currently considered non-viable. 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 and some flats in certain undisturbed areas, gulches, or stream banks in mesic or wet *Metrosideros polymorpha-Acacia koa* forests. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Kokia kauaiensis*—a

This unit is critical habitat for *Kokia kauaiensis* and is 155 ha (384 ac) on State land (Alakai Wilderness Preserve). This unit contains portions of Kawaiiki and Kipalau Valleys. This unit provides habitat for three populations of 100 mature, reproducing individuals of the long-lived perennial *Kokia kauaiensis* and is currently occupied with 70 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, 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 catastrophe.

Kauai 11—*Kokia kauaiensis*—b

This unit is critical habitat for *Kokia kauaiensis* and is 30 ha (74 ac) on State land (Na Pali Coast State Park) within Pohakuau Valley. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Kokia kauaiensis* and is currently occupied with two plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently

considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, 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 catastrophe.

Kauai 11—*Kokia kauaiensis*—c

This unit is critical habitat for *Kokia kauaiensis* and is 666 ha (1,648 ac) on State land (Kuia NAR). This unit contains portions of Milolii Ridge, Kuia and Mahanaloa Valleys. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Kokia kauaiensis* and is currently occupied with between 78 and 83 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, 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 catastrophe.

Kauai 11—*Kokia kauaiensis*—d

This unit is critical habitat for *Kokia kauaiensis* and is 127 ha (313 ac) on State land (Na Pali Coast State Park) within Kalalau Valley. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Kokia kauaiensis* and is currently occupied with 16 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, 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 catastrophe.

Kauai 4—*Labordia lydgatei*—a

This unit is critical habitat for *Labordia lydgatei* and is 587 ha (1,455 ac) on State (Kealia and Moloaa Forest

Reserves) and private land. This unit contains Kekoiki, Leleiwi, Namahana, and Puu Awa Summits. This unit provides habitat for one population of 250 mature, reproducing individuals of the short-lived perennial *Labordia lydgatei* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream banks in *Metrosideros polymorpha-Dicranopteris linearis* forest. 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 catastrophe.

Kauai 10—*Labordia lydgatei*—b

This unit is critical habitat for *Labordia lydgatei* and is 1,035 ha (2,558 ac) on State (Lihue-Koloa Forest Reserve) and private land. This unit contains Hulua, Iole, Kahile, and Pilikea Summits. This unit provides habitat for two populations of 250 mature, reproducing individuals of the short-lived perennial *Labordia lydgatei* and is currently occupied with five plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream banks in *Metrosideros polymorpha-Dicranopteris linearis* forest. 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 catastrophe.

Kauai 11—*Labordia lydgatei*—c

This unit is critical habitat for *Labordia lydgatei* and is 325 ha (804 ac) on private land within Lumahai Valley. This unit provides habitat for one population of 250 mature, reproducing individuals of the short-lived perennial *Labordia lydgatei* and is currently occupied with seven plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the

expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream banks in *Metrosideros polymorpha-Dicranopteris linearis* forest. 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 catastrophe.

Kauai 11—*Labordia lydgatei*—d

This unit is critical habitat for *Labordia lydgatei* and is 82 ha (204 ac) on State land (Halelea Forest Reserve). This unit contains portions of Waioli Valley and Waiopa Summit. This unit provides habitat for one population of 250 mature, reproducing individuals of the short-lived perennial *Labordia lydgatei* and is currently occupied with two plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream banks in *Metrosideros polymorpha-Dicranopteris linearis* forest. 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 catastrophe.

Kauai 11—*Labordia lydgatei*—e

This unit is critical habitat for *Labordia lydgatei* and is 119 ha (291 ac) on State (Halelea Forest Reserve, Hono o Na Pali NAR, and Na Pali Coast State Park) and private land. This unit contains Hono O Na Pali and Pali Elele Summits. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Labordia lydgatei* and is currently occupied with two plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream banks in *Metrosideros polymorpha-Dicranopteris linearis* forest. 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 catastrophe.

Kauai 10—*Labordia tinifolia* var. *wahiawaensis*—a

This unit is critical habitat for *Labordia tinifolia* var. *wahiawaensis* and is 912 ha (2,255 ac) on private land. This unit contains Hulua, Iole, Kahili, Kapalaoa, and Palikea Summits. This unit provides habitat for four populations of 100 mature, reproducing individuals of the long-lived perennial *Labordia tinifolia* var. *wahiawaensis* and is currently occupied with 20 to 30 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream banks in lowland wet forest. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of appropriate size so that each potential recovery population on Kauai within the unit is geographically separated enough to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Lipochaeta fauriei*—a

This unit is critical habitat for *Lipochaeta fauriei* and is 106 ha (262 ac) on State land (Alakai Wilderness Preserve), containing portions of Kipalau Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Lipochaeta fauriei* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 steep gulches in diverse mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the

other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Lipochaeta fauriei*—b

This unit is critical habitat for *Lipochaeta fauriei* and is 545 ha (1,347 ac) on State land (Kuia NAR). This unit contains portions of Mahanaloa and Kuia Valleys. This unit provides habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Lipochaeta fauriei* and is currently occupied with 70 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, sides of steep gulches in diverse mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 7—*Lipochaeta micrantha*—a

This unit is critical habitat for *Lipochaeta micrantha* and is 340 ha (843 ac) on private land. This unit contains Hokulei Peak, Haupu and Naluakeina Summits, and Queen Victoria's Profile. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Lipochaeta micrantha* and is currently occupied with 50 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs, ridges, stream banks, or slopes in mesic to wet mixed communities. 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 catastrophe. Although we do not feel that there is enough habitat that

currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Lipochaeta micrantha*—b

This unit is critical habitat for *Lipochaeta micrantha* and is 212 ha (523 ac) on State land, containing portions of Kaluahaulu Ridge. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Lipochaeta micrantha* and is currently occupied with at least one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs, ridges, stream banks, or slopes in mesic to wet mixed communities. 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 13—*Lipochaeta waimeaensis*—a

This unit is critical habitat for *Lipochaeta waimeaensis* and is 56 ha (139 ac) on State land, containing portions of Waimea Canyon. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Lipochaeta waimeaensis* and is currently occupied with at least 100 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, precipitous, shrub-covered gulches in diverse lowland forest. Although there may not be sufficient habitat designated to reach the recovery goal of 8 to 10 populations, this species is a very narrow endemic and may never

naturally occurred in more than a single or a few populations.

Kauai 11—*Lobelia niihauensis*—a

This unit is critical habitat for *Lobelia niihauensis* and is 89 ha (220 ac) on State land (Alakai Wilderness Preserve), containing portions of Kipalau Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Lobelia niihauensis* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai in order to reach recovery goals. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, exposed mesic mixed shrubland or coastal dry cliffs. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Lobelia niihauensis*—b

This unit is critical habitat for *Lobelia niihauensis* and is 2,003 ha (4,950 ac) on State (Haena State Park and Hono o Na Pali NAR) and private land. This unit contains Hanakapiai, Hanakoa, Kalalau, and Limahuli Valleys, Kaaalahina and Manono Ridges, Kanakou and Makana Summits, Hoolau and Waiahuakua Streams. This unit provides habitat for five populations of 300 mature, reproducing individuals of the short-lived perennial *Lobelia niihauensis* and is currently occupied with 168 to 1,108 plants. This unit is important to the conservation of the taxon because it supports an extant colony of this species. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, exposed mesic mixed shrubland or coastal dry cliffs. This unit provides for five populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 10—*Lysimachia filifolia*—a

This unit is critical habitat for *Lysimachia filifolia* and is 995 ha (2,458

ac) on State (Lihue-Koloa Forest Reserve) and private land. This unit contains Iole, Kalalea, Kamanu, and Palikea Summits. This unit provides habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Lysimachia filifolia* and is currently occupied with 20 to 75 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, mossy banks at the base of cliff faces within the spray zone of waterfalls or along streams in lowland wet forests. This unit provides for four populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Mariscus pennatiformis*—a

This unit is critical habitat for *Mariscus pennatiformis* and is 1,003 ha (2,479 ac) on State land (Kuia NAR, Kokee and Waimea Canyon State Parks). This unit contains portions of Milolii Ridge and Nualolo Trail. This unit provides habitat for three 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 taxon because it supports habitat that is important to the establishment of additional populations on Kauai in order to reach recovery goals. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, open sites in *Metrosideros polymorpha*-*Acacia koa* mixed mesic forest. This unit provides for three populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 7—*Melicope haupuensis*—a

This unit is critical habitat for *Melicope haupuensis* and is 330 ha (816 ac) on private land. This unit contains Hokulei Peak, Haupu and Naluakeina Summits, and Queen Victoria's Profile.

This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope haupuensis* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 talus slopes in *Metrosideros polymorpha* dominated lowland mesic forest or *Metrosideros polymorpha*-*Acacia koa* montane mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Melicope haupuensis*—b

This unit is critical habitat for *Melicope haupuensis* and is 575 ha (1,418 ac) on State land (Kuia NAR, Kokee and Na Pali Coast State Parks). This unit contains portions of Awaawapuhi, Honopu, and Nualolo Trails, Kainamanu and Kalahu Summits. This unit provides habitat for three populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope haupuensis* and is currently occupied with 11 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, moist talus slopes in *Metrosideros polymorpha* dominated lowland mesic forest or *Metrosideros polymorpha*-*Acacia koa* montane mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid

their destruction by one naturally occurring catastrophic event.

Kauai 11—*Melicope haupuensis*—c

This unit is critical habitat for *Melicope haupuensis* and is 290 ha (716 ac) on State land (Alakai Wilderness Preserve), containing portions of Kipalau Valley. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope haupuensis* and is currently occupied with two plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, moist talus slopes in *Metrosideros polymorpha* dominated lowland mesic forest or *Metrosideros polymorpha*-*Acacia koa* montane mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Melicope knudsenii*—a

This unit is critical habitat for *Melicope knudsenii* and is 967 ha (2,389 ac) on State land (Kuia NAR). This unit contains portions of Awaawapuhi and Nualolo Trails, and Milolii Ridge. This unit provides habitat for three populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope knudsenii* and is currently occupied with four plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, forested flats with brown granular soil in lowland dry to montane mesic forests. This unit provides for three populations within this multi-island species' historical range on Kauai that are some distance away from the

other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Melicope knudsenii*—b

This unit is critical habitat for *Melicope knudsenii* and is 373 ha (922 ac) on State land (Alakai Wilderness Preserve). This unit contains portions of Kawaiiki and Kipalau Valleys. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope knudsenii* and is currently occupied with six plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, forested flats with brown granular soil in lowland dry to montane mesic forests. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Melicope pallida*—a

This unit is critical habitat for *Melicope pallida* and is 143 ha (353 ac) on State land (Alakai Wilderness Preserve), containing portions of Kipalau Valley. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Melicope pallida* and is currently occupied with 10 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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 rock faces in lowland to montane mesic to wet forests or shrubland. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Melicope pallida*—b

This unit is critical habitat for *Melicope pallida* and is 310 ha (766 ac) on State land (Na Pali Coast State Park). This unit contains portions of Kaaalahina Ridge and Puu Ki Summit. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope pallida* and is currently occupied with 50 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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 rock faces in lowland to montane mesic to wet forests or shrubland. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 5—*Munroidendron racemosum*—a

This unit is critical habitat for *Munroidendron racemosum* and is 60 ha (148 ac) on State land (Nonou Forest Reserve). This unit contains Nonou Summit and the Sleeping Giant. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Munroidendron racemosum* and is currently occupied with six plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep exposed cliffs or ridge slopes in coastal or lowland 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 catastrophe.

Kauai 7—*Munroidendron racemosum*—b

This unit is critical habitat for *Munroidendron racemosum* and is 50 ha (123 ac) on private land, containing

Naluakeina Summit and Queen Victoria's Profile. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Munroidendron racemosum* and is currently occupied with two plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep exposed cliffs or ridge slopes in coastal or lowland 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 catastrophe.

Kauai 11—*Munroidendron racemosum*—c

This unit is critical habitat for *Munroidendron racemosum* and is 1,952 ha (4,824 ac) on State (Hono o Na Pali NAR, Haena and Na Pali Coast State Parks) and private land. This unit contains Hanakapiai, Hanakoa, and Kalalau Valleys, Kanakou Summit, Kaaalahina and Kalepa Ridges, Nualolo Kai, and Pohakuao. This unit provides habitat for six populations of 100 mature, reproducing individuals of the long-lived perennial *Munroidendron racemosum* and is currently occupied with 46 to 86 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep exposed cliffs or ridge slopes in coastal or lowland 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 catastrophe.

Kauai 11—*Munroidendron racemosum*—d

This unit is critical habitat for *Munroidendron racemosum* and is 153 ha (379 ac) on State land (Alakai Wilderness Preserve). This unit contains portions of Kawaiiki and Kipalau Valleys. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-

lived perennial *Munroidendron racemosum* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep exposed cliffs or ridge slopes in coastal or lowland 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 catastrophe.

Kauai 7—*Myrsine linearifolia*—a

This unit is critical habitat for *Myrsine linearifolia* and is 334 ha (825 ac) on private land. This unit contains Hokulei Peak, Haupū and Naluakeina Summits, and Queen Victoria's Profile. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Myrsine linearifolia* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, diverse mesic or wet lowland or montane *Metrosideros polymorpha* forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominant species. 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 catastrophe.

Kauai 10—*Myrsine linearifolia*—b

This unit is critical habitat for *Myrsine linearifolia* and is 167 ha (412 ac) on private and State land (Lihue-Koloa Forest Reserve). This unit contains Hulua, Kahili, and Kapalaoa Summits. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Myrsine linearifolia* and is currently occupied with 47 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in

this unit that are essential for this species include, but are not limited to, diverse mesic or wet lowland or montane *Metrosideros polymorpha* forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominant species. 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 catastrophe.

Kauai 11—*Myrsine linearifolia*—c

This unit is critical habitat for *Myrsine linearifolia* and is 685 ha (1,692 ac) on State land (Alakai Wilderness Preserve), containing portions of Kipalau Valley. This unit provides habitat for three populations of 100 mature, reproducing individuals of the long-lived perennial *Myrsine linearifolia* and is currently occupied with 34 to 44 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse mesic or wet lowland or montane *Metrosideros polymorpha* forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominant species. 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 catastrophe.

Kauai 11—*Myrsine linearifolia*—d

This unit is critical habitat for *Myrsine linearifolia* and is 286 ha (707 ac) on State (Halelea Forest Reserve, Hono o Na Pali NAR, and Na Pali Coast State Park) and private land. This unit contains Hono o Na Pali and Pali Elelee Summits, and Limahuli Falls. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Myrsine linearifolia* and is currently occupied with 23 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse mesic or wet lowland or montane *Metrosideros polymorpha* forest with *Cheirodendron*

spp. or *Dicranopteris linearis* as co-dominant species. 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 catastrophe.

Kauai 11—*Myrsine linearifolia*—e

This unit is critical habitat for *Myrsine linearifolia* and is 345 ha (854 ac) on State land (Hono o Na Pali NAR, Kokee and Na Pali Coast State Parks). This unit contains Alealau, Pihea, and Puu o Kila Summits. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Myrsine linearifolia* and is currently occupied with 366 to 420 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse mesic or wet lowland or montane *Metrosideros polymorpha* forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominant species. 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 catastrophe.

Kauai 11—*Myrsine linearifolia*—f

This unit is critical habitat for *Myrsine linearifolia* and is 135 ha (334 ac) on State (Halelea Forest Reserve) and private land, containing Kaliko Summit. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Myrsine linearifolia* and is currently occupied with 20 to 30 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse mesic or wet lowland or montane *Metrosideros polymorpha* forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominant species. 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 catastrophe.

Kauai 11—*Nothocestrum peltatum*—a

This unit is critical habitat for *Nothocestrum peltatum* and is 427 ha (1,056 ac) on State land (Kokee State Park). This unit contains portions of Kumuwela Ridge and Trail. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Nothocestrum peltatum* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, rich soil on steep slopes in mesic or wet forest dominated by *Acacia koa* or a mixture of *Acacia koa* and *Metrosideros polymorpha*. 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 catastrophe.

Kauai 11—*Nothocestrum peltatum*—b

This unit is critical habitat for *Nothocestrum peltatum* and is 1,465 ha (3,619 ac) on State land (Kuia NAR, Kokee, Waimea Canyon, and Na Pali Coast State Parks). This unit contains portions of Awaawapuhi, Honopu, and Nualolo Trails, Kainamanu and Kalahu Summits, and Mahanaloa Valley. This unit provides habitat for four populations of 100 mature, reproducing individuals of the long-lived perennial *Nothocestrum peltatum* and is currently occupied with 12 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important to the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, rich soil on steep slopes in mesic or wet forest dominated by *Acacia koa* or a mixture of *Acacia koa* and *Metrosideros polymorpha*. 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 catastrophe.

Kauai 11—*Nothocestrum peltatum*—c

This unit is critical habitat for *Nothocestrum peltatum* and is 80 ha (198 ac) on State land (Kokee and Na Pali Coast State Parks). This unit

contains Kahuamaa Flat and Puu o Kila Summit. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Nothocestrum peltatum* and is currently occupied with five plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, rich soil on steep slopes in mesic or wet forest dominated by *Acacia koa* or a mixture of *Acacia koa* and *Metrosideros polymorpha*. 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 catastrophe.

Kauai 12—*Nothocestrum peltatum*—d

This unit is critical habitat for *Nothocestrum peltatum* and is 161 ha (400 ac) on State land (Waimea Canyon State Park and Puu Ka Pele Forest Reserve). This unit contains Puu Lua Summit. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Nothocestrum peltatum* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, rich soil on steep slopes in mesic or wet forest dominated by *Acacia koa* or a mixture of *Acacia koa* and *Metrosideros polymorpha*. 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 catastrophe.

Kauai 14—*Panicum niihauense*—a

This unit is critical habitat for *Panicum niihauense* and is 118 ha (296 ac) on State (Polihale State Park and Puu Ka Pele Forest Reserve) and Federal land (Pacific Missile Range Facility). This unit contains Nohili Point. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Panicum niihauense* and is currently occupied with 23 plants. This unit is

essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, sand dunes in coastal shrubland. This unit is geographically separated from the other three units designated as critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 15—*Panicum niihauense*—b

This unit is critical habitat for *Panicum niihauense* and is 15 ha (38 ac) on federal land (Pacific Missile Range Facility). This unit contains Mana Point and Waieli Draw. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Panicum niihauense* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, sand dunes in coastal shrubland. This unit is geographically separated from the other three units designated as critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 16—*Panicum niihauense*—c

This unit is critical habitat for *Panicum niihauense* and is 11 ha (28 ac) on Federal land (Pacific Missile Range Facility) along the western coastline near the radio facility. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Panicum niihauense* and is currently unoccupied.

This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, sand dunes in coastal 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 17—*Panicum niihauense*—d

This unit is critical habitat for *Panicum niihauense* and is 27 ha (67 ac) on Federal and State land. This unit contains Kokole Point. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Panicum niihauense* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, sand dunes in coastal shrubland. This unit is geographically separated from the other three units designated as critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 7—*Peucedanum sandwicense*—a

This unit is critical habitat for *Peucedanum sandwicense* and is 21 ha (53 ac) on private land. This unit contains Haupu Summit and Queen Victoria's Profile. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Peucedanum sandwicense* and is currently occupied

with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, cliff habitats in mixed shrub coastal dry cliff communities or diverse mesic forest. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Peucedanum sandwicense*—b

This unit is critical habitat for *Peucedanum sandwicense* and is 579 ha (1,431 ac) on State land (Kuia NAR and Na Pali Coast State Park). This unit contains portions of Kuia and Mahanaloa Valleys, and Milolii Ridge. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Peucedanum sandwicense* and is currently occupied with 55 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, cliff habitats in mixed shrub coastal dry cliff communities or diverse mesic forest. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Peucedanum sandwicense*—c

This unit is critical habitat for *Peucedanum sandwicense* and is 181 ha (447 ac) on State land (Hono o Na Pali NAR and Na Pali Coast State Park). This unit contains portions of Kaaalahina Ridge, and Alealau, Kanakou, Keanapuka, and Puu Ki Summits. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial

Peucedanum sandwicense and is currently occupied with 100 to 200 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, cliff habitats in mixed shrub coastal dry cliff communities or diverse mesic forest. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 10—*Phlegmariurus nutans*—a

This unit is critical habitat for *Phlegmariurus nutans* and is 621 ha (1,532 ac) on State (Lihue-Koloa Forest Reserve) and private land. This unit contains Kahili, Kalalea, Kamanu, Kapalaoa, and Kawaikini Summits. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Phlegmariurus nutans* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, tree trunks on open ridges and slopes in *Metrosideros polymorpha-Dicranopteris linearis* wet forest. This unit provides for three populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event. This species has wind-blown spores with limited opportunity for germination and growth. Therefore, this species requires large intact areas of land to support a viable population.

Kauai 11—*Phyllostegia knudsenii*—a

This unit is critical habitat for *Phyllostegia knudsenii* and is 297 ha (735 ac) on State land (Alakai Wilderness Preserve). This unit contains portions of Kawaiiki and Kipalau Valleys. This unit provides habitat for three populations of 300 mature,

reproducing individuals of the short-lived perennial *Phyllostegia knudsenii* and is currently occupied with 4 to 13 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, *Metrosideros polymorpha* lowland mesic or wet forest. Although we do not feel that there is enough habitat designated to reach the recovery goal of 8 to 10 populations, this species is a very narrow endemic and probably never naturally occurred in more than a single or a few populations.

Kauai 11—*Phyllostegia waimeae*—a

This unit is critical habitat for *Phyllostegia waimeae* and is 365 ha (901 ac) on State land (Alakai Wilderness Preserve), containing portions of Kawaiiki Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia waimeae* and is currently occupied with six plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, *Acacia koa-Metrosideros polymorpha* dominated wet or mixed mesic forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominants. Although we do not feel that there is enough habitat designated to reach the recovery goal of 8 to 10 populations, this species is a very narrow endemic and probably never naturally occurred in more than a single or a few populations.

Kauai 4—*Phyllostegia wawrana*—a

This unit is critical habitat for *Phyllostegia wawrana* and is 351 ha (871 ac) on State (Kealia Forest Reserve) and private land. This unit contains Lelewi, Makaleha, Uluawaa, and Wekiu Summits. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia wawrana* and is currently occupied with 25 to 35 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently

considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, *Acacia koa-Metrosideros polymorpha-Cheirodendron* mixed 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 catastrophe.

Kauai 11—*Phyllostegia wawrana*—b

This unit is critical habitat for *Phyllostegia wawrana* and is 1,038 ha (2,565 ac) on State (Alakai Wilderness Preserve, Halelea Forest Reserve, Hono o Na Pali NAR, and Na Pali Coast State Park) and private land. This unit contains Hanakoa Valley, and Alealau Summit, Hono O Napali, Keanapuka, Moaalele, Pali elele, Pohakea, Puu Ki, and Waiahuakua Summits. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia wawrana* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, *Acacia koa-Metrosideros polymorpha-Cheirodendron* mixed 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 catastrophe.

Kauai 11—*Phyllostegia wawrana*—c

This unit is critical habitat for *Phyllostegia wawrana* and is 108 ha (268 ac) on State land (Alakai Wilderness Preserve), containing portions of Kipalau Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia wawrana* and is currently occupied with 1 to 10 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, *Acacia koa-Metrosideros polymorpha-Cheirodendron* mixed 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 catastrophe.

Kauai 11—*Phyllostegia wawrana*—d

This unit is critical habitat for *Phyllostegia wawrana* and is 251 ha (620 ac) on State land (Kokee and Na Pali Coast State Parks). This unit contains portions of Honopu Trail, Kainamanu and Kalahu Summits, and Kalalau Lookout. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia wawrana* and is currently occupied with 5 to 6 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable.

The habitat features contained in this unit that are essential for this species include, but are not limited to, *Acacia koa-Metrosideros polymorpha-Cheirodendron* mixed 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 catastrophe.

Kauai 10—*Plantago princeps*—a

This unit is critical habitat for *Plantago princeps* and is 277 ha (682 ac) on State (Halelea and Lihue-Koloa Forest Reserves) and private land. This unit contains Kuaohukini Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Plantago princeps* and is currently occupied with 350 to 400 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, windswept areas near waterfalls in *Metrosideros polymorpha-Cheirodendron* montane wet forest with riparian vegetation or *Metrosideros polymorpha* lowland to montane transitional wet forest on cliffs and ridges, growing on rocky basalt outcrops. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other

critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Plantago princeps*—b

This unit is critical habitat for *Plantago princeps* and is 126 ha (312 ac) on State land (Kokee and Na Pali Coast State Park), containing Kalalau Lookout. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Plantago princeps* and is currently occupied with 18 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, windswept areas near waterfalls in *Metrosideros polymorpha-Cheirodendron* montane wet forest with riparian vegetation or *Metrosideros polymorpha* lowland to montane transitional wet forest on cliffs and ridges, growing on rocky basalt outcrops. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Plantago princeps*—c

This unit is critical habitat for *Plantago princeps* and is 244 ha (603 ac) on State land (Halelea Forest Reserve). This unit contains Kaliko and Puu Manu Summits. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Plantago princeps* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai in order to reach recovery goals. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, windswept areas near waterfalls in *Metrosideros polymorpha-Cheirodendron* montane wet forest with riparian vegetation or *Metrosideros polymorpha* lowland to montane transitional wet forest on cliffs and

ridges, growing on rocky basalt outcrops.

Kauai 11—*Plantago princeps*—d

This unit is critical habitat for *Plantago princeps* and is 77 ha (189 ac) on State land (Hono o Na Pali NAR and Na Pali Coast State Park). This unit contains Alealau and Puu Ki Summits, and Kaaalahina Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Plantago princeps* and is currently occupied with 20 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, windswept areas near waterfalls in *Metrosideros polymorpha-Cheirodendron* montane wet forest with riparian vegetation or *Metrosideros polymorpha* lowland to montane transitional wet forest on cliffs and ridges, growing on rocky basalt outcrops. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Platanthera holochila*—a

This unit is critical habitat for *Platanthera holochila* and is 4,148 ha (10,251 ac) on State (Alakai Wilderness Preserve, Halelea Forest Reserve, Hono o Na Pali NAR, and Na Pali Coast State Park) and private land. This unit contains the Alakai Swamp and Trail, Halehaha and Halepaakai Streams, and Kapoki, Kilohana, Kaali, and Pihea Summits. This unit provides habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Platanthera holochila* and is currently occupied with 24 to 34 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, montane *Metrosideros polymorpha-*

Dicranopteris linearis wet forest or *M. polymorpha* mixed bog. This unit provides for four populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Poa mannii*—a

This unit is critical habitat for *Poa mannii* and is 1,872 ha (4,624 ac) on State land (Kuia NAR, Kokee, Na Pali Coast, and Waimea Canyon State Parks, and Puu Ka Pele Forest Reserve). This unit contains portions of Anakai, and Awaawapuhi, Honopu, and Nualolo Trails, and Haahole, Kuia, and Mahanaloa Valleys, and Milolii Ridge. This unit provides habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Poa mannii* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, cliffs or rock faces in lowland or montane mesic *Metrosideros polymorpha* or *Acacia koa-Metrosideros polymorpha* 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 catastrophe.

Kauai 11—*Poa mannii*—b

This unit is critical habitat for *Poa mannii* and is 677 ha (1,673 ac) on State land (Alakai Wilderness Preserve), containing portions of Kipalau Valley. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Poa mannii* and is currently occupied with 50 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs or rock faces in lowland or montane mesic *Metrosideros polymorpha* or *Acacia koa-Metrosideros polymorpha* 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 catastrophe.

Kauai 11—*Poa mannii*—c

This unit is critical habitat for *Poa mannii* 155 ha (383 ac) on State land (Hono o Na Pali NAR and Na Pali Coast State Park). This unit contains portions of Kaaalahina Ridge, and Alealau, Kanakou, and Puu Ki Summits. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Poa mannii* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, cliffs or rock faces in lowland or montane mesic *Metrosideros polymorpha* or *Acacia koa-Metrosideros polymorpha* 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 catastrophe.

Kauai 11—*Poa mannii*—d

This unit is critical habitat for *Poa mannii* and is 307 ha (759 ac) on State land (Na Pali-Kona Forest Reserve, Kokee and Na Pali Coast State Parks). This unit contains Kalahu, Niania, and Puu o Kila Summits, Kalepa Ridge, and Nakeikionaiwa Pillar. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Poa mannii* and is currently occupied with 205 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs or rock faces in lowland or montane mesic *Metrosideros polymorpha* or *Acacia koa-Metrosideros polymorpha* 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 catastrophe.

Kauai 11—*Poa sandvicensis*—a

This unit is critical habitat for *Poa sandvicensis* and is 1,111 ha (2,746 ac) on State land (Alakai Wilderness

Preserve). This unit contains portions of Kawaiiki Ridge and Kipalau Valley. This unit provides habitat for six populations of 300 mature, reproducing individuals of the short-lived perennial *Poa sandvicensis* and is currently occupied with 1,000 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important 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, wet, shaded, gentle to steep slopes, ridges, and rock ledges of stream banks in semi-open to closed, wet, diverse *Acacia koa-Metrosideros polymorpha* montane forest. 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 catastrophe.

Kauai 11—*Poa sandvicensis*—b

This unit is critical habitat for *Poa sandvicensis* and is 52 ha (129 ac) on State land (Alakai Wilderness Preserve, Hono o Na Pali NAR, and Na Pali Coast State Park). This unit contains Alealau and Keanapuka Summits. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Poa sandvicensis* and is currently occupied with four plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, wet, shaded, gentle to steep slopes, ridges, and rock ledges of stream banks in semi-open to closed, wet, diverse *Acacia koa-Metrosideros polymorpha* montane forest. 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 catastrophe.

Kauai 11—*Poa siphonoglossa*—a

This unit is critical habitat for *Poa siphonoglossa* and is 1,620 ha (4,008 ac) on State land (Kuia NAR, Kokee and Na Pali Coast State Parks). This unit contains portions of Kahuamaa Flat, Kaunuahaa and Milolii Ridges, Kuia and Mahanaloa Valleys, Nualolo Trail, and Kainamanu and Puu O Kila Summits. This unit provides habitat for five

populations of 300 mature, reproducing individuals of the short-lived perennial *Poa siphonoglossa* and is currently occupied with 13 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, shady banks on steep slopes in mesic *Metrosideros polymorpha-Acacia koa* 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 catastrophe.

Kauai 11—*Poa siphonoglossa*—b

This unit is critical habitat for *Poa siphonoglossa* and is 2,189 ha (5,410 ac) on State land (Alakai Wilderness Preserve). This unit contains portions of Kawaiiki Ridge and Kipalau Valley. This unit provides habitat for five populations of 300 mature, reproducing individuals of the short-lived perennial *Poa siphonoglossa* and is currently occupied with 30 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, shady banks on steep slopes in mesic *Metrosideros polymorpha-Acacia koa* 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 catastrophe.

Kauai 7—*Pteralyxia kauaiensis*—a

This unit is critical habitat for *Pteralyxia kauaiensis* and is 345 ha (854 ac) on private land. This unit contains Hokulei Peak, Haupū and Naluakeina Summits, and Queen Victoria's Profile. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Pteralyxia kauaiensis* and is currently occupied with 10 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population,

which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse mesic or *Diospyros sandwicensis* mixed mesic forests with *Pisonia* spp. This unit is geographically separated from the other six units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 10—*Pteralyxia kauaiensis*—b

This unit is critical habitat for *Pteralyxia kauaiensis* and is 304 ha (752 ac) on State (Halelea and Lihue-Koloa Forest Reserves) and private land, containing Kuaohukini Summit. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Pteralyxia kauaiensis* and is currently occupied with two plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse mesic or *Diospyros sandwicensis* mixed mesic forests with *Pisonia* spp. This unit is geographically separated from the other six units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Pteralyxia kauaiensis*—c

This unit is critical habitat for *Pteralyxia kauaiensis* and is 209 ha (516 ac) on State land (Hono o Na Pali NAR and Na Pali Coast State Park). This unit contains Alealau, Kanakou, and Puu Ki Summits and Kaaalahina Ridge. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Pteralyxia kauaiensis* and is currently occupied with 24 to 33 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse mesic or *Diospyros sandwicensis* mixed mesic forests with *Pisonia* spp. This unit is geographically separated from the other six units designated as critical habitat for this

island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Pteralyxia kauaiensis*—d

This unit is critical habitat for *Pteralyxia kauaiensis* and is 57 ha (141 ac) on State land within Makaha Valley. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Pteralyxia kauaiensis* and is currently occupied with 300 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important 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, diverse mesic or *Diospyros sandwicensis* mixed mesic forests with *Pisonia* spp. This unit is geographically separated from the other six units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Pteralyxia kauaiensis*—e

This unit is critical habitat for *Pteralyxia kauaiensis* and is 353 ha (873 ac) on State land (Na Pali Coast State Park) within Kalalau Valley. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Pteralyxia kauaiensis* and is currently occupied with 332 to 337 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important 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, diverse mesic or *Diospyros sandwicensis* mixed mesic forests with *Pisonia* spp. This unit is geographically separated from the other six units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Pteralyxia kauaiensis*—f

This unit is critical habitat for *Pteralyxia kauaiensis* and is 588 ha (1,445 ac) on State (Alakai Wilderness Preserve and Puu Ka Pele Forest Reserve) and private land. This unit contains Hipalau, Kawaiiki, Kipalau, and Oneopaewa Valleys and portions of Kaluahaulu Ridge. This unit provides habitat for two populations of 100 mature, reproducing individuals of the

long-lived perennial *Pteralyxia kauaiensis* and is currently occupied with 70 to 82 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse mesic or *Diospyros sandwicensis* mixed mesic forests with *Pisonia* spp. This unit is geographically separated from the other six units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Pteralyxia kauaiensis*—g

This unit is critical habitat for *Pteralyxia kauaiensis* and is 445 ha (1,100 ac) on State land (Kuia NAR, Na Pali Coast State Park, and Puu Ka Pele Forest Reserve). This unit contains Kawaiula, Kuia, Mahanaloa, Paaiki, and Poopooiki Valleys and Milolii Ridge. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Pteralyxia kauaiensis* and is currently occupied with 335 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important 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, diverse mesic or *Diospyros sandwicensis* mixed mesic forests with *Pisonia* spp. This unit is geographically separated from the other six units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Remya kauaiensis*—a

This unit is critical habitat for *Remya kauaiensis* and is 172 ha (426 ac) on State land (Alakai Wilderness Preserve), containing portions of Kipalau Valley. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Remya kauaiensis* and is currently occupied with five to 10 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in

this unit that are essential for this species include, but are not limited to, steep, north- or northeast-facing slopes in *Acacia koa-Metrosideros polymorpha* lowland 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 from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Remya kauaiensis*—b

This unit is critical habitat for *Remya kauaiensis* and is 66 ha (163 ac) on State land (Na Pali Coast State Park) within Kalalau Valley. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Remya kauaiensis* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, north- or northeast-facing slopes in *Acacia koa-Metrosideros polymorpha* lowland 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 from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Remya kauaiensis*—c

This unit is critical habitat for *Remya kauaiensis* and is 886 ha (2,190 ac) on State land (Kuia NAR and Kokee State Park). This unit contains portions of Awaawapuhi, Honopu, and Nualolo Trails and Kainamanu Summit. This unit provides habitat for five populations of 300 mature, reproducing individuals of the short-lived perennial *Remya kauaiensis* and is currently occupied with 73 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, north- or northeast-facing slopes in *Acacia koa-Metrosideros polymorpha* lowland 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 from

being destroyed by one naturally occurring catastrophe.

Kauai 11—*Remya kauaiensis*—d

This unit is critical habitat for *Remya kauaiensis* and is 47 ha (115 ac) on State land, containing portions of Kaluahaulu Ridge. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Remya kauaiensis* and is currently occupied with 10 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, north- or northeast-facing slopes in *Acacia koa-Metrosideros polymorpha* lowland 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 from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Remya kauaiensis*—e

This unit is critical habitat for *Remya kauaiensis* and is 66 ha (163 ac) on State land (Alakai Wilderness Preserve) and contains portions of Kohua Ridge and the Mohihi Waialai Trail. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Remya kauaiensis* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, north- or northeast-facing slopes in *Acacia koa-Metrosideros polymorpha* lowland 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 from being destroyed by one naturally occurring catastrophe.

Kauai 12—*Remya kauaiensis*—f

This unit is critical habitat for *Remya kauaiensis* and is 52 ha (128 ac) on State land (Waimea Canyon State Park) near Lapa Picnic Area and Lua Reservoir. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial

Remya kauaiensis and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, north- or northeast-facing slopes in *Acacia koa-Metrosideros polymorpha* lowland 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 from being destroyed by one naturally occurring catastrophe.

Kauai 11—*Remya montgomeryi*—a

This unit is critical habitat for *Remya montgomeryi* and is 69 ha (171 ac) on State land (Kuia NAR) within portions of the Kuia and Mahanaloa Valleys. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Remya montgomeryi* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, north- or northeast-facing slopes or cliffs in transitional wet or *Metrosideros polymorpha*-dominated mixed mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Remya montgomeryi*—b

This unit is critical habitat for *Remya montgomeryi* and is 1,010 ha (2,496 ac) on State land (Alakai Wilderness Preserve and Halelea Forest Reserve), containing portions of the Alakai Swamp. This unit provides habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Remya montgomeryi* and is currently occupied with nine plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important

for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, north- or northeast-facing slopes or cliffs in transitional wet or *Metrosideros polymorpha*-dominated mixed mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Remya montgomeryi*—c

This unit is critical habitat for *Remya montgomeryi* and is 436 ha (1,077 ac) on State land (Kokee and Na Pali Coast State Parks). This unit contains Kahuamāa Flat, and Kalahu, Pihea, and Puu o Kila Summits, and Kalalau Lookout. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Remya montgomeryi* and is currently occupied with 134 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep, north- or northeast-facing slopes or cliffs in transitional wet or *Metrosideros polymorpha*-dominated mixed mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Schiedea apokremnos*—a

This unit is critical habitat for *Schiedea apokremnos* and is 170 ha (421 ac) on State land (Na Pali Coast State Park), containing Nakeikionaiwi

Pillar. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea apokremnos* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, crevices of near-vertical basalt coastal cliff faces in sparse dry coastal cliff shrub vegetation. 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 catastrophe.

Kauai 11—*Schiedea apokremnos*—b

This unit is critical habitat for *Schiedea apokremnos* and is 187 ha (463 ac) on State land (Na Pali Coast State Park), containing Kanakou Summit. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea apokremnos* and is currently occupied with 100 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, crevices of near-vertical basalt coastal cliff faces in sparse dry coastal cliff shrub vegetation. 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 catastrophe.

Kauai 11—*Schiedea apokremnos*—c

This unit is critical habitat for *Schiedea apokremnos* and is 295 ha (730 ac) on State land (Na Pali Coast State Park and Puu Ka Pele Forest Reserve). This unit contains portions of Kawaiula, Milolii, Paaiki, and Poopooiki Valleys. This unit provides habitat for five populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea apokremnos* and is currently occupied with 100 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important

for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, crevices of near-vertical basalt coastal cliff faces in sparse dry coastal cliff shrub vegetation. 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 catastrophe.

Kauai 11—*Schiedea helleri*—a

This unit is critical habitat for *Schiedea helleri* and is 483 ha (1,194 ac) on State land (Alakai Wilderness Preserve), containing portions of Halehaha and Halepaakai Streams. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea helleri* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 steep cliffs in closed *Metrosideros polymorpha*-*Dicranopteris linearis* montane wet forest, *M. polymorpha*-*Cheirodendron* spp. montane wet forest, or *Acacia koa*-*M. polymorpha* montane mesic forest. 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other units to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Schiedea helleri*—b

This unit is critical habitat for *Schiedea helleri* and is 154 ha (381 ac) on State land (Alakai Wilderness Preserve) on portions of Kohua Ridge and the Mohihi-Waialae Trail. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea helleri* and is currently occupied with 50 to 60 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present

population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridges and steep cliffs in closed *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest, *M. polymorpha-Cheirodendron* spp. montane wet forest, or *Acacia koa-M. polymorpha* montane mesic forest. 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other units to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Schiedea helleri*—c

This unit is critical habitat for *Schiedea helleri* and is 172 ha (426 ac) on State land (Alakai Wilderness Preserve), containing portions of Kipalau Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea helleri* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 steep cliffs in closed *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest, *M. polymorpha-Cheirodendron* spp. montane wet forest, or *Acacia koa-M. polymorpha* montane mesic forest. 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other units to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Schiedea kauaiensis*—a

This unit is critical habitat for *Schiedea kauaiensis* and is 12 ha (29 ac) on private land, containing Pohakukane Cliffs. This unit provides habitat for one population of 300 mature, reproducing

individuals of the short-lived perennial *Schiedea kauaiensis* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 in diverse mesic to wet *Acacia koa-Metrosideros polymorpha* 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 catastrophe.

Kauai 11—*Schiedea kauaiensis*—b

This unit is critical habitat for *Schiedea kauaiensis* and is 395 ha (975 ac) on State land (Kokee and Na Pali Coast State Parks). This unit contains Kahuamaa Flat, and Kalahu, Piheha, and Puu o Kila Summits, and Kalalau Lookout. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea kauaiensis* and is currently occupied with five plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes in diverse mesic to wet *Acacia koa-Metrosideros polymorpha* 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 catastrophe.

Kauai 11—*Schiedea kauaiensis*—c

This unit is critical habitat for *Schiedea kauaiensis* and is 510 ha (1,260 ac) on State land (Kuia NAR). This unit contains portions of Kuia and Mahanaloa Valleys and Milolii Ridge. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea kauaiensis* and is currently occupied with 17 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in

this unit that are essential for this species include, but are not limited to, steep slopes in diverse mesic to wet *Acacia koa-Metrosideros polymorpha* 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 catastrophe.

Kauai 11—*Schiedea kauaiensis*—d

This unit is critical habitat for *Schiedea kauaiensis* and is 11 ha (28 ac) on State land (Hono o Na Pali NAR), containing portions of Kalalau Trail. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea kauaiensis* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 in diverse mesic to wet *Acacia koa-Metrosideros polymorpha* 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 catastrophe.

Kauai 11—*Schiedea membranacea*—a

This unit is critical habitat for *Schiedea membranacea* and is 251 ha (620 ac) on State land (Alakai Wilderness Preserve) within the Koaie Canyon. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea membranacea* and is currently occupied with 6 to 10 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs or cliff bases of mesic or wet habitats, in lowland or montane shrubland, or forest communities dominated by *Acacia koa*, *Pipturus* spp. and *Metrosideros polymorpha* or Urticaceae shrubland on talus slopes. 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 catastrophe.

Kauai 11—*Schiedea membranacea*—b

This unit is critical habitat for *Schiedea membranacea* and is 234 ha (580 ac) on State land (Kokee and Na Pali Coast State Parks). This unit contains Kalahu and Puu o Kila Summits and Kalalu Lookout. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea membranacea* and is currently occupied with 24 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs or cliff bases of mesic or wet habitats, in lowland or montane shrubland, or forest communities dominated by *Acacia koa*, *Pipturus* spp. and *Metrosideros polymorpha* or Urticaceae shrubland on talus slopes. 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 catastrophe.

Kauai 11—*Schiedea membranacea*—c

This unit is critical habitat for *Schiedea membranacea* and is 528 ha (1,303 ac) on State land (Kuia NAR and Puu Ka Pele Forest Reserve). This unit contains portions of Kuia and Mahanaloa Valleys and Milolii Ridge. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea membranacea* and is currently occupied with 266 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs or cliff bases of mesic or wet habitats, in lowland or montane shrubland, or forest communities dominated by *Acacia koa*, *Pipturus* spp. and *Metrosideros polymorpha* or Urticaceae shrubland on talus slopes. 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 catastrophe.

Kauai 11—*Schiedea membranacea*—d

This unit is critical habitat for *Schiedea membranacea* and is 327 ha (810 ac) on State land (Kuia NAR and Kokee State Park). This unit contains portions of Awaawapuhi and Honopu Trails and Kainamau Summit. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea membranacea* and is currently occupied with eight plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs or cliff bases of mesic or wet habitats, in lowland or montane shrubland, or forest communities dominated by *Acacia koa*, *Pipturus* spp. and *Metrosideros polymorpha* or Urticaceae shrubland on talus slopes. 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 catastrophe.

Kauai 7—*Schiedea nuttallii*—a

This unit is critical habitat for *Schiedea nuttallii* and is 282 ha (698 ac) on private land. This unit contains Haupu and Naluakeina Summits and Queen Victoria's Profile. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Schiedea nuttallii* and is currently occupied with ten to 50 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, cliffs in lowland diverse mesic forest dominated by *Metrosideros polymorpha*. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 9—*Schiedea spergulina* var. *leiopoda*—a

This unit is critical habitat for *Schiedea spergulina* var. *leiopoda* and is 5 ha (11 ac) on private land within Lawai Valley. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea spergulina* var. *leiopoda* and is currently occupied with 135 to 150 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic forests. Although we do not feel that there is enough habitat designated to reach the recovery goal of 8 to 10 populations, this species is a very narrow endemic and probably never naturally occurred in more than a single or a few populations.

Kauai 11—*Schiedea spergulina* var. *spergulina*—a

This unit is critical habitat for *Schiedea spergulina* var. *spergulina* and is 131 ha (324 ac) on State land (Na Pali Coast State Park) within Kalalau Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea spergulina* var. *spergulina* and is currently occupied with one plant. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is of an appropriate distance from the other units to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Schiedea spergulina* var. *spergulina*—b

This unit is critical habitat for *Schiedea spergulina* var. *spergulina* and is 77 ha (191 ac) on State land within Kawaiiki Valley. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea spergulina* var. *spergulina* and is currently occupied with five plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other units to avoid their destruction by one naturally occurring catastrophic event.

Kauai 13—*Schiedea spergulina* var. *spergulina*—c

This unit is critical habitat for *Schiedea spergulina* var. *spergulina* and is 221 ha (545 ac) on State land within Waimea Canyon. This unit provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea spergulina* var. *spergulina* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to

reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Schiedea stellarioides*—a

This unit is critical habitat for *Schiedea stellarioides* and is 1,259 ha (3,113 ac) on State land (Alakai Wilderness Preserve and Puu Ka Pele Forest Reserve). This unit contains portions of Kaluahaulu and Kawaiiki Ridges, and Kawaiiki and Kipalau Valleys. This unit provides habitat for five populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea stellarioides* and is currently occupied with 200 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, steep slopes in closed *Acacia koa*-*Metrosideros polymorpha* lowland or montane mesic forest or 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate size and distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Schiedea stellarioides*—b

This unit is critical habitat for *Schiedea stellarioides* and is 129 ha (320 ac) on State land (Alakai Wilderness Preserve) within upper Waialae Valley. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Schiedea stellarioides* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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 in closed *Acacia koa*-*Metrosideros polymorpha* lowland or montane mesic forest or 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 8—*Sesbania tomentosa*—a

This unit is critical habitat for *Sesbania tomentosa* and is 46 ha (115 ac) on private land, containing Paoa Point and Naake Cape. This 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 conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, sandy beaches, dunes, or pond margins in coastal dry shrublands or mixed coastal dry cliffs. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 14—*Sesbania tomentosa*—b

This unit is critical habitat for *Sesbania tomentosa* and is 44 ha (109 ac) on State land (Polihale State Park). This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Sesbania tomentosa* and is currently occupied with 11 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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, sandy beaches, dunes, or pond margins in coastal dry shrublands or mixed coastal dry cliffs. This unit provides for one population within this multi-island species' historical range on Kauai that is

some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Solanum sandwicense*—a

This unit is critical habitat for *Solanum sandwicense* and is 2,442 ha (6,039 ac) on State land (Kuia NAR, Kokee and Na Pali Coast State Parks). This unit contains portions of the Awaawapuhi, Berry Flat, Nualolo and Honopu Trails, Kahuamaa Flat, Kainamanu and Kalahu Summits, and Kaunuohua and Kumuwela Ridges. This unit provides habitat for five populations of 300 mature, reproducing individuals of the short-lived perennial *Solanum sandwicense* and is currently occupied with eight to nine plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, forest canopies in diverse lowland or montane *Acacia koa* or *Acacia koa-Metrosideros polymorpha* mesic or wet forests. This unit provides for five populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Solanum sandwicense*—b

This unit is critical habitat for *Solanum sandwicense* and is 249 ha (614 ac) on State land, containing portions of Kawaiiki Ridge. This 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 conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai in order to reach recovery goals. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, forest canopies in diverse lowland or montane *Acacia koa* or *Acacia koa-Metrosideros polymorpha* mesic or wet forests. This unit provides for one population within this multi-island species' historical range on Kauai

that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Spermolepis hawaiiensis*—a

This unit is critical habitat for *Spermolepis hawaiiensis* and is 95 ha (237 ac) on State land (Puu Ka Pele Forest Reserve), containing portions of Kawaiiki Valley. This unit provides habitat for one population of 500 mature, reproducing individuals of the annual *Spermolepis hawaiiensis* and is currently occupied with two plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, *Metrosideros polymorpha* forests or *Dodonaea viscosa* lowland dry shrubland. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 13—*Spermolepis hawaiiensis*—b

This unit is critical habitat for *Spermolepis hawaiiensis* and is 87 ha (215 ac) on State land, containing portions of Waimea Canyon. This unit provides habitat for one population of 500 mature, reproducing individuals of the annual *Spermolepis hawaiiensis* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. It provides habitat for the westernmost range of the species that is unique to Kauai. The habitat features contained in this unit that are essential for this species include, but are not limited to, *Metrosideros polymorpha* forests or *Dodonaea viscosa* lowland dry shrubland. This unit provides for one population within this multi-island species' historical range on Kauai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Kauai 11—*Stenogyne campanulata*—a

This unit is critical habitat for *Stenogyne campanulata* and is 424 ha (1,050 ac) on State land (Kokee and Na Pali Coast State Parks). This unit contains the Kahuamaa Flats. This unit provides habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Stenogyne campanulata* and is currently occupied with 51 to 66 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, rock faces of nearly vertical, north-facing cliffs in diverse lowland or montane mesic forest. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate size to avoid their destruction by one naturally occurring catastrophic event.

Kauai 10—*Viola helenae*—a

This unit is critical habitat for *Viola helenae* and is 610 ha (1,510 ac) on State (Lihue-Koloa Forest Reserve) and private land. This unit contains portions of Kanaele Swamp and Kahili Summit. This unit provides habitat for five populations of 250 mature, reproducing individuals of the short-lived perennial *Viola helenae* and is currently occupied with 137 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, stream drainage banks or adjacent valley bottoms in light to moderate shade in *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest or *Metrosideros polymorpha-Cheirodendron* wet forest. This unit is at an appropriate size to avoid the destruction of all recovery populations by one naturally occurring catastrophic event.

Kauai 10—*Viola kauaiensis* var. *wahiawaensis*—a

This unit is critical habitat for *Viola kauaiensis* var. *wahiawaensis* and is 657 ha (1,623 ac) on State (Lihue-Koloa Forest Reserve) and private land. This unit contains portions of Kanaele Swamp and Kahili Summit. This unit

provides habitat for five populations of 300 mature, reproducing individuals of the short-lived perennial *Viola kauaiensis* var. *wahiaensis* and is currently occupied with 13 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, *Machaerina angustifolia-Rhynchospora rugosa* lowland bog or mixed wet shrubland and adjacent *Metrosideros polymorpha* wet forest. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate size to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Wilkesia hobdyi*—a

This unit is critical habitat for *Wilkesia hobdyi* and is 775 ha (1,916 ac) on State land (Hono o Na Pali NAR, Na Pali Coast State Park, and Puu Ka Pele Forest Reserve). This unit contains Anaki, and Kawaiula, Kaaholi, Paaiki, Pohakuao, and Poopooiki Valleys, Kanakou Summit, Manono Ridge, and Nakeikionaiwi Pillar. This unit provides habitat for nine populations of 300 mature, reproducing individuals of the short-lived perennial *Wilkesia hobdyi* and is currently occupied with 81 plants. This unit is important to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, coastal dry cliffs or very dry ridges. The 325–390 other plants on Kauai are not included in critical habitat because the habitat they occupy is not considered essential to the conservation of this species. The more appropriate habitat on Kauai, within its historical range, are being designated as critical habitat.

Kauai 11—*Xylosma crenatum*—a

This unit is critical habitat for *Xylosma crenatum* and is 840 ha (2,077 ac) on State land (Kokee and Na Pali Coast State Parks). This unit contains poritons of the Awaawapuhi, Honopu, and Nualolo Trails, and Kainamanu and Kalahu Summits. This unit provides habitat for four populations of 100 mature, reproducing individuals of the long-lived perennial *Xylosma crenatum*

and is currently occupied with 14 plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. The habitat features contained in this unit that are essential for this species include, but are not limited to, diverse *Acacia koa-Metrosideros polymorpha* montane mesic or wet forest, or *Metrosideros polymorpha-Dicranopteris linearis* montane wet 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate size and distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 12—*Xylosma crenatum*—b

This unit is critical habitat for *Xylosma crenatum* and is 52 ha (128 ac) on State land (Kuia NAR and Waimea Canyon State Park) near Lapa Picnic Area and Lua Reservoir. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Xylosma crenatum* and is currently unoccupied. This unit is essential to the conservation of the taxon because it supports habitat that is important to the establishment of additional populations on Kauai 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, diverse *Acacia koa-Metrosideros polymorpha* montane mesic or wet forest, or *Metrosideros polymorpha-Dicranopteris linearis* montane wet 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 catastrophe. Although we do not feel that there is enough habitat that currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is at an appropriate distance from the other unit to avoid their destruction by one naturally occurring catastrophic event.

Kauai 11—*Zanthoxylum hawaiiense*—a

This unit is critical habitat for *Zanthoxylum hawaiiense* and is 523 ha (1,292 ac) on State land (Alakai

Wilderness Preserve and Puu Ka Pele Forest Reserve), containing portions of Kawaiiki Valley. This unit provides habitat for two populations of 100 mature, reproducing individuals of the long-lived perennial *Zanthoxylum hawaiiense* and is currently occupied with three plants. This unit is essential to the conservation of the taxon because it supports an extant colony of this species and includes habitat that is important for the expansion of the present population, which is currently considered non-viable. 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 *Metrosideros polymorpha* or *Diospyros sandwicensis*. This unit provides for two populations within this multi-island species' historical range on Kauai that are some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) 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) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is designated or proposed. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. 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 the destruction or adverse modification of proposed critical habitat.

TABLE 4.—APPROXIMATE CRITICAL HABITAT AREA DESIGNATED BY UNIT AND LANDOWNERSHIP OR JURISDICTION, KAUAI COUNTY, HAWAII

Unit name	State/local	Private	Federal	Total
Kauai 1— <i>Ischaemum byrhone</i> —a		<1 ha (1 ac)		<1 ha (1 ac)
Kauai 2— <i>Ischaemum byrhone</i> —b		5 ha (13 ac)		5 ha (13 ac)
Kauai 3— <i>Ischaemum byrhone</i> —c		6 ha (15 ac)		6 ha (15 ac)
Kauai 4— <i>Adenophorus periens</i> —a	237 ha (585 ac)	<1 ha (<1 ac)		237 ha (585 ac)
Kauai 4— <i>Cyanea asarifolia</i> —a	607 ha (1,499 ac)	47 ha (117 ac)		654 ha (1,616 ac)
Kauai 4— <i>Cyanea recta</i> —a	252 ha (622 ac)	<1 ha (<1 ac)		252 ha (622 ac)
Kauai 4— <i>Cyanea recta</i> —b	79 ha (195 ac)	274 ha (678 ac)		353 ha (873 ac)
Kauai 4— <i>Cyanea remyi</i> —a	80 ha (198 ac)	295 ha (730 ac)		376 ha (928 ac)
Kauai 4— <i>Cyrtandra cyaneoides</i> —a	80 ha (198 ac)	295 ha (730 ac)		376 ha (928 ac)
Kauai 4— <i>Cyrtandra limahuliensis</i> —a	498 ha (1,231 ac)	2 ha (6 ac)		501 ha (1,237 ac)
Kauai 4— <i>Cyrtandra limahuliensis</i> —b	79 ha (195 ac)	274 ha (678 ac)		353 ha (873 ac)
Kauai 4— <i>Hibiscus clayi</i> —a		4 ha (9 ac)		4 ha (9 ac)
Kauai 4— <i>Hibiscus clayi</i> —b		85 ha (210 ac)		85 ha (210 ac)
Kauai 4— <i>Hibiscus clayi</i> —c	586 ha (1,448 ac)	2 ha (6 ac)		588 ha (1,454 ac)
Kauai 4— <i>Hibiscus clayi</i> —d		48 ha (119 ac)		48 ha (119 ac)
Kauai 4— <i>Hibiscus clayi</i> —e	19 ha (47 ac)			19 ha (47 ac)
Kauai 4— <i>Labordia lydgatei</i> —a	585 ha (1,447 ac)	2 ha (6 ac)		588 ha (1,453 ac)
Kauai 4— <i>Phyllostegia wawrana</i> —a	78 ha (194 ac)	273 ha (675 ac)		352 ha (869 ac)
Kauai 5— <i>Hibiscus clayi</i> —f	60 ha (148 ac)			60 ha (148 ac)
Kauai 5— <i>Munroidendron racemosum</i> —a	60 ha (148 ac)			60 ha (148 ac)
Kauai 6— <i>Brighamia insignis</i> —a		63 ha (156 ac)		63 ha (156 ac)
Kauai 7— <i>Brighamia insignis</i> —b		341 ha (842 ac)		341 ha (842 ac)
Kauai 7— <i>Delissea rhytidosperma</i> —a		221 ha (545 ac)		221 ha (545 ac)
Kauai 7— <i>Isodendron longifolium</i> —a		337 ha (833 ac)		337 ha (833 ac)
Kauai 7— <i>Lipochaeta micrantha</i> —a		341 ha (842 ac)		341 ha (842 ac)
Kauai 7— <i>Melicope haupuensis</i> —a		330 ha (816 ac)		330 ha (816 ac)
Kauai 7— <i>Munroidendron racemosum</i> —b		50 ha (123 ac)		50 ha (123 ac)
Kauai 7— <i>Myrsine linearifolia</i> —a		334 ha (826 ac)		334 ha (826 ac)
Kauai 7— <i>Peucedanum sandwicense</i> —a		21 ha (52 ac)		21 ha (52 ac)
Kauai 7— <i>Pteralyxia kauaiensis</i> —a		346 ha (854 ac)		346 ha (854 ac)
Kauai 7— <i>Schiedea nuttallii</i> —a		282 ha (697 ac)		282 ha (697 ac)
Kauai 8— <i>Sesbania tomentosa</i> —a		47 ha (115 ac)		47 ha (115 ac)
Kauai 9— <i>Schiedea spergulina</i> var. <i>leiopoda</i> —a		5 ha (11 ac)		5 ha (11 ac)
Kauai 10— <i>Adenophorus periens</i> —b	12 ha (29 ac)	480 ha (1,185 ac)		491 ha (1,215 ac)
Kauai 10— <i>Bonamia menziesii</i> —a	11 ha (28 ac)	409 ha (1,011 ac)		421 ha (1,039 ac)
Kauai 10— <i>Cyanea asarifolia</i> —b	161 ha (398 ac)	742 ha (1,834 ac)		903 ha (2,232 ac)
Kauai 10— <i>Cyanea remyi</i> —b		1,904 ha (4,705 ac)		1,904 ha (4,705 ac)
Kauai 10— <i>Cyanea undulata</i> —a	53 ha (130 ac)	952 ha (2,353 ac)		1,005 ha (2,484 ac)
Kauai 10— <i>Cyrtandra limahuliensis</i> —c	471 ha (1,164 ac)	1,542 ha (3,811 ac)		2,013 ha (4,975 ac)
Kauai 10— <i>Dubautia pauciflora</i> —a	38 ha (93 ac)	776 ha (1,919 ac)		814 ha (2,012 ac)
Kauai 10— <i>Exocarpos luteolus</i> —a	2 ha (5 ac)	399 ha (986 ac)		401 ha (991 ac)
Kauai 10— <i>Hesperonmanna lydgatei</i> —a		646 ha (1,596 ac)		646 ha (1,596 ac)
Kauai 10— <i>Isodendron longifolium</i> —b		142 ha (350 ac)		142 ha (350 ac)
Kauai 10— <i>Labordia lydgatei</i> —b	135 ha (333 ac)	900 ha (2,225 ac)		1,035 ha (2,558 ac)
Kauai 10— <i>Labordia tinifolia</i> var. <i>wahiawaensis</i> —a		913 ha (2,255 ac)		913 ha (2,255 ac)
Kauai 10— <i>Lysimachia filifolia</i> —a	171 ha (421 ac)	824 ha (2,037 ac)		995 ha (2,458 ac)
Kauai 10— <i>Myrsine linearifolia</i> —b	<1 ha (<1 ac)	167 ha (413 ac)		167 ha (413 ac)
Kauai 10— <i>Phlegmariurus nutans</i> —a	44 ha (108 ac)	577 ha (1,425 ac)		620 ha (1,533 ac)
Kauai 10— <i>Plantago princeps</i> —a	276 ha (683 ac)	<1 ha (<1 ac)		277 ha (683 ac)
Kauai 10— <i>Pteralyxia kauaiensis</i> —b	304 ha (751 ac)	<1 ha (<1 ac)		304 ha (751 ac)
Kauai 10— <i>Viola helenae</i> —a	13 ha (33 ac)	598 ha (1,477 ac)		611 ha (1,510 ac)
Kauai 10— <i>Viola kauaiensis</i> var. <i>wahiawaensis</i> —a	54 ha (134 ac)	603 ha (1,489 ac)		657 ha (1,623 ac)
Kauai 11— <i>Adenophorus periens</i> —c	301 ha (743 ac)	168 ha (415 ac)		469 ha (1,158 ac)
Kauai 11— <i>Adenophorus periens</i> —d	914 ha (2,259 ac)	92 ha (227 ac)		1,006 ha (2,485 ac)
Kauai 11— <i>Alectryon macrococcus</i> —a	382 ha (943 ac)			382 ha (943 ac)
Kauai 11— <i>Alectryon macrococcus</i> —b	90 ha (222 ac)			90 ha (222 ac)
Kauai 11— <i>Alsinidendron lychnoides</i> —a	992 ha (2,452 ac)	1 ha (3 ac)		994 ha (2,445 ac)
Kauai 11— <i>Alsinidendron lychnoides</i> —b	138 ha (340 ac)			138 ha (340 ac)
Kauai 11— <i>Alsinidendron lychnoides</i> —c	55 ha (136 ac)			55 ha (136 ac)
Kauai 11— <i>Alsinidendron viscosum</i> —a	736 ha (1,819 ac)			736 ha (1,819 ac)
Kauai 11— <i>Alsinidendron viscosum</i> —b	17 ha (42 ac)			17 ha (42 ac)
Kauai 11— <i>Alsinidendron viscosum</i> —c	22 ha (55 ac)			22 ha (55 ac)
Kauai 11— <i>Alsinidendron viscosum</i> —d	61 ha (150 ac)			61 ha (150 ac)
Kauai 11— <i>Bonamia menziesii</i> —b	93 ha (229 ac)			93 ha (229 ac)
Kauai 11— <i>Brighamia insignis</i> —c	1,639 ha (4,049 ac)			1,639 ha (4,049 ac)
Kauai 11— <i>Centaurium sebaeoides</i> —a	156 ha (385 ac)			156 ha (385 ac)
Kauai 11— <i>Chamaesyce halemanui</i> —a	108 ha (267 ac)			108 ha (267 ac)
Kauai 11— <i>Chamaesyce halemanui</i> —b	17 ha (43 ac)			17 ha (43 ac)
Kauai 11— <i>Chamaesyce halemanui</i> —c	1,283 ha (3,171 ac)			1,283 ha (3,171 ac)
Kauai 11— <i>Ctenitis squamigera</i> —a	735 ha (1,817 ac)			735 ha (1,817 ac)
Kauai 11— <i>Cyanea recta</i> —c	385 ha (951 ac)	168 ha (416 ac)		553 ha (1,367 ac)

TABLE 4.—APPROXIMATE CRITICAL HABITAT AREA DESIGNATED BY UNIT AND LANDOWNERSHIP OR JURISDICTION, KAUAI COUNTY, HAWAII—Continued

Unit name	State/local	Private	Federal	Total
Kauai 11— <i>Cyanea recta</i> —d	143 ha (352 ac)	255 ha (629 ac) .....	.....	397 ha (981 ac)
Kauai 11— <i>Cyanea remyi</i> —c	365 ha (901 ac) .....	.....	.....	365 ha (901 ac)
Kauai 11— <i>Cyanea remyi</i> —d	342 ha (845 ac)	321 ha (794 ac) .....	.....	663 ha (1,638 ac)
Kauai 11— <i>Cyperus trachysanthos</i> —a	432 ha (1,068 ac) .....	.....	.....	432 ha (1,068 ac)
Kauai 11— <i>Cyrtandra cyaneoides</i> —b	553 ha (1,366 ac)	295 ha (730 ac) .....	.....	848 ha (2,095 ac)
Kauai 11— <i>Cyrtandra cyaneoides</i> —c	31 ha (78 ac)	1,085 ha (2,682 ac) .....	.....	1,117 ha (2,759 ac)
Kauai 11— <i>Cyrtandra limahuliensis</i> —d	523 ha (1,292 ac)	293 ha (724 ac) .....	.....	816 ha (2,016 ac)
Kauai 11— <i>Cyrtandra limahuliensis</i> —e	366 ha (905 ac)	327 ha (807 ac) .....	.....	693 ha (1,712 ac)
Kauai 11— <i>Delissea rhytidospema</i> —b	258 ha (638 ac) .....	.....	.....	258 ha (638 ac)
Kauai 11— <i>Delissea rhytidospema</i> —c	103 ha (254 ac) .....	.....	.....	103 ha (254 ac)
Kauai 11— <i>Delissea rivularis</i> —a	850 ha (2,100 ac) .....	.....	.....	850 ha (2,100 ac)
Kauai 11— <i>Delissea undulata</i> —a	139 ha (344 ac)	118 ha (291 ac) .....	.....	257 ha (635 ac)
Kauai 11— <i>Delissea undulata</i> —b	532 ha (1,314 ac) .....	.....	.....	532 ha (1,314 ac)
Kauai 11— <i>Diellia erecta</i> —a	364 ha (901 ac) .....	.....	.....	364 ha (901 ac)
Kauai 11— <i>Diellia pallida</i> —a	601 ha (1,485 ac) .....	.....	.....	601 ha (1,485 ac)
Kauai 11— <i>Diellia pallida</i> —b	55 ha (136 ac) .....	.....	.....	55 ha (136 ac)
Kauai 11— <i>Diplazium molokaiense</i> —a	430 ha (1,062 ac) .....	.....	.....	430 ha (1,062 ac)
Kauai 11— <i>Dubautia latifolia</i> —a	31 ha (76 ac) .....	.....	.....	31 ha (76 ac)
Kauai 11— <i>Dubautia latifolia</i> —b	1,522 ha (3,761 ac) .....	.....	.....	1,522 ha (3,761 ac)
Kauai 11— <i>Dubautia latifolia</i> —c	809 ha (1,999 ac) .....	.....	.....	809 ha (1,999 ac)
Kauai 11— <i>Euphorbia haeleeleana</i> —a	263 ha (649 ac) .....	.....	.....	263 ha (649 ac)
Kauai 11— <i>Euphorbia haeleeleana</i> —b	192 ha (476 ac) .....	.....	.....	192 ha (476 ac)
Kauai 11— <i>Euphorbia haeleeleana</i> —c	204 ha (505 ac) .....	.....	.....	204 ha (505 ac)
Kauai 11— <i>Exocarpos luteolus</i> —b	3,705 ha (9,155 ac)	94 ha (232 ac) .....	.....	3,799 ha (9,387 ac)
Kauai 11— <i>Exocarpos luteolus</i> —c	177 ha (438 ac) .....	.....	.....	177 ha (438 ac)
Kauai 11— <i>Exocarpos luteolus</i> —d	83 ha (206 ac) .....	.....	.....	83 ha (206 ac)
Kauai 11— <i>Exocarpos luteolus</i> —e	522 ha (1,290 ac) .....	.....	.....	522 ha (1,290 ac)
Kauai 11— <i>Flueggea neowawraea</i> —a	51 ha (126 ac) .....	.....	.....	51 ha (126 ac)
Kauai 11— <i>Flueggea neowawraea</i> —b	47 ha (117 ac) .....	.....	.....	47 ha (117 ac)
Kauai 11— <i>Flueggea neowawraea</i> —c	152 ha (376 ac) .....	.....	.....	152 ha (376 ac)
Kauai 11— <i>Flueggea neowawraea</i> —d	77 ha (191 ac) .....	.....	.....	77 ha (191 ac)
Kauai 11— <i>Flueggea neowawraea</i> —e	27 ha (67 ac) .....	.....	.....	27 ha (67 ac)
Kauai 11— <i>Flueggea neowawraea</i> —f	240 ha (594 ac) .....	.....	.....	240 ha (594 ac)
Kauai 11— <i>Gouania meyenii</i> —a	443 ha (1,094 ac) .....	.....	.....	443 ha (1,094 ac)
Kauai 11— <i>Gouania meyenii</i> —b	128 ha (316 ac) .....	.....	.....	128 ha (316 ac)
Kauai 11— <i>Gouania meyenii</i> —c	215 ha (532 ac) .....	.....	.....	215 ha (532 ac)
Kauai 11— <i>Hedyotis cookiana</i> —a	771 ha (1,905 ac) .....	.....	.....	771 ha (1,905 ac)
Kauai 11— <i>Hedyotis st. johnii</i> —a	238 ha (589 ac) .....	.....	.....	238 ha (589 ac)
Kauai 11— <i>Hesperomannia lydgatei</i> —b	314 ha (776 ac)	599 ha (1,480 ac) .....	.....	913 ha (2,257 ac)
Kauai 11— <i>Hesperomannia lydgatei</i> —c	79 ha (196 ac)	101 ha (249 ac) .....	.....	180 ha (444 ac)
Kauai 11— <i>Hibiscadelphus woodii</i> —a	278 ha (686 ac) .....	.....	.....	278 ha (686 ac)
Kauai 11— <i>Hibiscadelphus woodii</i> —b	72 ha (177 ac) .....	.....	.....	72 ha (177 ac)
Kauai 11— <i>Hibiscus waimeae</i> ssp. <i>hannerae</i> —a	565 ha (1,396 ac)	554 ha (1,370 ac) .....	.....	1,119 ha (2,765 ac)
Kauai 11— <i>Ischaemum byrone</i> —d	45 ha (111 ac) .....	.....	.....	45 ha (111 ac)
Kauai 11— <i>Isodendron laurifolium</i> —a	401 ha (991 ac) .....	.....	.....	401 ha (991 ac)
Kauai 11— <i>Isodendron laurifolium</i> —b	400 ha (988 ac) .....	.....	.....	400 ha (988 ac)
Kauai 11— <i>Isodendron longifolium</i> —c	59 ha (146 ac) .....	.....	.....	59 ha (146 ac)
Kauai 11— <i>Isodendron longifolium</i> —d	493 ha (1,218 ac) .....	.....	.....	493 ha (1,218 ac)
Kauai 11— <i>Isodendron longifolium</i> —e	279 ha (690 ac)	101 ha (251 ac) .....	.....	381 ha (941 ac)
Kauai 11— <i>Kokia kauaiensis</i> —a	155 ha (384 ac) .....	.....	.....	155 ha (384 ac)
Kauai 11— <i>Kokia kauaiensis</i> —b	30 ha (74 ac) .....	.....	.....	30 ha (74 ac)
Kauai 11— <i>Kokia kauaiensis</i> —c	667 ha (1,647 ac) .....	.....	.....	667 ha (1,647 ac)
Kauai 11— <i>Kokia kauaiensis</i> —d	126 ha (312 ac) .....	.....	.....	126 ha (312 ac)
Kauai 11— <i>Labordia lydgatei</i> —c	325 ha (803 ac) .....	.....	.....	325 ha (803 ac)
Kauai 11— <i>Labordia lydgatei</i> —d	82 ha (203 ac) .....	.....	.....	82 ha (203 ac)
Kauai 11— <i>Labordia lydgatei</i> —e	6 ha (16 ac)	111 ha (275 ac) .....	.....	117 ha (290 ac)
Kauai 11— <i>Lipochaeta fauriei</i> —a	106 ha (262 ac) .....	.....	.....	106 ha (262 ac)
Kauai 11— <i>Lipochaeta fauriei</i> —b	545 ha (1,347 ac) .....	.....	.....	545 ha (1,347 ac)
Kauai 11— <i>Lipochaeta micrantha</i> —b	212 ha (523 ac) .....	.....	.....	212 ha (523 ac)
Kauai 11— <i>Lobelia niihauensis</i> —a	89 ha (220 ac) .....	.....	.....	89 ha (220 ac)
Kauai 11— <i>Lobelia niihauensis</i> —b	1,854 ha (4,582 ac)	147 ha (362 ac) .....	.....	2,001 ha (4,944 ac)
Kauai 11— <i>Mariscus pennatifolius</i> —a	1,003 ha (2,479 ac) .....	.....	.....	1,003 ha (2,479 ac)
Kauai 11— <i>Melicope haupuensis</i> —b	574 ha (1,418 ac) .....	.....	.....	574 ha (1,418 ac)
Kauai 11— <i>Melicope haupuensis</i> —c	290 ha (716 ac) .....	.....	.....	290 ha (716 ac)
Kauai 11— <i>Melicope knudsenii</i> —a	966 ha (2,388 ac) .....	.....	.....	966 ha (2,388 ac)
Kauai 11— <i>Melicope knudsenii</i> —b	373 ha (922 ac) .....	.....	.....	373 ha (922 ac)
Kauai 11— <i>Melicope pallida</i> —a	143 ha (353 ac) .....	.....	.....	143 ha (353 ac)
Kauai 11— <i>Melicope pallida</i> —b	310 ha (765 ac) .....	.....	.....	310 ha (765 ac)
Kauai 11— <i>Munroidendron racemosum</i> —c	1,921 ha (4,747 ac)	29 ha (72 ac) .....	.....	1,950 ha (4,819 ac)
Kauai 11— <i>Munroidendron racemosum</i> —d	153 ha (379 ac) .....	.....	.....	153 ha (379 ac)
Kauai 11— <i>Myrsine linearifolia</i> —c	684 ha (1,691 ac) .....	.....	.....	684 ha (1,691 ac)

TABLE 4.—APPROXIMATE CRITICAL HABITAT AREA DESIGNATED BY UNIT AND LANDOWNERSHIP OR JURISDICTION, KAUAI COUNTY, HAWAII—Continued

Unit name	State/local	Private	Federal	Total
Kauai 11— <i>Myrsine linearifolia</i> —d	125 ha (309 ac)	161 ha (397 ac)		286 ha (707 ac)
Kauai 11— <i>Myrsine linearifolia</i> —e	346 ha (854 ac)			346 ha (854 ac)
Kauai 11— <i>Myrsine linearifolia</i> —f	56 ha (139 ac)	79 ha (195 ac)		135 ha (334 ac)
Kauai 11— <i>Nothocestrum peltatum</i> —a	427 ha (1,056 ac)			427 ha (1,056 ac)
Kauai 11— <i>Nothocestrum peltatum</i> —b	1,464 ha (3,617 ac)			1,464 ha (3,617 ac)
Kauai 11— <i>Nothocestrum peltatum</i> —c	80 ha (198 ac)			80 ha (198 ac)
Kauai 11— <i>Peucedanum sandwicense</i> —b	579 ha (1,430 ac)			579 ha (1,430 ac)
Kauai 11— <i>Peucedanum sandwicense</i> —c	181 ha (447 ac)			181 ha (447 ac)
Kauai 11— <i>Phyllostegia knudsenii</i> —a	297 ha (735 ac)			297 ha (735 ac)
Kauai 11— <i>Phyllostegia waimeae</i> —a	364 ha (901 ac)			364 ha (901 ac)
Kauai 11— <i>Phyllostegia wawrana</i> —b	973 ha (2,406 ac)	63 ha (156 ac)		1,037 ha (2,562 ac)
Kauai 11— <i>Phyllostegia wawrana</i> —c	108 ha (268 ac)			108 ha (268 ac)
Kauai 11— <i>Phyllostegia wawrana</i> —d	251 ha (619 ac)			251 ha (619 ac)
Kauai 11— <i>Plantago princeps</i> —b	126 ha (312 ac)			126 ha (312 ac)
Kauai 11— <i>Plantago princeps</i> —c	244 ha (603 ac)			244 ha (603 ac)
Kauai 11— <i>Plantago princeps</i> —d	77 ha (189 ac)			77 ha (189 ac)
Kauai 11— <i>Platanthera holochila</i> —a	4,053 ha (10,014 ac)	94 ha (232 ac)		4,146 ha (10,246 ac)
Kauai 11— <i>Poa mannii</i> —a	1,871 ha (4,624 ac)			1,871 ha (4,624 ac)
Kauai 11— <i>Poa mannii</i> —b	677 ha (1,673 ac)			677 ha (1,673 ac)
Kauai 11— <i>Poa mannii</i> —c	155 ha (382 ac)			155 ha (382 ac)
Kauai 11— <i>Poa mannii</i> —d	307 ha (758 ac)			307 ha (758 ac)
Kauai 11— <i>Poa sandwicensis</i> —a	1,111 ha (2,745 ac)			1,111 ha (2,745 ac)
Kauai 11— <i>Poa sandwicensis</i> —b	52 ha (129 ac)			52 ha (129 ac)
Kauai 11— <i>Poa siphonoglossa</i> —a	1,621 ha (4,006 ac)			1,621 ha (4,006 ac)
Kauai 11— <i>Poa siphonoglossa</i> —b	2,189 ha (5,408 ac)			2,189 ha (5,408 ac)
Kauai 11— <i>Pteralyxia kauaiensis</i> —c	209 ha (516 ac)			209 ha (516 ac)
Kauai 11— <i>Pteralyxia kauaiensis</i> —d	57 ha (141 ac)			57 ha (141 ac)
Kauai 11— <i>Pteralyxia kauaiensis</i> —e	353 ha (872 ac)			353 ha (872 ac)
Kauai 11— <i>Pteralyxia kauaiensis</i> —f	588 ha (1,453 ac)	<1 ha (<1 ac)		588 ha (1,453 ac)
Kauai 11— <i>Pteralyxia kauaiensis</i> —g	445 ha (1,100 ac)			445 ha (1,100 ac)
Kauai 11— <i>Remya kauaiensis</i> —a	172 ha (426 ac)			172 ha (426 ac)
Kauai 11— <i>Remya kauaiensis</i> —b	66 ha (163 ac)			66 ha (163 ac)
Kauai 11— <i>Remya kauaiensis</i> —c	886 ha (2,190 ac)			886 ha (2,190 ac)
Kauai 11— <i>Remya kauaiensis</i> —d	47 ha (115 ac)			47 ha (115 ac)
Kauai 11— <i>Remya kauaiensis</i> —e	66 ha (163 ac)			66 ha (163 ac)
Kauai 11— <i>Remya montgomeryi</i> —a	69 ha (171 ac)			69 ha (171 ac)
Kauai 11— <i>Remya montgomeryi</i> —b	1,010 ha (2,496 ac)			1,010 ha (2,496 ac)
Kauai 11— <i>Remya montgomeryi</i> —c	435 ha (1,076 ac)			435 ha (1,076 ac)
Kauai 11— <i>Schiedea apokremnos</i> —a	170 ha (420 ac)			170 ha (420 ac)
Kauai 11— <i>Schiedea apokremnos</i> —b	187 ha (463 ac)			187 ha (463 ac)
Kauai 11— <i>Schiedea apokremnos</i> —c	295 ha (730 ac)			295 ha (730 ac)
Kauai 11— <i>Schiedea helleri</i> —a	483 ha (1,194 ac)			483 ha (1,194 ac)
Kauai 11— <i>Schiedea helleri</i> —b	154 ha (381 ac)			154 ha (381 ac)
Kauai 11— <i>Schiedea helleri</i> —c	172 ha (426 ac)			172 ha (426 ac)
Kauai 11— <i>Schiedea kauaiensis</i> —a		12 ha (29 ac)		12 ha (29 ac)
Kauai 11— <i>Schiedea kauaiensis</i> —b	394 ha (974 ac)			394 ha (974 ac)
Kauai 11— <i>Schiedea kauaiensis</i> —c	510 ha (1,260 ac)			510 ha (1,260 ac)
Kauai 11— <i>Schiedea kauaiensis</i> —d	11 ha (28 ac)			11 ha (28 ac)
Kauai 11— <i>Schiedea membranacea</i> —a	251 ha (620 ac)			251 ha (620 ac)
Kauai 11— <i>Schiedea membranacea</i> —b	234 ha (579 ac)			234 ha (579 ac)
Kauai 11— <i>Schiedea membranacea</i> —c	527 ha (1,303 ac)			527 ha (1,303 ac)
Kauai 11— <i>Schiedea membranacea</i> —d	327 ha (809 ac)			327 ha (809 ac)
Kauai 11— <i>Schiedea spergulina</i> var. <i>spergulina</i> —a	131 ha (323 ac)			131 ha (323 ac)
Kauai 11— <i>Schiedea spergulina</i> var. <i>spergulina</i> —b	77 ha (191 ac)			77 ha (191 ac)
Kauai 11— <i>Schiedea stellarioides</i> —a	1,259 ha (3,112 ac)			1,259 ha (3,112 ac)
Kauai 11— <i>Schiedea stellarioides</i> —b	129 ha (320 ac)			129 ha (320 ac)
Kauai 11— <i>Solanum sandwicense</i> —a	2,443 ha (6,037 ac)			2,443 ha (6,037 ac)
Kauai 11— <i>Solanum sandwicense</i> —b	249 ha (614 ac)			249 ha (614 ac)
Kauai 11— <i>Spermolepis hawaiiensis</i> —a	96 ha (237 ac)			96 ha (237 ac)
Kauai 11— <i>Stenogyne campanulata</i> —a	425 ha (1,050 ac)			425 ha (1,050 ac)
Kauai 11— <i>Wilkesia hobbii</i> —a	775 ha (1,914 ac)			775 ha (1,914 ac)
Kauai 11— <i>Xylosma crenatum</i> —a	840 ha (2,076 ac)			840 ha (2,076 ac)
Kauai 11— <i>Zanthoxylum hawaiiense</i> —a	523 ha (1,292 ac)			523 ha (1,292 ac)
Kauai 12— <i>Nothocestrum peltatum</i> —d	162 ha (400 ac)			162 ha (400 ac)
Kauai 12— <i>Remya kauaiensis</i> —f	52 ha (128 ac)			52 ha (128 ac)
Kauai 12— <i>Xylosma crenatum</i> —b	52 ha (128 ac)			52 ha (128 ac)
Kauai 13— <i>Lipochaeta waimeae</i> —a	56 ha (139 ac)			56 ha (139 ac)
Kauai 13— <i>Schiedea spergulina</i> var. <i>spergulina</i> —c	221 ha (545 ac)			221 ha (545 ac)
Kauai 13— <i>Spermolepis hawaiiensis</i> —b	87 ha (215 ac)			87 ha (215 ac)
Kauai 14— <i>Panicum niihauense</i> —a	79 ha (196 ac)		40 ha (99 ac)	119 ha (294 ac)
Kauai 14— <i>Sesbania tomentosa</i> —b	44 ha (109 ac)			44 ha (109 ac)

TABLE 4.—APPROXIMATE CRITICAL HABITAT AREA DESIGNATED BY UNIT AND LANDOWNERSHIP OR JURISDICTION, KAUAI COUNTY, HAWAII—Continued

Unit name	State/local	Private	Federal	Total
Kauai 15— <i>Panicum niihauense</i> —b .....	.....	.....	15 ha (38 ac)	15 ha (38 ac)
Kauai 16— <i>Panicum niihauense</i> —c .....	.....	.....	11 ha (28 ac)	11 ha (28 ac)
Kauai 17— <i>Panicum niihauense</i> —d	23 ha (56 ac) .....	.....	5 ha (12 ac)	28 ha (68 ac)
Niihau 1— <i>Brighamia insignis</i> —a .....	.....	144 ha (357 ac) .....	.....	.....
Grand Total*	14,814 ha (36,606 ac).	6,360 ha (15,717 ac)	72 ha (177 ac)	21,266 ha (52,549 ac)

*Totals take into consideration overlapping individual species units.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or destroy or adversely modify its critical habitat. 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.

Regulations at 50 CFR 402.16 require Federal agencies to reinstitute 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 83 plant species from Kauai and Niihau 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 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, Oregon 97232-4181 (telephone 503/231-2063; facsimile 503/231-6243).

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 areas from critical habitat when such exclusion will result in the extinction of the species concerned.

Following the publication of the revised proposed critical habitat designation on January 28, 2002, a draft economic analysis was conducted to estimate the potential economic impact of 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 May 28, 2002 (67 FR 36851). We accepted comments on the draft analysis until the comment period closed on September 30, 2002.

Our draft economic analysis evaluated the potential future effects of section 7 of the Act associated with the listing of the 83 species (*Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Bonamia menziesii*, *Brighamia insignis*, *Centaurium sebaeoides*, *Chamaesyce halemui*, *Ctenitis squamigera*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyperus trachysanthos*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rhytidisperma*, *Delissea rivularis*, *Delissea undulata*, *Diellia erecta*, *Diellia pallida*, *Diplazium molokaiense*, *Dubautia latifolia*, *Dubautia pauciflora*, *Euphorbia haeleeleana*, *Exocarpos luteolus*, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis cookiana*, *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscadelphus woodii*, *Hibiscus clayi*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Labordia tinifolia* var. *wahiawaensis*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeae*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope haupuensis*, *Melicope knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothocestrum peltatum*, *Panicum niihauense*, *Peucedanum*

sandwicense, *Phlegmariurus nutans*, *Phyllostegia knudsenii*, *Phyllostegia waimeae*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandwicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea apokremnos*, *Schiedea helleri*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea nuttallii*, *Schiedea spergulina* var. *leiopoda*, *Schiedea spergulina* var. *spergulina*, *Schiedea stellarioides*, *Sesbania tomentosa*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne campanulata*, *Viola helenae*, *Viola kauaiensis* var. *wahiawaensis*, *Wilkesia hobdyi*, *Xylosma crenatum*, and *Zanthoxylum hawaiiense*), as well as any potential effect of the critical habitat designation above and beyond the impacts associated with listing. To quantify the proportion of total potential economic impacts attributable to the critical habitat designation, the analysis evaluated a "without critical habitat" baseline and compared it to a "with critical habitat" scenario. The "without critical habitat" baseline represented the current and expected economic activity under all modifications prior to the critical habitat designation, including protections afforded the species under Federal and State laws. The difference between the two scenarios measured the net change in economic activity attributable to the designation of critical habitat. The categories of potential costs considered in the analysis included the costs associated with: (1) Conducting section 7 consultations associated with the listing or with the critical habitat, including incremental consultations and technical assistance; (2) modifications to projects, activities, or land uses resulting from the section 7 consultations; (3) potential delays associated with reinitiating completed consultations after critical habitat is finalized; (4) uncertainty and public perceptions resulting in loss of land value from the designation of critical habitat; (5) potential effects on property values including potential indirect costs resulting from the loss of hunting opportunities and increased regulation related costs due to the interaction of State and local laws; and (6) potential offsetting benefits 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.

Following the close of the comment period on the draft economic analysis, a final addendum was completed which

incorporated public comments on the draft analysis and made other changes in the draft as necessary. Together, these constitute our final economic analysis. The addendum to the draft economic analysis estimates that, over the next 10 years, the designation may result in potential direct economic effects of between approximately \$178,200 and \$1,124,800, and concludes that economic impacts from the designation of critical habitat for the 83 species would not be significant. This is a reduction of between approximately \$799,700 and \$1,318,430 from the costs estimated in the original draft economic analysis, and is due to the exclusion of the proposed unit Kauai D1 from final designation and the significant reduction in size to proposed units Kauai A2, Kauai B, Kauai C, Kauai D2, Kauai E, Kauai G, Kauai H1, H2, and H3, Kauai I, Kauai J, Kauai K, Kauai L, Kauai M, Kauai N, Kauai O and Niihau A (designation of 21,410 ha (52,906 ac) versus the 40,429 ha (99,903 ac) proposed as critical habitat, a reduction of approximately 19,019 ha (46,997 ac)). As described in the analysis, direct costs result from section 7 consultations and project modifications at the Pacific Missile Range Facility while there is a small risk of compromising national defense as an indirect cost. Other indirect costs include: a reduction in State and County development approvals; a change in game management to reduce ungulates and as a result hunting activity; mandated conservation management; redistributing by the State of land in the Urban and Agricultural Districts to the Conservation District; and a loss in landowner participation in conservation projects. However, these indirect costs are not subject to accurate quantification and had slight to small probabilities of occurring. Therefore, we do not believe that they are significant. 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).

No critical habitat units in the proposed rule were excluded or modified due to economic impacts. However, as described above, section 4(b)(2) of the Act requires us to consider other relevant impacts, in addition to economic impacts, of designating critical habitat. No critical habitat units were excluded or modified due to non-economic impacts. (While units were excluded or reduced, as noted above, because they lacked primary constituent

elements or were more degraded than other available proposed or designated habitat for the species.) Thus this final rule represents no increase in impacts beyond the revised proposed rule.

Taxonomic Changes

At the time we listed *Cyrtandra limahuliensis*, *Delissea undulata*, *Hibiscus brackenridgei*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeaensis*, and *Mariscus pennatifolius*, 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 listing, we became aware of new taxonomic treatments of these species. Also, the soon-to-be-published book *Hawaii's Ferns and Fern Allies* (Palmer, in press) has changed the family name for *Ctenitis squamigera* (from Aspleniaceae to Dryopteridaceae). Due to the court-ordered deadlines, we are required to publish this final rule to designate critical habitat on Kauai and Niihau before we can prepare and publish a notice of taxonomic changes for these eight species. We plan to publish a taxonomic change notice for these eight species after we have published the final critical habitat designations on Kauai and Niihau.

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order 12866, the Office of Management and Budget (OMB) has determined that this is a significant regulatory action because it may raise novel legal or policy issues. As required by the executive order, we have provided a copy of the rule, which describes the need for this action and how designation meets that need and the economic analysis, which assesses the costs and benefits of this critical habitat designation, to OMB for review. OMB did not recommend or make any changes in this regulatory action.

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.

Federal courts and Congress have indicated that an RFA/SBREFA analysis may be limited to all impacts to entities directly subject to the requirements of the regulation (Service 2002). As such, entities indirectly impacted by the plant listings and critical habitat and, therefore, not directly regulated by the listing or critical habitat designation are not considered in this section of the analysis.

In today's rule, we are certifying that the designation of critical habitat for the 83 Kauai and Niihau species will not have a significant effect on a substantial number of small entities. The following discussion explains our rationale.

Small entities include small organizations, such as independent non-profit 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. 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. In estimating the numbers of small entities potentially affected, we also

consider whether their activities have any Federal involvement; some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation.

Designation of critical habitat only affects activities conducted, funded, or permitted by Federal agencies; non-Federal activities are not affected by the designation. In areas where the species are present, Federal agencies are already required to consult with us under section 7 of the Act on activities that they fund, permit, or implement that may affect any one of the 83 species. Federal agencies must also consult with us if their activities may affect critical habitat. However, in areas where the species are present, we do not believe that this will result in any additional regulatory burden on Federal agencies or their applicants because consultation would already be required due to the presence of the listed species, and the duty to avoid adverse modification of critical habitat likely would not trigger additional regulatory impacts beyond the duty to avoid jeopardizing the species.

Even if the duty to avoid adverse modification does not trigger additional regulatory impacts in areas where the species is present, designation of critical habitat could result in an additional economic burden on small entities due to the requirement to reinstitute consultation for ongoing Federal activities. However, since these 83 plant species were listed (between 1991 and 1996), there have been no formal consultations, and we have conducted only six informal consultations, in addition to consultations on Federal grants to State wildlife programs, which would not affect small entities. On the island of Kauai the six informal consultations have concerned nine of the 83 species (*Alsinidendron lychnoides*, *Cyanea recta*, *Cyrtandra limahuliensis*, *Diellia erecta*, *Dubautia latifolia*, *Exocarpos luteolus*, *Panicum niihauense*, *Sesbania tomentosa*, and *Wilkesia hobbeyi*) and were conducted with the Corps, Navy, and the U.S. Department of Agriculture. One informal consultation was conducted on behalf of the Corps for the Defense Environmental Restoration Program, who requested a list of endangered species on a site formerly used by the Department of Defense at the Wailua Impact Area. Three of the 83 species, *Cyanea recta*, *Cyrtandra limahuliensis*, and *Exocarpos luteolus*, were reported from the project area. Four informal consultations were conducted with the Navy: one for the construction of a missile support facility at the PMRF at Barking Sands regarding several listed

animals and *Sesbania tomentosa*; one on the PMRF's Enhanced Capability regarding several listed animals and *Panicum niihauense* and *Sesbania tomentosa*; one for the mountaintop surveillance sensor test integration center facility at PMRF at Barking Sands regarding several listed animals and *Panicum niihauense*, and *Sesbania tomentosa*; and one for the Navy's INRMP for PMRF at Barking Sands regarding several listed animals and *Wilkesia hobyi* at Makaha Ridge. In addition, *Panicum niihauense* and *Sesbania tomentosa* were identified as occurring in Polihale State Park, adjacent to the Naval facility. The sixth informal consultation was conducted on several listed animals, *Alsinidendron lychnoides*, *Diellia erecta*, and *Dubautia latifolia* with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) through their Wildlife Incentive Program for noxious weed control actions on leased cabin lots within Kokee State Park. NRCS does not anticipate the need to reinstate consultation for these on-going actions as they are not occurring within the areas of designated critical habitat (Terrell Kelly, NRCS, pers. comm., 2001).

Except for the NRCS project, none of these consultations affected or concerned small entities. However, the NRCS project is not occurring within the designated critical habitat. In all six consultations, we concurred with each agency's determination that the project, as proposed, was not likely to adversely affect listed species. With the exception of the NRCS project, none of the other consultations affected or concerned small entities, and none of the proposed projects are ongoing. As a result, the requirement to reinstate consultation for ongoing projects will not affect a substantial number of small entities on Kauai.

There have been no consultations on any of these 83 species on the island of Niihau. Therefore, the requirement to reinstate consultations for ongoing projects will not affect a substantial number of small entities on Niihau.

In areas where the species is clearly not present, designation of critical habitat could trigger additional review of Federal activities under section 7 that would otherwise not be required. However, there will be little additional impact on State and local governments and their activities because all but one of the critical habitat areas are occupied by at least one species. Other than the federally funded PMRF and NRCS projects, we are aware of relatively few activities in the designated critical habitat areas for these 83 plants that

have Federal involvement, and thus, would require consultation for ongoing projects. As mentioned above, we have conducted no formal consultations and only six informal consultations under section 7 on Kauai to date which involved only nine of the 83 species. As a result, we cannot easily identify future consultations that may be due to the listing of the species or the increment of additional consultations that may be required by this critical habitat designation. Therefore, for the purposes of this review and certification under the Regulatory Flexibility Act, we are assuming that any future consultations in the area designated as critical habitat will be due to the critical habitat designations.

On Kauai, the designations are on Federal, State, or private land. Nearly all of the land within the critical habitat units is unsuitable for development, land uses, and activities. This is due to their remote locations, lack of access, and rugged terrain. Almost all of this land (nearly 100 percent) is within the State Conservation District where State land-use controls severely limit development and most activities. Less than one percent of this land is within the State Agricultural District, and less than one percent is within the State Rural District. On non-Federal lands, activities that lack Federal involvement would not be affected by the critical habitat designations. However, activities of an economic nature that are likely to occur on non-Federal lands in the area encompassed by these designations consist of improvements in communications and tracking facilities; ranching; road improvements; recreational use, such as hiking, camping, picnicking, game hunting, and fishing; botanical gardens; and crop farming. With the exception of communications and tracking facilities improvements by the FAA or the Federal Communications Commission, these activities are unlikely to have Federal involvement. On lands that are in agricultural production, the types of activities that might trigger a consultation include irrigation ditch system projects that may require section 404 authorizations from the Corps, and watershed management and restoration projects sponsored by NRCS. However the NRCS restoration projects typically are voluntary, and the irrigation ditch system projects within lands that are in agricultural production are rare and may affect only a small percentage of the small entities within these critical habitat designations.

Land that are within the State Urban District are primarily located within undeveloped coastal areas. The types of

activities that might trigger a consultation include shoreline restoration or modification projects that may require section 404 authorizations from the Corps or FEMA, housing or resort development that may require permits from the Department of Housing and Urban Development, small farms that may receive funding or require authorizations from the Department of Agriculture, watershed management and restoration projects sponsored by NRCS, and activities funded or authorized by the EPA. However, we are not aware of a significant number of future activities that would require Federal funds, permits, or authorizations in these coastal areas. Therefore, we conclude that the rule would not affect a substantial number of small entities. We are not aware of any commercial activities on the Federal lands included in these critical habitat designations.

The entire island of Niihau is under one private ownership and within the State Agricultural District. The current and projected land uses on Niihau are cattle and sheep ranching, commercial game hunting, and military exercises to train downed combat pilots on how to evade capture (Decision Analysts Hawaii (DAHI) 2001). The rule would not affect a substantial number of small agricultural entities on the island of Niihau. Therefore, we conclude that the rule would not affect a substantial number of small entities.

We also considered the likelihood that this rule would result in significant economic impacts to small entities. In general, two different mechanisms in section 7 consultations could lead to additional regulatory requirements. First, if we conclude, in a biological opinion, that a proposed action is likely to jeopardize the continued existence of a species or adversely modify its critical habitat, we can offer "reasonable and prudent alternatives." Reasonable and prudent alternatives are alternative actions that can be implemented in a manner consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid jeopardizing the continued existence of listed species or resulting in adverse modification of critical habitat. A Federal agency and an applicant may elect to implement a reasonable and prudent alternative associated with a biological opinion that has found jeopardy or adverse modification of critical habitat. An agency or applicant could alternatively choose to seek an exemption from the requirements of the Act or proceed without implementing the reasonable and prudent alternative. However, unless an exemption were

obtained, the Federal agency or applicant would be at risk of violating section 7(a)(2) of the Act if it chose to proceed without implementing the reasonable and prudent alternatives. Second, if we find that a proposed action is not likely to jeopardize the continued existence of a listed animal species, we may identify reasonable and prudent measures designed to minimize the amount or extent of take and require the Federal agency or applicant to implement such measures through non-discretionary terms and conditions. However, the Act does not prohibit the take of listed plant species or require terms and conditions to minimize adverse effect on critical habitat. We may also identify discretionary conservation recommendations designed to minimize or avoid the adverse effects of a proposed action on listed species or critical habitat, help implement recovery plans, or to develop information that could contribute to the recovery of the species.

Even where the requirements of section 7 might apply due to critical habitat, based on our experience with section 7 consultations for all listed species, virtually all projects—including those that, in their initial proposed form, would result in jeopardy or adverse modification determinations under section 7—can be implemented successfully with, at most, the adoption of reasonable and prudent alternatives. These measures by definition must be economically feasible and within the scope of authority of the Federal agency involved in the consultation. As we have a very limited consultation history for these 83 species from Kauai and Niihau, we can only describe the general kinds of actions that may be identified in future reasonable and prudent alternatives. These are based on our understanding of the needs of these species and the threats they face, especially as described in the final listing rules and in this critical habitat designation, as well as our experience with similar listed plants in Hawaii. In addition, all of these species are protected under the State of Hawaii's Endangered Species Act (Hawaii Revised Statutes, Chap. 195D–4). Therefore, we have also considered the kinds of actions required under the State licensing process for these species. The kinds of actions that may be included in future reasonable and prudent alternatives include conservation set-asides; management of competing nonnative species; restoration of degraded habitat; propagation; outplanting and augmentation of existing populations;

construction of protective fencing; and periodic monitoring. These measures are not likely to result in a significant economic impact to a substantial number of small entities because any measure included as a reasonable and prudent alternative would have to be economically feasible to an individual landowner, and because as discussed above, we do not believe there will be a substantial number of small entities affected by the Act's consultation requirements.

In summary, we have considered whether this final rule would result in a significant economic effect on a substantial number of small entities and have concluded that it would not affect a substantial number of small entities. Approximately 70 percent of the lands designated as critical habitat are State lands. The State of Hawaii is not a small entity. Less than one percent of the lands designated as critical habitat are Federal lands. The Federal Government is not a small entity. Approximately 30 percent of the lands designated as critical habitat are private lands. Many of these parcels are located in areas where likely future land uses are not expected to result in Federal involvement or section 7 consultations. As discussed earlier, most of the private and State parcels within the designation are currently being used for recreational and agricultural purposes and, therefore, are not likely to require any Federal authorization. In the remaining areas, Federal involvement—and thus section 7 consultations, the only trigger for economic impact under this rule—would be limited to a subset of the area being designated. The most likely future section 7 consultations resulting from this rule would be for informal consultations on federally funded land and water conservation projects, species-specific surveys and research projects, and watershed management and restoration projects sponsored by NRCS and the Service. These consultations would likely occur on only a subset of the total number of parcels and therefore would not be likely to affect a substantial number of small entities. This rule would result in project modifications only when proposed Federal activities would destroy or adversely modify critical habitat. While this may occur, it is not expected frequently enough to affect a substantial number of small entities. Even when it does occur, we do not expect it to result in a significant economic impact, as the measures included in reasonable and prudent alternatives must be economically feasible and consistent with the

proposed action. Therefore, we are certifying that the designation of critical habitat for *Adenophorus periens*, *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Bonamia menziesii*, *Brighamia insignis*, *Centaurium sebaeoides*, *Chamaesyce halemanui*, *Ctenitis squamigera*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyperus trachysanthos*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rhytidospenna*, *Delissea rivularis*, *Delissea undulata*, *Diellia erecta*, *Diellia pallida*, *Diplazium molokaiense*, *Dubautia latifolia*, *Dubautia pauciflora*, *Euphorbia haeleeleana*, *Exocarpos luteolus*, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis cookiana*, *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscadelphus woodii*, *Hibiscus clayi*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Labordia tinifolia* var. *wahiawaensis*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeae*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope haupuensis*, *Melicope knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothoestrum peltatum*, *Panicum niihauense*, *Peucedanum sandwicense*, *Phlegmariurus nutans*, *Phyllostegia knudsenii*, *Phyllostegia waimeae*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandwicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea apokremnos*, *Schiedea helleri*, *Schiedea kauaiensis*, *Schiedea membranacea*, *Schiedea nuttallii*, *Schiedea spargulina* var. *leiopoda*, *Schiedea spargulina* var. *spargulina*, *Schiedea stellarioides*, *Sesbania tomentosa*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne campanulata*, *Viola helenae*, *Viola kauaiensis* var. *wahiawaensis*, *Wilkesia hobdyi*, *Xylosma crenatum*, and *Zanthoxylum hawaiiense* 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. Although this rule is a significant regulatory action under Executive Order 12866, 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 83 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) This rule will not “significantly or uniquely” affect small governments. A Small Government Agency Plan is not required. Small governments will not be 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.

(b) This rule will not produce a Federal mandate on State or local governments or the private sector of \$100 million or greater in any year, that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no obligations on State or local governments.

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 83 species from Kauai and Niihau 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 effects. A Federalism assessment is not required. In keeping with Department of Interior policy, we requested information from appropriate State agencies in Hawaii. This rule imposes no regulatory requirements unless an agency is seeking Federal funding or authorization, so it does not have Federal implications. In addition, this rule will not have substantial direct compliance costs because many of the planned projects that could affect critical habitat have no Federal involvement.

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 does not alter where and what federally sponsored activities may occur, it may assist these local governments in long-range planning, rather than waiting for case-by-case section 7 consultation to occur.

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 the 83 plant species from Kauai and Niihau.

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). This determination does not constitute a major Federal action significantly affecting the quality of the human environment.

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 83 plant species.

Therefore, designation of critical habitat for these 83 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 primary 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 follows:

a. Under the table's heading FLOWERING PLANTS, by revising the entries for *Alectryon macrococcus*, *Alsinidendron lychnoides*, *Alsinidendron viscosum*, *Bonamia menziesii*, *Brighamia insignis*, *Centaurium sebaeoides*, *Chamaesyce halemanui*, *Cyanea asarifolia*, *Cyanea recta*, *Cyanea remyi*, *Cyanea undulata*, *Cyperus trachysanthos*, *Cyrtandra cyaneoides*, *Cyrtandra limahuliensis*, *Delissea rhytidisperma*, *Delissea rivularis*, *Delissea undulata*, *Dubautia latifolia*, *Dubautia pauciflora*, *Euphorbia haeleeleana*, *Exocarpos*

luteolus, *Flueggea neowawraea*, *Gouania meyenii*, *Hedyotis cookiana*, *Hedyotis st.-johnii*, *Hesperomannia lydgatei*, *Hibiscadelphus woodii*, *Hibiscus clayi*, *Hibiscus waimeae* ssp. *hannerae*, *Ischaemum byrone*, *Isodendron laurifolium*, *Isodendron longifolium*, *Kokia kauaiensis*, *Labordia lydgatei*, *Labordia tinifolia* var. *wahiawaensis*, *Lipochaeta fauriei*, *Lipochaeta micrantha*, *Lipochaeta waimeae*, *Lobelia niihauensis*, *Lysimachia filifolia*, *Mariscus pennatifolius*, *Melicope haupuensis*, *Melicope knudsenii*, *Melicope pallida*, *Munroidendron racemosum*, *Myrsine linearifolia*, *Nothocestrum peltatum*, *Panicum niihauense*, *Peucedanum sandwicense*, *Phyllostegia knudsenii*, *Phyllostegia waimeae*, *Phyllostegia wawrana*, *Plantago princeps*, *Platanthera holochila*, *Poa mannii*, *Poa sandwicensis*, *Poa siphonoglossa*, *Pteralyxia kauaiensis*, *Remya kauaiensis*, *Remya montgomeryi*, *Schiedea apokremnos*, *Schiedea helleri*,

Schiedea kauaiensis, *Schiedea membranacea*, *Schiedea nuttallii*, *Schiedea spargulina* var. *leiopoda*, *Schiedea spargulina* var. *spargulina*, *Schiedea stellarioides*, *Sesbania tomentosa*, *Solanum sandwicense*, *Spermolepis hawaiiensis*, *Stenogyne campanulata*, *Viola helenae*, *Viola kauaiensis* var. *wahiawaensis*, *Wilkesia hobdyi*, *Xylosma crenatum*, and *Zanthoxylum hawaiiense* to read as follows.

b. Under the table's heading FERNS AND ALLIES, by revising the entries for *Adenophorus periens*, *Ctenitis squamigera*, *Diellia erecta*, *Diellia pallida*, and *Diplazium molokaiense*, removing the entry for *Lycopodium* (= *Phlegmariurus*) *nutans*, and adding an entry for *Phlegmariurus nutans* to read as set forth below.

§ 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>Alectryon macrococcus.</i>	Mahoe	U.S.A. (HI)	Sapindaceae	E	467	17.99(a)(1)	NA
*	*	*	*	*	*		*
<i>Alsinidendron lychnoides.</i>	Kuawawaenohu	U.S.A. (HI)	Caryophyllaceae	E	590	17.99(a)(1)	NA
*	*	*	*	*	*		*
<i>Alsinidendron viscosum.</i>	None	U.S.A. (HI)	Caryophyllaceae	E	590	17.99(a)(1)	NA
*	*	*	*	*	*		*
<i>Bonamia menziesii</i> ...	None	U.S.A. (HI)	Convolvulaceae	E	559	17.99(a)(1)	NA
<i>Brighamia insignis</i>	Olulu	U.S.A. (HI)	Campanulaceae	E	530	17.99(a)(1) and (a)(2)	NA
*	*	*	*	*	*		*
<i>Centaurium sebaeoides.</i>	Awiwi	U.S.A. (HI)	Gentianaceae	E	448	17.99(a)(1)	NA
*	*	*	*	*	*		*
<i>Chamaesyce halemanui.</i>	None	U.S.A. (HI)	Euphorbiaceae	E	464	17.99(a)(1)	NA
*	*	*	*	*	*		*
<i>Cyanea asarifolia</i>	Haha	U.S.A. (HI)	Campanulaceae	E	530	17.99(a)(1)	NA
*	*	*	*	*	*		*
<i>Cyanea recta</i>	Haha	U.S.A (HI)	Campanulaceae	T	590	17.99(a)(1)	NA
<i>Cyanea remyi</i>	Haha	U.S.A (HI)	Campanulaceae	E	590	17.99(a)(1)	NA
*	*	*	*	*	*		*
<i>Cyanea undulata</i>	None	U.S.A. (HI)	Campanulaceae	E	436	17.99(a)(1)	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
<i>Cyperus trachysanthos</i> .	Puukaa	U.S.A. (HI)	Cyperaceae	E	592	17.99(a)(1)	NA
<i>Cyrtandra cyaneoides</i>	Mapele	U.S.A. (HI)	Gesneriaceae	E	590	17.99(a)(1)	NA
<i>Cyrtandra limahuliensis</i> .	Haiwale	U.S.A. (HI)	Gesneriaceae	T	530	17.99(a)(1)	NA
<i>Delissea rhytidosperra</i> .	None	U.S.A. (HI)	Campanulaceae	E	530	17.99(a)(1)	NA
<i>Delissea rivularis</i>	Oha	U.S.A. (HI)	Campanulaceae	E	590	17.99(a)(1)	NA
<i>Delissea undulata</i>	None	U.S.A. (HI)	Campanulaceae	E	593	17.99(a)(1)	NA
<i>Dubautia latifolia</i>	Naenae	U.S.A. (HI)	Asteraceae	E	464	17.99(a)(1)	NA
<i>Dubautia pauciflora</i>	Naenae	U.S.A. (HI)	Asteraceae	E	436	17.99(a)(1)	NA
<i>Euphorbia haeleeleana</i> .	Akoko	U.S.A. (HI)	Euphorbiaceae	E	592	17.99(a)(1)	NA
<i>Exocarpos luteolus</i> ...	Heau	U.S.A. (HI)	Santalaceae	E	530	17.99(a)(1)	NA
<i>Flueggea neowawraea</i> .	Mehamehame	U.S.A. (HI)	Euphorbiaceae	E	559	17.99(a)(1)	NA
<i>Gouania meyenii</i>	None	U.S.A. (HI)	Rhamnaceae	E	448	17.99(a)(1)	NA
<i>Hedyotis cookiana</i>	Awiiwi	U.S.A. (HI)	Rubiaceae	E	530	17.99(a)(1)	NA
<i>Hedyotis st.-johnii</i>	Na Pali beach hedyotis.	U.S.A. (HI)	Rubiaceae	E	441	17.99(a)(1)	NA
<i>Hesperomannia lydgatei</i> .	None	U.S.A. (HI)	Asteraceae	E	436	17.99(a)(1)	NA
<i>Hibiscadelphus woodii</i> .	Hau kuahiwi	U.S.A. (HI)	Malvaceae	E	590	17.99(a)(1)	NA
<i>Hibiscus clayi</i>	Clay's hibiscus	U.S.A. (HI)	Malvaceae	E	530	17.99(a)(1)	NA
<i>Hibiscus waimeae</i> ssp. <i>hannerae</i> .	Kokio keokeo	U.S.A. (HI)	Malvaceae	E	590	17.99(a)(1)	NA
<i>Ischaemum byrone</i> ...	Hilo ischaemum	U.S.A. (HI)	Poaceae	E	532	17.99(a)(1)	NA
<i>Isodendron laurifolium</i> .	Aupaka	U.S.A. (HI)	Violaceae	E	592	17.99(a)(1)	NA
<i>Isodendron longifolium</i> .	Aupaka	U.S.A. (HI)	Violaceae	T	592	17.99(a)(1)	NA
<i>Kokia kauaiensis</i>	Kokio	U.S.A. (HI)	Malvaceae	E	590	17.99(a)(1)	NA
<i>Labordia lydgatei</i>	Kamakahala	U.S.A. (HI)	Loganiaceae	E	436	17.99(a)(1)	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
<i>Labordia tinifolia</i> var. <i>wahiawaensis</i> .	Kamakahala	U.S.A. (HI)	Loganiaceae	E	590	17.99(a)(1)	NA
<i>Lipochaeta fauriei</i>	Nehe	U.S.A. (HI)	Asteraceae	E	530	17.99(a)(1)	NA
<i>Lipochaeta micrantha</i>	Nehe	U.S.A. (HI)	Asteraceae	E	530	17.99(a)(1)	NA
<i>Lipochaeta waimeaensis</i> .	Nehe	U.S.A. (HI)	Asteraceae	E	530	17.99(a)(1)	NA
<i>Lobelia niihauensis</i> ...	None	U.S.A. (HI)	Campanulaceae	E	448	17.99(a)(1)	NA
<i>Lysimachia filifolia</i>	None	U.S.A. (HI)	Primulaceae	E	530	17.99(a)(1)	NA
<i>Mariscus pennatiformis</i> .	None	U.S.A. (HI)	Cyperaceae	E	559	17.99(a)(1)	NA
<i>Melicope haupuensis</i>	Alani	U.S.A. (HI)	Rutaceae	E	530	17.99(a)(1)	NA
<i>Melicope knudsenii</i> ...	Alani	U.S.A. (HI)	Rutaceae	E	530	17.99(a)(1)	NA
<i>Melicope pallida</i>	Alani	U.S.A. (HI)	Rutaceae	E	530	17.99(a)(1)	NA
<i>Munroidendron racemosum</i> .	None	U.S.A. (HI)	Araliaceae	E	530	17.99(a)(1)	NA
<i>Myrsine linearifolia</i>	Kolea	U.S.A. (HI)	Myrsinaceae	T	590	17.99(a)(1)	NA
<i>Nothocestrum peltatum</i> .	Aiea	U.S.A. (HI)	Solanaceae	E	530	17.99(a)(1)	NA
<i>Panicum niihauense</i>	Lau ehū	U.S.A. (HI)	Poaceae	E	592	17.99(a)(1)	NA
<i>Peucedanum sandwicense</i> .	Makou	U.S.A. (HI)	Apiaceae	T	530	17.99(a)(1)	NA
<i>Phyllostegia knudsenii</i> .	None	U.S.A. (HI)	Lamiaceae	E	590	17.99(a)(1)	NA
<i>Phyllostegia waimeae</i>	None	U.S.A. (HI)	Lamiaceae	E	530	17.99(a)(1)	NA
<i>Phyllostegia wawrana</i>	None	U.S.A. (HI)	Lamiaceae	E	590	17.99(a)(1)	NA
<i>Plantago princeps</i>	Laukahi kuahiwi	U.S.A. (HI)	Plantaginaceae	E	559	17.99(a)(1)	NA
<i>Platanthera holochila</i>	None	U.S.A. (HI)	Orchidaceae	E	592	17.99(a)(1)	NA
<i>Poa mannii</i>	Mann's bluegrass	U.S.A. (HI)	Poaceae	E	558	17.99(a)(1)	NA
<i>Poa sandvicensis</i>	Hawaiian bluegrass ..	U.S.A. (HI)	Poaceae	E	464	17.99(a)(1)	NA
<i>Poa siphonoglossa</i> ...	None	U.S.A. (HI)	Poaceae	E	464	17.99(a)(1)	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
<i>Pteralyxia kauaiensis</i>	Kaulu	U.S.A. (HI)	Apocynaceae	E	530	17.99(a)(1)	NA
<i>Remya kauaiensis</i>	None	U.S.A. (HI)	Asteraceae	E	413	17.99(a)(1)	NA
<i>Remya montgomeryi</i>	None	U.S.A. (HI)	Asteraceae	E	413	17.99(a)(1)	NA
<i>Schiedea apokremnos</i> .	Maolioli	U.S.A. (HI)	Caryophyllaceae	E	441	17.99(a)(1)	NA
<i>Schiedea helleri</i>	None	U.S.A. (HI)	Caryophyllaceae	E	590	17.99(a)(1)	NA
<i>Schiedea kauaiensis</i>	None	U.S.A. (HI)	Caryophyllaceae	E	592	17.99(a)(1)	NA
<i>Schiedea membranacea</i> .	None	U.S.A. (HI)	Caryophyllaceae	E	590	17.99(a)(1)	NA
<i>Schiedea nuttallii</i>	None	U.S.A. (HI)	Caryophyllaceae	E	592	17.99(a)(1)	NA
<i>Schiedea spergulina</i> var. <i>leiopoda</i> .	None	U.S.A. (HI)	Caryophyllaceae	E	530	17.99(a)(1)	NA
<i>Schiedea spergulina</i> var. <i>spergulina</i> .	None	U.S.A. (HI)	Caryophyllaceae	E	530	17.99(a)(1)	NA
<i>Schiedea stellarioides</i>	Laulihilihi (=Maolioli)	U.S.A. (HI)	Caryophyllaceae	E	590	17.99(a)(1)	NA
<i>Sesbania tomentosa</i>	Ohai	U.S.A. (HI)	Fabaceae	E	559	17.99(a)(1)	NA
<i>Solanum sandwicense</i> .	Aiakeakua, popolo	U.S.A. (HI)	Solanaceae	E	530	17.99(a)(1)	NA
<i>Spermolepis hawaiiensis</i> .	None	U.S.A. (HI)	Apiaceae	E	559	17.99(a)(1)	NA
<i>Stenogyne campanulata</i> .	None	U.S.A. (HI)	Lamiaceae	E	464	17.99(a)(1)	NA
<i>Viola helenae</i>	None	U.S.A. (HI)	Violaceae	E	436	17.99(a)(1)	NA
<i>Viola kauaiensis</i> var. <i>wahiawaensis</i> .	Nani waialeale	U.S.A. (HI)	Violaceae	E	590	17.99(a)(1)	NA
<i>Wilkesia hobbeyi</i>	Dwarfiliau	U.S.A. (HI)	Asteraceae	E	473	17.99(a)(1)	NA
<i>Xylosma crenatum</i>	None	U.S.A. (HI)	Flacourtiaceae	E	464	17.99(a)(1)	NA
<i>Zanthoxylum hawaiiense</i> .	Ae	U.S.A. (HI)	Rutaceae	E	532	17.99(a)(1)	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)	NA
*	*	*	*	*	*	*	*
<i>Ctenitis squamigera</i> ..	Pauoa	U.S.A. (HI)	Aspleniaceae	E	553	17.99(a)(1)	NA
*	*	*	*	*	*	*	*
<i>Diellia erecta</i>	Asplenium-leaved diellia.	U.S.A. (HI)	Aspleniaceae	E	559	17.99(a)(1)	NA
*	*	*	*	*	*	*	*
<i>Diellia pallida</i>	None	U.S.A. (HI)	Aspleniaceae	E	530	17.99(a)(1)	NA
*	*	*	*	*	*	*	*
<i>Diplazium molokaiense</i> .	None	U.S.A. (HI)	Aspleniaceae	E	553	17.99(a)(1)	NA
*	*	*	*	*	*	*	*
<i>Phlegmariurus nutans</i>	Wawaeiole	U.S.A. (HI)	Lycopodiaceae	E	536	17.99(a)(1)	NA
*	*	*	*	*	*	*	*

3. Add a new § 17.99 to read as follows:

§ 17.99 Critical habitat; plants on the islands of Kauai and Niihau, HI.

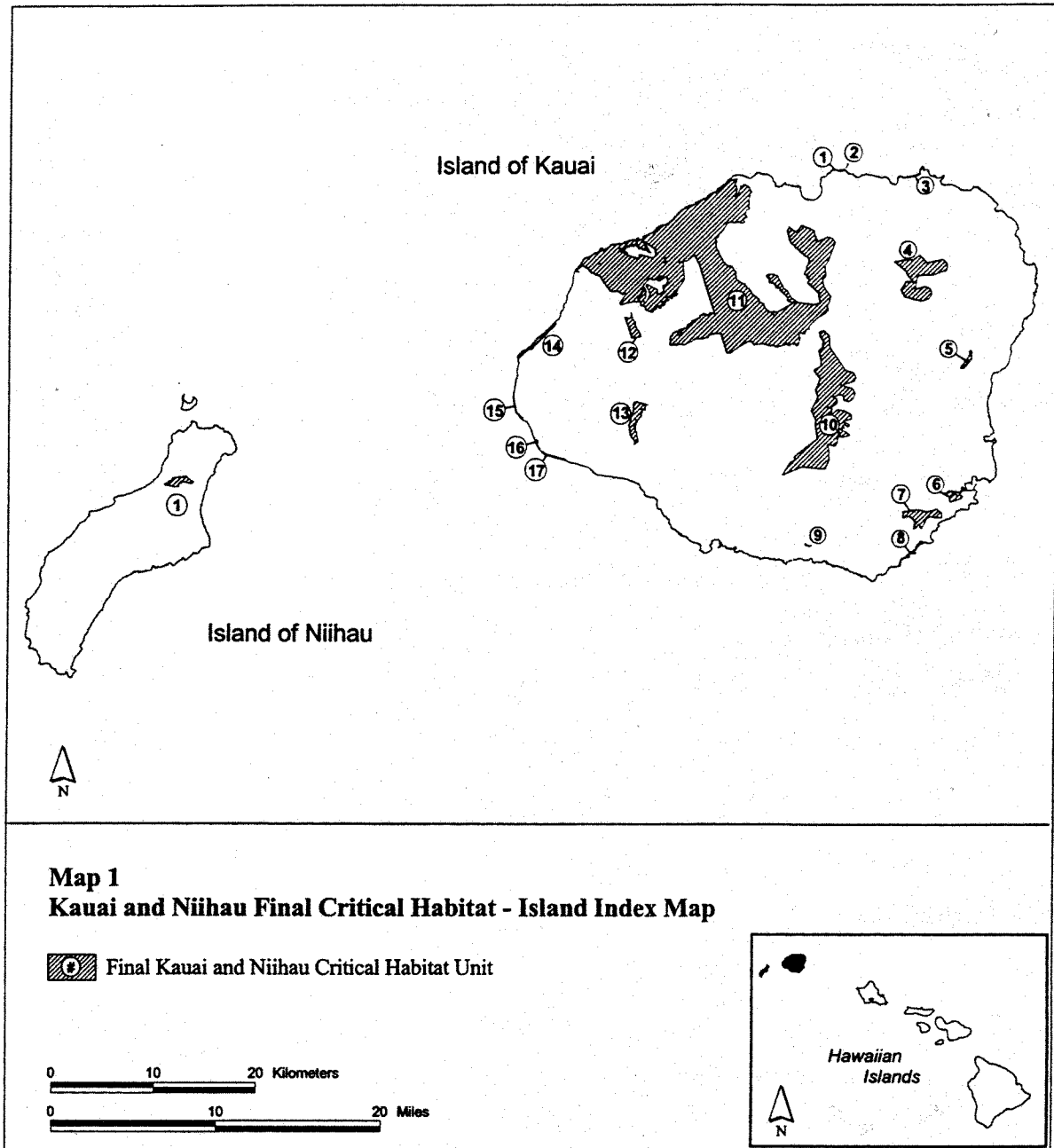
(a) *Maps and critical habitat unit descriptions.* The following paragraphs contain the legal descriptions of the critical habitat units designated for the Hawaiian Islands of Kauai and Niihau. Existing manmade features and structures within the boundaries of the mapped areas, such as buildings; roads; aqueducts and other water system features, including but not limited to pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks,

gaging stations, intakes, reservoirs, diversions, flumes, and wells; existing trails; campgrounds and their immediate surrounding landscaped area; scenic lookouts; remote helicopter landing sites; existing fences; telecommunications equipment towers and associated structures and equipment; electrical power transmission lines and distribution, and communication facilities and regularly maintained associated rights-of-way and access ways; radars, telemetry antennas; missile launch sites; arboreta and gardens; heiau (indigenous places of worship or shrines), and other

archaeological sites; airports; other paved areas; and lawns and other rural residential landscaped areas do not contain one or more of the primary constituent elements described for each species in paragraph (b) of this section and therefore are not included in the critical habitat designations.

(1) *Kauai.* Critical habitat units are described below. Coordinates in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the general locations of the 219 critical habitat units designated on the island of Kauai.

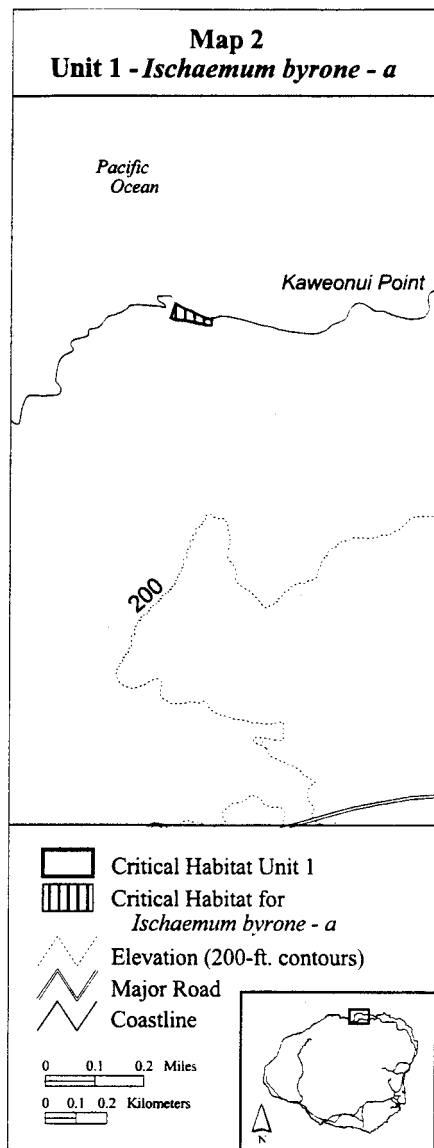
(i) **Note:** Map 1—Index map follows:



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

(A) Unit consists of the following 9 boundary points: coastline; 449995, 2458285; 449999, 2458293; 450118, 2458243; 450116, 2458221; 450104, 2458221; 450032, 2458238; 449997, 2458240; 449981, 2458248; 449991, 2458273; coastline.

(B) Note: Map 2 follows:

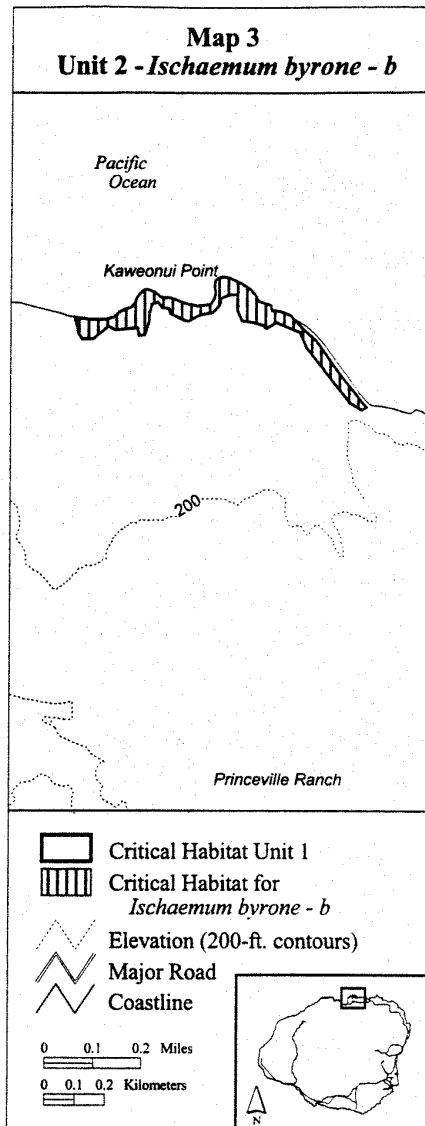


(iii) Kauai 2—*Ischaemum byrone*—b (6 ha; 14 ac)

(A) Unit consists of the following 59 boundary points: coastline; 451087, 2458201; 451120, 2458166; 451162, 2458127; 451246, 2458013; 451331, 2457904; 451317, 2457895; 451278, 2457919; 451277, 2457919; 451276, 2457920; 451190, 2458029; 451190, 2458032; 451175, 2458047; 451132, 2458101; 451110, 2458153; 451031, 2458185; 450999, 2458165; 450996, 2458166; 450987, 2458176; 450954,

2458185; 450916, 2458191; 450905, 2458216; 450900, 2458226; 450901, 2458242; 450902, 2458273; 450902, 2458273; 450902, 2458278; 450871, 2458277; 450848, 2458265; 450843, 2458242; 450818, 2458217; 450778, 2458211; 450737, 2458190; 450725, 2458194; 450679, 2458215; 450677, 2458215; 450673, 2458233; 450650, 2458236; 450636, 2458255; 450615, 2458247; 450612, 2458223; 450607, 2458222; 450607, 2458191; 450606, 2458185; 450592, 2458144; 450574, 2458143; 450568, 2458168; 450568, 2458168; 450568, 450495, 2458159; 450472, 2458173; 450420, 2458129; 450420, 2458129; 450383, 2458129; 450372, 2458147; 450366, 2458173; 450361, 2458197; 450360, 2458202; 450361, 2458202; 451076, 2458209; coastline.

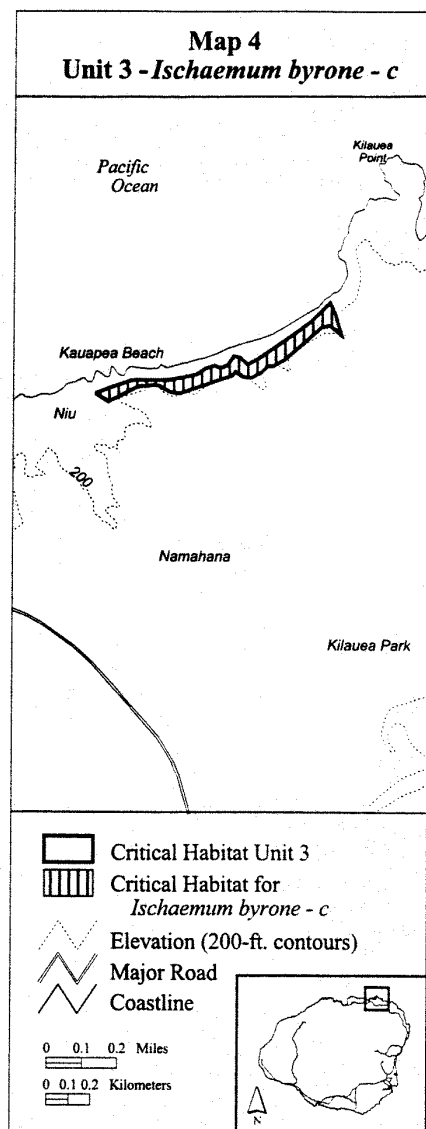
(B) Note: Map 3 follows:



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

(A) Unit consists of the following 51 boundary points: Start at 457168, 2457531; 457235, 2457554; 457342, 2457591; 457377, 2457591; 457421, 2457591; 457469, 2457591; 457503, 2457591; 457556, 2457600; 457625, 2457613; 457631, 2457617; 457674, 2457645; 457713, 2457657; 457739, 2457648; 457747, 2457650; 457754, 2457649; 457758, 2457653; 457769, 2457656; 457794, 2457692; 457801, 2457700; 457830, 2457691; 457865, 2457661; 457891, 2457678; 457913, 2457687; 457961, 2457722; 458074, 2457800; 458157, 2457861; 458240, 2457943; 458266, 2457887; 458291, 2457796; 458241, 2457839; 458199, 2457830; 458122, 2457761; 458032, 2457682; 457981, 2457654; 457958, 2457654; 457926, 2457624; 457883, 2457600; 457851, 2457604; 457835, 2457612; 457808, 2457629; 457794, 2457610; 457555, 2457530; 457515, 2457534; 457459, 2457567; 457441, 2457569; 457364, 2457561; 457364, 2457561; 457364, 2457561; 457329, 2457544; 457327, 2457542; 457230, 2457492; return to starting point.

(B) Note: Map 4 follows:



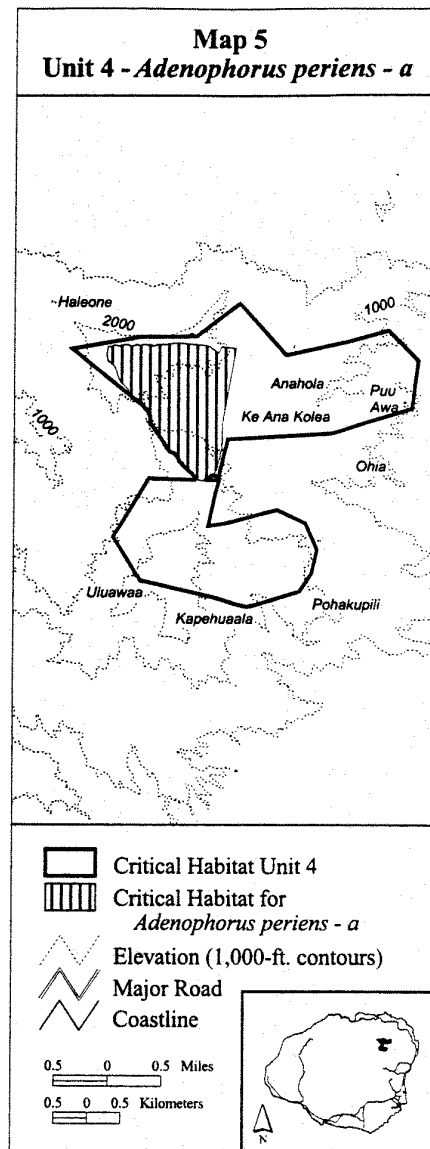
(v) Kauai 4—*Adenophorus periens*—a (237 ha; 585 ac)

(A) Unit consists of the following 183 boundary points: Start at 457883, 2449413; 457917, 2449393; 457954, 2449369; 458004, 2449331; 458025, 2449313; 458037, 2449307; 458058, 2449301; 458098, 2449392; 458308, 2449371; 458105, 2448250; 458095, 2447849; 458085, 2447839; 458077, 2447822; 458073, 2447793; 458073, 2447739; 458057, 2447694; 458046, 2447671; 458033, 2447617; 458027, 2447575; 458026, 2447556; 458023, 2447548; 458009, 2447525; 457998, 2447517; 457979, 2447491; 457946, 2447469; 457927, 2447446; 457899, 2447424; 457864, 2447408; 457850, 2447402; 457830, 2447399; 457801, 2447389; 457689, 2447425; 457690, 2447445; 457684, 2447466; 457667, 2447490; 457653, 2447503; 457639, 2447513; 457604, 2447540; 457587, 2447559; 457545, 2447595; 457538, 2447604; 457528, 2447615; 457505,

2447643; 457502, 2447650; 457473, 2447678; 457457, 2447706; 457446, 2447731; 457399, 2447802; 457389, 2447810; 457328, 2447832; 457310, 2447844; 457297, 2447860; 457274, 2447898; 457234, 2447967; 457193, 2448027; 457148, 2448093; 457124, 2448122; 457112, 2448143; 457089, 2448187; 457076, 2448209; 457048, 2448243; 457032, 2448261; 457029, 2448269; 457028, 2448278; 457031, 2448299; 457032, 2448323; 457031, 2448342; 457028, 2448361; 457016, 2448395; 457005, 2448416; 457002, 2448438; 456998, 2448448; 456991, 2448459; 456973, 2448474; 456957, 2448488; 456943, 2448512; 456930, 2448544; 456916, 2448568; 456896, 2448595; 456883, 2448609; 456870, 2448619; 456856, 2448627; 456832, 2448632; 456801, 2448644; 456771, 2448662; 456748, 2448682; 456733, 2448698; 456713, 2448726; 456697, 2448759; 456679, 2448787; 456671, 2448799; 456652, 2448821; 456635, 2448836; 456615, 2448849; 456596, 2448859; 456583, 2448874; 456572, 2448891; 456563, 2448911; 456551, 2448951; 456541, 2448985; 456535, 2449004; 456530, 2449029; 456526, 2449045; 456516, 2449067; 456504, 2449086; 456491, 2449106; 456476, 2449128; 456462, 2449139; 456446, 2449150; 456435, 2449153; 456419, 2449170; 456404, 2449186; 456395, 2449205; 456387, 2449236; 456386, 2449264; 456390, 2449313; 456395, 2449355; 456394, 2449367; 456394, 2449381; 456397, 2449394; 456401, 2449399; 456407, 2449399; 456420, 2449397; 456439, 2449398; 456457, 2449404; 456483, 2449414; 456501, 2449416; 456513, 2449416; 456533, 2449412; 456569, 2449406; 456586, 2449405; 456603, 2449410; 456620, 2449418; 456633, 2449423; 456647, 2449426; 456662, 2449428; 456681, 2449425; 456706, 2449417; 456733, 2449409; 456752, 2449403; 456769, 2449404; 456787, 2449409; 456807, 2449421; 456818, 2449430; 456826, 2449432; 456836, 2449428; 456852, 2449419; 456862, 2449411; 456869, 2449407; 456878, 2449407; 456889, 2449412; 456910, 2449422; 456924, 2449429; 456941, 2449429; 456969, 2449426; 456991, 2449421; 457000, 2449421; 457034, 2449425; 457042, 2449425; 457049, 2449422; 457064, 2449414; 457073, 2449409; 457083, 2449408; 457097, 2449407; 457107, 2449413; 457123, 2449423; 457132, 2449429; 457141, 2449431; 457168, 2449428; 457205, 2449431; 457229, 2449432; 457255, 2449429; 457276, 2449429; 457289, 2449431; 457300, 2449437; 457307, 2449440; 457314, 2449440; 457325, 2449437; 457352,

2449440; 457363, 2449443; 457395, 2449451; 457417, 2449451; 457451, 2449456; return to starting point.

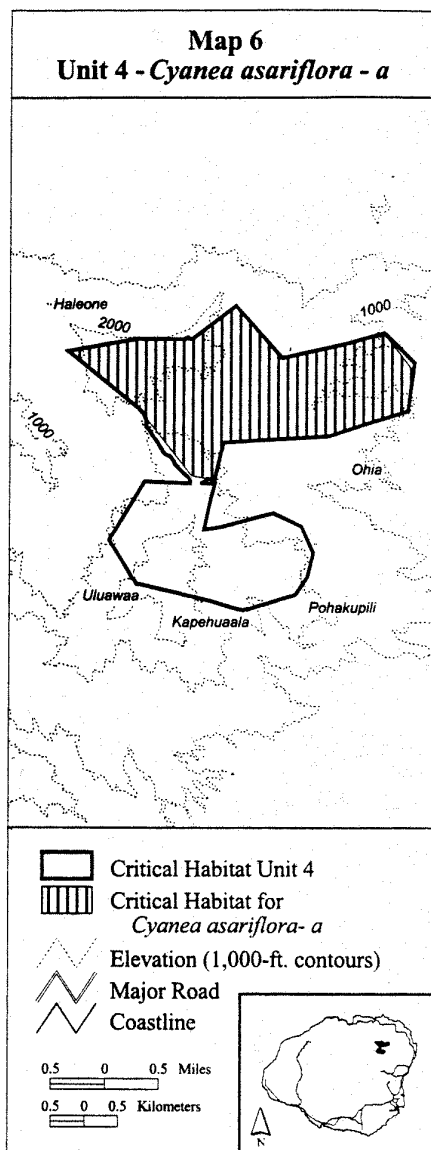
(B) Note: Map 5 follows:



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

(A) Unit consists of the following 18 boundary points: Start at 455868, 2449362; 456901, 2449549; 457715, 2449548; 458372, 2450048; 459061, 2449266; 460595, 2449609; 460596, 2449609; 461002, 2449077; 460947, 2448554; 460939, 2448483; 460904, 2448472; 460823, 2448447; 460270, 2448273; 459750, 2448109; 458184, 2448016; 458059, 2447453; 457715, 2447516; 456932, 2448517; return to starting point.

(B) Note: Map 6 follows:



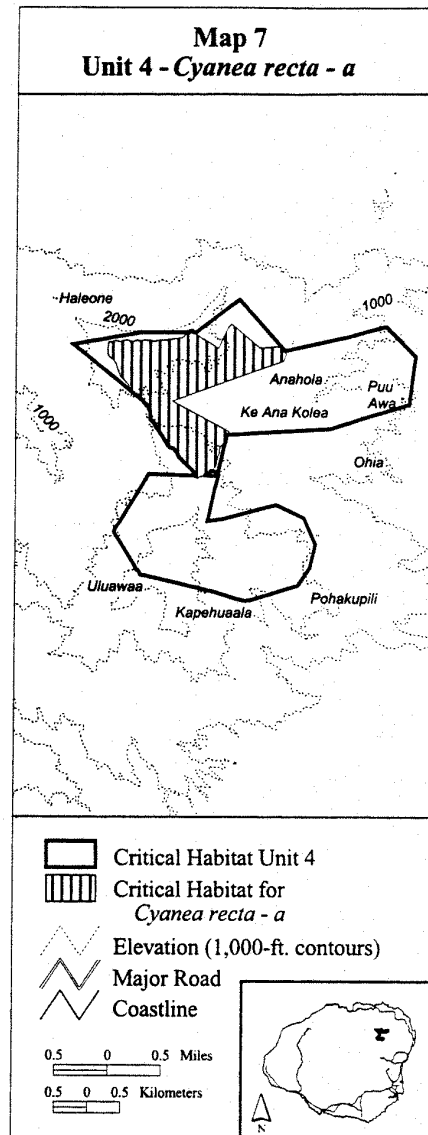
(vii) Kauai 4—*Cyanea recta*—a (252 ha; 622 ac)

(A) Unit consists of the following 217 boundary points: Start at 458254, 2449672; 458681, 2449311; 458976, 2449337; 459083, 2449224; 459041, 2449114; 458385, 2448885; 457368, 2448525; 458223, 2448067; 458204, 2448065; 458165, 2447893; 458096, 2447851; 458085, 2447839; 458077, 2447822; 458073, 2447793; 458073, 2447739; 458057, 2447694; 458046, 2447671; 458033, 2447617; 458027, 2447575; 458026, 2447556; 458023, 2447548; 458009, 2447525; 457998, 2447517; 457979, 2447491; 457946, 2447469; 457927, 2447446; 457899, 2447424; 457864, 2447408; 457850, 2447402; 457830, 2447399; 457797, 2447387; 457757, 2447362; 457741, 2447354; 457739, 2447359; 457725, 2447369; 457716, 2447375; 457694, 2447401; 457689, 2447425; 457690, 2447445; 457684, 2447466; 457667,

2447490; 457653, 2447503; 457639, 2447513; 457604, 2447540; 457587, 2447559; 457545, 2447595; 457538, 2447604; 457528, 2447615; 457505, 2447643; 457502, 2447650; 457473, 2447678; 457457, 2447706; 457446, 2447731; 457399, 2447802; 457389, 2447810; 457328, 2447832; 457310, 2447844; 457297, 2447860; 457274, 2447898; 457234, 2447967; 457193, 2448027; 457148, 2448093; 457124, 2448122; 457112, 2448143; 457089, 2448187; 457076, 2448209; 457048, 2448243; 457032, 2448261; 457029, 2448269; 457028, 2448278; 457031, 2448299; 457032, 2448323; 457031, 2448342; 457028, 2448361; 457016, 2448395; 457005, 2448416; 457002, 2448438; 456998, 2448448; 456991, 2448459; 456973, 2448474; 456957, 2448488; 456943, 2448512; 456930, 2448544; 456916, 2448568; 456896, 2448595; 456883, 2448609; 456870, 2448619; 456856, 2448627; 456832, 2448632; 456801, 2448644; 456771, 2448662; 456748, 2448682; 456733, 2448698; 456713, 2448726; 456697, 2448759; 456679, 2448787; 456671, 2448799; 456652, 2448821; 456635, 2448836; 456615, 2448849; 456596, 2448859; 456583, 2448874; 456572, 2448891; 456563, 2448911; 456551, 2448951; 456541, 2448985; 456535, 2449004; 456530, 2449029; 456526, 2449045; 456516, 2449067; 456504, 2449086; 456491, 2449106; 456476, 2449128; 456462, 2449139; 456446, 2449150; 456435, 2449153; 456419, 2449170; 456404, 2449186; 456395, 2449205; 456387, 2449236; 456386, 2449264; 456390, 2449313; 456395, 2449355; 456394, 2449367; 456394, 2449381; 456397, 2449394; 456401, 2449399; 456407, 2449399; 456420, 2449397; 456439, 2449398; 456457, 2449404; 456483, 2449414; 456501, 2449416; 456513, 2449416; 456533, 2449412; 456569, 2449406; 456586, 2449405; 456603, 2449410; 456620, 2449418; 456633, 2449423; 456647, 2449426; 456662, 2449428; 456681, 2449425; 456706, 2449417; 456733, 2449409; 456752, 2449403; 456769, 2449404; 456787, 2449409; 456807, 2449421; 456818, 2449430; 456826, 2449432; 456836, 2449428; 456852, 2449419; 456862, 2449411; 456869, 2449407; 456878, 2449407; 456889, 2449412; 456910, 2449422; 456924, 2449429; 456941, 2449429; 456969, 2449426; 456991, 2449421; 457000, 2449421; 457034, 2449425; 457042, 2449425; 457049, 2449422; 457064, 2449414; 457073, 2449409; 457083, 2449408; 457097, 2449407; 457107, 2449413; 457123, 2449423; 457132, 2449429; 457141, 2449431; 457168, 2449428; 457205, 2449431; 457229,

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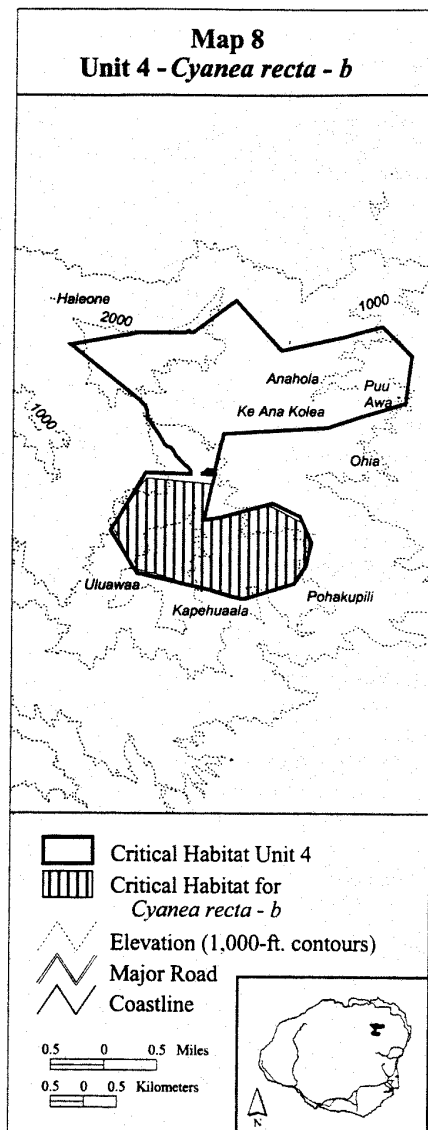
(B) Note: Map 7 follows:



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

(A) Unit consists of the following 15 boundary points: Start at 458861, 2446942; 459372, 2446687; 459490, 2446382; 459454, 2446075; 459242, 2445757; 458486, 2445521; 457390, 2445835; 457139, 2445925; 457088, 2445921; 456838, 2445992; 456525, 2446628; 457027, 2447344; 458020, 2447254; 457900, 2446720; 458214, 2446760; return to starting point.

(B) Note: Map 8 follows:

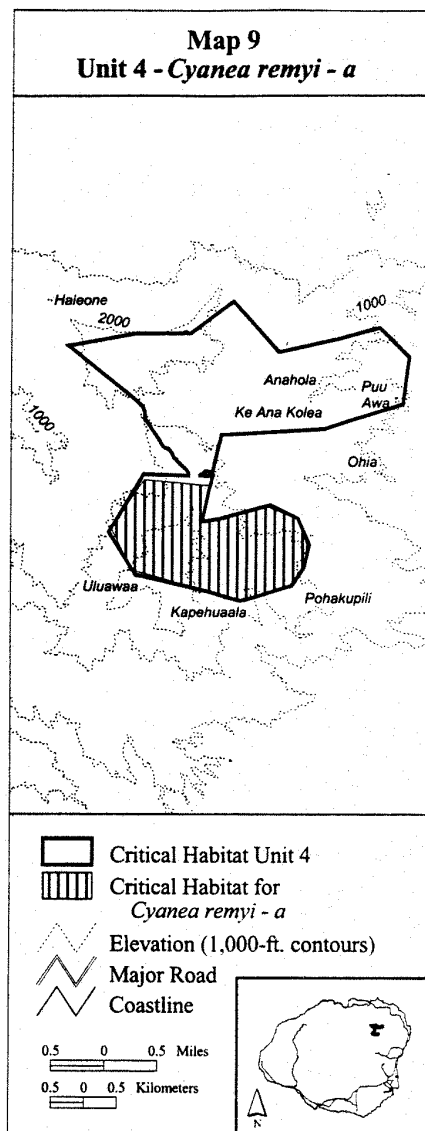


(ix) Kauai 4—*Cyanea remyi*—a (353 ha; 873 ac)

(A) Unit consists of the following 14 boundary points: Start at 457088, 2445921; 456838, 2445992; 456525, 2446628; 457027, 2447344; 458020, 2447254; 457900, 2446720; 458214, 2446760; 458887, 2446950; 459348, 2446748; 459490, 2446382; 459454, 2446075; 459242, 2445757; 458486,

2445521; 457390, 2445835; return to starting point.

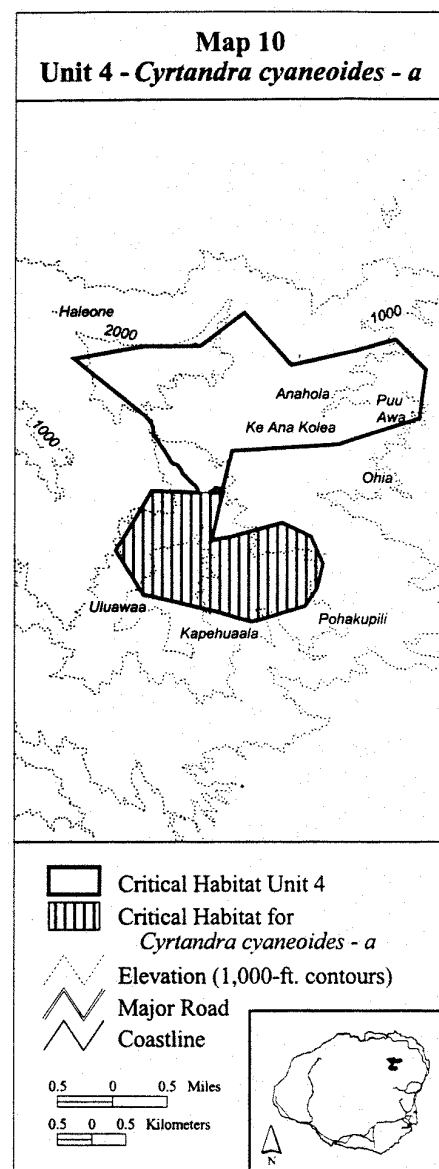
(B) Note: Map 9 follows:



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

(A) Unit consists of the following 13 boundary points: Start at 457013, 2447427; 458066, 2447394; 457852, 2446671; 458938, 2446966; 459350, 2446768; 459531, 2446374; 459449, 2446012; 459268, 2445749; 458544, 2445536; 457395, 2445800; 456955, 2445902; 456898, 2445915; 456486, 2446556; return to starting point.

(B) Note: Map 10 follows:



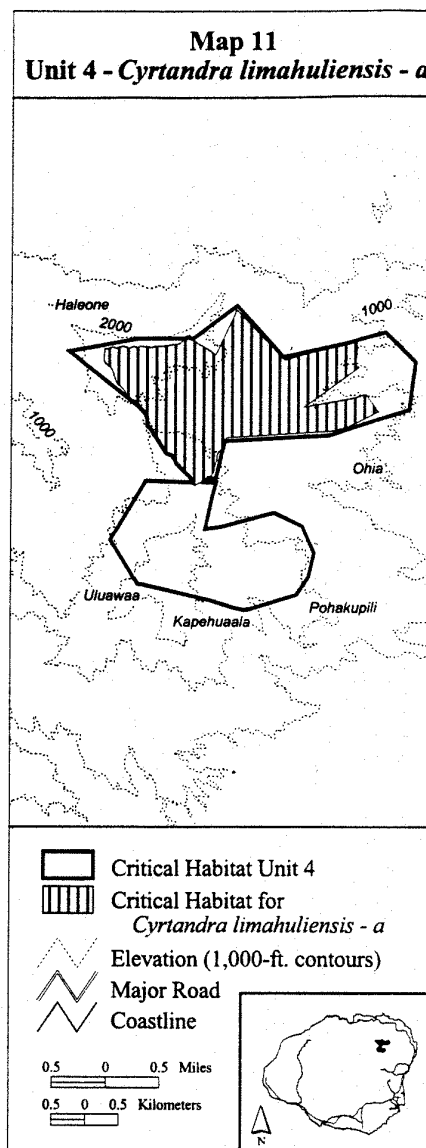
(xi) Kauai 4—*Cyrtandra limahuliensis*—a (501 ha; 1,237 ac)

(A) Unit consists of the following 225 boundary points: Start at 460167, 2449523; 460165, 2449520; 460143, 2449148; 460121, 2449133; 460190, 2449113; 459376, 2448529; 460097, 2448660; 460288, 2448720; 460453, 2448490; 460443, 2448485; 460474, 2448455; 460038, 2448238; 459811, 2448172; 458204, 2448065; 458165, 2447893; 458096, 2447851; 458085, 2447839; 458077, 2447822; 458073, 2447793; 458073, 2447739; 458057, 2447694; 458046, 2447671; 458033, 2447617; 458027, 2447575; 458026, 2447556; 458023, 2447548; 458009, 2447525; 457998, 2447517; 457979, 2447491; 457946, 2447469; 457927, 2447446; 457899, 2447424; 457864, 2447408; 457850, 2447402; 457830, 2447399; 457797, 2447387; 457757, 2447362; 457741, 2447354; 457739,

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 2447860; 457274, 2447898; 457234,
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 2449224; return to starting point.

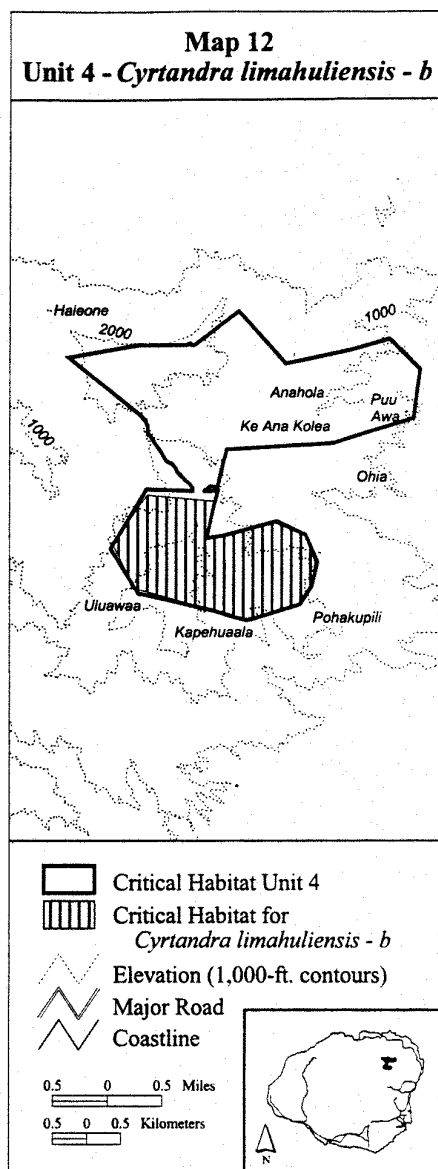
(B) Note: Map 11 follows:



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

(A) Unit consists of the following 14 boundary points: Start at 457088, 2445921; 456838, 2445992; 456525, 2446628; 457027, 2447344; 458020, 2447254; 457900, 2446720; 458214, 2446760; 458887, 2446950; 459348, 2446748; 459490, 2446382; 459454, 2446075; 459242, 2445757; 458486, 2445521; 457390, 2445835; return to starting point.

(B) Note: Map 12 follows:

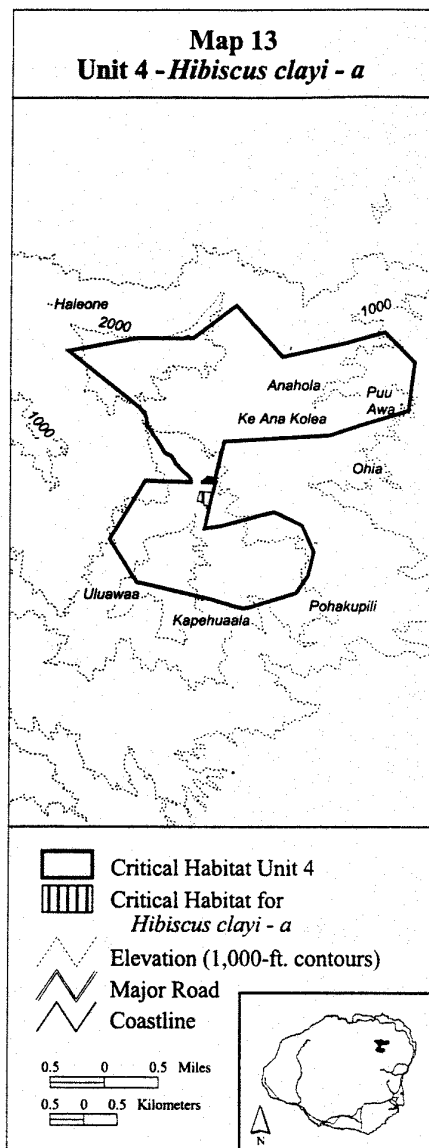


(xiii) Kauai 4—*Hibiscus clayi*—a (4 ha; 9 ac)

(A) Unit consists of the following 70 boundary points: Start at 457819, 2447272; 458020, 2447254; 457971, 2447038; 457967, 2447019; 457946, 2447009; 457942, 2447010; 457938, 2447011; 457936, 2447012; 457933, 2447015; 457932, 2447018; 457930, 2447025; 457932, 2447041; 457933, 2447055; 457933, 2447059; 457931, 2447065; 457930, 2447067; 457928, 2447067; 457921, 2447067; 457918, 2447067; 457917, 2447066; 457910, 2447062; 457908, 2447062; 457898, 2447060; 457896, 2447062; 457894, 2447065; 457893, 2447069; 457890, 2447077; 457888, 2447085; 457888, 2447086; 457887, 2447093; 457887, 2447095; 457884, 2447100; 457878, 2447105; 457871, 2447102; 457868, 2447102; 457858, 2447103; 457848, 2447108; 457844, 2447111; 457841,

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(B) Note: Map 13 follows:



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

(A) Unit consists of the following 421 boundary points: Start at 458269, 2446775; 458887, 2446950; 459348,

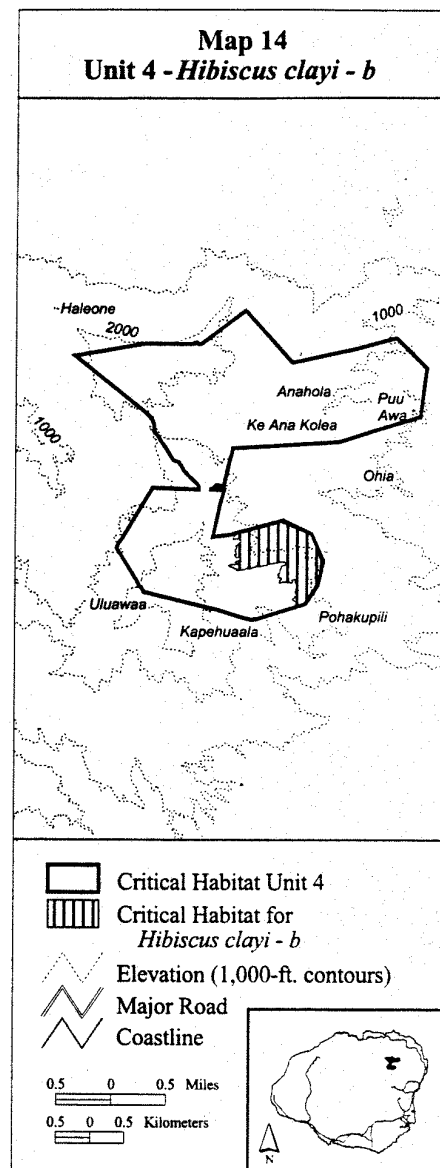
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2446395; 458308, 2446406; 458313,
2446411; 458315, 2446415; 458312,
2446419; 458308, 2446421; 458288,
2446427; 458278, 2446427; 458276,
2446427; 458269, 2446426; 458258,
2446425; 458258, 2446425; 458252,
2446429; 458248, 2446431; 458246,
2446433; 458244, 2446435; 458242,
2446439; 458239, 2446446; 458238,
2446447; 458235, 2446451; 458229,
2446455; 458226, 2446463; 458225,
2446465; 458228, 2446466; 458236,
2446468; 458243, 2446469; 458244,
2446469; 458248, 2446471; 458250,
2446473; 458250, 2446475; 458249,
2446486; 458246, 2446495; 458241,
2446505; 458240, 2446507; 458236,
2446513; 458234, 2446515; 458231,
2446525; 458233, 2446530; 458235,
2446535; 458238, 2446539; 458242,
2446541; 458245, 2446545; 458251,
2446553; 458252, 2446555; 458254,
2446559; 458257, 2446565; 458253,
2446575; 458250, 2446577; 458240,
2446585; 458243, 2446590; 458249,
2446595; 458255, 2446598; 458262,
2446602; 458268, 2446605; 458279,
2446615; 458288, 2446625; 458293,
2446630; 458298, 2446634; 458304,
2446639; 458311, 2446645; 458320,
2446655; 458321, 2446665; 458315,
2446672; 458312, 2446675; 458308,
2446677; 458302, 2446679; 458288,
2446682; 458286, 2446683; 458284,
2446685; 458282, 2446688; 458278,
2446693; 458277, 2446694; 458275,
2446695; 458268, 2446698; 458258,
2446697; 458248, 2446693; 458242,
2446691; 458238, 2446690; 458228,
2446690; 458224, 2446689; 458218,
2446687; 458212, 2446685; 458208,
2446684; 458207, 2446684; 458203,

2446685; 458200, 2446687; 458200,
2446688; 458201, 2446695; 458206,
2446707; 458208, 2446710; 458214,
2446719; 458228, 2446739; 458230,
2446741; 458247, 2446757; 458258,
2446772; return to starting point.

(B) Note: Map 14 follows:



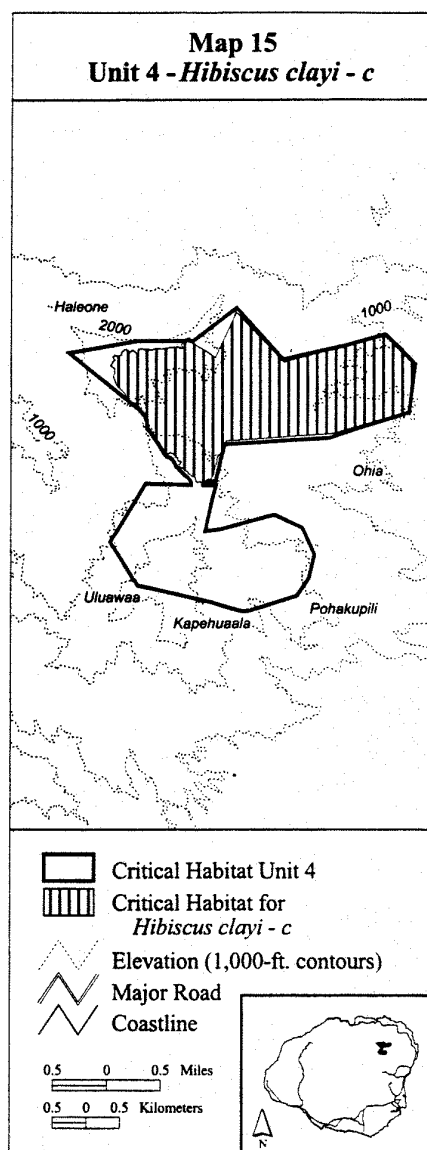
(xv) Kauai 4—*Hibiscus clayi*—c (590 ha; 1,458 ac)

(A) Unit consists of the following 192 boundary points: Start at 457668, 2449552; 457672, 2449547; 457689, 2449529; 457699, 2449522; 457714, 2449515; 457742, 2449506; 457770, 2449483; 457776, 2449475; 457788, 2449467; 457825, 2449449; 457846, 2449433; 457856, 2449429; 457917, 2449393; 457954, 2449369; 458004, 2449331; 458025, 2449313; 458037, 2449307; 458058, 2449301; 458141, 2449491; 458199, 2449615; 458316, 2449881; 458363, 2449984; 459083,

2449224; 460578, 2449637; 461026,
2449189; 460925, 2448495; 459811,
2448172; 458204, 2448065; 458165,
2447893; 458096, 2447851; 458085,
2447839; 458077, 2447822; 458073,
2447793; 458073, 2447739; 458057,
2447694; 458046, 2447671; 458033,
2447617; 458027, 2447575; 458026,
2447556; 458023, 2447548; 458009,
2447525; 457998, 2447517; 457979,
2447491; 457946, 2447469; 457927,
2447446; 457899, 2447424; 457864,
2447422; 457848, 2447449; 457822,
2447451; 457802, 2447444; 457771,
2447453; 457756, 2447462; 457757,
2447484; 457751, 2447506; 457752,
2447524; 457741, 2447534; 457689,
2447539; 457676, 2447562; 457651,
2447573; 457640, 2447603; 457586,
2447621; 457575, 2447659; 457553,
2447656; 457529, 2447667; 457502,
2447707; 457532, 2447722; 457544,
2447753; 457500, 2447771; 457492,
2447810; 457459, 2447812; 457439,
2447864; 457412, 2447879; 457371,
2447884; 457345, 2447859; 457332,
2447868; 457274, 2447898; 457234,
2447967; 457193, 2448027; 457148,
2448093; 457124, 2448122; 457112,
2448143; 457089, 2448187; 457076,
2448209; 457048, 2448243; 457032,
2448261; 457029, 2448269; 457028,
2448278; 457031, 2448299; 457032,
2448323; 457031, 2448342; 457028,
2448361; 457016, 2448395; 457005,
2448416; 457002, 2448438; 456998,
2448448; 456991, 2448459; 456973,
2448474; 456957, 2448488; 456943,
2448512; 456930, 2448544; 456916,
2448568; 456896, 2448595; 456883,
2448609; 456870, 2448619; 456856,
2448627; 456832, 2448632; 456801,
2448644; 456771, 2448662; 456748,
2448682; 456733, 2448698; 456713,
2448726; 456697, 2448759; 456679,
2448787; 456671, 2448799; 456652,
2448821; 456635, 2448836; 456615,
2448849; 456596, 2448859; 456583,
2448874; 456572, 2448891; 456563,
2448911; 456551, 2448951; 456541,
2448985; 456535, 2449004; 456530,
2449029; 456546, 2449060; 456540,
2449095; 456553, 2449134; 456490,
2449179; 456513, 2449208; 456520,
2449240; 456555, 2449262; 456524,
2449303; 456546, 2449327; 456600,
2449316; 456652, 2449333; 456652,
2449376; 456672, 2449396; 456706,
2449417; 456733, 2449409; 456778,
2449374; 456817, 2449409; 456862,
2449378; 456880, 2449352; 456895,
2449372; 456897, 2449409; 456924,
2449429; 456941, 2449429; 456969,
2449426; 456991, 2449421; 457000,
2449421; 457034, 2449425; 457042,
2449425; 457049, 2449422; 457064,
2449414; 457073, 2449409; 457083,
2449408; 457097, 2449407; 457107,

2449413; 457123, 2449423; 457132,
2449429; 457141, 2449431; 457168,
2449428; 457205, 2449431; 457229,
2449432; 457255, 2449429; 457276,
2449429; 457289, 2449431; 457300,
2449437; 457307, 2449440; 457314,
2449440; 457325, 2449437; 457352,
2449440; 457363, 2449443; 457395,
2449451; 457417, 2449451; 457492,
2449461; 457518, 2449446; 457527,
2449437; 457542, 2449435; 457550,
2449428; 457557, 2449434; 457555,
2449453; 457546, 2449470; 457543,
2449490; 457547, 2449505; 457592,
2449538; 457610, 2449548; 457619,
2449546; 457638, 2449550; 457649,
2449548; 457660, 2449547; return to
starting point.

(B) Note: Map 15 follows:



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

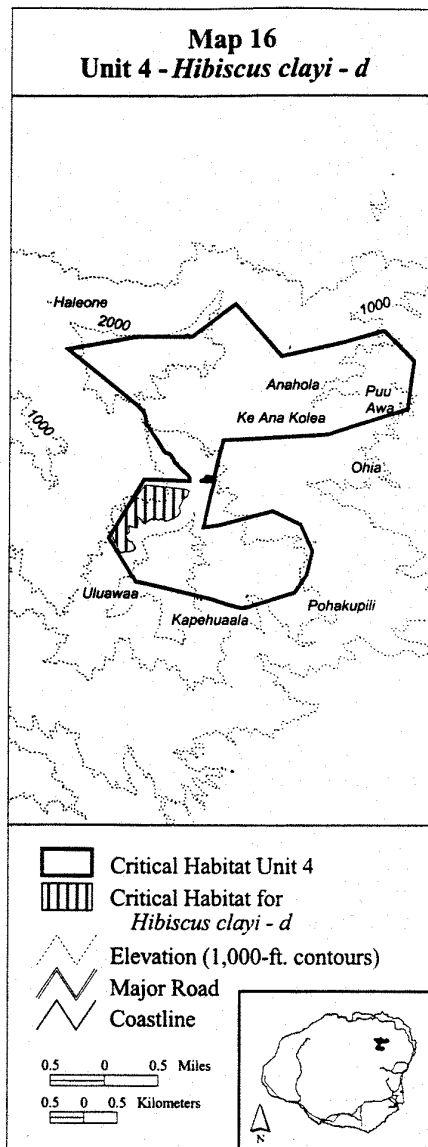
(A) Unit consists of the following 283 boundary points: Start at 457027,

2447344; 457644, 2447288; 457645,
2447282; 457658, 2447272; 457670,
2447265; 457675, 2447261; 457678,
2447259; 457680, 2447257; 457682,
2447255; 457680, 2447245; 457678,
2447241; 457676, 2447237; 457674,
2447235; 457669, 2447225; 457666,
2447215; 457663, 2447205; 457662,
2447195; 457661, 2447192; 457657,
2447185; 457651, 2447175; 457650,
2447173; 457648, 2447172; 457644,
2447169; 457638, 2447166; 457637,
2447166; 457631, 2447162; 457628,
2447160; 457625, 2447158; 457621,
2447152; 457618, 2447148; 457608,
2447139; 457605, 2447138; 457602,
2447135; 457600, 2447133; 457595,
2447128; 457591, 2447122; 457586,
2447115; 457584, 2447109; 457584,
2447105; 457582, 2447095; 457577,
2447086; 457576, 2447085; 457573,
2447075; 457571, 2447072; 457568,
2447068; 457564, 2447065; 457561,
2447062; 457556, 2447057; 457555,
2447055; 457552, 2447051; 457541,
2447032; 457537, 2447025; 457536,
2447017; 457536, 2447015; 457536,
2447012; 457537, 2447005; 457541,
2446995; 457545, 2446985; 457546,
2446983; 457557, 2446955; 457560,
2446945; 457558, 2446941; 457556,
2446937; 457551, 2446932; 457545,
2446928; 457540, 2446924; 457535,
2446919; 457531, 2446913; 457527,
2446906; 457524, 2446899; 457523,
2446895; 457522, 2446892; 457518,
2446887; 457517, 2446885; 457512,
2446881; 457508, 2446880; 457504,
2446879; 457497, 2446877; 457489,
2446874; 457483, 2446871; 457478,
2446868; 457471, 2446863; 457465,
2446858; 457458, 2446852; 457452,
2446845; 457448, 2446842; 457438,
2446838; 457428, 2446838; 457418,
2446837; 457408, 2446834; 457403,
2446831; 457398, 2446828; 457391,
2446823; 457385, 2446818; 457381,
2446815; 457379, 2446814; 457378,
2446814; 457371, 2446812; 457358,
2446810; 457354, 2446809; 457347,
2446807; 457344, 2446805; 457338,
2446803; 457336, 2446803; 457328,
2446805; 457327, 2446805; 457322,
2446809; 457319, 2446815; 457318,
2446825; 457308, 2446825; 457302,
2446828; 457298, 2446830; 457268,
2446834; 457258, 2446833; 457248,
2446831; 457244, 2446829; 457236,
2446825; 457228, 2446822; 457225,
2446822; 457218, 2446821; 457216,
2446823; 457213, 2446825; 457211,
2446828; 457208, 2446831; 457206,
2446833; 457200, 2446837; 457198,
2446838; 457191, 2446838; 457188,
2446838; 457168, 2446832; 457158,
2446831; 457155, 2446832; 457148,
2446834; 457138, 2446839; 457128,
2446839; 457118, 2446836; 457108,

2446831; 457088, 2446819; 457078,
2446813; 457068, 2446807; 457057,
2446796; 457044, 2446780; 457041,
2446775; 457038, 2446772; 457035,
2446769; 457028, 2446765; 457018,
2446765; 457013, 2446770; 457008,
2446774; 457007, 2446775; 457003,
2446780; 456994, 2446791; 456990,
2446797; 456982, 2446809; 456978,
2446816; 456968, 2446830; 456958,
2446844; 456950, 2446855; 456940,
2446867; 456938, 2446868; 456928,
2446872; 456918, 2446869; 456916,
2446867; 456914, 2446865; 456912,
2446861; 456911, 2446855; 456912,
2446845; 456914, 2446835; 456917,
2446825; 456919, 2446816; 456921,
2446808; 456924, 2446795; 456923,
2446785; 456920, 2446775; 456920,
2446774; 456920, 2446765; 456921,
2446758; 456921, 2446753; 456921,
2446745; 456920, 2446743; 456917,
2446725; 456916, 2446718; 456915,
2446715; 456912, 2446712; 456908,
2446710; 456898, 2446708; 456888,
2446707; 456882, 2446709; 456878,
2446710; 456868, 2446715; 456858,
2446720; 456854, 2446721; 456839,
2446726; 456823, 2446730; 456808,
2446732; 456800, 2446734; 456789,
2446735; 456788, 2446734; 456786,
2446728; 456785, 2446719; 456785,
2446706; 456786, 2446696; 456788,
2446686; 456791, 2446678; 456793,
2446676; 456794, 2446672; 456797,
2446664; 456798, 2446656; 456797,
2446647; 456797, 2446646; 456793,
2446641; 456777, 2446627; 456775,
2446626; 456771, 2446623; 456765,
2446619; 456758, 2446616; 456748,
2446610; 456746, 2446608; 456743,
2446606; 456736, 2446596; 456742,
2446586; 456748, 2446581; 456751,
2446579; 456753, 2446576; 456756,
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2446546; 456768, 2446536; 456769,
2446527; 456770, 2446526; 456775,
2446522; 456778, 2446521; 456788,
2446518; 456791, 2446516; 456795,
2446512; 456798, 2446509; 456801,
2446508; 456808, 2446505; 456816,
2446504; 456838, 2446501; 456842,
2446499; 456844, 2446496; 456844,
2446486; 456843, 2446476; 456845,
2446472; 456850, 2446467; 456856,
2446463; 456863, 2446460; 456869,
2446456; 456870, 2446456; 456881,
2446439; 456882, 2446436; 456883,
2446426; 456882, 2446416; 456883,
2446406; 456883, 2446401; 456882,
2446396; 456881, 2446394; 456878,
2446392; 456852, 2446372; 456848,
2446370; 456845, 2446369; 456830,
2446364; 456822, 2446362; 456808,
2446358; 456788, 2446354; 456778,
2446355; 456768, 2446358; 456758,
2446360; 456748, 2446361; 456738,
2446360; 456728, 2446357; 456727,

2446356; 456716, 2446348; 456709,
2446345; 456708, 2446345; 456700,
2446344; 456698, 2446344; 456688,
2446342; 456678, 2446340; 456675,
2446339; 456668, 2446337; 456525,
2446628; return to starting point.

(B) Note: Map 16 follows:



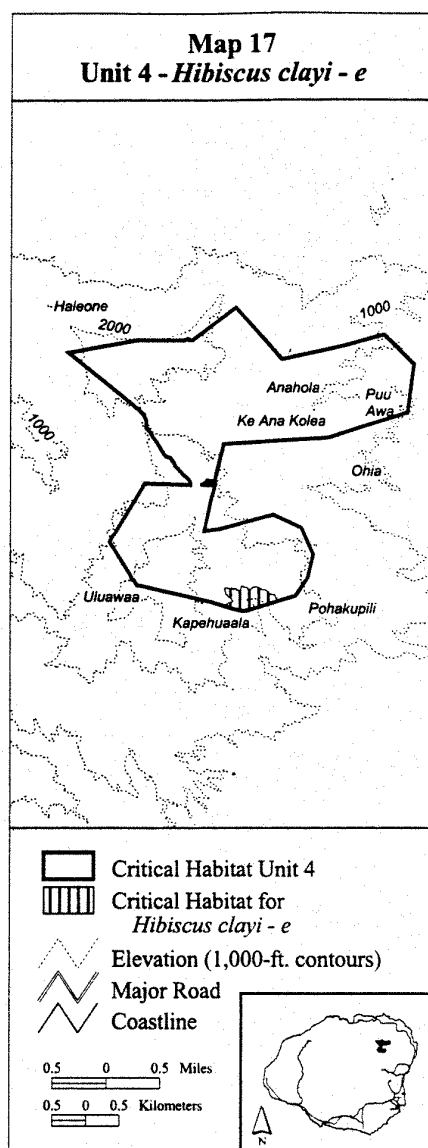
(xvii) Kauai 4—*Hibiscus clayi*—e (19 ha; 47 ac)

(A) Unit consists of the following 225 boundary points: Start at 459000, 2445681; 458500, 2445525; 458499, 2445526; 458498, 2445527; 458493, 2445530; 458488, 2445532; 458485, 2445533; 458478, 2445534; 458469, 2445547; 458468, 2445547; 458463, 2445550; 458458, 2445552; 458448, 2445549; 458440, 2445544; 458428, 2445540; 458422, 2445539; 458288, 2445578; 458285, 2445582; 458281, 2445586; 458273, 2445590; 458268, 2445593; 458266, 2445596; 458263, 2445601; 458259, 2445606; 458254,

2445611; 458248, 2445616; 458248, 2445616; 458244, 2445622; 458244, 2445626; 458248, 2445632; 458258, 2445645; 458259, 2445646; 458265, 2445649; 458268, 2445650; 458278, 2445651; 458283, 2445651; 458291, 2445653; 458306, 2445656; 458323, 2445661; 458328, 2445663; 458332, 2445666; 458333, 2445671; 458334, 2445676; 458328, 2445683; 458326, 2445686; 458318, 2445691; 458316, 2445693; 458312, 2445696; 458311, 2445698; 458307, 2445704; 458288, 2445726; 458283, 2445731; 458274, 2445736; 458271, 2445738; 458268, 2445740; 458265, 2445743; 458263, 2445746; 458261, 2445748; 458257, 2445754; 458255, 2445756; 458251, 2445758; 458248, 2445760; 458244, 2445766; 458242, 2445770; 458234, 2445782; 458230, 2445786; 458229, 2445787; 458228, 2445788; 458226, 2445793; 458225, 2445796; 458224, 2445806; 458222, 2445816; 458217, 2445836; 458212, 2445849; 458207, 2445855; 458207, 2445856; 458207, 2445857; 458211, 2445863; 458215, 2445866; 458217, 2445867; 458228, 2445872; 458232, 2445872; 458235, 2445872; 458245, 2445872; 458248, 2445872; 458253, 2445870; 458261, 2445866; 458266, 2445863; 458268, 2445862; 458278, 2445859; 458292, 2445862; 458302, 2445866; 458307, 2445867; 458311, 2445869; 458318, 2445870; 458327, 2445866; 458328, 2445865; 458332, 2445860; 458336, 2445854; 458338, 2445852; 458348, 2445850; 458351, 2445853; 458356, 2445858; 458358, 2445861; 458368, 2445866; 458375, 2445862; 458378, 2445860; 458388, 2445849; 458392, 2445846; 458398, 2445841; 458408, 2445836; 458418, 2445833; 458428, 2445833; 458431, 2445833; 458439, 2445835; 458446, 2445834; 458448, 2445841; 458450, 2445848; 458452, 2445852; 458454, 2445866; 458455, 2445876; 458457, 2445885; 458457, 2445887; 458458, 2445890; 458462, 2445892; 458468, 2445893; 458478, 2445892; 458482, 2445892; 458486, 2445893; 458488, 2445893; 458495, 2445892; 458498, 2445891; 458516, 2445883; 458523, 2445880; 458528, 2445876; 458536, 2445873; 458538, 2445872; 458548, 2445871; 458551, 2445868; 458552, 2445865; 458555, 2445862; 458558, 2445859; 458565, 2445855; 458567, 2445854; 458568, 2445854; 458578, 2445853; 458588, 2445849; 458598, 2445849; 458603, 2445851; 458608, 2445853; 458610, 2445855; 458618, 2445865; 458623, 2445871; 458625, 2445875; 458628, 2445879; 458632, 2445882; 458638, 2445885; 458647, 2445884; 458658, 2445884; 458663, 2445885; 458667,

2445886; 458688, 2445888; 458691, 2445888; 458698, 2445885; 458704, 2445881; 458708, 2445877; 458709, 2445876; 458718, 2445873; 458724, 2445871; 458728, 2445870; 458731, 2445868; 458735, 2445865; 458738, 2445863; 458743, 2445860; 458751, 2445858; 458758, 2445856; 458759, 2445855; 458768, 2445849; 458771, 2445848; 458778, 2445845; 458788, 2445844; 458798, 2445844; 458808, 2445842; 458818, 2445840; 458821, 2445838; 458825, 2445835; 458826, 2445834; 458828, 2445832; 458833, 2445830; 458840, 2445827; 458843, 2445825; 458858, 2445819; 458861, 2445818; 458864, 2445815; 458866, 2445813; 458870, 2445807; 458874, 2445801; 458878, 2445795; 458884, 2445791; 458891, 2445788; 458898, 2445786; 458900, 2445785; 458908, 2445781; 458915, 2445775; 458918, 2445773; 458928, 2445770; 458938, 2445770; 458948, 2445773; 458955, 2445772; 458958, 2445772; 458962, 2445769; 458963, 2445765; 458963, 2445755; 458964, 2445745; 458967, 2445735; 458971, 2445728; 458973, 2445725; 458975, 2445722; 458980, 2445717; 458983, 2445715; 458985, 2445712; 458988, 2445708; 458989, 2445706; 458992, 2445695; 458997, 2445685; return to starting point.

(B) Note: Map 17 follows:

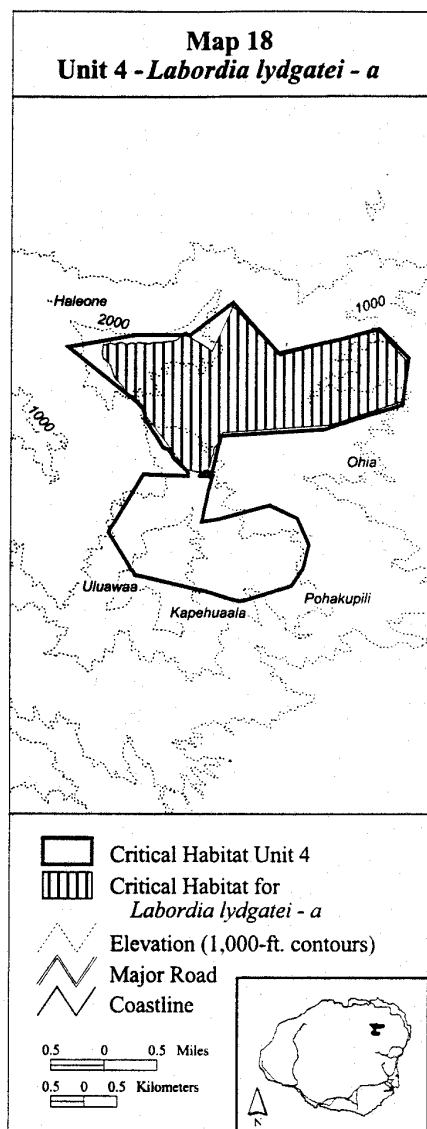


(xviii) Kauai 4—*Labordia lydgatei*—a (588 ha; 1,453 ac)

(A) Unit consists of the following 170 boundary points: Start at 457589, 2449536; 457687, 2449531; 457689, 2449529; 457699, 2449522; 457714, 2449515; 457742, 2449506; 457770, 2449483; 457776, 2449475; 457788, 2449467; 457825, 2449449; 457846, 2449433; 457856, 2449429; 457917, 2449393; 457954, 2449369; 458004, 2449331; 458025, 2449313; 458037, 2449307; 458058, 2449301; 458141, 2449491; 458199, 2449615; 458316, 2449881; 458363, 2449983; 458397, 2449949; 459083, 2449224; 460011, 2449480; 460567, 2449609; 461011, 2449133; 460921, 2448534; 459969, 2448218; 459811, 2448172; 458204, 2448065; 458165, 2447893; 458096, 2447851; 458085, 2447839; 458077, 2447822; 458073, 2447793; 458073, 2447739; 458057, 2447694; 458046, 2447671; 458033, 2447617; 458027,

2447575; 458026, 2447556; 458023, 2447548; 458009, 2447525; 457998, 2447517; 457979, 2447491; 457946, 2447469; 457930, 2447450; 457669, 2447502; 457031, 2448340; 457031, 2448342; 457028, 2448361; 457016, 2448395; 457005, 2448416; 457002, 2448438; 456998, 2448448; 456991, 2448459; 456973, 2448474; 456957, 2448488; 456943, 2448512; 456930, 2448544; 456916, 2448568; 456896, 2448595; 456883, 2448609; 456870, 2448619; 456856, 2448627; 456832, 2448632; 456801, 2448644; 456771, 2448662; 456748, 2448682; 456733, 2448698; 456713, 2448726; 456697, 2448759; 456679, 2448787; 456671, 2448799; 456652, 2448821; 456635, 2448836; 456615, 2448849; 456596, 2448859; 456583, 2448874; 456572, 2448891; 456563, 2448911; 456551, 2448951; 456541, 2448985; 456535, 2449004; 456530, 2449029; 456526, 2449045; 456516, 2449067; 456504, 2449086; 456491, 2449106; 456476, 2449128; 456462, 2449139; 456446, 2449150; 456435, 2449153; 456419, 2449170; 456404, 2449186; 456395, 2449205; 456387, 2449236; 456386, 2449264; 456390, 2449313; 456395, 2449355; 456394, 2449367; 456394, 2449381; 456397, 2449394; 456401, 2449399; 456407, 2449399; 456420, 2449397; 456439, 2449398; 456457, 2449404; 456483, 2449414; 456501, 2449416; 456513, 2449416; 456533, 2449412; 456569, 2449406; 456586, 2449405; 456603, 2449410; 456620, 2449418; 456633, 2449423; 456647, 2449426; 456662, 2449428; 456681, 2449425; 456706, 2449417; 456733, 2449409; 456752, 2449403; 456769, 2449404; 456787, 2449409; 456807, 2449421; 456818, 2449430; 456826, 2449432; 456836, 2449428; 456852, 2449419; 456862, 2449411; 456869, 2449407; 456878, 2449407; 456889, 2449412; 456910, 2449422; 456924, 2449429; 456941, 2449429; 456969, 2449426; 456991, 2449421; 457000, 2449421; 457034, 2449425; 457042, 2449425; 457049, 2449422; 457064, 2449414; 457073, 2449409; 457083, 2449408; 457097, 2449407; 457107, 2449413; 457123, 2449423; 457132, 2449429; 457141, 2449431; 457168, 2449428; 457205, 2449431; 457229, 2449432; 457255, 2449429; 457276, 2449429; 457289, 2449431; 457300, 2449437; 457307, 2449440; 457314, 2449440; 457325, 2449437; 457352, 2449440; 457363, 2449443; 457395, 2449451; 457417, 2449451; 457492, 2449461; 457515, 2449471; 457522, 2449475; 457547, 2449505; return to starting point.

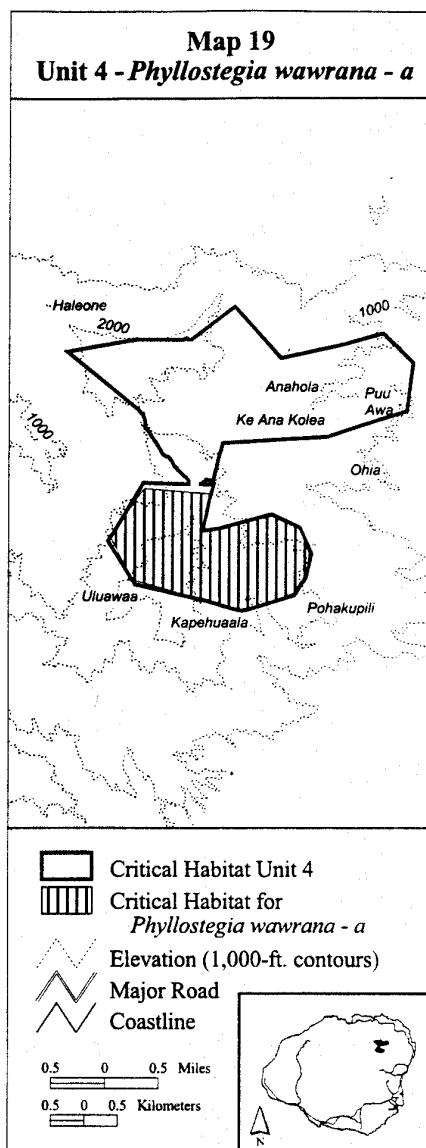
(B) Note: Map 18 follows:



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

(A) Unit consists of the following 25 boundary points: Start at 457390, 2445835; 457088, 2445921; 456838, 2445992; 456709, 2446255; 456732, 2446269; 456702, 2446268; 456529, 2446620; 456709, 2446891; 457027, 2447344; 458020, 2447262; 457940, 2447000; 457957, 2446974; 457900, 2446720; 458214, 2446760; 458463, 2446830; 458936, 2446928; 459341, 2446751; 459365, 2446704; 459490, 2446382; 459454, 2446075; 459260, 2445784; 458941, 2445663; 458510, 2445529; 458255, 2445590; 458262, 2445585; return to starting point.

(B) Note: Map 19 follows:

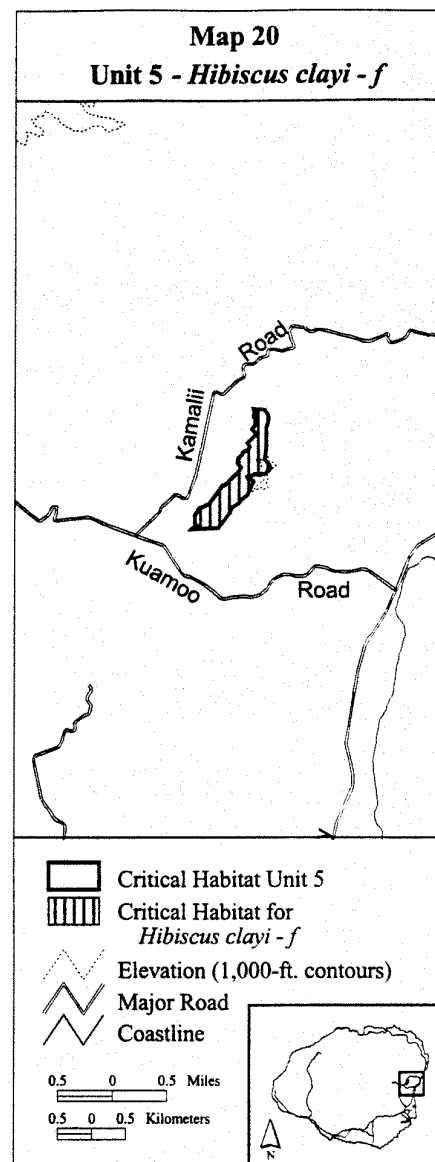


(xx) Kauai 5—*Hibiscus clayi*—f (60 ha; 148 ac)

(A) Unit consists of the following 52 boundary points: Start at 462370, 2438990; 462438, 2439048; 462412, 2439074; 462412, 2439188; 462475, 2439287; 462548, 2439318; 462631, 2439365; 462709, 2439469; 462819, 2439625; 462845, 2439625; 463011, 2439781; 463043, 2439818; 463084, 2439885; 463074, 2439911; 463037, 2439953; 463048, 2440021; 463079, 2440042; 463121, 2440109; 463162, 2440140; 463194, 2440140; 463214, 2440192; 463183, 2440245; 463313, 2440375; 463246, 2440448; 463287, 2440505; 463298, 2440609; 463256, 2440635; 463287, 2440671; 463272, 2440744; 463433, 2440739; 463496, 2440650; 463491, 2440588; 463465, 2440479; 463459, 2440333; 463465, 2440187; 463438, 2440000; 463511, 2439916; 463517, 2439870; 463449, 2439802; 463360, 2439771; 463287,

2439792; 463256, 2439766; 463183, 2439745; 463194, 2439724; 463246, 2439703; 463272, 2439677; 463183, 2439474; 463126, 2439438; 463063, 2439365; 462954, 2439297; 462938, 2439230; 462756, 2439001; return to starting point.

(B) Note: Map 20 follows:

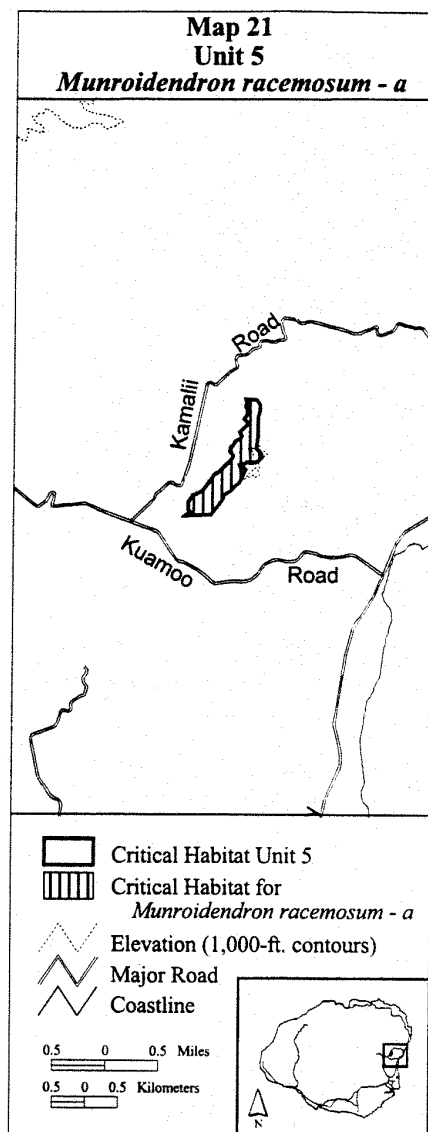


(xxi) Kauai 5—*Munroidendron racemosum*—a (60 ha; 148 ac)

(A) Unit consists of the following 52 boundary points: Start at 462370, 2438990; 462438, 2439048; 462412, 2439074; 462412, 2439188; 462475, 2439287; 462548, 2439318; 462631, 2439365; 462709, 2439469; 462819, 2439625; 462845, 2439625; 463011, 2439781; 463043, 2439818; 463084, 2439885; 463074, 2439911; 463037, 2439953; 463048, 2440021; 463079, 2440042; 463121, 2440109; 463162, 2440140; 463194, 2440140; 463214,

2440192; 463183, 2440245; 463313, 2440375; 463246, 2440448; 463287, 2440505; 463298, 2440609; 463256, 2440635; 463287, 2440671; 463272, 2440744; 463433, 2440739; 463496, 2440650; 463491, 2440588; 463465, 2440479; 463459, 2440333; 463465, 2440187; 463438, 2440000; 463511, 2439916; 463517, 2439870; 463449, 2439802; 463360, 2439771; 463287, 2439792; 463256, 2439766; 463183, 2439745; 463194, 2439724; 463246, 2439703; 463272, 2439677; 463183, 2439474; 463126, 2439438; 463063, 2439365; 462954, 2439297; 462938, 2439230; 462756, 2439001; return to starting point.

(B) Note: Map 21 follows:

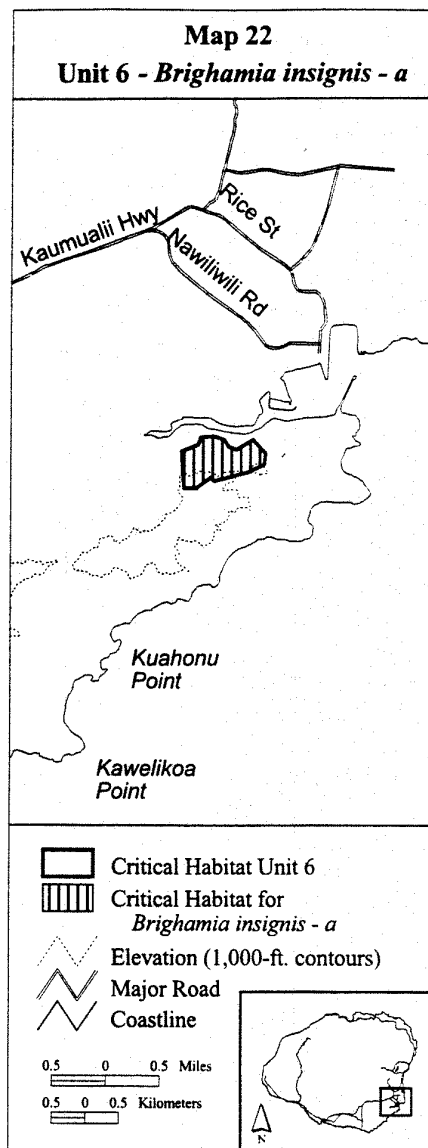


(xxii) Kauai 6—*Brighamia insignis*—a (63 ha; 156 ac)

(A) Unit consists of the following 22 boundary points: Start at 462682, 2426559; 462657, 2426391; 462532, 2426329; 462422, 2426274; 462417,

2426272; 462234, 2426225; 462055, 2426178; 461911, 2426141; 461862, 2426197; 461719, 2426089; 461655, 2426041; 461649, 2426036; 461464, 2426045; 461448, 2426165; 461433, 2426586; 461678, 2426687; 461714, 2426795; 461907, 2426808; 462068, 2426762; 462130, 2426658; 462247, 2426612; 462487, 2426760; return to starting point.

(B) Note: Map 22 follows:

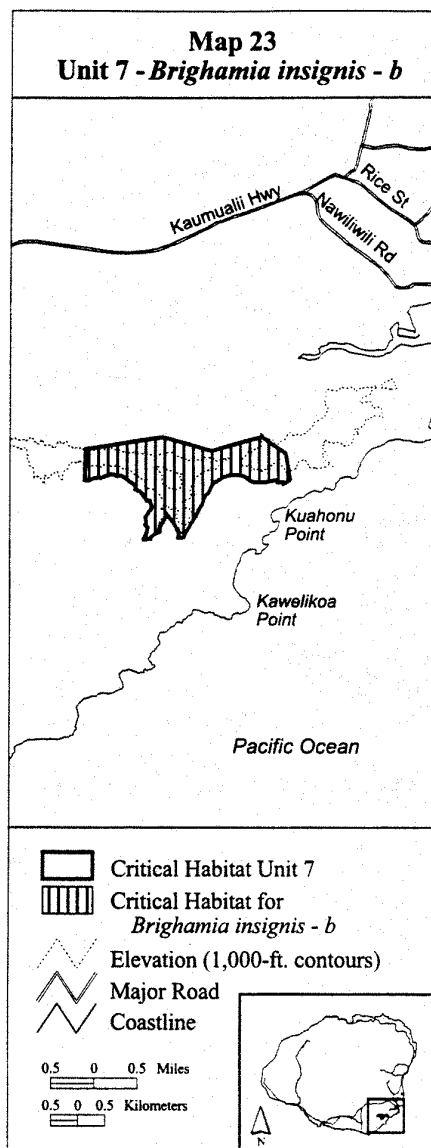


(xxiii) Kauai 7—*Brighamia insignis*—b (341 ha; 842 ac)

(A) Unit consists of the following 118 boundary points: Start at 458142, 2423455; 458117, 2423452; 458106, 2423450; 458074, 2423446; 458031, 2423441; 458022, 2423439; 458014, 2423466; 458021, 2423472; 458036, 2423485; 458058, 2423560; 458086, 2423655; 458073, 2423681; 458043, 2423708; 458049, 2423751; 458049, 2423808; 458039, 2423854; 458066,

2423887; 458092, 2423928; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457321, 2424612; 457298, 2424612; 457252, 2424591; 457238, 2424585; 457218, 2424576; 457204, 2424580; 457203, 2424580; 457195, 2424582; 457148, 2424589; 457099, 2424582; 457036, 2424556; 457019, 2424549; 457006, 2424540; 456924, 2424561; 456949, 2425099; 458411, 2425339; 458609, 2425269; 459268, 2425094; 459490, 2425148; 460208, 2425361; 460651, 2425063; 460662, 2424997; 460736, 2424562; 460732, 2424559; 460721, 2424548; 460705, 2424534; 460688, 2424518; 460619, 2424484; 460594, 2424517; 460594, 2424517; 460495, 2424517; 460475, 2424550; 460373, 2424536; 460281, 2424513; 460170, 2424523; 460066, 2424516; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458986, 2423894; 458939, 2423815; 458891, 2423732; 458854, 2423668; 458826, 2423618; 458786, 2423542; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; return to starting point.

(B) Note: Map 23 follows:

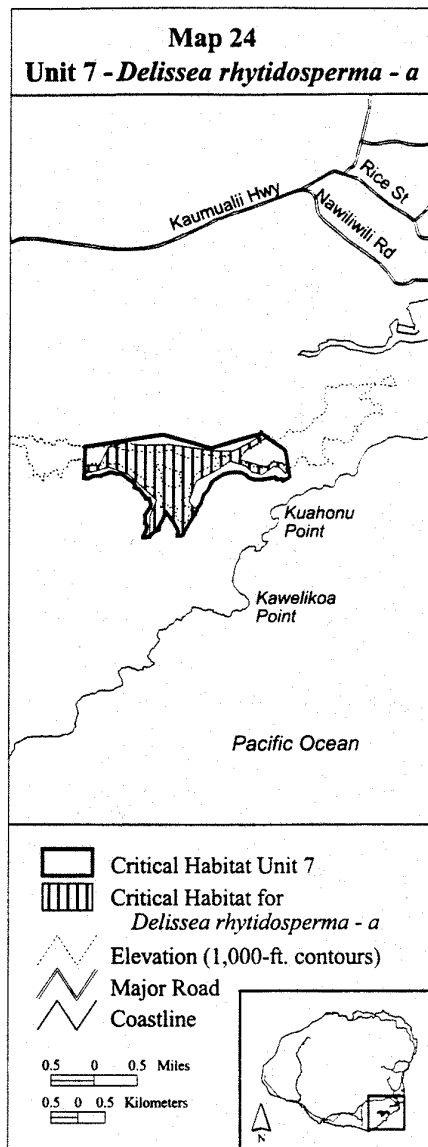


(xxiv) Kauai 7—*Delissea rhytidosperra*—a (221 ha; 545 ac)

(A) Unit consists of the following 53 boundary points: Start at 457776, 2425183; 457996, 2425162; 458503, 2425167; 459357, 2425044; 459695, 2425039; 459982, 2425193; 460156, 2425290; 460184, 2425357; 460210, 2425363; 460315, 2425300; 460202, 2425218; 460110, 2425157; 459890, 2425029; 459823, 2424886; 460294, 2424732; 460443, 2424844; 460683, 2424773; 460693, 2424691; 460663, 2424614; 460555, 2424732; 460443, 2424757; 460228, 2424599; 460038, 2424650; 459920, 2424768; 459634, 2424845; 459393, 2424691; 459009, 2424491; 458866, 2424113; 458958, 2423990; 459032, 2423977; 458955, 2423865; 458897, 2423775; 458840, 2423683; 458785, 2423540; 458756, 2423487; 458737, 2423478; 458661, 2423469; 458671, 2423560; 458523, 2423816; 458446, 2423913; 458293,

2423606; 458134, 2423468; 458139, 2423836; 458267, 2424138; 457955, 2424420; 457735, 2424620; 457371, 2424748; 457156, 2424676; 456952, 2424640; 456931, 2424789; 457197, 2424778; 457361, 2425116; 457765, 2425229; return to starting point.

(B) Note: Map 24 follows:

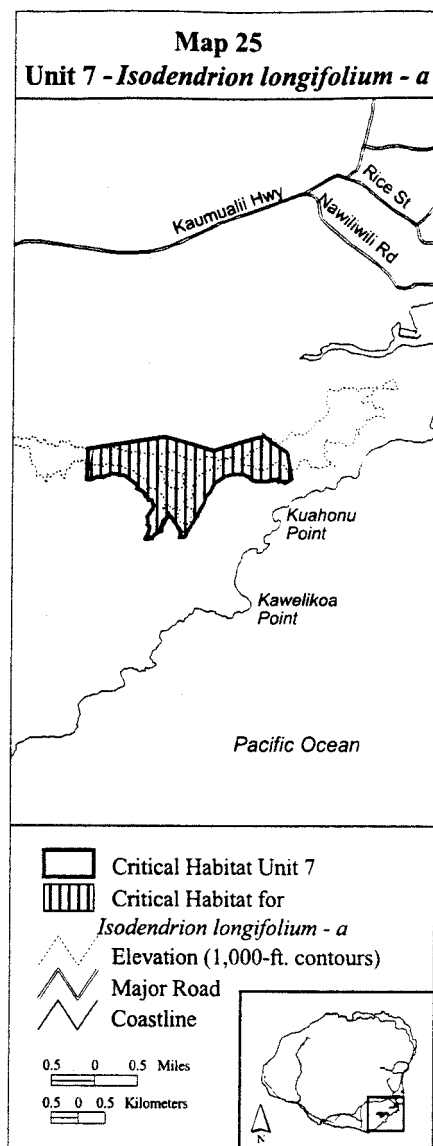


(xxv) Kauai 7—*Isodendron longifolium*—a (337 ha; 833 ac)

(A) Unit consists of the following 127 boundary points: Start at 456913, 2424541; 457040, 2425134; 457651, 2425234; 458371, 2425346; 459277, 2425049; 460211, 2425364; 460651, 2425063; 460662, 2424997; 460736, 2424562; 460732, 2424559; 460721, 2424548; 460705, 2424534; 460602, 2424507; 460593, 2424514; 460496, 2424516; 460475, 2424550; 460373, 2424536; 460281, 2424513; 460213, 2424515; 460213, 2424515; 460213, 2424515; 460209, 2424517; 460185,

2424518; 460184, 2424516; 460184, 2424516; 460184, 2424516; 460169, 2424516; 460068, 2424515; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458982, 2423888; 458939, 2423815; 458890, 2423741; 458869, 2423724; 458842, 2423663; 458811, 2423619; 458777, 2423544; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; 458142, 2423455; 458117, 2423452; 458106, 2423450; 458058, 2423560; 458086, 2423655; 458073, 2423681; 458043, 2423708; 458049, 2423751; 458049, 2423808; 458039, 2423854; 458066, 2423887; 458092, 2423928; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457321, 2424612; 457298, 2424612; 457252, 2424591; 457238, 2424585; 457218, 2424576; 457204, 2424580; 457203, 2424580; 457195, 2424582; 457148, 2424589; 457099, 2424582; 457036, 2424556; 457019, 2424549; 456995, 2424533; 456994, 2424532; 456986, 2424527; 456979, 2424529; 456977, 2424529; 456926, 2424539; 456919, 2424552; 456919, 2424552; 456919, 2424552; 456917, 2424541; return to starting point.

(B) Note: Map 25 follows:

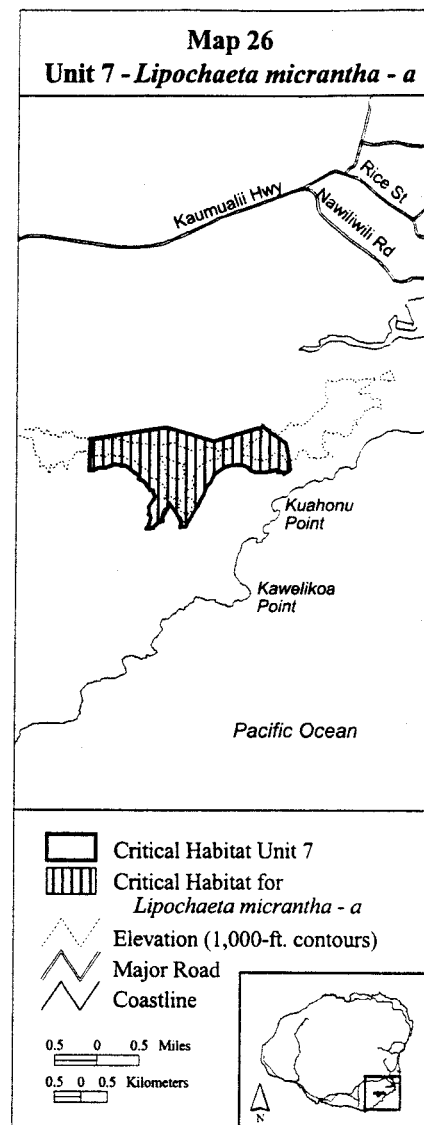


(xxvi) Kauai 7—*Lipochaeta micrantha*—a (341 ha; 842 ac)

(A) Unit consists of the following 125 boundary points: Start at 456916, 2424553; 456952, 2425094; 458386, 2425333; 459277, 2425098; 459948, 2425284; 460206, 2425358; 460327, 2425282; 460590, 2425104; 460617, 2425086; 460649, 2425064; 460662, 2424997; 460736, 2424562; 460732, 2424559; 460721, 2424548; 460705, 2424534; 460688, 2424518; 460619, 2424484; 460594, 2424518; 460497, 2424515; 460475, 2424550; 460373, 2424536; 460281, 2424513; 460213, 2424515; 460209, 2424517; 460185, 2424518; 460184, 2424516; 460178, 2424516; 460073, 2424516; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085,

2424072; 459037, 2423991; 458985, 2423890; 458939, 2423815; 458892, 2423732; 458852, 2423677; 458849, 2423670; 458825, 2423622; 458784, 2423557; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; 458142, 2423455; 458117, 2423452; 458106, 2423450; 458074, 2423446; 458031, 2423441; 458021, 2423472; 458036, 2423485; 458058, 2423560; 458086, 2423655; 458073, 2423681; 458043, 2423708; 458049, 2423751; 458049, 2423808; 458039, 2423854; 458066, 2423887; 458092, 2423928; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457321, 2424612; 457298, 2424612; 457252, 2424591; 457238, 2424585; 457218, 2424576; 457204, 2424580; 457203, 2424580; 457195, 2424582; 457148, 2424589; 457099, 2424582; 457036, 2424556; 457019, 2424549; 456995, 2424533; 456919, 2424552; 456919, 2424552; return to starting point.

(B) **Note:** Map 26 follows:

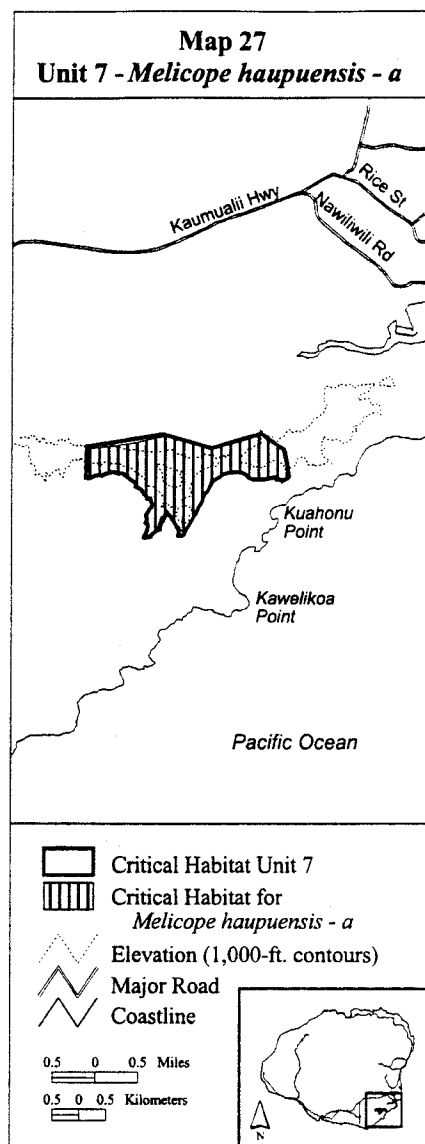


(xxvii) Kauai 7—*Melicope haupuensis*—a (330 ha; 816 ac)

(A) Unit consists of the following 115 boundary points: Start at 456977, 2424529; 456957, 2425070; 457830, 2425189; 458432, 2425322; 458875, 2425201; 459283, 2425089; 459699, 2425210; 459897, 2425266; 460048, 2425310; 460143, 2425340; 460188, 2425357; 460207, 2425364; 460327, 2425282; 460590, 2425104; 460615, 2425036; 460721, 2424548; 460705, 2424534; 460688, 2424518; 460617, 2424483; 460594, 2424517; 460497, 2424515; 460475, 2424550; 460373, 2424536; 460284, 2424515; 460212, 2424516; 460209, 2424517; 460185, 2424518; 460184, 2424516; 460179, 2424516; 460114, 2424515; 460051, 2424519; 460009, 2424534; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134,

2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458972, 2423889; 458939, 2423815; 458892, 2423732; 458845, 2423670; 458816, 2423623; 458792, 2423564; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199, 2423551; 458142, 2423478; 458142, 2423455; 458117, 2423452; 458106, 2423450; 458074, 2423446; 458042, 2423453; 458091, 2423660; 458086, 2423872; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457321, 2424612; 457298, 2424612; 457252, 2424591; 457203, 2424580; 457195, 2424582; 457148, 2424589; 457099, 2424582; 457036, 2424556; 457019, 2424549; 456995, 2424533; 456994, 2424532; 456979, 2424529; return to starting point.

(B) Note: Map 27 follows:

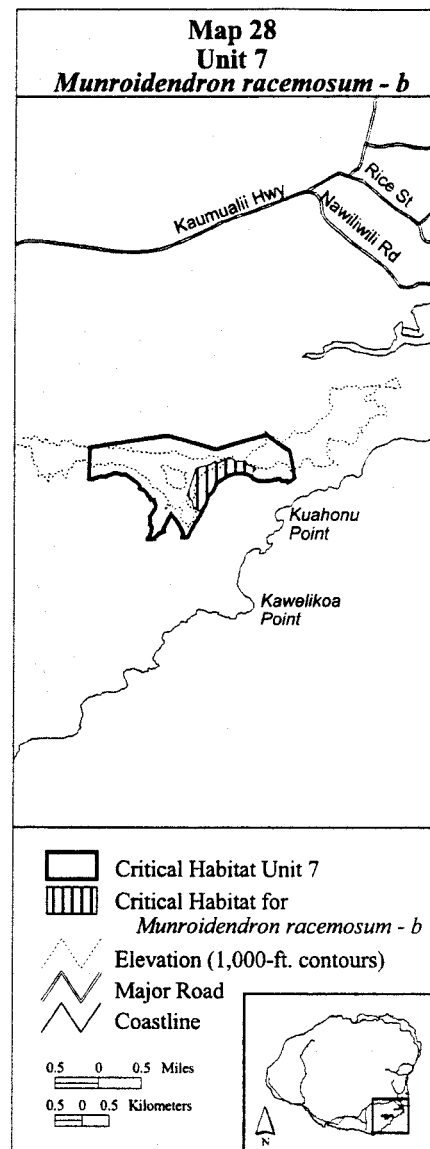


(xxviii) Kauai 7—*Munroidendron racemosum*—b (50 ha; 123 ac)

(A) Unit consists of the following 42 boundary points: Start at 460171, 2424516; 460070, 2424515; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 459025, 2423961; 458943, 2423966; 458866, 2424034; 458846, 2424063; 458831, 2424156; 458744, 2424248; 458909, 2424734; 459045, 2424788; 459167, 2424803; 459201, 2424827; 459259, 2424875; 459327, 2424841; 459405, 2424890; 459507, 2424919; 459585, 2424919; 459643, 2424880; 459721, 2424875; 459838, 2424870; 459882, 2424802; 459964, 2424778; 460013, 2424759; 460023, 2424725; 459959, 2424666; 459964, 2424593; 460081,

2424530; 460149, 2424530; return to starting point.

(B) Note: Map 28 follows:

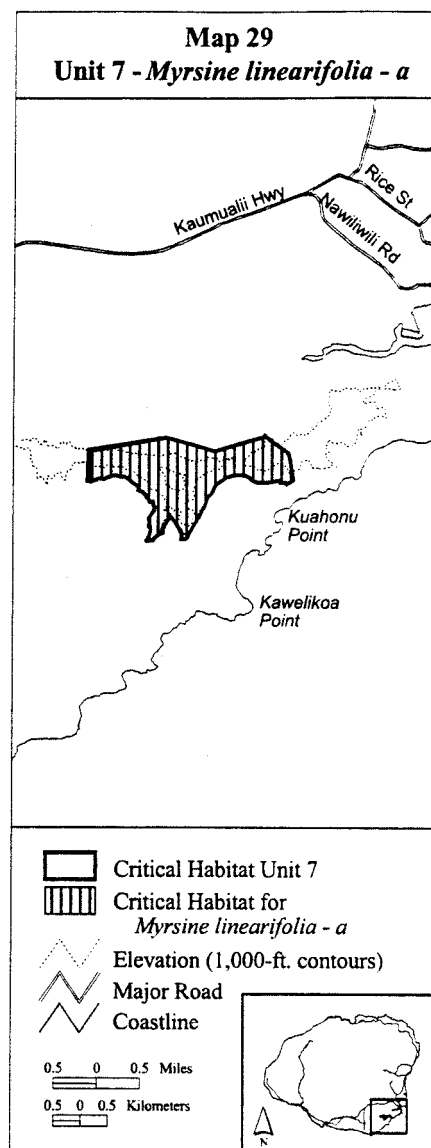


(xxix) Kauai 7—*Myrsine linearifolia*—a (334 ha; 826 ac)

(A) Unit consists of the following 109 boundary points: Start at 460009, 2424534; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458985, 2423890; 458939, 2423815; 458893, 2423731; 458860, 2423681; 458827, 2423624; 458787, 2423540; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335,

2423824; 458305, 2423771; 458295,
2423728; 458279, 2423668; 458315,
2423638; 458312, 2423581; 458199,
2423551; 458142, 2423478; 458142,
2423455; 458117, 2423452; 458056,
2423466; 458103, 2423665; 458082,
2423889; 458092, 2423928; 458096,
2423934; 458119, 2423970; 458122,
2423978; 458149, 2423997; 458162,
2424054; 458136, 2424097; 458136,
2424099; 458139, 2424114; 458133,
2424118; 458126, 2424160; 458066,
2424167; 458043, 2424217; 458009,
2424240; 457966, 2424313; 457930,
2424340; 457853, 2424376; 457860,
2424406; 457833, 2424456; 457640,
2424596; 457594, 2424622; 457527,
2424612; 457504, 2424622; 457474,
2424636; 457421, 2424646; 457371,
2424652; 457358, 2424642; 457321,
2424612; 457298, 2424612; 457252,
2424591; 457238, 2424585; 457204,
2424580; 457203, 2424580; 457195,
2424582; 457148, 2424589; 457099,
2424582; 457036, 2424556; 456975,
2424548; 456943, 2425070; 458384,
2425331; 459271, 2425086; 459894,
2425257; 460207, 2425364; 460327,
2425282; 460590, 2425104; 460617,
2425086; 460732, 2424559; 460721,
2424548; 460705, 2424534; 460688,
2424518; 460619, 2424484; 460594,
2424517; 460594, 2424517; 460495,
2424517; 460475, 2424550; 460373,
2424536; 460281, 2424513; 460213,
2424515; 460209, 2424517; 460185,
2424518; 460184, 2424516; 460176,
2424516; 460170, 2424523; 460118,
2424515; return to starting point.

(B) Note: Map 29 follows:

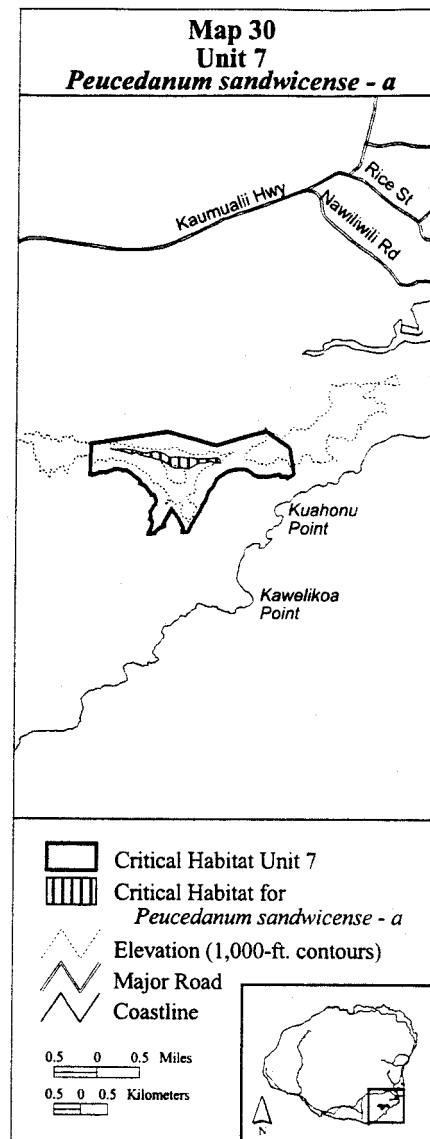


(xxx) Kauai 7—*Peucedanum sandwicense*—a (21 ha; 52 ac)

(A) Unit consists of the following 53 boundary points: Start at 457285, 2425044; 457378, 2425011; 457470, 2425024; 457559, 2425031; 457622, 2425008; 457671, 2425005; 457727, 2425005; 457806, 2424982; 457869, 2424952; 457961, 2424945; 458037, 2424958; 458110, 2424972; 458258, 2424958; 458301, 2424932; 458367, 2424889; 458417, 2424863; 458479, 2424866; 458568, 2424873; 458618, 2424876; 458680, 2424859; 458726, 2424853; 458789, 2424859; 458845, 2424853; 458888, 2424836; 458971, 2424836; 459043, 2424836; 459126, 2424836; 459182, 2424836; 459231, 2424853; 459304, 2424859; 459350, 2424823; 459353, 2424790; 459310, 2424764; 459251, 2424767; 459182, 2424797; 459060, 2424764; 458987, 2424764; 458888, 2424724; 458816, 2424681; 458756, 2424648; 458644,

2424671; 458499, 2424675; 458420, 2424698; 458360, 2424751; 458248, 2424803; 458050, 2424863; 457830, 2424909; 457787, 2424955; 457721, 2424949; 457691, 2424925; 457599, 2424958; 457421, 2425001; 457338, 2425005; return to starting point.

(B) Note: Map 30 follows:

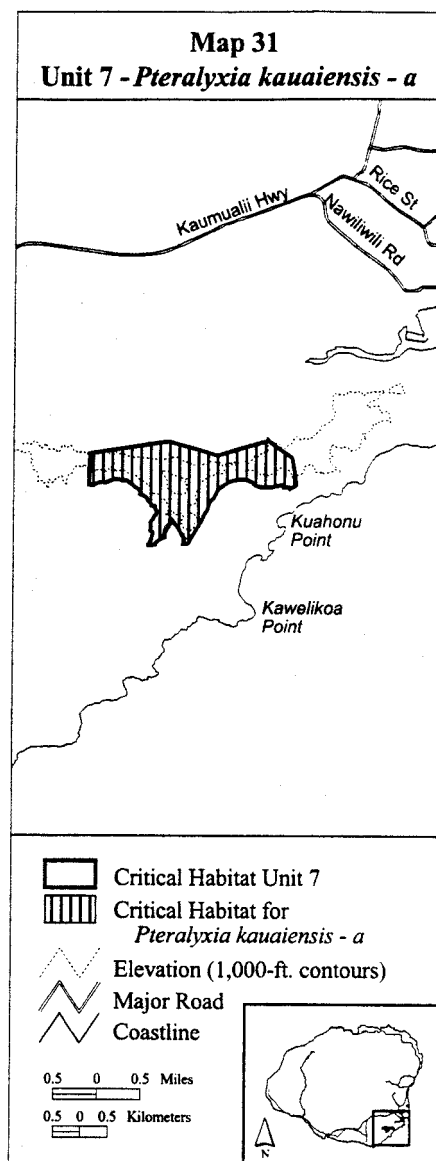


(xxxi) Kauai 7—*Pteralyxia kauaiensis*—a (346 ha; 854 ac)

(A) Unit consists of the following 149 boundary points: Start at 460212, 2424515; 460204, 2424515; 460183, 2424515; 460180, 2424516; 460074, 2424516; 460073, 2424516; 460066, 2424516; 460017, 2424532; 460009, 2424534; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037,

2423991; 458985, 2423890; 458939,
 2423815; 458894, 2423737; 458893,
 2423735; 458892, 2423732; 458890,
 2423730; 458851, 2423668; 458827,
 2423621; 458787, 2423543; 458741,
 2423531; 458744, 2423558; 458688,
 2423585; 458658, 2423661; 458631,
 2423661; 458551, 2423758; 458541,
 2423798; 458512, 2423871; 458445,
 2423921; 458405, 2423884; 458382,
 2423834; 458335, 2423824; 458305,
 2423771; 458295, 2423728; 458279,
 2423668; 458315, 2423638; 458312,
 2423581; 458199, 2423551; 458142,
 2423478; 458142, 2423455; 458117,
 2423452; 458106, 2423450; 458074,
 2423446; 458031, 2423441; 458029,
 2423440; 458011, 2423438; 458009,
 2423462; 458021, 2423472; 458021,
 2423472; 458036, 2423485; 458058,
 2423560; 458086, 2423655; 458073,
 2423681; 458043, 2423708; 458049,
 2423751; 458049, 2423808; 458039,
 2423854; 458066, 2423887; 458092,
 2423928; 458096, 2423934; 458119,
 2423970; 458122, 2423978; 458149,
 2423997; 458162, 2424054; 458136,
 2424097; 458136, 2424099; 458133,
 2424118; 458126, 2424160; 458066,
 2424167; 458043, 2424217; 458009,
 2424240; 457966, 2424313; 457930,
 2424340; 457853, 2424376; 457860,
 2424406; 457833, 2424456; 457640,
 2424596; 457594, 2424622; 457527,
 2424612; 457504, 2424622; 457474,
 2424636; 457421, 2424646; 457371,
 2424652; 457358, 2424642; 457321,
 2424612; 457298, 2424612; 457252,
 2424591; 457238, 2424585; 457218,
 2424576; 457204, 2424580; 457203,
 2424580; 457195, 2424582; 457148,
 2424589; 457099, 2424582; 457036,
 2424556; 457019, 2424549; 456995,
 2424533; 456994, 2424532; 456986,
 2424527; 456979, 2424529; 456977,
 2424529; 456926, 2424539; 456919,
 2424552; 456919, 2424552; 456919,
 2424552; 456917, 2424541; 456913,
 2424541; 456912, 2424542; 456911,
 2424542; 456922, 2424860; 456931,
 2425122; 456931, 2425122; 458355,
 2425346; 458360, 2425344; 458369,
 2425346; 458371, 2425346; 458372,
 2425346; 459274, 2425092; 460209,
 2425362; 460217, 2425356; 460218,
 2425356; 460651, 2425063; 460662,
 2424997; 460736, 2424562; 460732,
 2424559; 460721, 2424548; 460705,
 2424534; 460688, 2424518; 460619,
 2424484; 460596, 2424515; 460497,
 2424515; 460495, 2424517; 460495,
 2424517; 460475, 2424550; 460373,
 2424536; 460281, 2424513; 460214,
 2424515; return to starting point.

(B) Note: Map 31 follows:

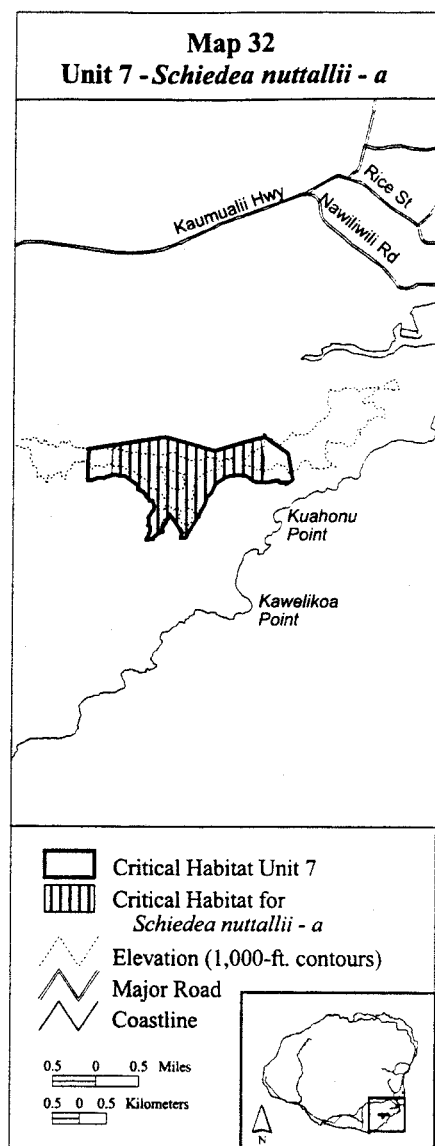


(xxxii) Kauai 7—*Schiedea nuttallii*—a
 (282 ha; 697 ac)

(A) Unit consists of the following 93 boundary points: Start at 460009, 2424534; 459976, 2424546; 459929, 2424597; 459855, 2424638; 459740, 2424652; 459629, 2424638; 459499, 2424606; 459384, 2424532; 459286, 2424472; 459212, 2424315; 459157, 2424250; 459134, 2424204; 459105, 2424102; 459085, 2424072; 459037, 2423991; 458985, 2423890; 458939, 2423815; 458893, 2423731; 458860, 2423681; 458827, 2423624; 458787, 2423540; 458741, 2423531; 458744, 2423558; 458688, 2423585; 458658, 2423661; 458631, 2423661; 458551, 2423758; 458541, 2423798; 458512, 2423871; 458445, 2423921; 458405, 2423884; 458382, 2423834; 458335, 2423824; 458305, 2423771; 458295, 2423728; 458279, 2423668; 458315, 2423638; 458312, 2423581; 458199,

2423551; 458142, 2423478; 458142, 2423455; 458117, 2423452; 458106, 2423450; 458074, 2423446; 458031, 2423441; 458029, 2423440; 458021, 2423472; 458036, 2423485; 458058, 2423560; 458086, 2423655; 458073, 2423681; 458043, 2423708; 458049, 2423751; 458049, 2423808; 458039, 2423854; 458066, 2423887; 458092, 2423928; 458096, 2423934; 458119, 2423970; 458122, 2423978; 458149, 2423997; 458162, 2424054; 458136, 2424097; 458136, 2424099; 458133, 2424118; 458126, 2424160; 458066, 2424167; 458043, 2424217; 458009, 2424240; 457966, 2424313; 457930, 2424340; 457853, 2424376; 457860, 2424406; 457833, 2424456; 457640, 2424596; 457594, 2424622; 457527, 2424612; 457504, 2424622; 457474, 2424636; 457421, 2424646; 457371, 2424652; 457358, 2424642; 457377, 2425117; 457456, 2425204; 457651, 2425234; 458369, 2425346; 459306, 2425071; 460130, 2425340; 460207, 2424964; 460176, 2424516; 460170, 2424523; 460118, 2424515; 460074, 2424516; return to starting point.

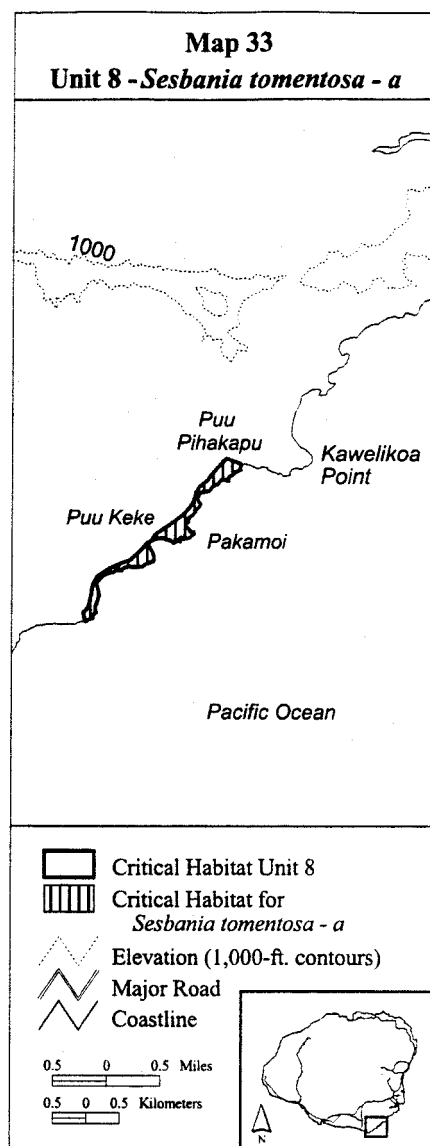
(B) Note: Map 32 follows:



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

(A) Unit consists of the following 26 boundary points: coastline; 458938, 2422136; 456613, 2419801; 456582, 2419934; 456653, 2420011; 456705, 2420236; 456722, 2420354; 456790, 2420479; 456952, 2420581; 457154, 2420676; 457284, 2420717; 457481, 2420921; 457534, 2420977; 457598, 2421003; 457649, 2421080; 457665, 2421106; 457862, 2421239; 458083, 2421412; 458182, 2421516; 458226, 2421605; 458262, 2421722; 458324, 2421821; 458434, 2421911; 458499, 2422001; 458665, 2422178; 458720, 2422231; 458912, 2422161; coastline.

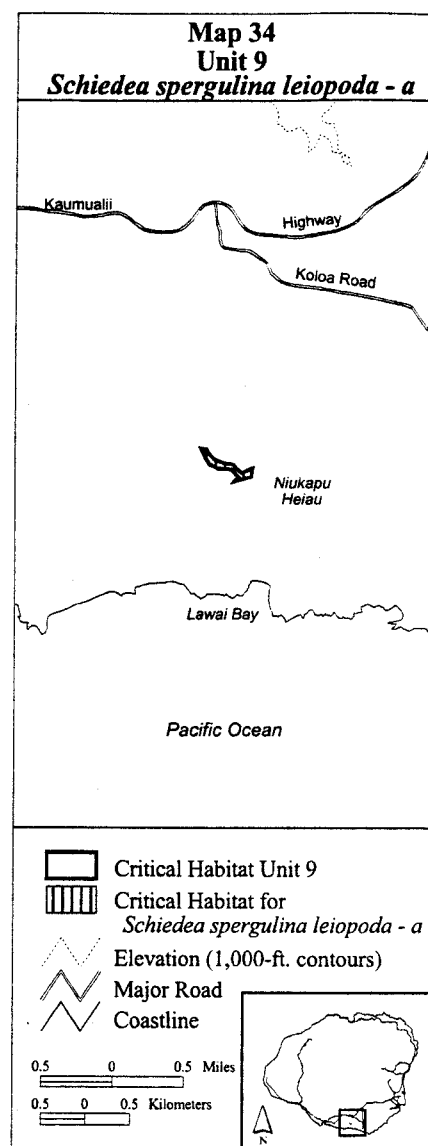
(B) **Note:** Map 33 follows:



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

(A) Unit consists of the following 23 boundary points: Start at 447953, 2421713; 447951, 2421694; 447757, 2421647; 447804, 2421699; 447721, 2421781; 447613, 2421788; 447569, 2421791; 447544, 2421803; 447473, 2421836; 447445, 2421889; 447380, 2422014; 447420, 2422010; 447443, 2422008; 447482, 2421943; 447527, 2421894; 447574, 2421872; 447636, 2421848; 447702, 2421846; 447752, 2421830; 447806, 2421767; 447843, 2421739; 447843, 2421739; 447961, 2421793; return to starting point.

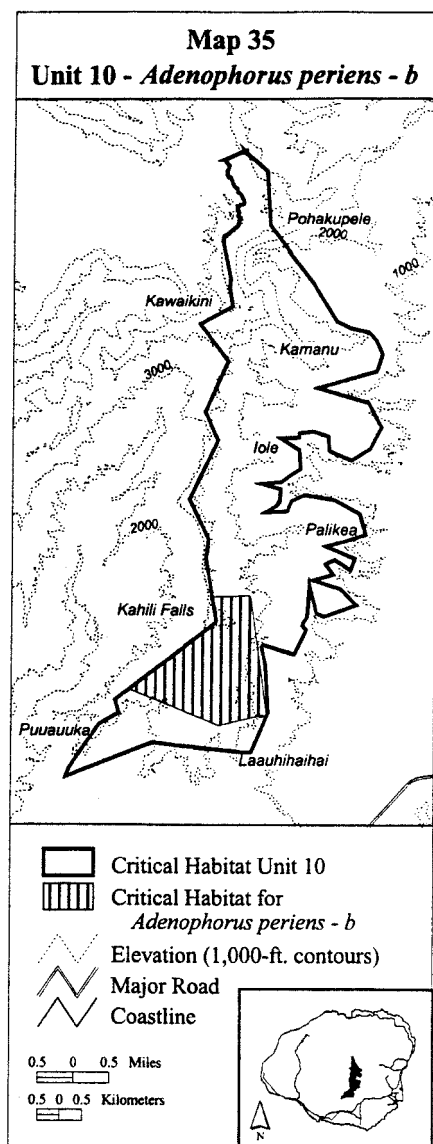
(B) **Note:** Map 34 follows:



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

(A) Unit consists of the following 13 boundary points: Start at 448417, 2432669; 449262, 2432700; 449291, 2432590; 449659, 2430034; 449634, 2429983; 449569, 2430034; 448593, 2429793; 446563, 2430607; 447808, 2431562; 448023, 2431693; 448011, 2431718; 448515, 2432105; 448503, 2432172; return to starting point.

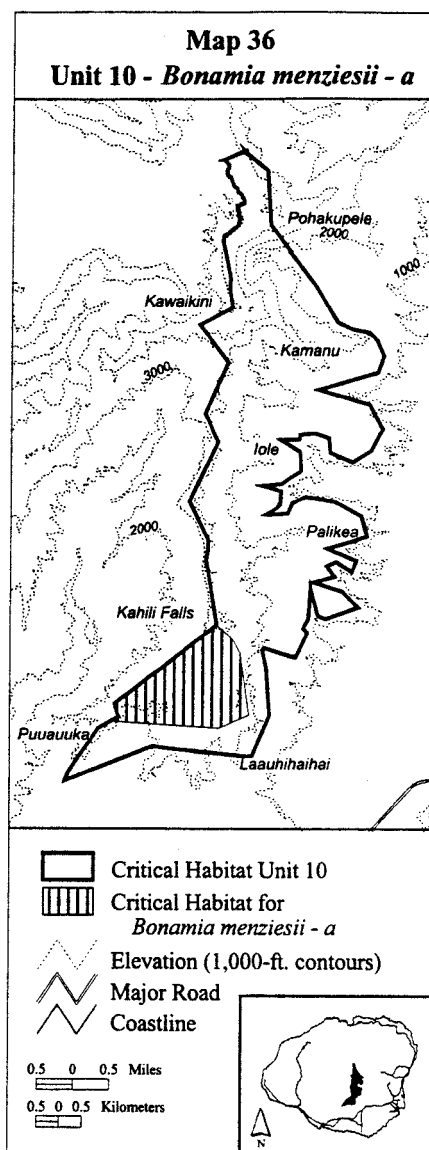
(B) **Note:** Map 35 follows:



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

(A) Unit consists of the following 8 boundary points: Start at 448513, 2432103; 448882, 2431783; 449031, 2431495; 449240, 2430109; 448586, 2429812; 446148, 2429968; 446327, 2430072; 446237, 2430356; return to starting point.

(B) Note: Map 36 follows:

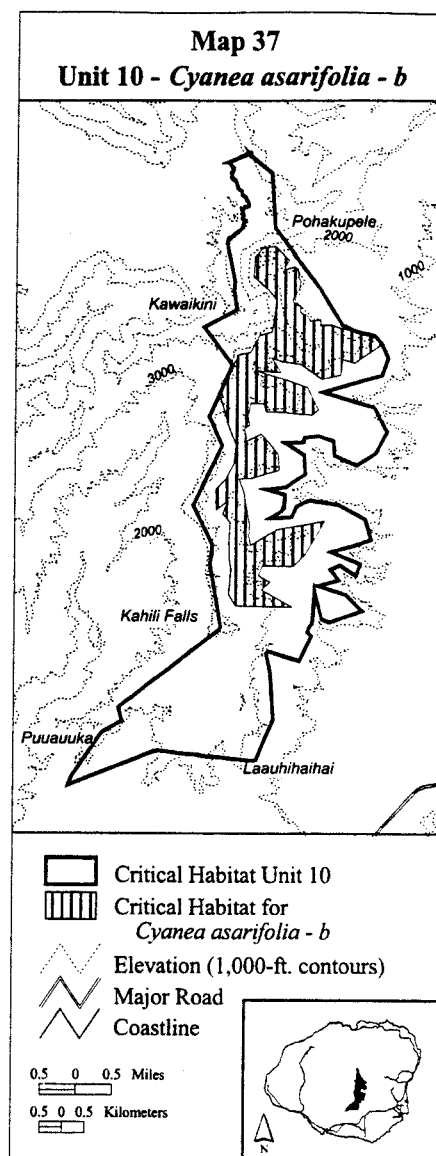


(xxxvii) Kauai 10—*Cyanea asarifolia*—b (903 ha; 2,232 ac)

(A) Unit consists of the following 103 boundary points: Start at 451083, 2438783; 451901, 2438605; 452064, 2438426; 451856, 2438263; 451455, 2437996; 451187, 2438070; 451143, 2437728; 450727, 2437639; 450252, 2437966; 449850, 2438026; 449613, 2438100; 449806, 2437788; 449271, 2437818; 449925, 2437625; 450415, 2437446; 450653, 2436956; 450519, 2436837; 449776, 2436897; 449494, 2436897; 449449, 2437090; 449152, 2437105; 449093, 2436808; 449122, 2436615; 449018, 2436541; 449063, 2436318; 449018, 2436229; 449390, 2436422; 449628, 2436125; 449761, 2435976; 449791, 2435605; 449167, 2435427; 448900, 2435412; 449018, 2435115; 449078, 2434773; 449137, 2434416; 449122, 2434149; 449167, 2433956; 449761, 2434298; 450816, 2434491; 450400, 2433763; 450118,

2433481; 449449, 2433495; 449345, 2433287; 449613, 2433139; 449420, 2432961; 450088, 2432589; 448840, 2432604; 448677, 2432872; 448706, 2433154; 448736, 2433421; 448692, 2433629; 448677, 2434030; 448706, 2434461; 448543, 2434654; 448662, 2434921; 448394, 2434743; 448380, 2435189; 448617, 2435427; 448781, 2435753; 448825, 2436169; 448647, 2436630; 448544, 2437006; 448458, 2437328; 448714, 2437911; 448825, 2438056; 448840, 2438160; 449137, 2438219; 449330, 2438605; 449613, 2438679; 449712, 2439392; 449522, 2439625; 449191, 2439915; 449211, 2440336; 449375, 2440536; 449671, 2440580; 449971, 2440270; 449870, 2440076; 449899, 2440063; 450011, 2440098; 450059, 2440101; 450106, 2440129; 450147, 2440093; 450162, 2440075; 450162, 2440075; 450185, 2440030; 450190, 2440016; 450203, 2439969; 450175, 2439897; 450247, 2439815; 450203, 2439630; 450115, 2439486; 450071, 2439407; 450084, 2439338; 450175, 2439294; 450238, 2439250; 450252, 2439220; 450237, 2439156; 450297, 2439075; 450379, 2439062; 450463, 2438924; 450671, 2438949; 450714, 2438836; 450940, 2438833; return to starting point.

(B) Note: Map 37 follows:

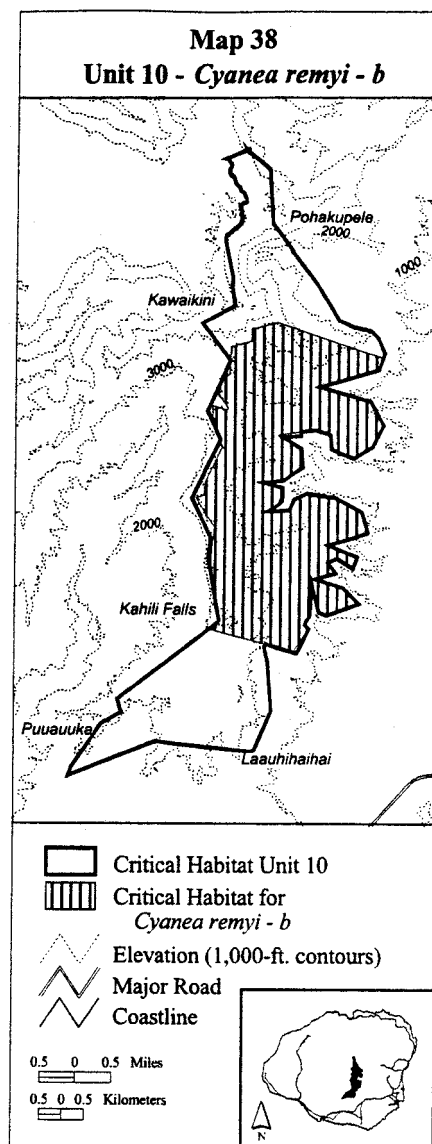


(xxxviii) Kauai 10—*Cyanea remyi*—b (1,904 ha; 4,705 ac)

(A) Unit consists of the following 71 boundary points: Start at 449428, 2431642; 448291, 2431933; 448515, 2432105; 448503, 2432172; 448417, 2432669; 448308, 2433302; 448343, 2433782; 448405, 2434199; 447967, 2434846; 448155, 2434909; 448176, 2435180; 448551, 2435973; 448503, 2436133; 448515, 2436159; 448453, 2436296; 448343, 2436661; 448343, 2436932; 448656, 2436828; 448697, 2436870; 448489, 2437141; 448465, 2437344; 448553, 2437544; 448718, 2437621; 448739, 2438246; 449198, 2438372; 449198, 2438643; 449782, 2438789; 452161, 2437996; 452078, 2437725; 450763, 2437349; 451890, 2437015; 452182, 2436473; 451932, 2435993; 451514, 2435722; 451014, 2435931; 450993, 2436264; 450659, 2436369; 449845, 2436265; 450346,

2435952; 450367, 2435514; 449908, 2435222; 449490, 2435201; 449929, 2435075; 449908, 2434825; 449845, 2434700; 449595, 2434554; 450075, 2434575; 450179, 2434804; 450471, 2434950; 451118, 2434846; 451723, 2434533; 451848, 2434074; 451431, 2433928; 450972, 2433803; 451619, 2433532; 451514, 2433281; 451160, 2433511; 450951, 2433406; 451139, 2433177; 450680, 2433052; 451285, 2432864; 451660, 2432488; 450930, 2432238; 450763, 2432322; 450596, 2432927; 450555, 2432217; 450429, 2432050; 450533, 2431929; 450459, 2431769; 450429, 2431800; 450200, 2431445; return to starting point.

(B) Note: Map 38 follows:

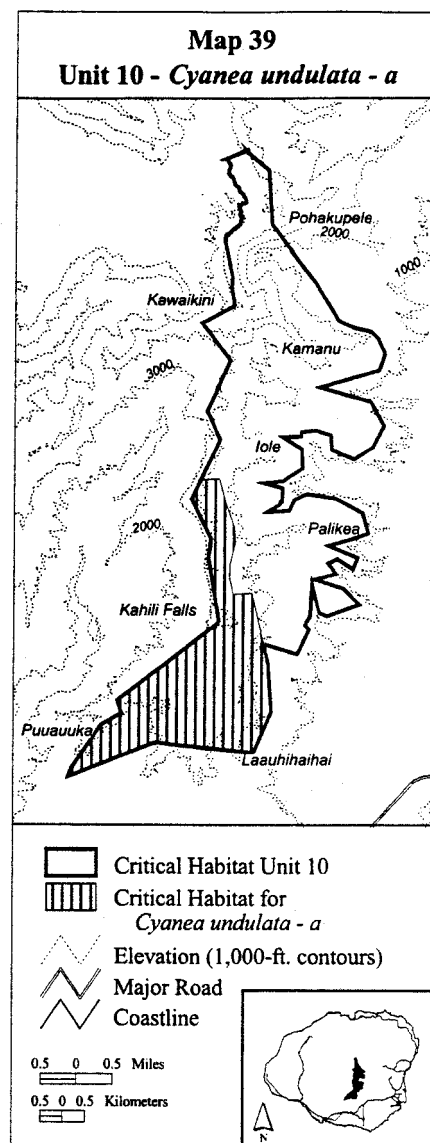


(xxxix) Kauai 10—*Cyanea undulata*—a (1,005 ha; 2,484 ac)

(A) Unit consists of the following 28 boundary points: Start at 448088, 2435267; 448504, 2435281; 448661,

2434734; 448844, 2434201; 448877, 2433868; 448746, 2433374; 448740, 2433286; 448740, 2433060; 448779, 2432916; 448823, 2432729; 449256, 2432753; 449617, 2431161; 449696, 2430088; 449318, 2429191; 447115, 2429408; 447101, 2429410; 447100, 2429410; 447092, 2429411; 445133, 2428627; 445203, 2428817; 445869, 2429806; 446327, 2430072; 446237, 2430356; 448515, 2432105; 448503, 2432172; 448267, 2433542; 448319, 2433974; 447886, 2434845; return to starting point.

(B) Note: Map 39 follows:



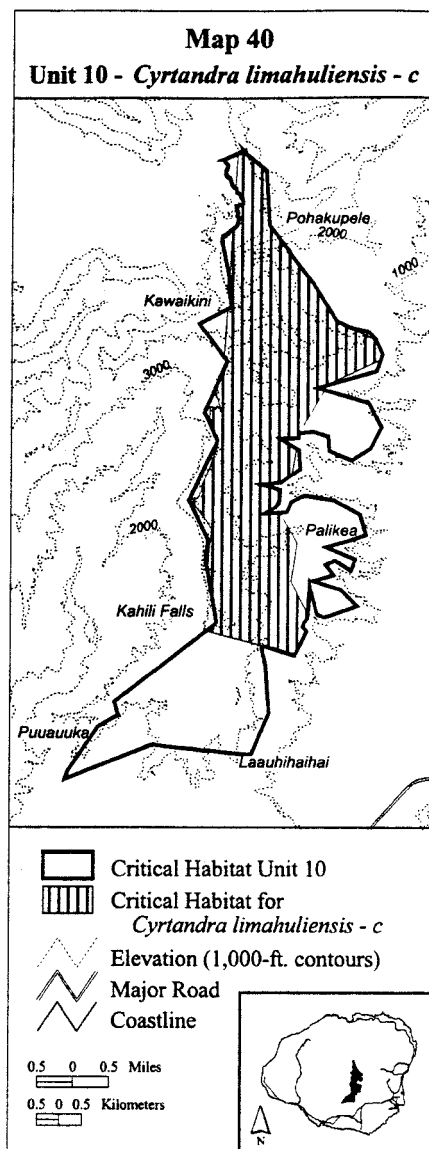
(xl) Kauai 10—*Cyrtandra limahuliensis*—c (2,013 ha; 4,975 ac)

(A) Unit consists of the following 172 boundary points: Start at 450986, 2437413; 450763, 2437349; 450920, 2437303; 450356, 2436356; 450332, 2436229; 449924, 2436215; 450288, 2435988; 450188, 2435455; 450167,

2435387; 450091, 2435338; 449939,
2435224; 449909, 2435222; 449908,
2435222; 449889, 2435221; 449520,
2435192; 449929, 2435075; 449908,
2434825; 449890, 2434790; 449906,
2434762; 449866, 2434742; 449845,
2434700; 449602, 2434558; 449641,
2434556; 449926, 2434568; 450308,
2433891; 450180, 2433045; 450561,
2432319; 450555, 2432217; 450489,
2432130; 450442, 2432036; 450533,
2431929; 450364, 2431564; 450270,
2431394; 449620, 2431593; 449428,
2431642; 448291, 2431933; 448515,
2432105; 448503, 2432172; 448417,
2432669; 448308, 2433302; 448343,
2433782; 448405, 2434199; 448223,
2434468; 447893, 2434860; 447894,
2434861; 448013, 2434861; 448101,
2434891; 448168, 2435077; 448176,
2435180; 448299, 2435441; 448519,
2436050; 448518, 2436082; 448503,
2436133; 448515, 2436159; 448453,
2436296; 448343, 2436661; 448343,
2436932; 448488, 2436884; 448486,
2436941; 448585, 2436875; 448512,
2437111; 448489, 2437141; 448480,
2437211; 448450, 2437310; 448728,
2437943; 448662, 2438032; 448728,
2439126; 448819, 2439175; 448756,
2439586; 448770, 2439804; 448837,
2440912; 448841, 2440914; 448861,
2440927; 448877, 2440939; 448918,
2440982; 448940, 2441006; 448941,
2441024; 448943, 2441044; 448943,
2441053; 448943, 2441063; 448944,
2441075; 448948, 2441084; 448954,
2441097; 448964, 2441109; 448969,
2441116; 448971, 2441119; 448972,
2441136; 448973, 2441143; 448972,
2441150; 448967, 2441159; 448961,
2441163; 448949, 2441170; 448941,
2441177; 448933, 2441184; 448930,
2441194; 448926, 2441212; 448934,
2441230; 448940, 2441238; 448944,
2441250; 448946, 2441259; 448948,
2441264; 448948, 2441273; 448948,
2441281; 448944, 2441291; 448935,
2441302; 448928, 2441313; 448925,
2441322; 448920, 2441333; 448919,
2441341; 448917, 2441357; 448916,
2441369; 448918, 2441381; 448922,
2441392; 448930, 2441400; 448936,
2441403; 448940, 2441404; 448945,
2441411; 448948, 2441420; 448952,
2441427; 448964, 2441441; 448971,
2441443; 449003, 2441449; 449032,
2441461; 449040, 2441466; 449049,
2441471; 449053, 2441472; 449060,
2441481; 449064, 2441492; 449065,
2441502; 449066, 2441511; 449061,
2441528; 449050, 2441561; 449046,
2441569; 449043, 2441578; 449037,
2441588; 449030, 2441595; 449017,
2441611; 449012, 2441616; 449009,
2441625; 449006, 2441639; 449004,
2441650; 449000, 2441660; 448995,
2441668; 448986, 2441677; 448972,

2441689; 448957, 2441700; 448939,
2441710; 448933, 2441715; 448925,
2441722; 448915, 2441738; 448913,
2441753; 448914, 2441760; 448913,
2441774; 448915, 2441796; 448910,
2441807; 448900, 2441814; 448892,
2441817; 448898, 2441915; 448939,
2442579; 449163, 2442553; 449589,
2442203; 449662, 2441006; 449663,
2440988; 450101, 2440409; 450094,
2440396; 450653, 2439686; 451170,
2438845; 452064, 2438419; 452203,
2438108; 452189, 2438063; 452160,
2437988; 451002, 2437441; return to
starting point.

(B) Note: Map 40 follows:

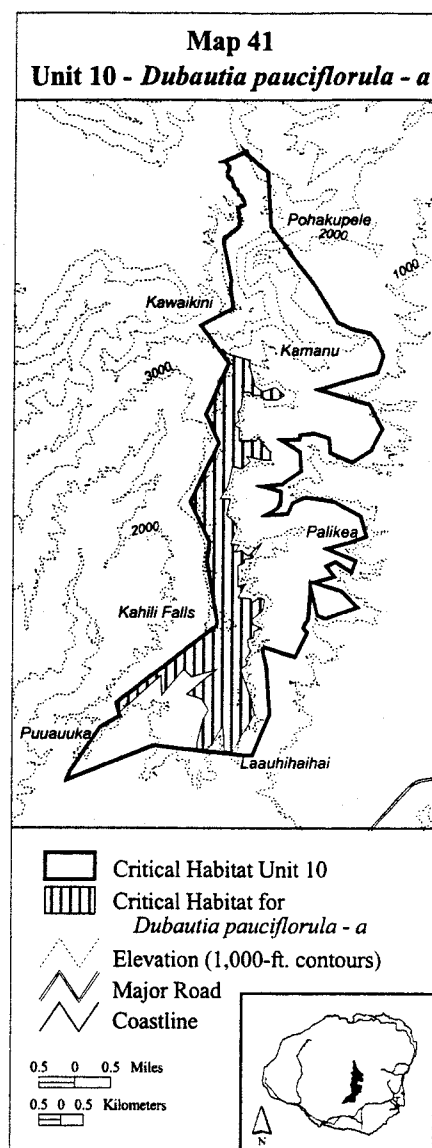


(xli) Kauai 10—*Dubautia pauciflora*—
a (814 ha; 2,012 ac)

(A) Unit consists of the following 96
boundary points: Start at 448697,
2438146; 449173, 2438007; 449213,
2437809; 449273, 2437571; 449312,
2437432; 449491, 2437293; 449788,

2437392; 449987, 2437214; 449808,
2437114; 449570, 2437114; 449451,
2437214; 449273, 2437214; 449174,
2437313; 449054, 2437273; 449015,
2436936; 448935, 2436857; 448975,
2436658; 448856, 2436559; 448975,
2436500; 448975, 2436202; 449372,
2436202; 449392, 2436281; 449669,
2435944; 449669, 2435766; 449550,
2435766; 449134, 2435865; 449233,
2435746; 449035, 2435567; 448816,
2435627; 448737, 2435191; 448559,
2434913; 448777, 2434913; 448697,
2434556; 448876, 2434417; 448935,
2434219; 448797, 2433921; 448995,
2433881; 448896, 2433723; 449055,
2433762; 449193, 2433643; 449511,
2433941; 449293, 2433584; 449114,
2433564; 449114, 2433485; 448955,
2433405; 448975, 2433167; 448955,
2432949; 449154, 2433009; 448975,
2432711; 449253, 2432691; 449273,
2432592; 449451, 2432711; 449570,
2432671; 449531, 2432414; 449273,
2432215; 449312, 2432116; 449511,
2432037; 449332, 2431957; 449332,
2431819; 449193, 2431779; 449213,
2431600; 449273, 2431521; 449154,
2431342; 449193, 2431223; 449035,
2431104; 449154, 2430787; 449273,
2430450; 449352, 2430093; 448856,
2429259; 448678, 2429299; 448658,
2429855; 448283, 2429271; 448109,
2429291; 448055, 2429297; 448063,
2429438; 448201, 2429974; 448320,
2430192; 448162, 2430450; 447825,
2430549; 448499, 2431104; 447944,
2430926; 447765, 2431104; 447269,
2430529; 447249, 2430966; 446310,
2430125; 446237, 2430356; 448515,
2432105; 448503, 2432172; 448267,
2433542; 448319, 2433974; 447886,
2434845; 448515, 2436159; 448226,
2436801; 448728, 2437943; 448612,
2438099; 448598, 2438245; return to
starting point.

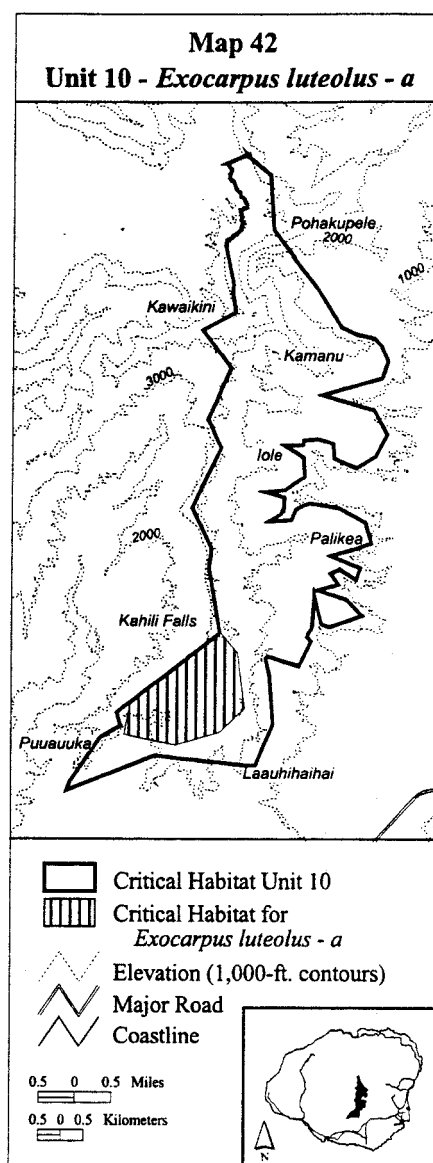
(B) Note: Map 41 follows:



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

(A) Unit consists of the following 10 boundary points: Start at 448504, 2432168; 448908, 2431685; 449077, 2430445; 448532, 2429929; 447543, 2429635; 446414, 2429881; 446462, 2430141; 446530, 2430532; 446530, 2430581; 448515, 2432105; return to starting point.

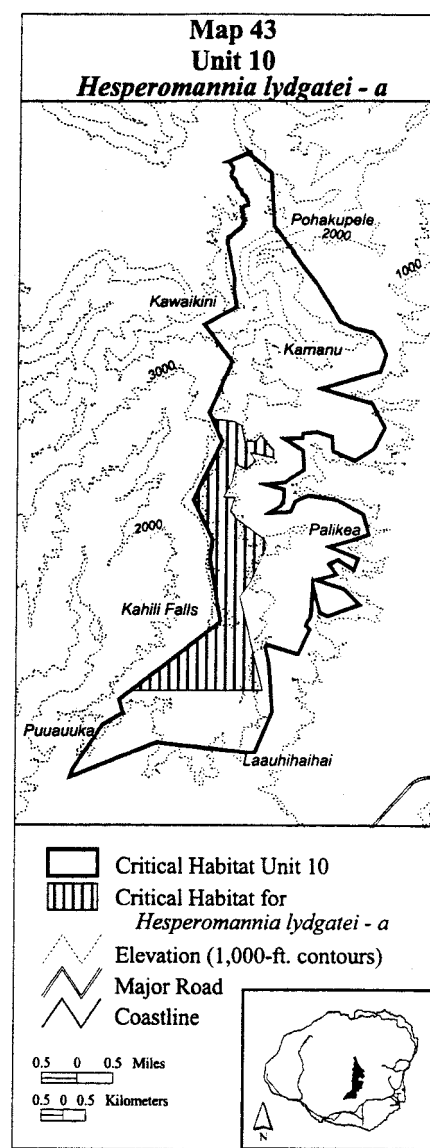
(B) **Note:** Map 42 follows:



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

(A) Unit consists of the following 29 boundary points: Start at 448286, 2436668; 448802, 2436599; 448953, 2436524; 449029, 2436158; 449294, 2436158; 449395, 2436284; 449672, 2435981; 449672, 2435780; 449155, 2435893; 449281, 2435704; 449067, 2435527; 448840, 2435641; 448751, 2435237; 448562, 2434909; 448827, 2434897; 448713, 2434594; 448877, 2434417; 449496, 2433951; 449559, 2433825; 449193, 2433005; 448953, 2432677; 449466, 2430577; 446508, 2430564; 448515, 2432105; 448503, 2432172; 448267, 2433542; 448319, 2433974; 447886, 2434845; 448515, 2436159; return to starting point.

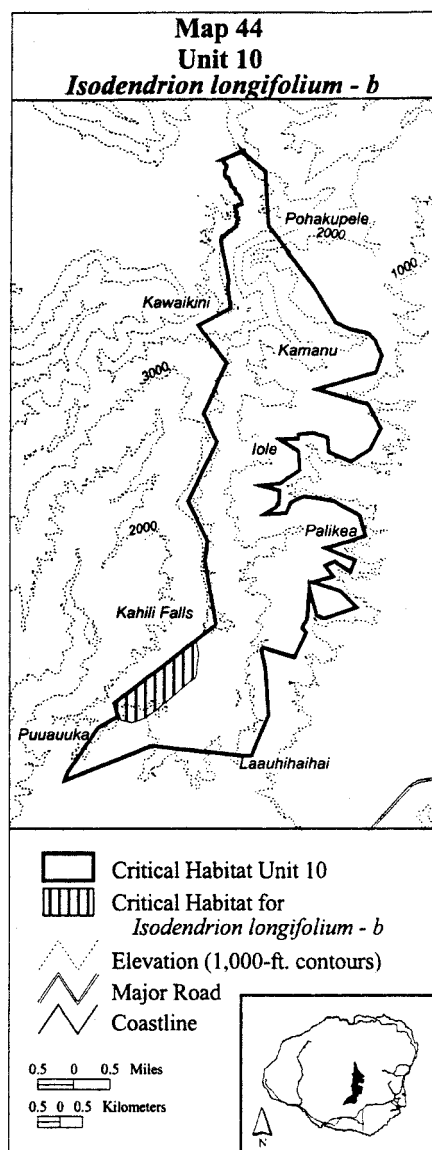
(B) **Note:** Map 43 follows:



(xliv) Kauai 10—*Isodendron longifolium*—b (142 ha; 350 ac)

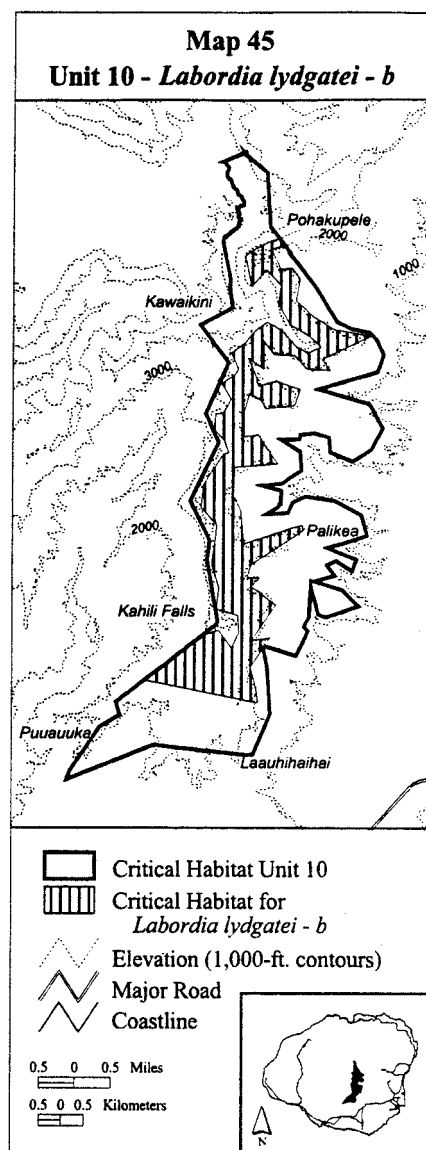
(A) Unit consists of the following 14 boundary points: Start at 448057, 2430921; 448043, 2430923; 447940, 2430853; 447794, 2430722; 447574, 2430543; 447170, 2430191; 446888, 2429999; 446635, 2429933; 446414, 2429985; 446295, 2430053; 446327, 2430072; 446237, 2430356; 448077, 2431769; 448127, 2431466; return to starting point.

(B) **Note:** Map 44 follows:



2438293; 450535, 2438535; 450100, 2438800; 449835, 2439259; 449907, 2439669; 449773, 2439813; 449569, 2440031; 449255, 2439645; 449122, 2440175; 449086, 2440321; 449255, 2440442; 449617, 2440635; 449861, 2440726; 449987, 2440561; 449690, 2440490; 449823, 2440174; 449883, 2440031; 449894, 2440032; 450149, 2440055; 450318, 2439814; 450245, 2439331; 450632, 2438969; 450873, 2438824; 451090, 2438679; 451911, 2438534; 450825, 2438003; 451018, 2437762; 450487, 2437810; 450221, 2438100; 449762, 2438124; 449521, 2438414; 449521, 2437810; 449183, 2438028; 449352, 2437617; 449400, 2437424; 449810, 2437521; 450342, 2437352; 450221, 2436989; 449569, 2436917; 449472, 2437110; 449207, 2437255; 449086, 2436845; 449086, 2436555; 449086, 2436289; 449400, 2436314; 449835, 2435686; 448869, 2435589; 448844, 2434961; 449014, 2434623; 449086, 2433875; 450390, 2434309; 450414, 2434165; 449255, 2433416; 449158, 2433126; 449448, 2433126; 449255, 2432933; 449810, 2432523; return to starting point.

(B) Note: Map 45 follows:



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

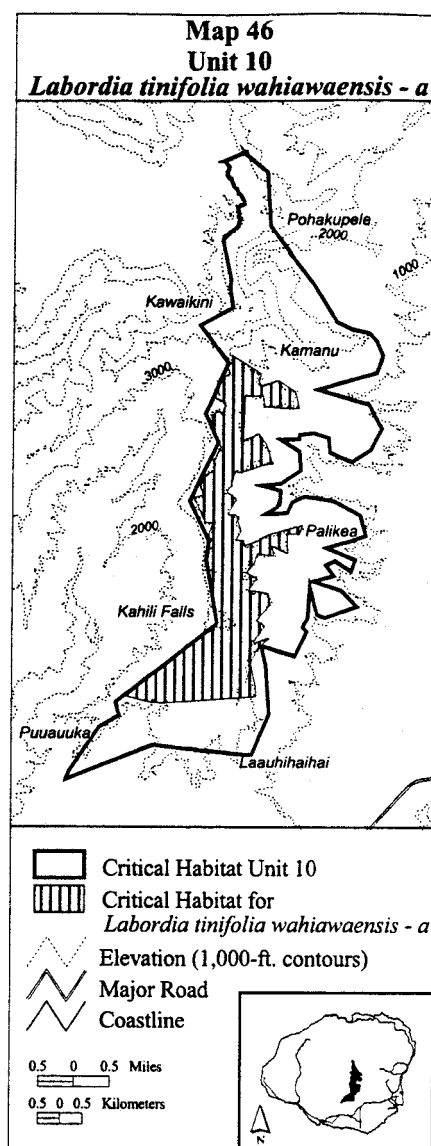
(A) Unit consists of the following 97 boundary points: Start at 449391, 2431894; 449279, 2431726; 449412, 2431749; 449690, 2431798; 449457, 2431436; 449255, 2431122; 449376, 2430639; 449421, 2430343; 446873, 2430844; 448170, 2431840; 448531, 2431943; 448820, 2431557; 448989, 2431895; 448965, 2432281; 448482, 2432426; 448508, 2432672; 448531, 2432885; 448362, 2433440; 448458, 2434020; 448482, 2434310; 448120, 2434696; 448168, 2435203; 448627, 2435903; 448748, 2435927; 448627, 2436217; 448410, 2436458; 448458, 2436796; 448603, 2436796; 448724, 2436965; 448796, 2437134; 448579, 2437473; 448869, 2437666; 448965, 2437810; 448796, 2438149; 449110, 2438390; 449327, 2438655; 449593, 2438848; 449931, 2438655; 450245, 2438317; 450511, 2438148; 450801,

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

(A) Unit consists of the following 89 boundary points: Start at 448798, 2438127; 449165, 2437887; 449468, 2437696; 449420, 2437473; 449516, 2437425; 449867, 2437552; 450250, 2437297; 450329, 2436930; 450170, 2436914; 449563, 2436962; 449516, 2437201; 449117, 2437201; 449101, 2436627; 449069, 2436196; 449436, 2436356; 449579, 2436132; 449739, 2435670; 449579, 2435654; 449021, 2435463; 448893, 2435494; 448814, 2435175; 448718, 2435048; 448941, 2434888; 448750, 2434537; 448941, 2434521; 449037, 2434154; 448941, 2433963; 449101, 2433963; 449117, 2433835; 449468, 2433979; 449659, 2434090; 450425, 2434298; 450361, 2434106; 450074, 2434106; 450090, 2433676; 449739, 2433835; 449771, 2433628; 449420, 2433660; 449324, 2433436; 449165, 2433245; 449404,

2433133; 449228, 2432846; 449420, 2432830; 449659, 2432782; 449707, 2432527; 449420, 2432192; 449595, 2432048; 449340, 2431713; 449356, 2431681; 449675, 2431777; 449404, 2431506; 449276, 2431218; 449388, 2430692; 449404, 2430484; 449404, 2430484; 447362, 2430345; 447060, 2430364; 446435, 2430508; 448515, 2432105; 448503, 2432172; 448267, 2433542; 448294, 2433768; 448383, 2433787; 448415, 2433963; 448303, 2434059; 448415, 2434362; 448223, 2434362; 448111, 2434649; 447968, 2434904; 448191, 2434968; 448127, 2435159; 448207, 2435415; 448415, 2435510; 448415, 2435750; 448574, 2436037; 448494, 2436244; 448462, 2436277; 448367, 2436488; 448367, 2436771; 448526, 2436866; 448606, 2436787; 448670, 2437058; 448446, 2437186; 448510, 2437313; 448510, 2437448; 448571, 2437587; 448766, 2437696; 448718, 2437856; 448829, 2437999; return to starting point.

(B) Note: Map 46 follows:

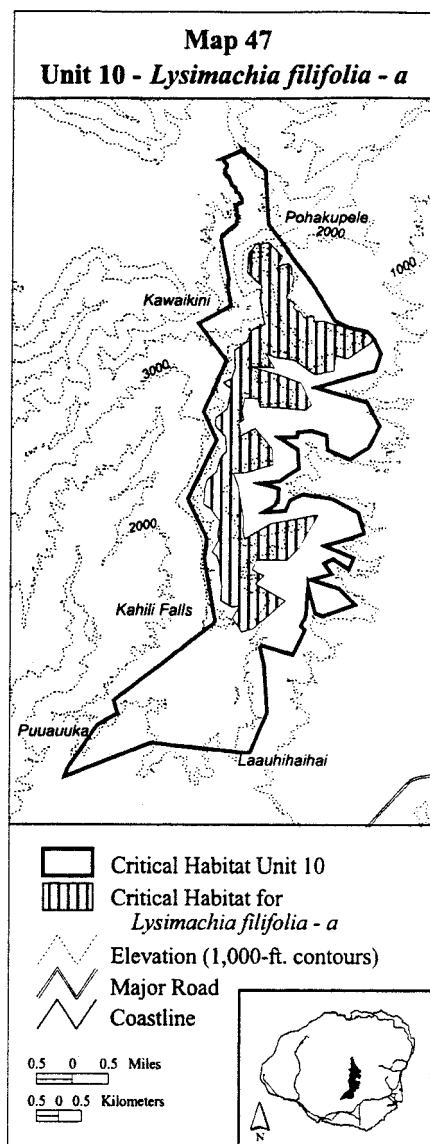


2433481; 449449, 2433495; 449345, 2433287; 449613, 2433139; 449420, 2432961; 450088, 2432589; 449381, 2431977; 449117, 2431900; 448904, 2432197; 449065, 2432473; 448889, 2432462; 448635, 2432590; 448650, 2432917; 448613, 2433130; 448599, 2433373; 448547, 2433571; 448444, 2433659; 448580, 2433916; 448573, 2434107; 448610, 2434346; 448386, 2434622; 448239, 2434732; 448261, 2435063; 448312, 2435268; 448522, 2435445; 448610, 2435753; 448749, 2435904; 448720, 2436242; 448496, 2436469; 448485, 2436660; 448753, 2436862; 448830, 2437318; 448669, 2437450; 448845, 2437549; 448922, 2437766; 448915, 2438166; 449164, 2438353; 449293, 2438629; 449580, 2438754; 449469, 2439364; 449522, 2439625; 449191, 2439915; 449211, 2440336; 449375, 2440536; 449671, 2440580; 449971, 2440270; 449870, 2440076; 449899, 2440063; 450011, 2440098; 450059, 2440101; 450106, 2440129; 450147, 2440093; 450162, 2440075; 450162, 2440075; 450185, 2440030; 450190, 2440016; 450203, 2439969; 450175, 2439897; 450247, 2439815; 450203, 2439630; 450115, 2439486; 450071, 2439407; 450084, 2439338; 450175, 2439294; 450238, 2439250; 450252, 2439220; 450237, 2439156; 450297, 2439075; 450379, 2439062; 450463, 2438924; 450671, 2438949; 450714, 2438836; 450940, 2438833; return to starting point.

(B) Note: Map 47 follows:

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

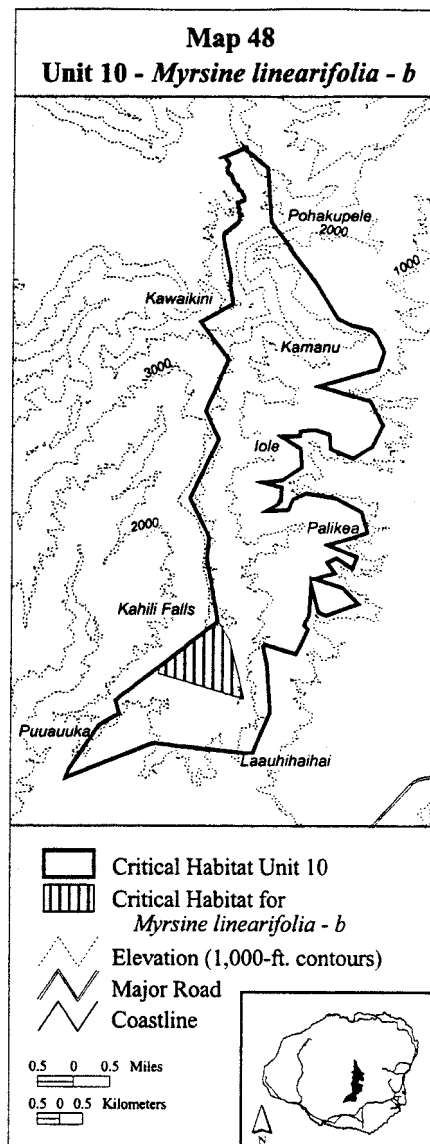
(A) Unit consists of the following 113 boundary points: Start at 451083, 2438783; 451901, 2438605; 452064, 2438426; 451856, 2438263; 451455, 2437996; 451187, 2438070; 451143, 2437728; 450727, 2437639; 450252, 2437966; 449850, 2438026; 449613, 2438100; 449806, 2437788; 449271, 2437818; 449925, 2437625; 450415, 2437446; 450653, 2436956; 450519, 2436837; 449776, 2436897; 449494, 2436897; 449449, 2437090; 449152, 2437105; 449093, 2436808; 449122, 2436615; 449018, 2436541; 449063, 2436318; 449018, 2436229; 449390, 2436422; 449628, 2436125; 449761, 2435976; 449791, 2435605; 449167, 2435427; 448900, 2435412; 449018, 2435115; 449078, 2434773; 449137, 2434416; 449122, 2434149; 449167, 2433956; 449761, 2434298; 450816, 2434491; 450400, 2433763; 450118,



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

(A) Unit consists of the following 6 boundary points: Start at 448507, 2432148; 448782, 2431712; 449112, 2430394; 447193, 2430959; 447222, 2431112; 448515, 2432105; return to starting point.

(B) Note: Map 48 follows:

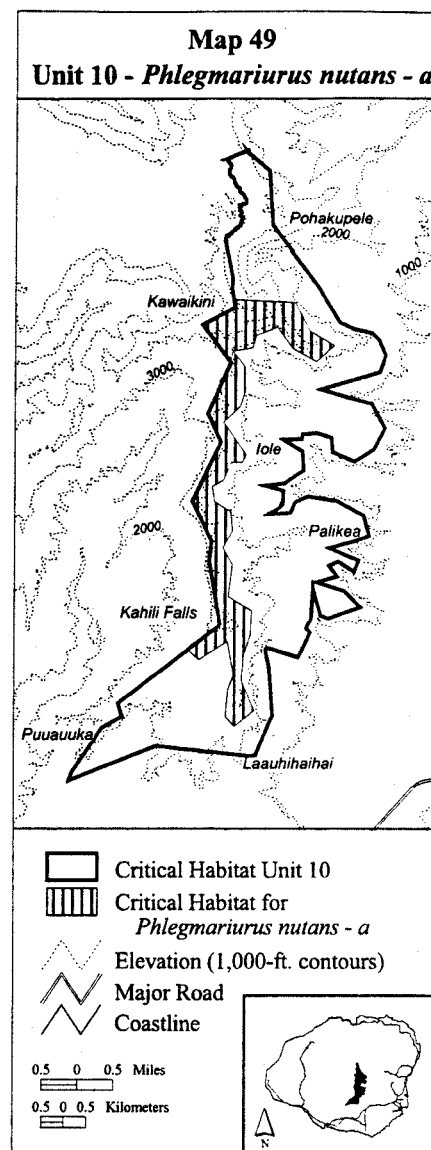


(xlix) Kauai 10—*Phlegmariurus nutans*—a (620 ha; 1,533 ac)

(A) Unit consists of the following 47 boundary points: Start at 448793, 2439345; 450186, 2439278; 450512, 2438647; 451062, 2438321; 450655, 2437974; 450105, 2438280; 449779, 2438728; 449310, 2438545; 449228, 2438280; 448780, 2438199; 449045, 2437852; 449065, 2437302; 448943, 2436956; 448576, 2436610; 449086, 2435876; 449004, 2435713; 448760, 2435713; 448576, 2435306; 448332, 2435163; 448373, 2434837; 448739, 2434613; 448780, 2434165; 448576, 2433818; 448780, 2433452; 448699, 2432739; 449229, 2432413; 449208, 2431903; 449045, 2431434; 449004, 2430864; 449290, 2430212; 448841, 2429845; 448638, 2430069; 448699, 2430681; 448821, 2430986; 448678, 2431740; 448047, 2431333; 447800, 2431556; 448515, 2432105; 448503, 2432172; 448267, 2433542; 448319,

2433974; 447886, 2434845; 448515, 2436159; 448226, 2436801; 448728, 2437943; 448103, 2438785; 448819, 2439175; return to starting point.

(B) Note: Map 49 follows:



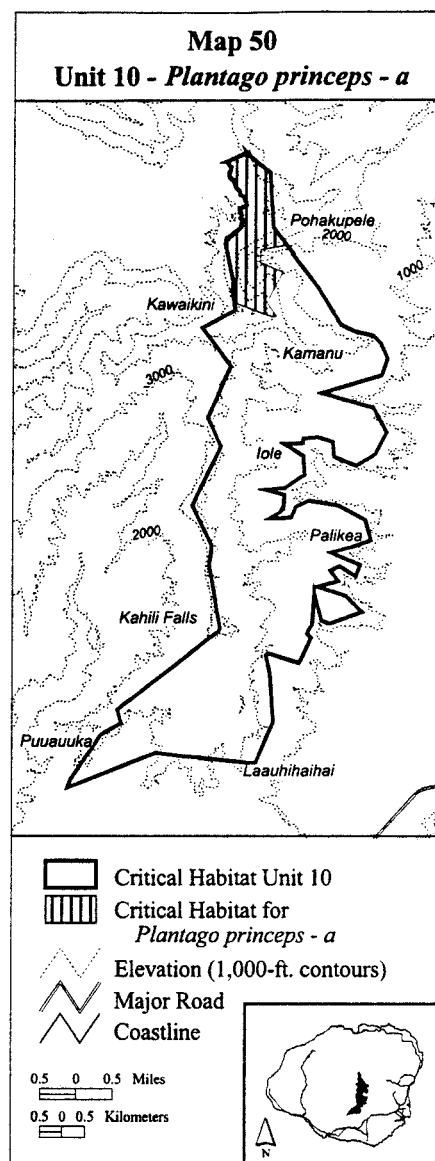
(l) Kauai 10—*Plantago princeps*—a (276 ha; 683 ac)

(A) Unit consists of the following 195 boundary points: Start at 449378, 2440492; 449378, 2440219; 449753, 2440049; 449884, 2440014; 449514, 2439343; 449731, 2439042; 449653, 2439026; 448873, 2439316; 448605, 2440582; 448605, 2440585; 448604, 2440594; 448603, 2440603; 448601, 2440618; 448600, 2440627; 448599, 2440637; 448600, 2440668; 448601, 2440679; 448606, 2440704; 448612, 2440722; 448615, 2440731; 448619, 2440740; 448622, 2440749; 448630, 2440759; 448638, 2440764; 448650, 2440769; 448663, 2440773; 448678, 2440780; 448691, 2440790; 448711,

2440806; 448720, 2440813; 448727,
2440820; 448735, 2440829; 448745,
2440841; 448764, 2440857; 448788,
2440878; 448802, 2440889; 448811,
2440896; 448841, 2440914; 448861,
2440927; 448877, 2440939; 448918,
2440982; 448940, 2441006; 448941,
2441024; 448943, 2441044; 448943,
2441053; 448943, 2441063; 448944,
2441075; 448948, 2441084; 448954,
2441097; 448964, 2441109; 448969,
2441116; 448971, 2441119; 448972,
2441136; 448973, 2441143; 448972,
2441150; 448967, 2441159; 448961,
2441163; 448949, 2441170; 448941,
2441177; 448933, 2441184; 448930,
2441194; 448926, 2441212; 448934,
2441230; 448940, 2441238; 448944,
2441250; 448946, 2441259; 448948,
2441264; 448948, 2441273; 448948,
2441281; 448944, 2441291; 448935,
2441302; 448928, 2441313; 448925,
2441322; 448920, 2441333; 448919,
2441341; 448917, 2441357; 448916,
2441369; 448918, 2441381; 448922,
2441392; 448930, 2441400; 448936,
2441403; 448940, 2441404; 448945,
2441411; 448948, 2441420; 448952,
2441427; 448964, 2441441; 448971,
2441443; 449003, 2441449; 449032,
2441461; 449040, 2441466; 449049,
2441471; 449053, 2441472; 449060,
2441481; 449064, 2441492; 449065,
2441502; 449066, 2441511; 449061,
2441528; 449050, 2441561; 449046,
2441569; 449043, 2441578; 449037,
2441588; 449030, 2441595; 449017,
2441611; 449012, 2441616; 449009,
2441625; 449006, 2441639; 449004,
2441650; 449000, 2441660; 448995,
2441668; 448986, 2441677; 448972,
2441689; 448957, 2441700; 448939,
2441710; 448933, 2441715; 448925,
2441722; 448915, 2441738; 448913,
2441753; 448914, 2441760; 448913,
2441774; 448915, 2441796; 448910,
2441807; 448900, 2441814; 448890,
2441818; 448884, 2441820; 448877,
2441825; 448850, 2441844; 448840,
2441852; 448831, 2441859; 448820,
2441871; 448817, 2441884; 448814,
2441894; 448813, 2441900; 448803,
2441914; 448789, 2441938; 448787,
2441967; 448781, 2441990; 448777,
2442002; 448773, 2442013; 448768,
2442019; 448764, 2442029; 448755,
2442041; 448746, 2442051; 448736,
2442055; 448728, 2442058; 448723,
2442061; 448718, 2442069; 448710,
2442077; 448694, 2442089; 448683,
2442101; 448677, 2442115; 448675,
2442123; 448677, 2442140; 448682,
2442148; 448684, 2442157; 448680,
2442169; 448674, 2442187; 448671,
2442202; 448673, 2442209; 448678,
2442221; 448684, 2442226; 448692,
2442233; 448699, 2442238; 448705,
2442250; 448706, 2442257; 448707,

2442267; 448712, 2442283; 448718,
2442295; 448722, 2442303; 448723,
2442309; 448724, 2442320; 448721,
2442331; 448711, 2442341; 448697,
2442342; 448682, 2442350; 448677,
2442356; 448673, 2442365; 448671,
2442369; 448665, 2442379; 448657,
2442387; 448648, 2442399; 448643,
2442410; 448642, 2442430; 448642,
2442440; 448640, 2442451; 448637,
2442455; 449104, 2442662; 449108,
2442589; 449074, 2442637; 449099,
2442572; 449576, 2442210; 449620,
2441513; 449654, 2441008; 449662,
2441006; 449663, 2440988; 449955,
2440602; return to starting point.

(B) Note: Map 50 follows:



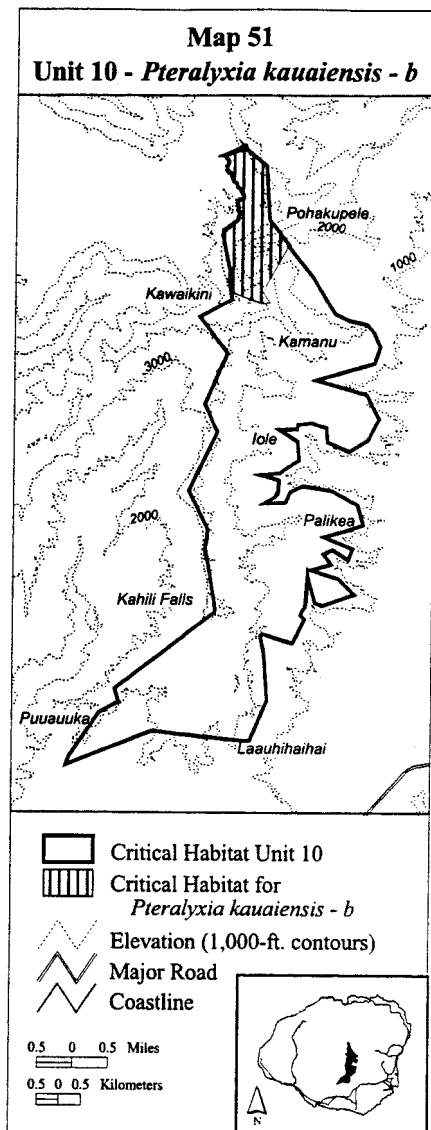
(li) Kauai 10—*Pteralyxia kauaiensis*—b
(304 ha; 751 ac)

(A) Unit consists of the following 183
boundary points: Start at 448642,
2442419; 449125, 2442584; 449589,
2442203; 449662, 2441006; 449663,

2440988; 450101, 2440409; 449514,
2439343; 449691, 2439097; 449529,
2439072; 448873, 2439316; 448605,
2440582; 448605, 2440585; 448604,
2440594; 448603, 2440603; 448601,
2440618; 448600, 2440627; 448599,
2440637; 448600, 2440668; 448601,
2440679; 448606, 2440704; 448612,
2440722; 448615, 2440731; 448619,
2440740; 448622, 2440749; 448630,
2440759; 448638, 2440764; 448650,
2440769; 448663, 2440773; 448678,
2440780; 448691, 2440790; 448711,
2440806; 448720, 2440813; 448727,
2440820; 448735, 2440829; 448745,
2440841; 448764, 2440857; 448788,
2440878; 448802, 2440889; 448811,
2440896; 448841, 2440914; 448861,
2440927; 448877, 2440939; 448918,
2440982; 448940, 2441006; 448941,
2441024; 448943, 2441044; 448943,
2441053; 448943, 2441063; 448944,
2441075; 448948, 2441084; 448954,
2441097; 448964, 2441109; 448969,
2441116; 448971, 2441119; 448972,
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2441150; 448967, 2441159; 448961,
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2441177; 448933, 2441184; 448930,
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2441281; 448944, 2441291; 448935,
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2441369; 448918, 2441381; 448922,
2441392; 448930, 2441400; 448936,
2441403; 448940, 2441404; 448945,
2441411; 448948, 2441420; 448952,
2441427; 448964, 2441441; 448971,
2441443; 449003, 2441449; 449032,
2441461; 449040, 2441466; 449049,
2441471; 449053, 2441472; 449060,
2441481; 449064, 2441492; 449065,
2441502; 449066, 2441511; 449061,
2441528; 449050, 2441561; 449046,
2441569; 449043, 2441578; 449037,
2441588; 449030, 2441595; 449017,
2441611; 449012, 2441616; 449009,
2441625; 449006, 2441639; 449004,
2441650; 449000, 2441660; 448995,
2441668; 448986, 2441677; 448972,
2441689; 448957, 2441700; 448939,
2441710; 448933, 2441715; 448925,
2441722; 448915, 2441738; 448913,
2441753; 448914, 2441760; 448913,
2441774; 448915, 2441796; 448910,
2441807; 448900, 2441814; 448890,
2441818; 448884, 2441820; 448877,
2441825; 448850, 2441844; 448840,
2441852; 448831, 2441859; 448820,
2441871; 448817, 2441884; 448814,
2441894; 448813, 2441900; 448803,
2441914; 448789, 2441938; 448787,
2441967; 448781, 2441990; 448777,
2442002; 448773, 2442013; 448768,

2442019; 448764, 2442029; 448755, 2442041; 448746, 2442051; 448736, 2442055; 448728, 2442058; 448723, 2442061; 448718, 2442069; 448710, 2442077; 448694, 2442089; 448683, 2442101; 448677, 2442115; 448675, 2442123; 448677, 2442140; 448682, 2442148; 448684, 2442157; 448680, 2442169; 448674, 2442187; 448671, 2442202; 448673, 2442209; 448678, 2442221; 448684, 2442226; 448692, 2442233; 448699, 2442238; 448705, 2442250; 448706, 2442257; 448707, 2442267; 448712, 2442283; 448718, 2442295; 448722, 2442303; 448723, 2442309; 448724, 2442320; 448721, 2442331; 448711, 2442341; 448697, 2442342; 448682, 2442350; 448677, 2442356; 448673, 2442365; 448671, 2442369; 448665, 2442379; 448657, 2442387; 448648, 2442399; 448643, 2442410; return to starting point.

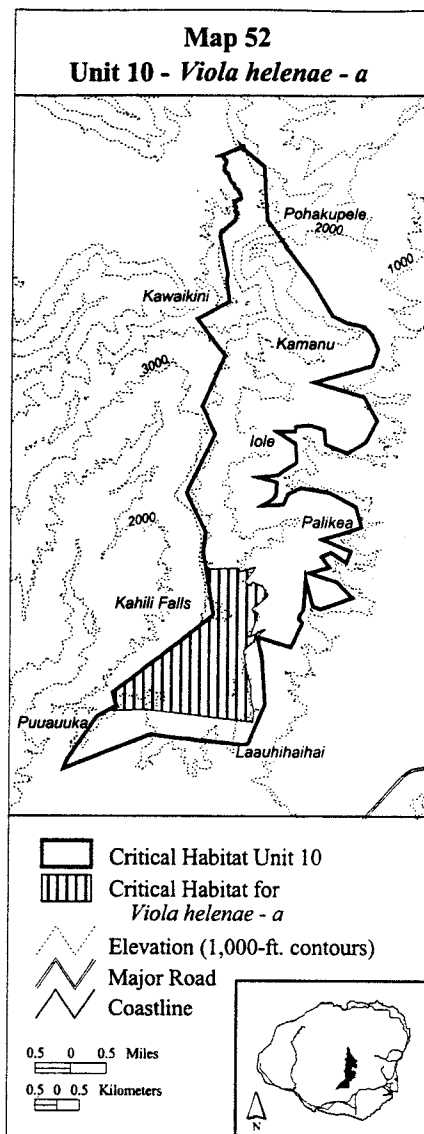
(B) Note: Map 51 follows:



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

(A) Unit consists of the following 31 boundary points: Start at 448328, 2433188; 448454, 2433140; 449088, 2433152; 449076, 2433067; 449466, 2433177; 449222, 2432836; 449320, 2432763; 449405, 2432848; 449636, 2432738; 449746, 2432531; 449527, 2432361; 449380, 2432239; 449551, 2432153; 449344, 2431617; 449685, 2431800; 449417, 2431508; 449198, 2431301; 449234, 2431142; 449271, 2430923; 449320, 2430692; 449380, 2430484; 449380, 2430229; 449441, 2429961; 449429, 2429693; 446980, 2429985; 446274, 2429948; 446193, 2429994; 446327, 2430072; 446237, 2430356; 448515, 2432105; 448503, 2432172; return to starting point.

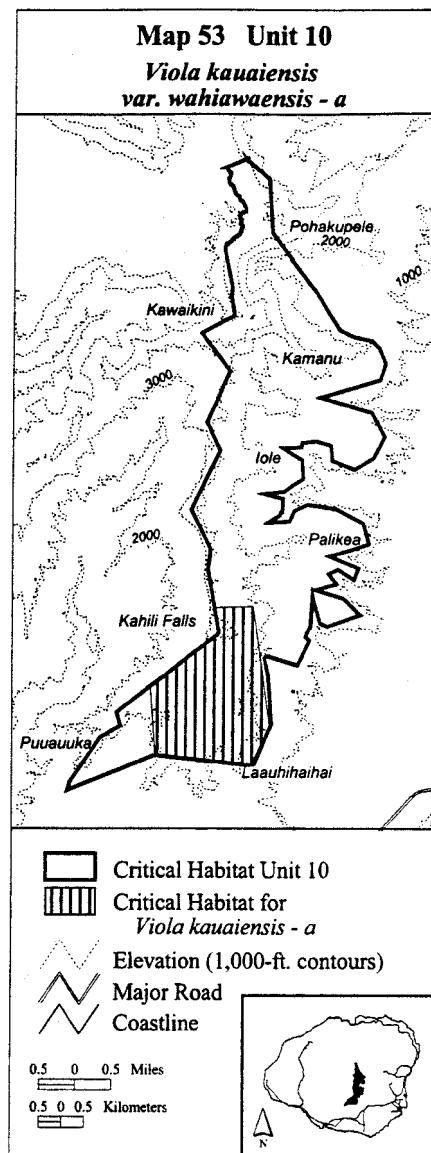
(B) Note: Map 52 follows:



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

(A) Unit consists of the following 10 boundary points: Start at 448417, 2432669; 449275, 2432700; 449659, 2430034; 449241, 2429178; 447613, 2429349; 447532, 2429359; 447101, 2429410; 446996, 2430939; 448515, 2432105; 448503, 2432172; return to starting point.

(B) Note: Map 53 follows:

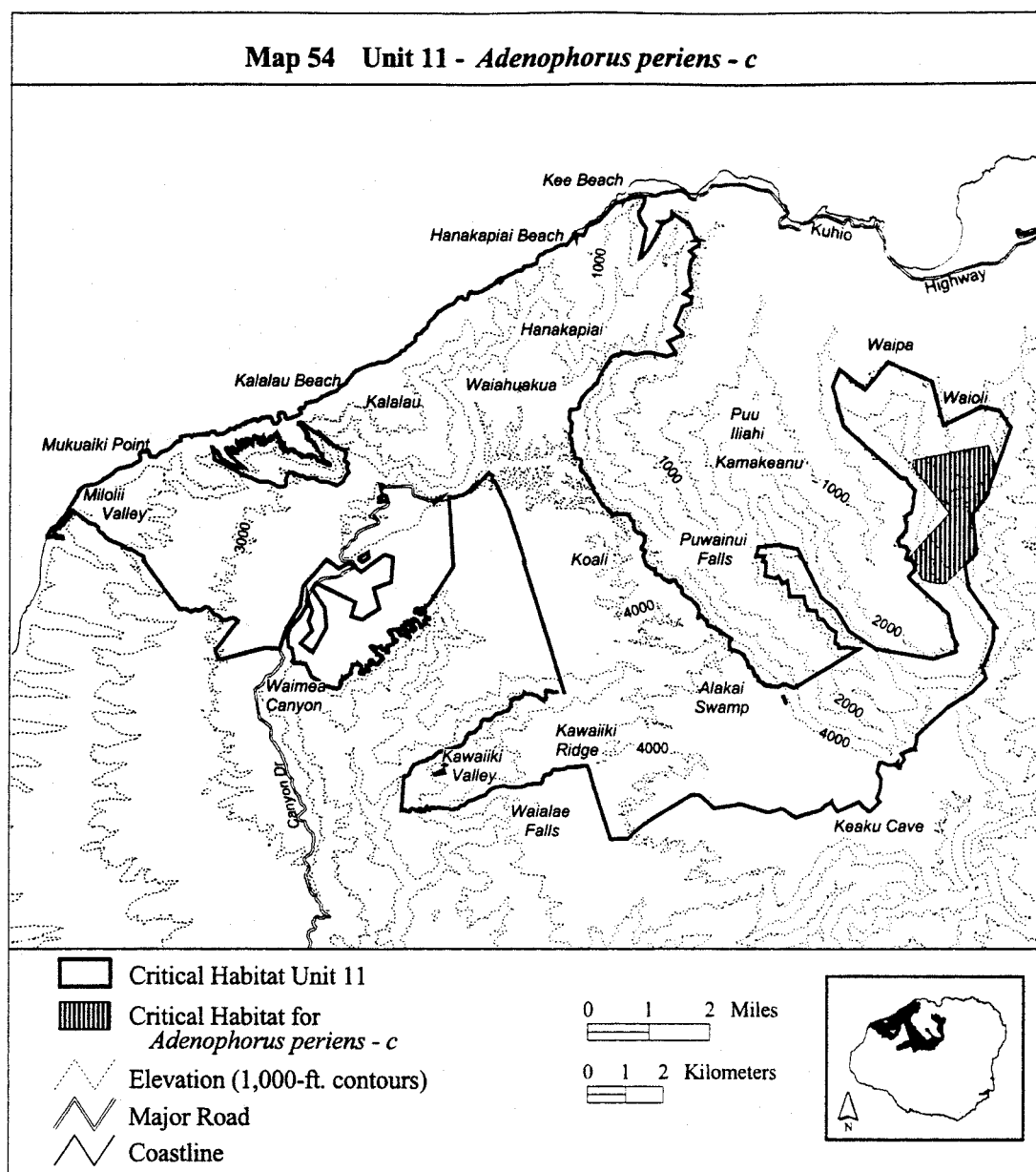


(liv) Kauai 11—*Adenophorus periens*—c (469 ha; 1,158 ac)

(A) Unit consists of the following 14 boundary points: Start at 449704, 2450172; 449432, 2449395; 449073, 2448923; 449147, 2447868; 448881, 2447609; 448393, 2447136; 448172, 2447124; 447753, 2447224; 447428, 2447829; 448470, 2448968; 447485, 2450219; 447507, 2450366; 449486,

2450747; 449649, 2450316; return to starting point.

(B) Note: Map 54 follows:



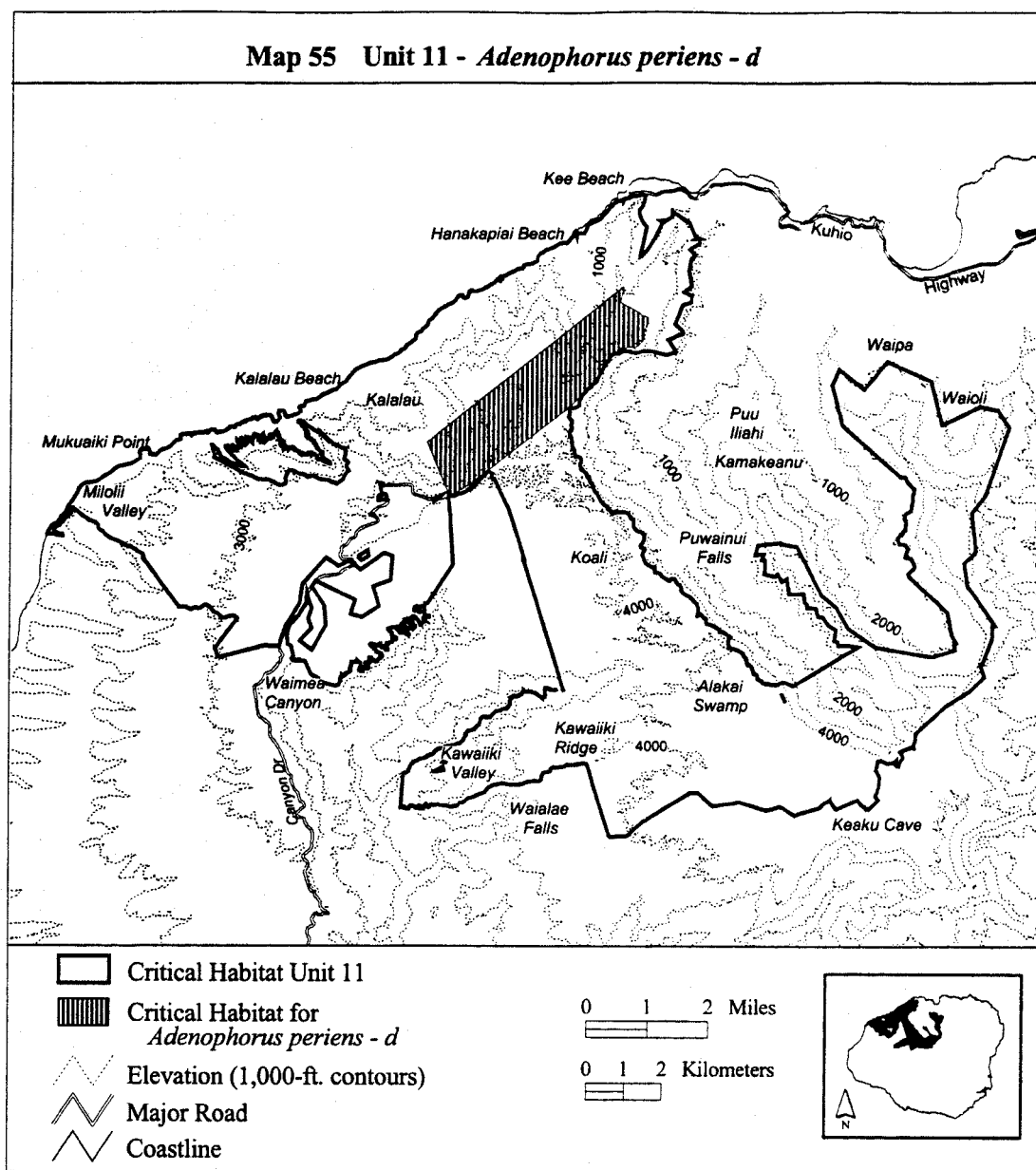
(lv) Kauai 11—*Adenophorus periens*—d
(1,006 ha; 2,485 ac)

(A) Unit consists of the following 82 boundary points: Start at 439347, 2452789; 439324, 2452794; 439098, 2452402; 438924, 2452225; 438478, 2451772; 438422, 2451715; 438390, 2451682; 436328, 2450087; 436296, 2450046; 436244, 2450016; 436213, 2450009; 436203, 2450009; 436111, 2449924; 436104, 2449902; 436086, 2449869; 436075, 2449855; 436058, 2449842; 436017, 2449817; 436001, 2449805; 435988, 2449789; 435985, 2449783; 435308, 2449368; 435292,

2449379; 435269, 2449384; 435247, 2449385; 434652, 2450774; 434814, 2450917; 434829, 2450928; 435956, 2451815; 438144, 2453533; 438500, 2453813; 439711, 2454765; 439738, 2454786; 439842, 2454868; 439760, 2454456; 440303, 2454155; 440294, 2454127; 440436, 2454081; 440496, 2454047; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355,

2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; 439355, 2452801; return to starting point.

(B) Note: Map 55 follows:



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

(A) Unit consists of the following 292 boundary points: Start at 435336,

2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435596, 2442883; 435624, 2442882; 435632, 2442910; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722,

2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160,

2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758,

2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2443995; 436943, 2444066; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437129, 2444107; 437182, 2444088; 437303, 2444229; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437365, 2444221; 437566, 2444182; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820,

2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438335, 2444214; 438238, 2444515; 438251, 2444591; 438333, 2444564; 438464, 2444701; 438540, 2444598; 438837, 2444584; 438878, 2444453; 438982, 2444481; 439071, 2444639; 439712, 2444756; 439712, 2444935; 439774, 2444949; 439816, 2444749; 439747, 2444687; 439395, 2444474; 439271, 2444301; 438988, 2444026; 438609, 2444178; 438554, 2444019; 438154, 2443806; 438037, 2443916; 437368, 2443785; 437354, 2443668; 437354, 2443516; 437203, 2443323; 436548, 2443254; 436617, 2443027; 436224, 2442848; 436210, 2442751; 436637, 2442799; 436982, 2442606; 436644, 2442510; 437023, 2442303; 436989, 2442144; 437223, 2442103; 436975, 2442027; 436975, 2441958; 436803, 2441986; 436734, 2442110; 436672, 2442034; 436623, 2442034; 436389, 2442076; 436375, 2441993; 436175, 2441965; 436072, 2442041; 435879, 2441972; 435617, 2441890; 435810,

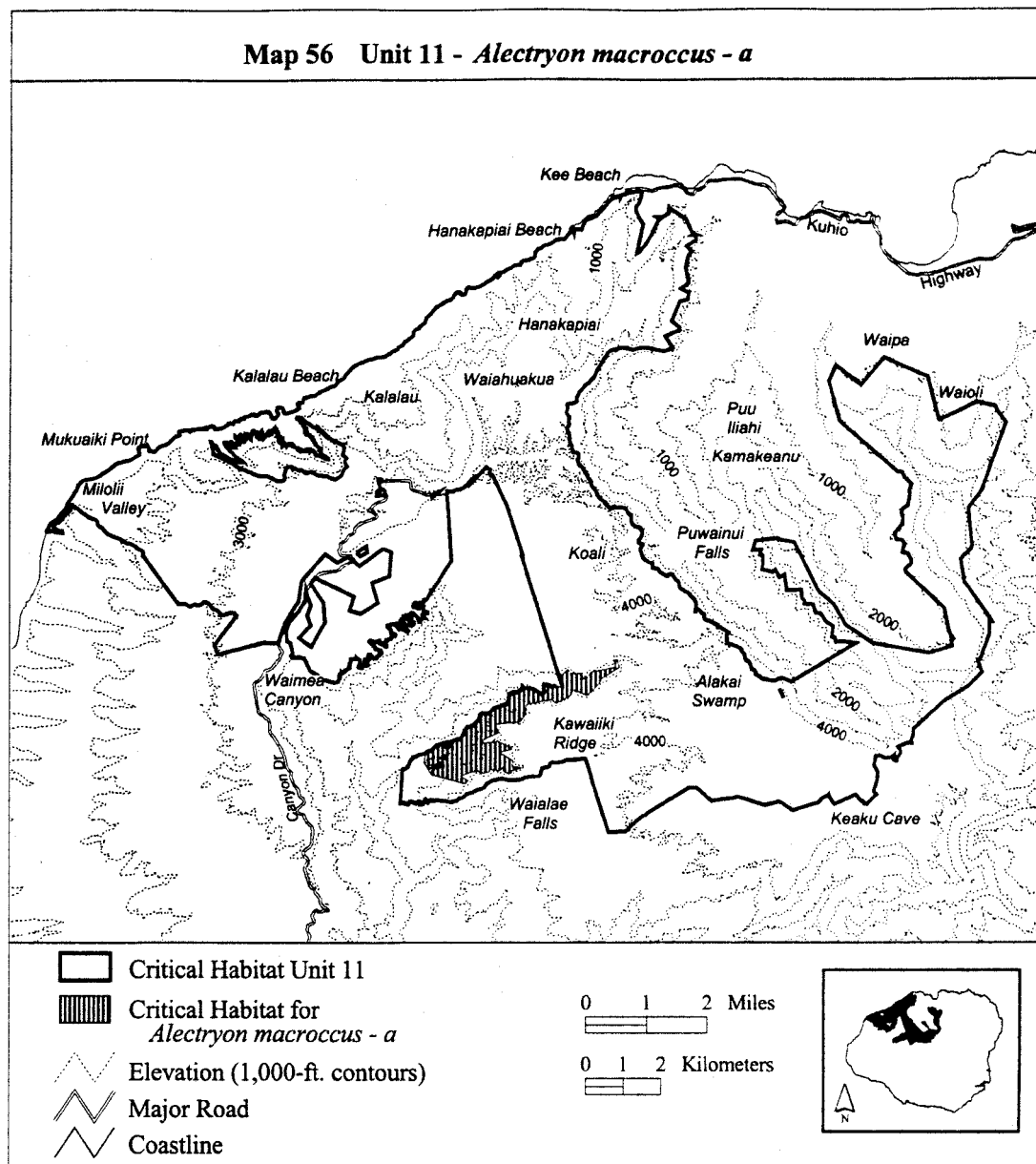
2441766; 435755, 2441683; 434852, 2441917; 434645, 2442255; 434684, 2442495; 434700, 2442502; 434713, 2442515; 434725, 2442524; 434735, 2442532; 434755, 2442542; 434775, 2442551; 434800, 2442556; 434822, 2442562; 434842, 2442574; 434862, 2442596; 434883, 2442613; 434896, 2442626; 434916, 2442647; 434934, 2442668; 434949, 2442681; 434972, 2442699; 434986, 2442705; 434997, 2442708; 435006, 2442713; 435012, 2442717; 435026, 2442719; 435039, 2442722; 435061, 2442727; 435081, 2442733; 435100, 2442739; 435119, 2442747; 435135, 2442754; 435150, 2442764; 435164, 2442771; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

(B) Excluding 2 areas:

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

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

(C) **Note:** Map 56 follows:



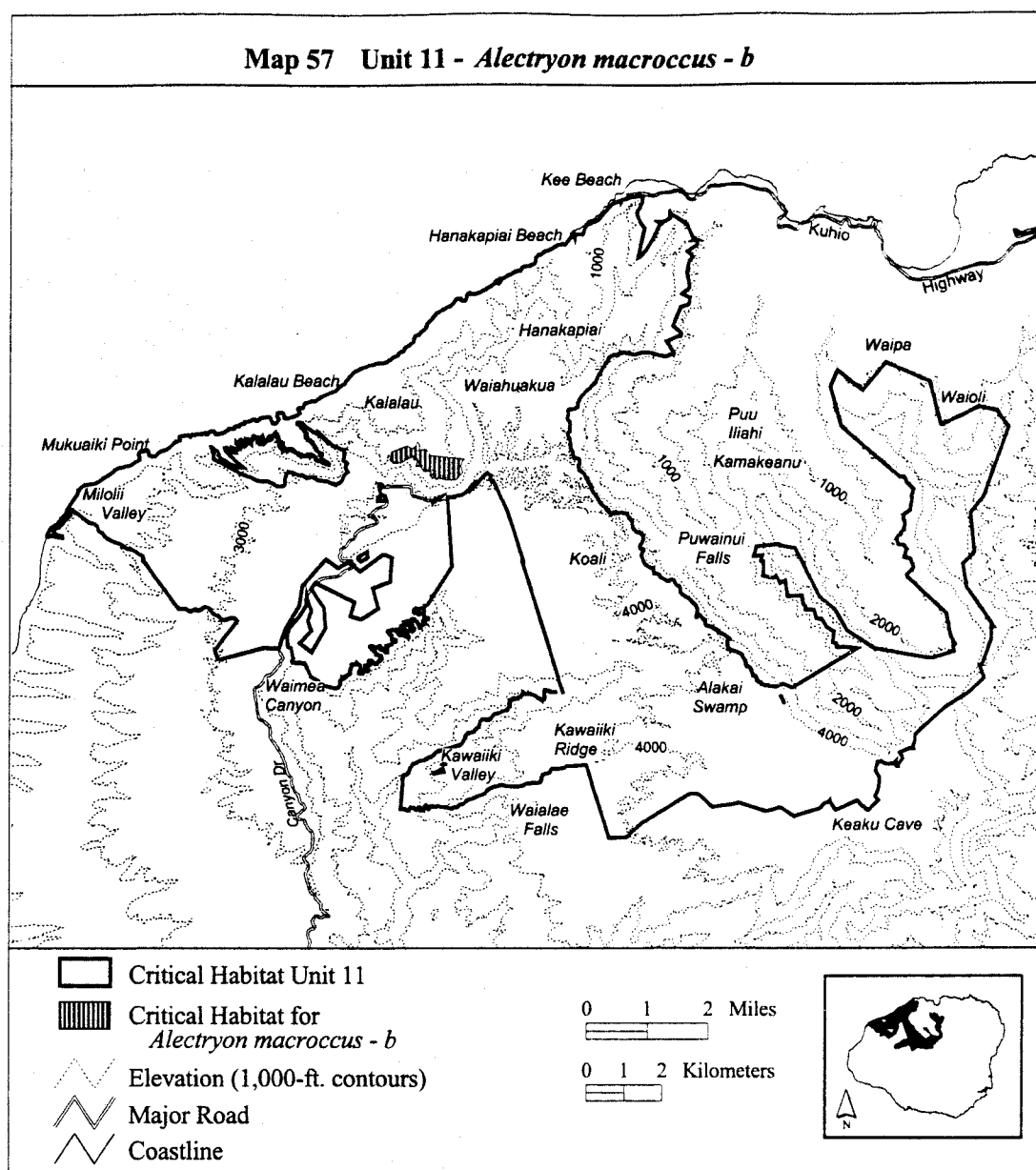
(lvii) Kauai 11—*Alectryon macroccus*—b (90 ha; 222 ac)

(A) Unit consists of the following 42 boundary points: Start at 434114, 2450720; 434166, 2450751; 434206, 2450682; 434246, 2450687; 434293, 2450650; 434374, 2450717; 434437, 2450858; 434504, 2450749; 434475, 2450619; 434648, 2450659; 434778,

2450484; 435695, 2450389; 435608, 2450327; 435588, 2450199; 435632, 2450023; 435535, 2449928; 435447, 2449835; 435182, 2449829; 435011, 2449895; 434939, 2449841; 434894, 2449891; 434816, 2449871; 434773, 2449947; 434755, 2449958; 434787, 2450016; 434784, 2450052; 434742, 2450070; 434609, 2450052; 434578,

2450109; 434543, 2450151; 434504, 2450195; 434399, 2450200; 434430, 2450325; 434417, 2450370; 434363, 2450363; 434331, 2450386; 434320, 2450475; 434145, 2450379; 433991, 2450281; 433804, 2450277; 433704, 2450352; 433744, 2450570; return to starting point.

(B) **Note:** Map 57 follows:



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

(A) Unit consists of the following 192 boundary points: Start at 439360,

2452812; 439283, 2452730; 439242, 2452604; 439217, 2452559; 439144, 2452406; 439128, 2452379; 439125, 2452373; 439120, 2452368; 439061, 2452327; 439037, 2452297; 439020, 2452266; 438997, 2452241; 438936, 2452213; 438888, 2452163; 438833, 2452090; 438761, 2452013; 438715, 2451908; 438680, 2451858; 438680, 2451783; 438675, 2451766; 438670, 2451754; 438657, 2451738; 438599, 2451708; 438529, 2451692; 438484, 2451690; 438442, 2451682; 438429, 2451670; 438425, 2451652; 438440, 2451600; 438435, 2451571; 438419,

2451509; 438410, 2451464; 438422, 2451414; 438454, 2451380; 438478, 2451359; 438485, 2451346; 438481, 2451287; 438472, 2451261; 438467, 2451228; 438472, 2451209; 438481, 2451188; 438486, 2451163; 438484, 2451141; 438475, 2451113; 438455, 2451089; 438434, 2451069; 438425, 2451047; 438435, 2450985; 438427, 2450964; 438472, 2450910; 438501, 2450796; 438488, 2450686; 438554, 2450559; 438576, 2450448; 438571, 2450438; 438578, 2450438; 438581, 2450423; 438621, 2450415; 438690, 2450392; 438715, 2450373; 438731, 2450342; 438736, 2450325; 438737, 2450311; 438732, 2450286; 438717, 2450241; 438713, 2450206; 438716, 2450162; 438717, 2450158; 438658, 2450128; 438536, 2450165; 438407,

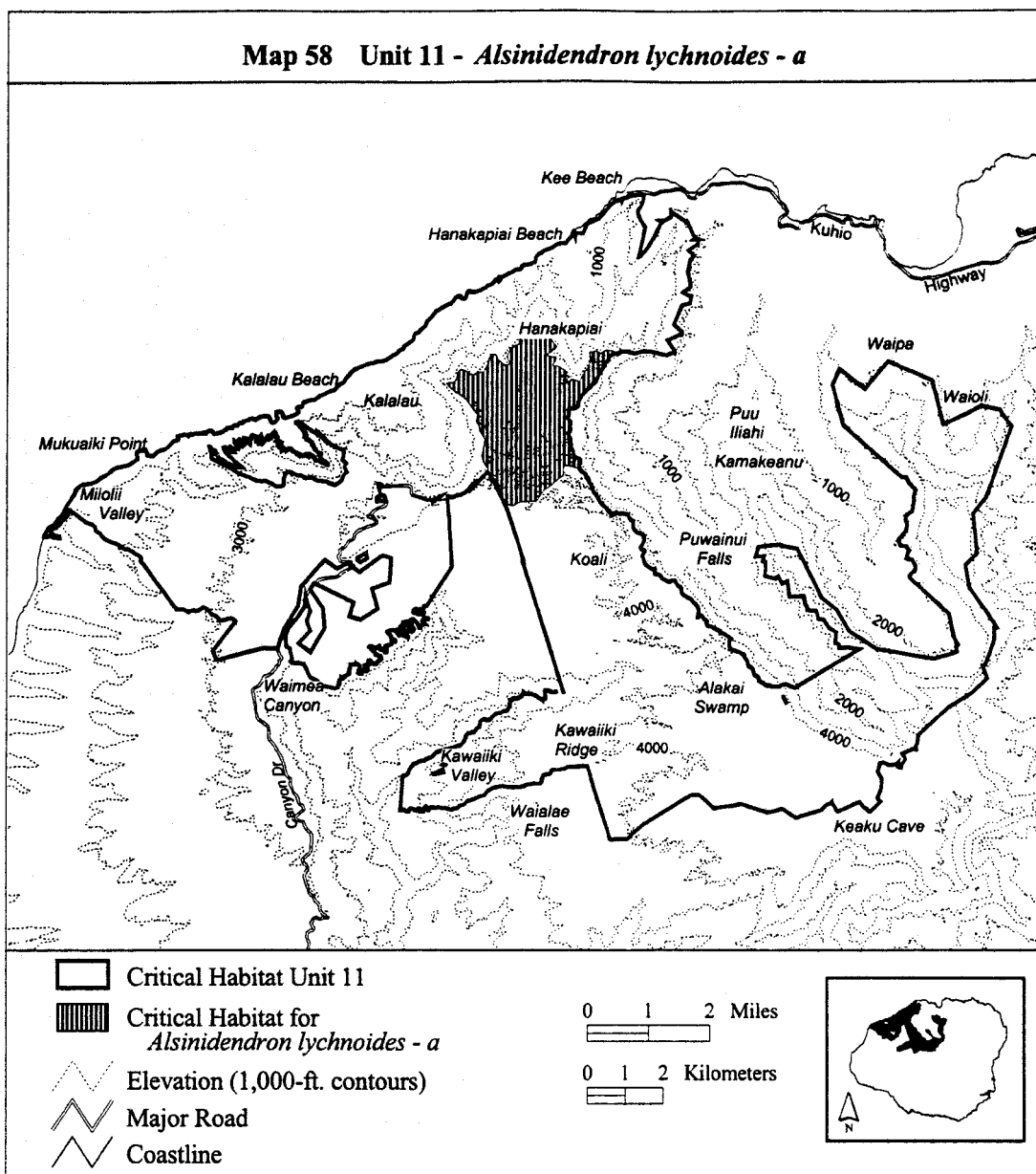
2450217; 438314, 2450210; 438311, 2450196; 438281, 2450069; 438277, 2449915; 438166, 2449844; 438107, 2449793; 437960, 2449667; 437875, 2449601; 437812, 2449579; 437668, 2449383; 437627, 2449302; 437550, 2449262; 437413, 2449247; 437247, 2449258; 437125, 2449214; 436955, 2449122; 436770, 2449170; 436737, 2449184; 436566, 2449559; 436578, 2449579; 436604, 2449675; 436575, 2449727; 436490, 2449760; 436423, 2449793; 436375, 2449838; 436375, 2449882; 436386, 2449952; 436334, 2449989; 436253, 2450044; 436310, 2450116; 436170, 2450294; 436132, 2450455; 436191, 2450690; 436218, 2450861; 436154, 2451005; 436084, 2451096; 436071, 2451235; 435999, 2451347; 436020, 2451545; 435900,

2451671; 435731, 2451919; 435437,
2452127; 435277, 2452266; 435202,
2452357; 435383, 2452379; 435442,
2452416; 435523, 2452667; 435587,
2452715; 435731, 2452662; 435859,
2452597; 435945, 2452592; 436009,
2452651; 436175, 2452641; 436293,
2452859; 436368, 2453095; 436491,
2453121; 436571, 2452971; 436699,
2452864; 436801, 2452816; 436876,
2452886; 436795, 2453040; 436902,
2453276; 437116, 2453404; 437116,
2453510; 437234, 2453580; 437239,
2453681; 437346, 2453810; 437426,
2453991; 437640, 2454012; 437710,

2453996; 437678, 2453943; 437635,
2453900; 437742, 2453809; 437849,
2453788; 437929, 2453799; 437993,
2453676; 437983, 2453510; 438004,
2453441; 438116, 2453323; 438079,
2453254; 437956, 2453184; 437844,
2453099; 437988, 2453045; 438100,
2453045; 438082, 2452951; 438047,
2452880; 438009, 2452858; 438009,
2452826; 438172, 2452798; 438248,
2452739; 438336, 2452682; 438357,
2452597; 438378, 2452559; 438453,
2452532; 438373, 2452458; 438368,
2452410; 438368, 2452361; 438512,
2452447; 438603, 2452442; 438705,

2452399; 438844, 2452644; 438928,
2452744; 439013, 2452928; 438986,
2453175; 439084, 2453179; 439154,
2453195; 439272, 2453141; 439389,
2453216; 439491, 2453221; 439576,
2453193; 439635, 2453173; 439658,
2453123; 439639, 2453119; 439600,
2453107; 439553, 2453082; 439503,
2453046; 439481, 2453022; 439473,
2452985; 439464, 2452963; 439414,
2452909; 439390, 2452876; return to
starting point.

(B) Note: Map 58 follows:



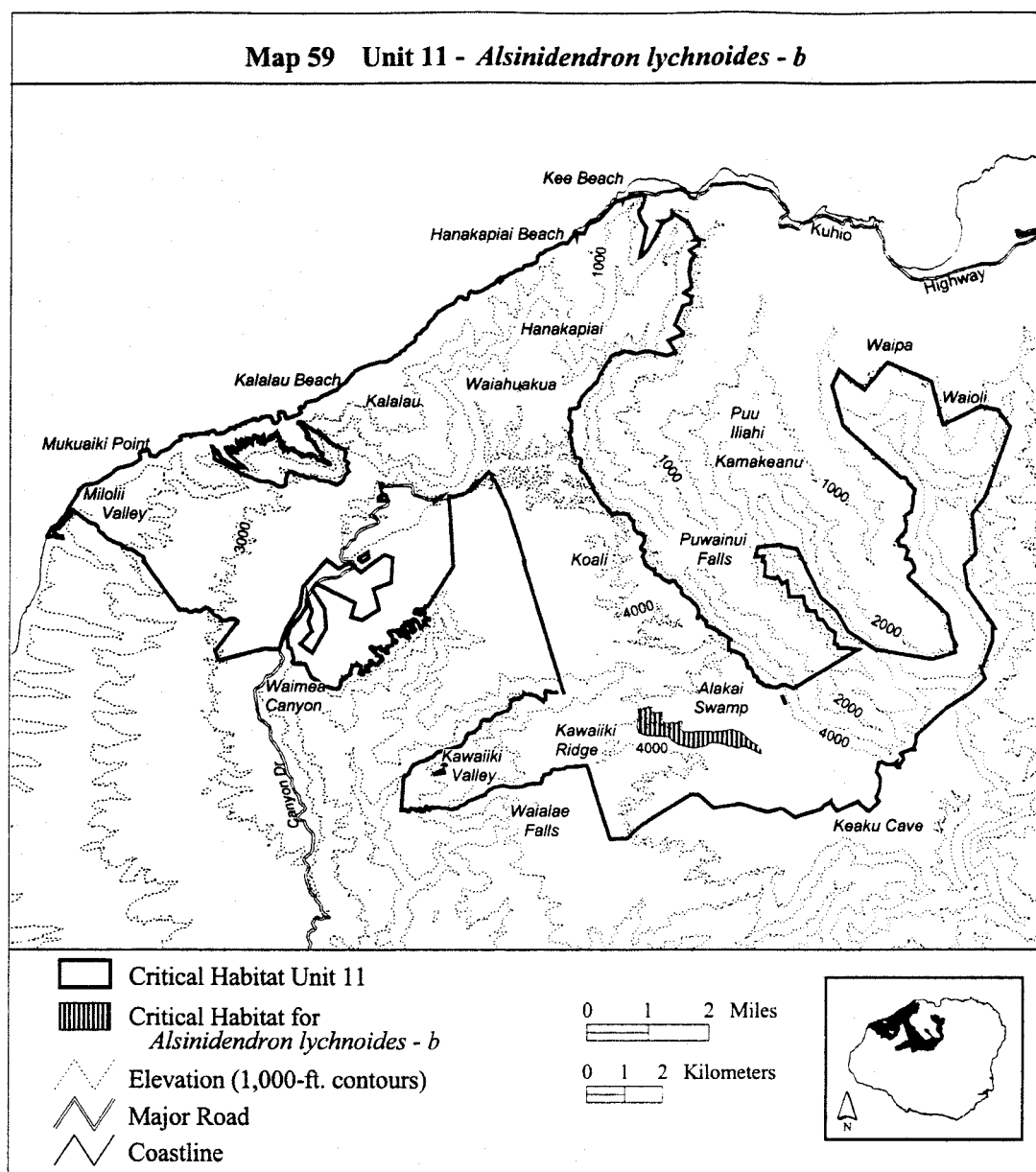
(lix) Kauai 11—*Alsinidendron lychnoides*—b (138 ha; 340 ac)

(A) Unit consists of the following 69 boundary points: Start at 442522, 2443254; 442609, 2443267; 442692, 2443312; 442829, 2443300; 442867, 2443258; 442962, 2443258; 443104, 2443163; 443187, 2443067; 443307, 2442972; 443473, 2442880; 443531, 2442768; 443548, 2442664; 443133, 2442864; 443045, 2442860; 442933, 2442822; 442746, 2442880; 442717, 2442860; 442622, 2442897; 442605,

2442901; 442522, 2442930; 442414, 2442951; 442265, 2442959; 442182, 2442935; 442099, 2442876; 441804, 2442823; 441629, 2442831; 441355, 2442906; 441177, 2443010; 441098, 2443101; 440998, 2443113; 440811, 2443118; 440487, 2443134; 440400, 2443172; 440350, 2443202; 440371, 2443201; 440305, 2443230; 440350, 2443202; 440309, 2443205; 440251, 2443371; 440271, 2443487; 440309, 2443591; 440300, 2443720; 440275, 2443832; 440346, 2443811; 440496, 2443865; 440579, 2443877; 440616,

2443852; 440633, 2443769; 440753, 2443736; 440923, 2443749; 440919, 2443678; 440919, 2443541; 440994, 2443479; 441127, 2443466; 441181, 2443487; 441280, 2443462; 441393, 2443516; 441451, 2443508; 441434, 2443437; 441417, 2443358; 441417, 2443288; 441488, 2443242; 441679, 2443229; 441775, 2443242; 441908, 2443263; 442020, 2443258; 442153, 2443263; 442298, 2443225; 442373, 2443262; return to starting point.

(B) Note: Map 59 follows:



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

(A) Unit consists of the following 113 boundary points: Start at 438531,

2445488; 438506, 2445513; 438506, 2445542; 438552, 2445621; 438610, 2445684; 438656, 2445758; 438656, 2445742; 438677, 2445713; 438697,

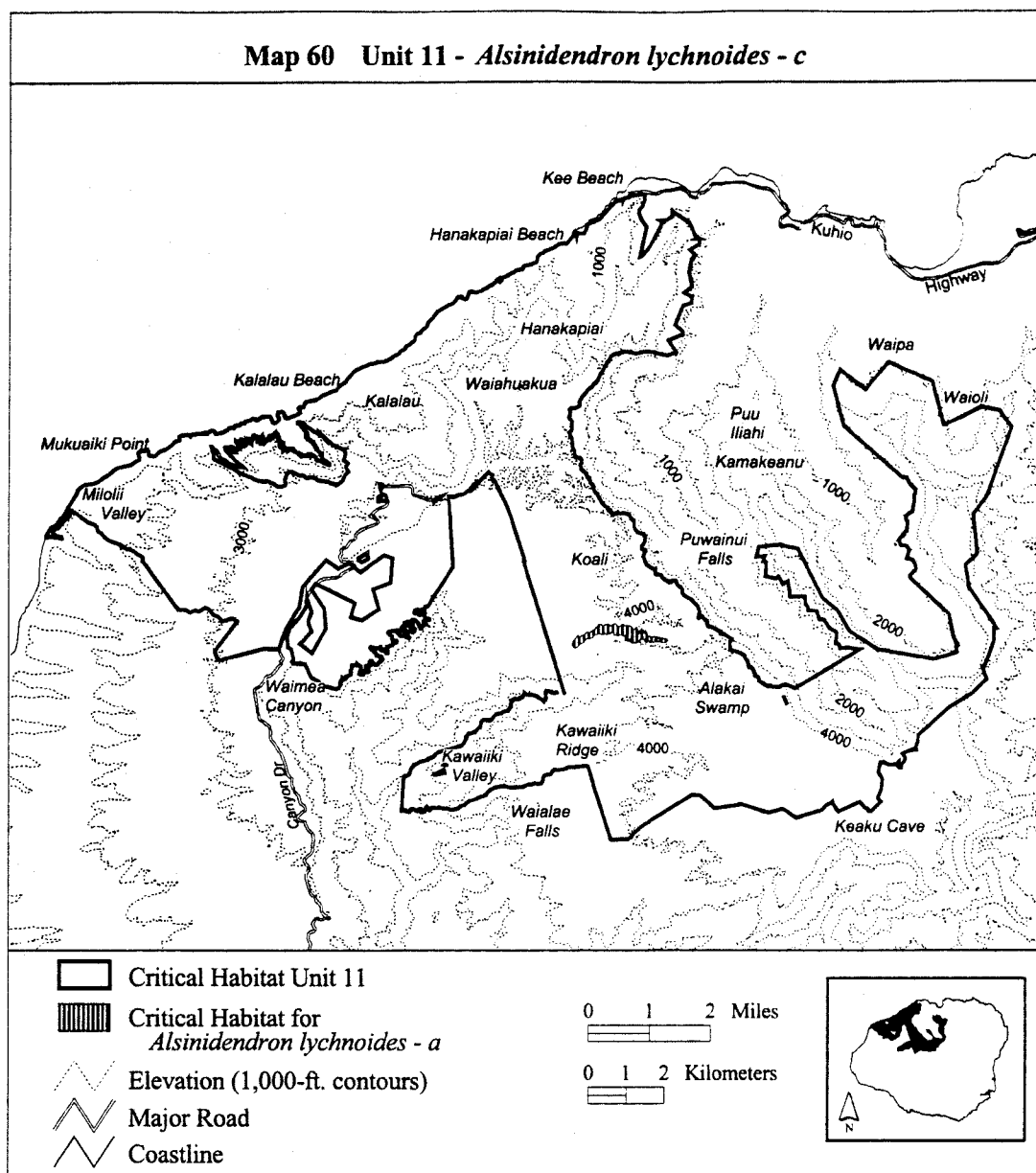
2445708; 438739, 2445721; 438760, 2445758; 438805, 2445779; 438847, 2445791; 438863, 2445825; 438913, 2445854; 438959, 2445820; 439001,

2445850; 439071, 2445899; 439129,
2445953; 439175, 2446007; 439208,
2446045; 439279, 2446045; 439329,
2446007; 439374, 2446028; 439441,
2446061; 439474, 2446044; 439511,
2446020; 439540, 2446020; 439582,
2446049; 439632, 2446069; 439665,
2446044; 439694, 2446011; 439810,
2446007; 439819, 2446049; 439860,
2446065; 439881, 2446036; 439931,
2446015; 440010, 2446019; 440084,
2445994; 440084, 2445957; 440109,
2445903; 440163, 2445932; 440192,
2445978; 440226, 2445978; 440230,
2445932; 440213, 2445828; 440259,
2445808; 440284, 2445837; 440313,
2445874; 440325, 2445924; 440359,

2445936; 440359, 2445882; 440363,
2445849; 440396, 2445857; 440462,
2445870; 440479, 2445791; 440512,
2445749; 440574, 2445716; 440658,
2445716; 440728, 2445729; 440765,
2445708; 440861, 2445683; 440911,
2445683; 441011, 2445670; 441035,
2445621; 440961, 2445579; 440869,
2445571; 440807, 2445604; 440753,
2445587; 440641, 2445571; 440591,
2445588; 440579, 2445612; 440491,
2445621; 440417, 2445608; 440412,
2445646; 440375, 2445671; 440342,
2445662; 440313, 2445633; 440255,
2445583; 440093, 2445567; 440047,
2445592; 440047, 2445654; 439985,
2445625; 439906, 2445621; 439893,

2445642; 439914, 2445696; 439922,
2445762; 439914, 2445779; 439881,
2445733; 439848, 2445758; 439806,
2445791; 439765, 2445754; 439690,
2445754; 439603, 2445779; 439603,
2445824; 439574, 2445849; 439507,
2445808; 439449, 2445787; 439399,
2445791; 439370, 2445837; 439366,
2445812; 439316, 2445775; 439254,
2445800; 439212, 2445808; 439100,
2445771; 439063, 2445700; 438947,
2445663; 438888, 2445663; 438805,
2445563; 438731, 2445542; 438710,
2445538; 438664, 2445459; 438589,
2445434; return to starting point.

(B) Note: Map 60 follows:



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

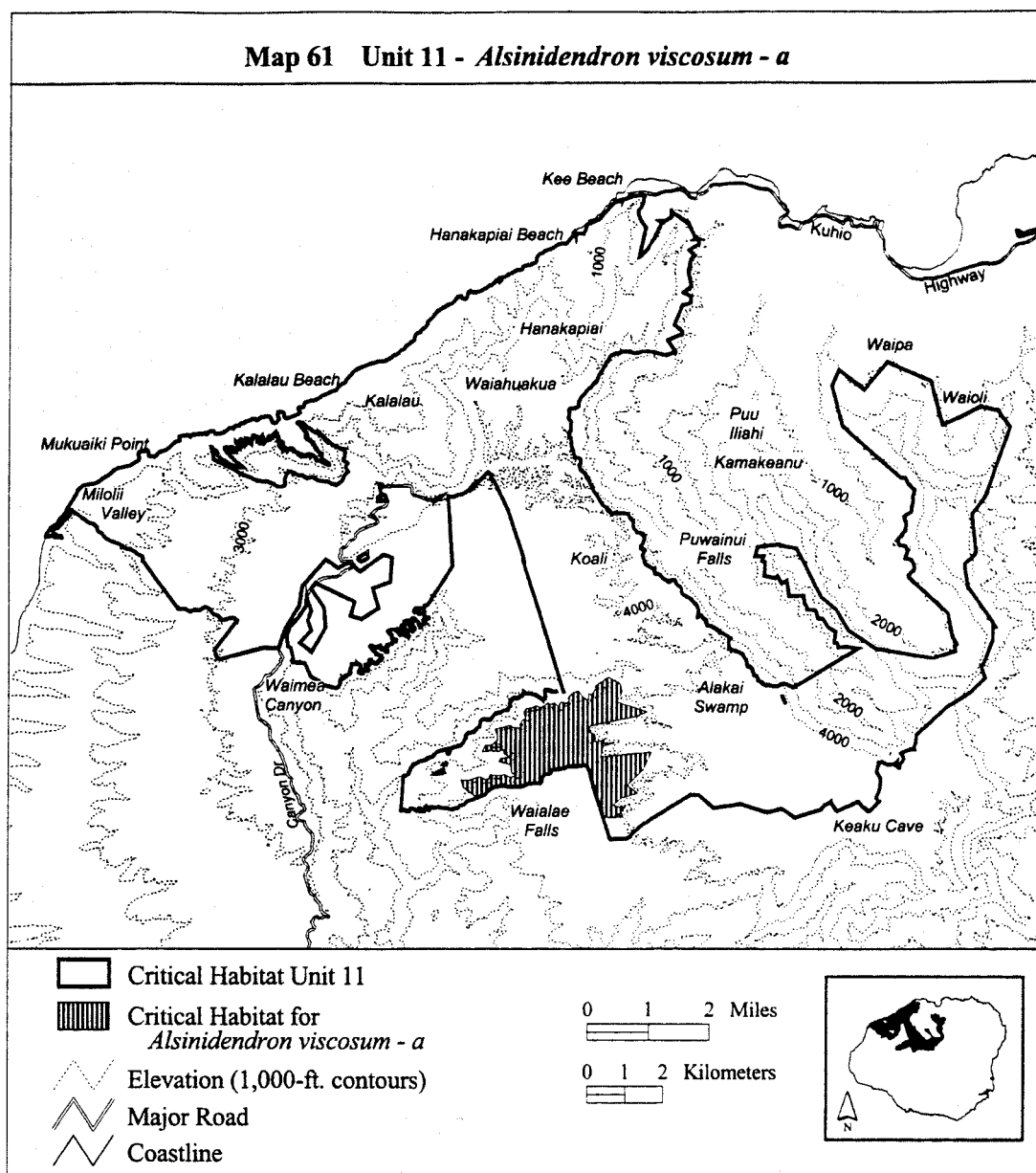
(A) Unit consists of the following 208 boundary points: Start at 439373,

2440983; 438934, 2442351; 438866, 2442347; 438838, 2442340; 438821, 2442339; 438757, 2442331; 438721, 2442329; 438704, 2442326; 438694, 2442327; 438679, 2442324; 438656, 2442321; 438626, 2442315; 438609, 2442314; 438561, 2442316; 438535, 2442314; 438523, 2442310; 438517, 2442310; 438496, 2442310; 438460, 2442320; 438453, 2442321; 438436, 2442321; 438433, 2442319; 438418, 2442311; 438392, 2442294; 438376, 2442278; 438355, 2442265; 438305, 2442256; 438254, 2442248; 438238, 2442248; 438219, 2442244; 438157, 2442234; 438130, 2442234; 438114, 2442232; 438098, 2442237; 438065, 2442246; 438049, 2442246; 438030, 2442243; 438012, 2442229; 438000, 2442216; 437998, 2442205; 437996, 2442188; 437984, 2442167; 437973, 2442147; 437954, 2442136; 437939, 2442128; 437926, 2442125; 437912, 2442123; 437873, 2442121; 437839, 2442110; 437826, 2442106; 437806, 2442092; 437791, 2442074; 437777, 2442052; 437766, 2442017; 437758, 2441998; 437754, 2441991; 437751, 2441981; 437745, 2441950; 437740, 2441938; 437736, 2441928; 437717, 2441899; 437711, 2441887; 437705, 2441878; 437689, 2441877; 437674, 2441875; 437647, 2441866; 437635,

2441866; 437617, 2441866; 437602, 2441867; 437566, 2441876; 437532, 2441880; 437522, 2441879; 437495, 2441869; 437460, 2441862; 437391, 2441858; 437366, 2441852; 437346, 2441845; 437332, 2441842; 437317, 2441835; 437287, 2441816; 437274, 2441809; 437240, 2441796; 437224, 2441791; 437181, 2441781; 437150, 2441777; 437111, 2441777; 437096, 2441779; 437062, 2441776; 437008, 2441775; 436960, 2441776; 436912, 2441780; 436895, 2441784; 436825, 2441795; 436799, 2441801; 436777, 2441809; 436730, 2441820; 436695, 2441811; 436666, 2441808; 436638, 2441803; 436618, 2441796; 436593, 2441792; 436583, 2441789; 436541, 2441785; 436492, 2441773; 436453, 2441759; 436419, 2441739; 436408, 2441737; 436374, 2441718; 436357, 2441708; 436342, 2441700; 436319, 2441681; 436285, 2441639; 436272, 2441618; 436247, 2441590; 436228, 2441575; 436203, 2441564; 436181, 2441558; 436167, 2441552; 436155, 2441546; 436121, 2441536; 436070, 2441515; 436039, 2441504; 436033, 2441502; 435654, 2441777; 435600, 2441959; 435782, 2441952; 436106, 2442053; 436248, 2441979; 436335, 2441979; 436369, 2442121; 436450, 2442100; 436659, 2442080; 436740, 2442121; 436915, 2442033; 437084, 2442087; 436936, 2442161; 436922, 2442363; 436625, 2442458; 436666, 2442525; 436888, 2442559; 436740,

2442647; 436720, 2442755; 436558, 2442714; 436524, 2442748; 436450, 2442707; 436403, 2442761; 436302, 2442714; 436160, 2442701; 436248, 2442883; 436410, 2442883; 436571, 2443011; 436551, 2443078; 436558, 2443159; 436504, 2443294; 436916, 2443395; 437003, 2443335; 437192, 2443314; 437152, 2443409; 437226, 2443523; 437327, 2443564; 437266, 2443705; 437320, 2443827; 437523, 2443847; 437583, 2443901; 437718, 2443833; 437921, 2443989; 437948, 2443935; 438062, 2443982; 438170, 2443867; 438251, 2444002; 438366, 2443955; 438447, 2444009; 438440, 2444117; 438575, 2444231; 438710, 2444285; 438804, 2444143; 438959, 2444042; 438986, 2444211; 439047, 2444184; 439074, 2444224; 439162, 2444325; 439155, 2444400; 439499, 2444649; 439823, 2444453; 439850, 2444238; 439735, 2444008; 440518, 2443732; 440241, 2443624; 439007, 2443361; 438993, 2443220; 439155, 2443132; 439128, 2442977; 439283, 2442970; 439405, 2443051; 439357, 2442916; 439668, 2442943; 439364, 2442849; 439283, 2442552; 440646, 2442700; 440437, 2442248; 440005, 2441810; 440281, 2441608; 439863, 2441513; 439641, 2441304; 439769, 2441257; 439964, 2441257; 439769, 2441055; 439904, 2440980; return to starting point.

(B) **Note:** Map 61 follows:



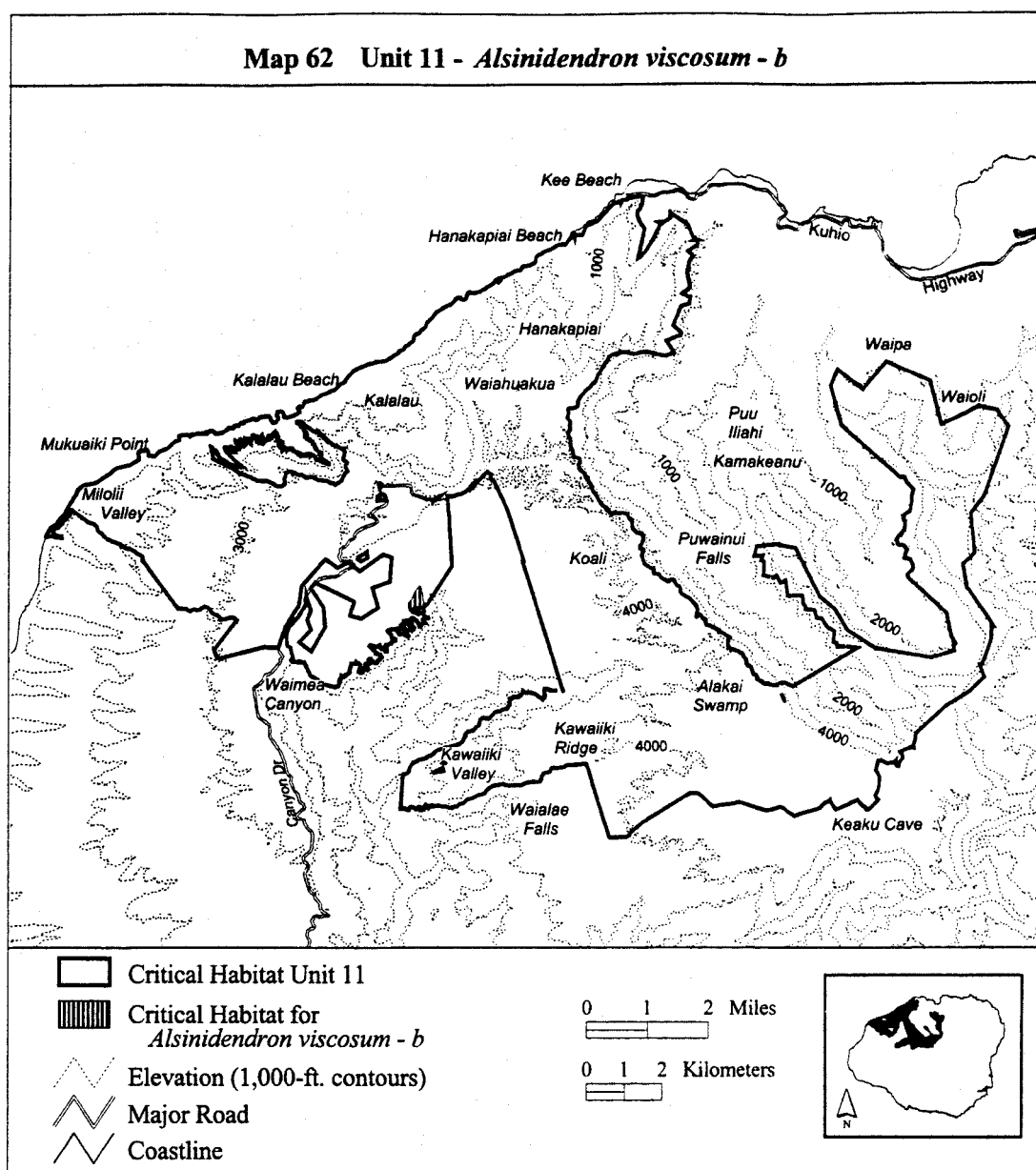
(Ixii) Kauai 11—*Alsinidendron viscosum*—b (17 ha; 42 ac)

(A) Unit consists of the following 106 boundary points: Start at 434696, 2446537; 434683, 2446522; 434681, 2446520; 434675, 2446517; 434668, 2446521; 434668, 2446521; 434668, 2446522; 434668, 2446522; 434668, 2446522; 434668, 2446523; 434668, 2446523; 434668, 2446524; 434668, 2446524; 434668, 2446525; 434668, 2446525; 434668, 2446525; 434668, 2446526; 434652, 2446530; 434615, 2446532; 434610, 2446511; 434615, 2446491; 434606, 2446463; 434569, 2446454; 434550, 2446470; 434504, 2446463; 434476, 2446440; 434460, 2446433; 434442, 2446465; 434423, 2446465; 434391,

2446428; 434366, 2446435; 434338, 2446426; 434320, 2446403; 434320, 2446371; 434336, 2446358; 434340, 2446352; 434353, 2446346; 434357, 2446343; 434387, 2446345; 434407, 2446334; 434435, 2446292; 434481, 2446285; 434479, 2446232; 434377, 2446272; 434294, 2446325; 434230, 2446392; 434193, 2446470; 434195, 2446546; 434211, 2446580; 434287, 2446652; 434320, 2446721; 434377, 2446857; 434453, 2446984; 434516, 2447023; 434534, 2447011; 434555, 2446861; 434573, 2446827; 434571, 2446746; 434587, 2446615; 434631, 2446567; 434684, 2446543; 434684, 2446543; 434684, 2446543; 434685, 2446543; 434685, 2446543; 434685, 2446543; 434686, 2446543; 434686, 2446543; 434686, 2446543; 434687,

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(B) **Note:** Map 62 follows:



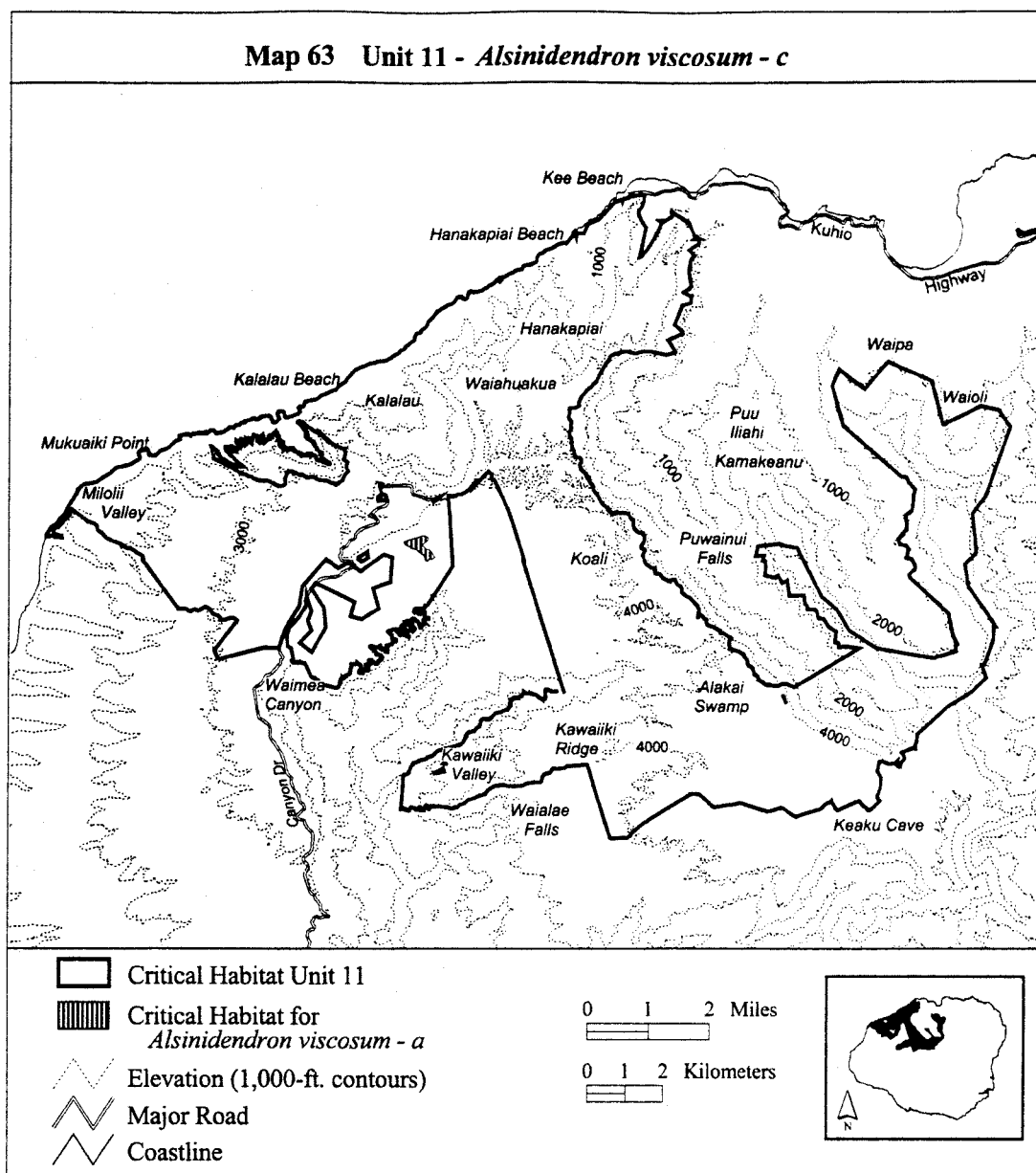
(lxiii) Kauai 11—*Alsinidendron viscosum*—c (22 ha; 55 ac)

(A) Unit consists of the following 27 boundary points: Start at 434055, 2448131; 434055, 2448166; 434207, 2448223; 434407, 2448288; 434564,

2448338; 434672, 2448322; 434718, 2448272; 434714, 2448223; 434679, 2448184; 434610, 2448154; 434550, 2448092; 434580, 2448043; 434656, 2447972; 434725, 2447970; 434765, 2447954; 434880, 2447767; 434825, 2447721; 434767, 2447721; 434714,

2447719; 434716, 2447684; 434672, 2447682; 434626, 2447707; 434610, 2447749; 434612, 2447797; 434400, 2447965; 434283, 2447995; 434151, 2448076; return to starting point.

(B) **Note:** Map 63 follows:



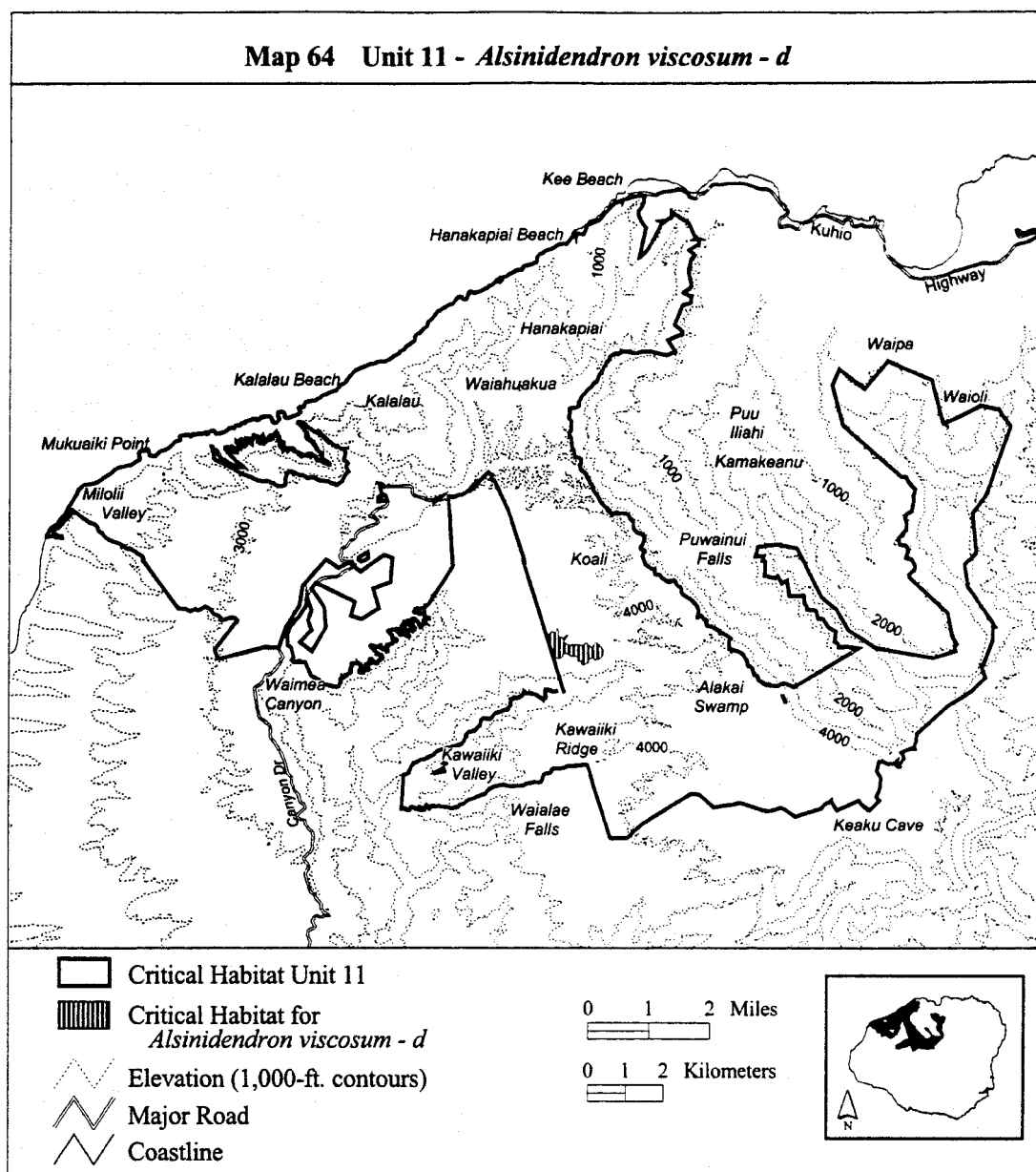
(lxiv) Kauai 11—*Alsinidendron viscosum*—d (61 ha; 150 ac)

(A) Unit consists of the following 63 boundary points: Start at 438024, 2445182; 437858, 2445698; 437863, 2445701; 437907, 2445735; 437930, 2445790; 437989, 2445842; 438041, 2445816; 438078, 2445809; 438112, 2445868; 438115, 2445913; 438130, 2445931; 438175, 2445835; 438156, 2445794; 438152, 2445742; 438193, 2445686; 438275, 2445657; 438297,

2445664; 438375, 2445727; 438401, 2445742; 438401, 2445709; 438368, 2445664; 438312, 2445590; 438312, 2445556; 438353, 2445523; 438464, 2445467; 438546, 2445489; 438609, 2445482; 438732, 2445482; 438814, 2445463; 438892, 2445541; 438929, 2445515; 438981, 2445441; 438999, 2445463; 439066, 2445397; 439137, 2445530; 439200, 2445534; 439330, 2445396; 439352, 2445333; 439333, 2445192; 439274, 2445133; 439192, 2445088; 439125, 2445088; 439085,

2445140; 438996, 2445126; 438970, 2445100; 438962, 2445018; 438921, 2445007; 438825, 2444947; 438784, 2444988; 438762, 2445062; 438713, 2445051; 438680, 2445055; 438680, 2445170; 438602, 2445196; 438535, 2445178; 438476, 2445204; 438431, 2445244; 438364, 2445267; 438286, 2445237; 438268, 2445185; 438219, 2445118; 438141, 2445118; 438030, 2445174; return to starting point.

(B) Note: Map 64 follows:



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

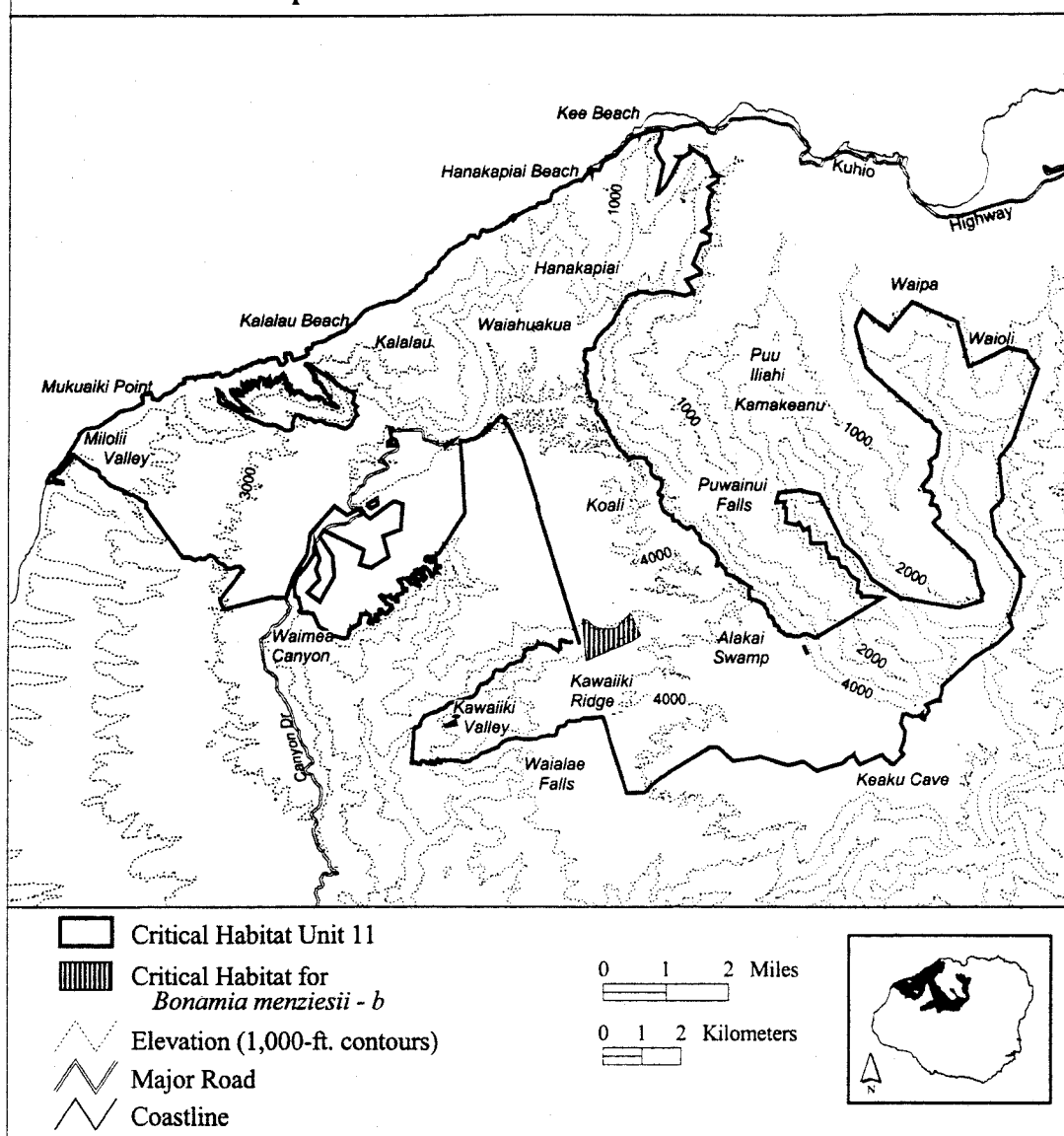
(A) Unit consists of the following 12
boundary points: Start at 438424,

2444853; 438550, 2444811; 438668,
2444697; 438924, 2444597; 439252,
2444612; 439616, 2444997; 439629,
2445010; 439911, 2444437; 439905,

2444434; 439701, 2444298; 438490,
2443789; 438404, 2444823; return to
starting point.

(B) **Note:** Map 65 follows:

Map 65 Unit 11 - *Bonamia menziesii* - b



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

(A) Unit consists of the following 807 boundary points: coastline; 430380, 2450816; 430372, 2450803; 430368, 2450818; 430364, 2450833; 430362, 2450842; 430355, 2450855; 430348, 2450863; 430335, 2450873; 430331, 2450883; 430328, 2450897; 430326, 2450922; 430319, 2450953; 430305, 2450972; 430295, 2450980; 430285, 2450982; 430281, 2450979; 430276, 2450975; 430272, 2450958; 430273, 2450938; 430261, 2450933; 430250, 2450924; 430246, 2450905; 430251, 2450875; 430256, 2450842; 430268, 2450786; 430261, 2450779; 430252, 2450779; 430249, 2450795; 430246, 2450807; 430242, 2450821; 430234,

2450838; 430217, 2450857; 430209,
2450860; 430204, 2450855; 430197,
2450844; 430193, 2450832; 430172,
2450844; 430173, 2450865; 430175,
2450880; 430183, 2450896; 430192,
2450910; 430197, 2450925; 430197,
2450937; 430194, 2450949; 430187,
2450962; 430177, 2450971; 430166,
2450974; 430154, 2450976; 430132,
2450976; 430116, 2450985; 430107,
2450980; 430091, 2450975; 430078,
2450990; 430069, 2450993; 430061,
2450978; 430054, 2450938; 430051,
2450920; 430030, 2450915; 430016,
2450914; 430010, 2450909; 430009,
2450885; 430018, 2450854; 430024,
2450828; 430018, 2450825; 430011,
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2450787; 430022, 2450756; 430002,
2450778; 429994, 2450795; 429984.

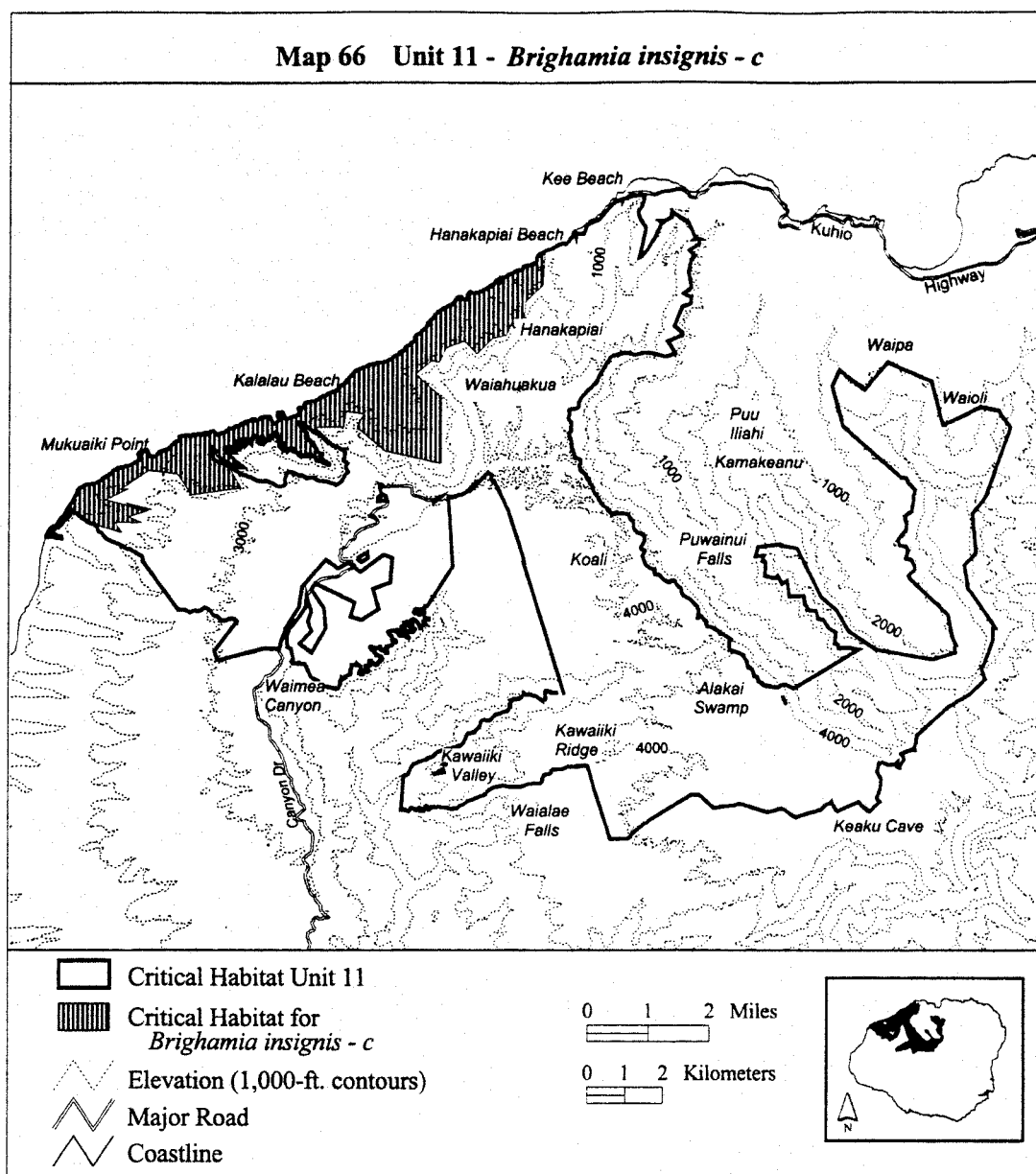
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2450871; 429869, 2450875; 429863,
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2450836; 429866, 2450814; 429870,
2450799; 429879, 2450785; 429885,
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2450756; 429874, 2450750; 429875,
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2448561; 424906, 2448551; 424898,
2448552; 424886, 2448554; 424877,
2448554; 424871, 2448552; 424863,
2448548; 424849, 2448543; 424840,
2448538; 424824, 2448534; 424811,
2448524; 424803, 2448521; 424795,
2448511; 424785, 2448498; 424778,
2448484; 424774, 2448461; 424778,
2448445; 424791, 2448421; 424819,
2448402; 424832, 2448389; 424848,
2448376; 424871, 2448368; 424900,
2448356; 424929, 2448346; 424953,
2448337; 424973, 2448335; 424990,
2448333; 424997, 2448333; 425003,
2448327; 425006, 2448318; 425009,
2448308; 425011, 2448298; 425013,
2448289; 425015, 2448280; 425010,
2448272; 424998, 2448277; 424991,
2448284; 424983, 2448288; 424971,
2448291; 424957, 2448291; 424948,
2448290; 424933, 2448287; 424927,
2448284; 424915, 2448289; 424892,
2448299; 424874, 2448301; 424841,
2448311; 424823, 2448330; 424803,
2448337; 424777, 2448336; 424735,
2448339; 424711, 2448334; 424677,
2448333; 424664, 2448328; 424648,
2448323; 424633, 2448323; 424626,
2448324; 437770, 2455823; coastline.

(B) **Note:** Map 66 follows:



(lxvii) Kauai 11—*Centaurium sebaeoides*—a (157 ha; 389 ac)

(A) Unit consists of the following 146 boundary points: coastline; 427095, 2450498; 427122, 2450315; 427060, 2450219; 426989, 2450139; 426899, 2450102; 426842, 2450083; 426718, 2450054; 426533, 2450045; 426396, 2449902; 426196, 2449751; 426078, 2449627; 425945, 2449585; 425683, 2449570; 425603, 2449523; 425935, 2449124; 425484, 2449385; 425361, 2449167; 425290, 2449017; 425272, 2449039; 425267, 2449033; 425259, 2449024; 425156, 2449046; 438151, 2455997; 438175, 2455951; 437980, 2455838; 437781, 2455767; 437748, 2455684; 437624, 2455686; 437596, 2455530; 437415, 2455416; 437353,

2455428; 437240, 2455402; 437187, 2455293; 437121, 2455312; 436893, 2455212; 436694, 2455108; 436670, 2454975; 436518, 2455013; 436186, 2454752; 435963, 2454705; 435782, 2454719; 435815, 2454383; 435773, 2454345; 435478, 2454572; 435355, 2454397; 435189, 2454316; 435198, 2454193; 435103, 2454269; 435087, 2454279; 435049, 2454273; 434968, 2454196; 434917, 2454149; 434823, 2454030; 434759, 2453950; 434695, 2453852; 434572, 2453716; 434563, 2453601; 434440, 2453605; 434431, 2453507; 434325, 2453410; 434159, 2453307; 434061, 2453235; 433716, 2452967; 433290, 2452789; 433133, 2452729; 433175, 2452661; 433086, 2452542; 433195, 2452368; 432916, 2452476; 432886, 2452378; 432815,

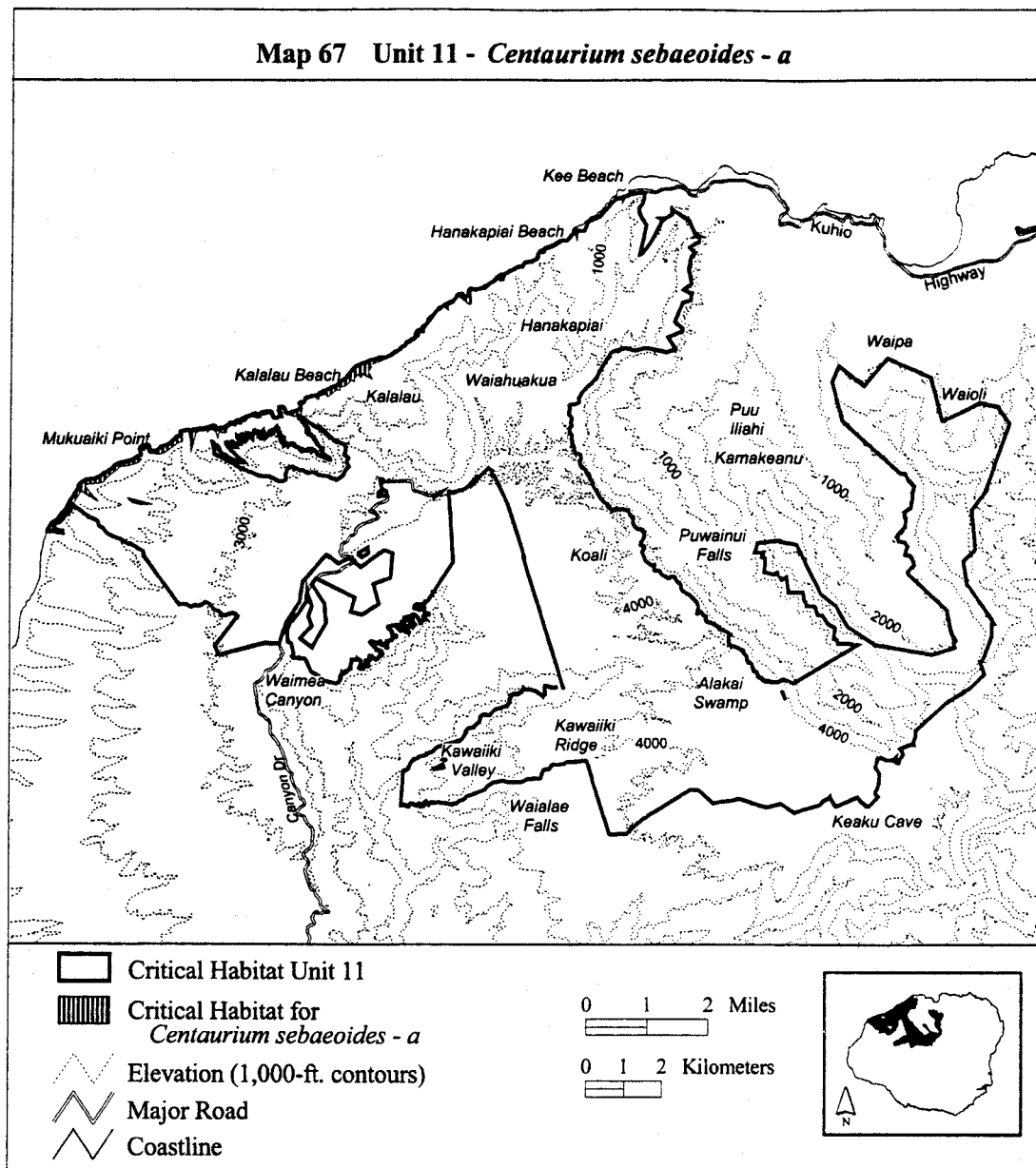
2452468; 432720, 2452373; 432710, 2452264; 432639, 2452321; 432487, 2452178; 432316, 2452117; 432330, 2452036; 432264, 2452055; 432008, 2451880; 431946, 2451956; 431789, 2451885; 431789, 2451823; 431756, 2451804; 431666, 2451899; 431447, 2451795; 431371, 2451676; 431286, 2451695; 431329, 2451576; 431310, 2451429; 431134, 2451353; 430963, 2451410; 430947, 2451439; 430893, 2451445; 430807, 2451586; 430761, 2451556; 430837, 2451309; 430777, 2451319; 430643, 2451285; 430595, 2451285; 430534, 2451345; 430495, 2451419; 430434, 2451441; 430326, 2451403; 430237, 2451411; 430239, 2451337; 430191, 2451306; 430126, 2451313; 430037, 2451352; 429905, 2451309; 429887, 2451259; 429807,

2451199; 429764, 2451267; 429734,
2451147; 429623, 2451176; 429575,
2451098; 429475, 2451133; 429351,
2451050; 429310, 2450929; 429219,
2450929; 429128, 2450959; 429108,
2450786; 429041, 2450972; 428972,
2451024; 428929, 2451037; 428857,

2450999; 428824, 2450925; 428797,
2450999; 428715, 2450981; 428640,
2450994; 428546, 2450948; 428384,
2450446; 428376, 2450782; 428325,
2450973; 428231, 2450952; 428150,
2450948; 428164, 2450704; 428047,
2450665; 427934, 2450565; 427801,

2450484; 427669, 2450378; 427543,
2450370; 427401, 2450386; 427318,
2450387; 427257, 2450448; 427213,
2450548; 427171, 2450463; coastline.

(B) Note: Map 67 follows:



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

(A) Unit consists of the following boundary points: Start at 437683, 2443241; 437679, 2443194; 437679, 2443137; 437726, 2443130; 437800, 2443150; 437817, 2443127; 437817, 2443080; 437803, 2443033; 437834, 2443009; 437887, 2443019; 437907, 2443056; 437948, 2443043; 437974,

2443036; 438008, 2443046; 438042, 2443036; 438082, 2443070; 438122, 2443033; 438162, 2443003; 438196, 2443043; 438216, 2443029; 438223, 2442992; 438246, 2442986; 438280, 2442986; 438280, 2442952; 438246, 2442915; 438283, 2442821; 438310, 2442764; 438307, 2442707; 438273, 2442644; 438199, 2442520; 438176, 2442479; 438139, 2442419; 438109,

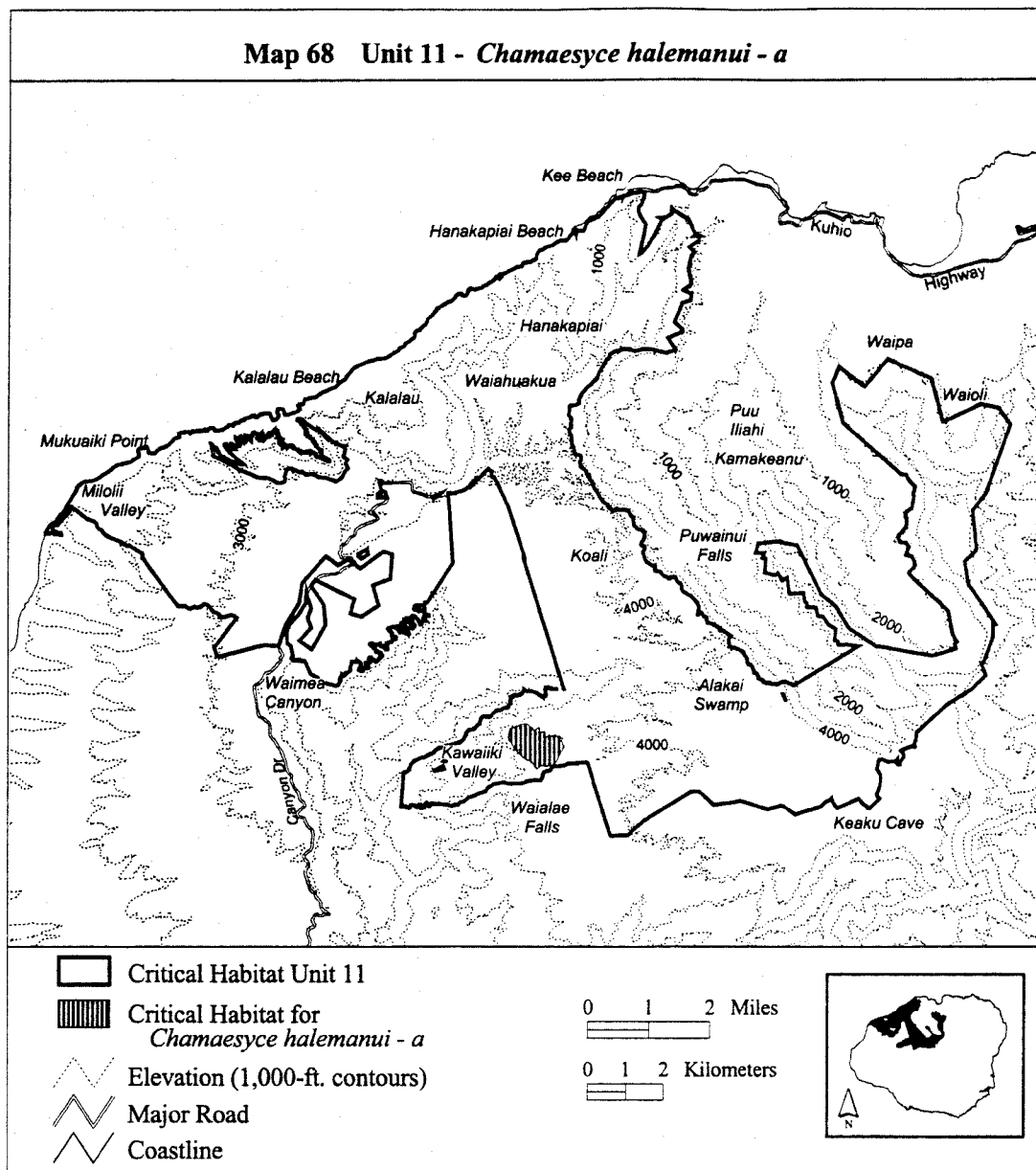
2442349; 438065, 2442285; 438066, 2442260; 438008, 2442239; 437971, 2442255; 437914, 2442255; 437830, 2442245; 437776, 2442271; 437676, 2442224; 437629, 2442167; 437572, 2442198; 437505, 2442302; 437438, 2442355; 437394, 2442392; 437314, 2442416; 437203, 2442506; 437015, 2442694; 436914, 2442875; 436847, 2442946; 436844, 2442986; 436847,

2443070; 436877, 2443160; 436901,
2443231; 436991, 2443258; 437062,
2443285; 437119, 2443301; 437186,
2443335; 437287, 2443345; 437334,

2443345; 437407, 2443308; 437428,
2443274; 437478, 2443264; 437485,
2443221; 437505, 2443184; 437579,

2443197; 437615, 2443237; 437652,
2443261; return to starting point.

(B) Note: Map 68 follows:



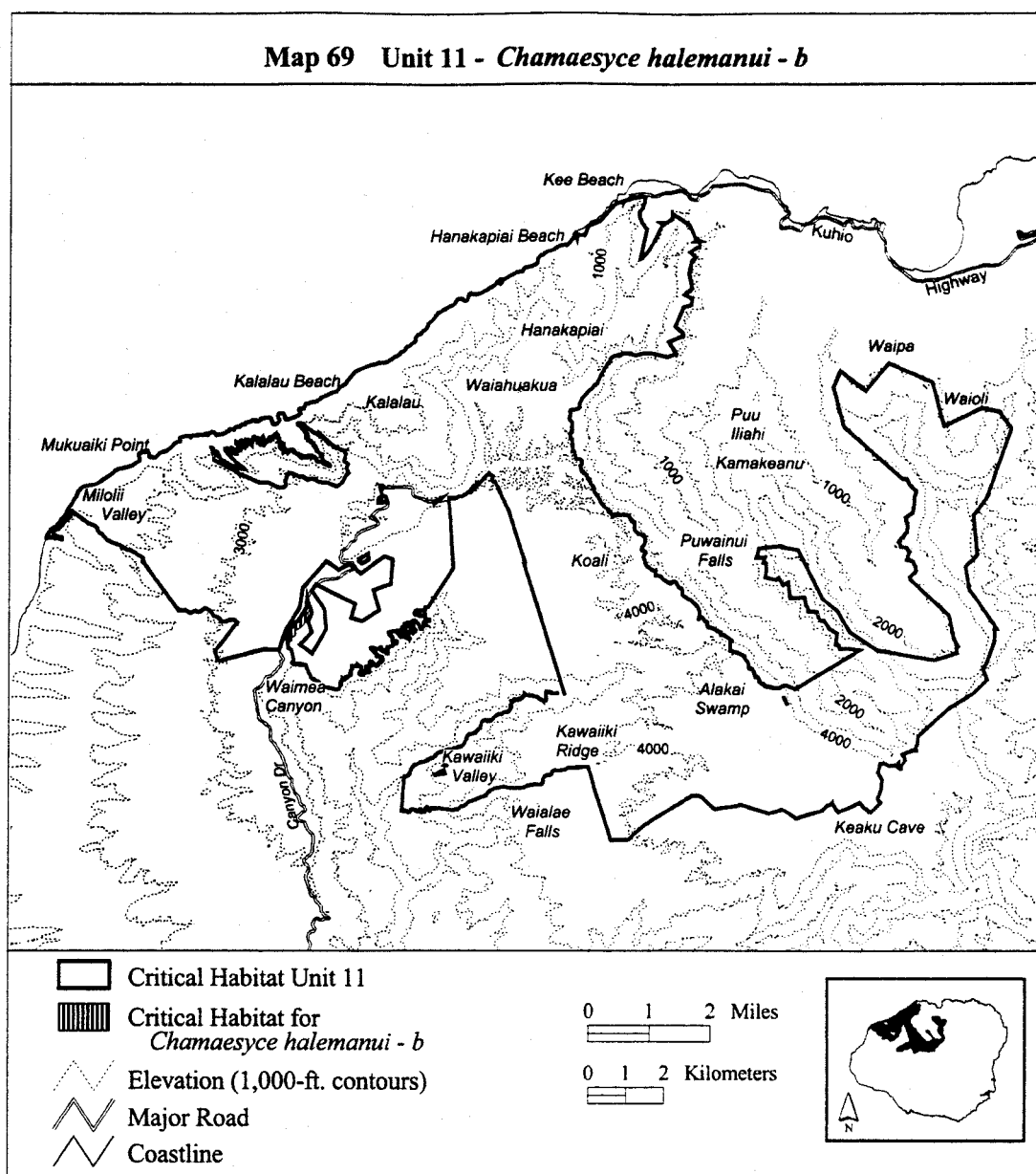
(lxix) Kauai 11—*Chamaesyce halemanui*—b (17 ha; 43 ac)

(A) Unit consists of the following 26 boundary points: Start at 431534, 2446637; 431530, 2446604; 431553, 2446538; 431557, 2446483; 431526,

2446397; 431495, 2446365; 431522, 2446303; 431518, 2446216; 431487, 2446158; 431420, 2446115; 431408, 2446048; 431322, 2445985; 431256, 2445938; 431193, 2445891; 431201, 2445817; 431177, 2445766; 431099, 2445738; 431079, 2445703; 431079,

2445652; 431040, 2445613; 430985, 2445601; 430977, 2445767; 431060, 2445963; 431278, 2446215; 431483, 2446536; 431491, 2446759; return to starting point.

(B) Note: Map 69 follows:



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

(A) Unit consists of the following 195 boundary points: Start at 430306,

2449349; 430289, 2449399; 430307, 2449482; 430312, 2449517; 430313, 2449532; 430320, 2449553; 430331, 2449565; 430346, 2449596; 430354, 2449622; 430355, 2449641; 430348, 2449666; 430376, 2449750; 430384, 2449766; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285,

2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432217, 2449712; 432259, 2449679; 432344, 2449744; 432419, 2449806; 432471, 2449904; 432504, 2449961; 432579, 2450036; 432551, 2450083; 432523, 2450130; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432452, 2450337; 432461, 2450375; 432480, 2450426; 432490, 2450478; 432501, 2450529; 432504, 2450523; 432515, 2450503; 432528, 2450468; 432550, 2450412; 432573, 2450385; 432591, 2450373; 432650, 2450343; 432692, 2450330; 432709, 2450317; 432733, 2450275; 432745,

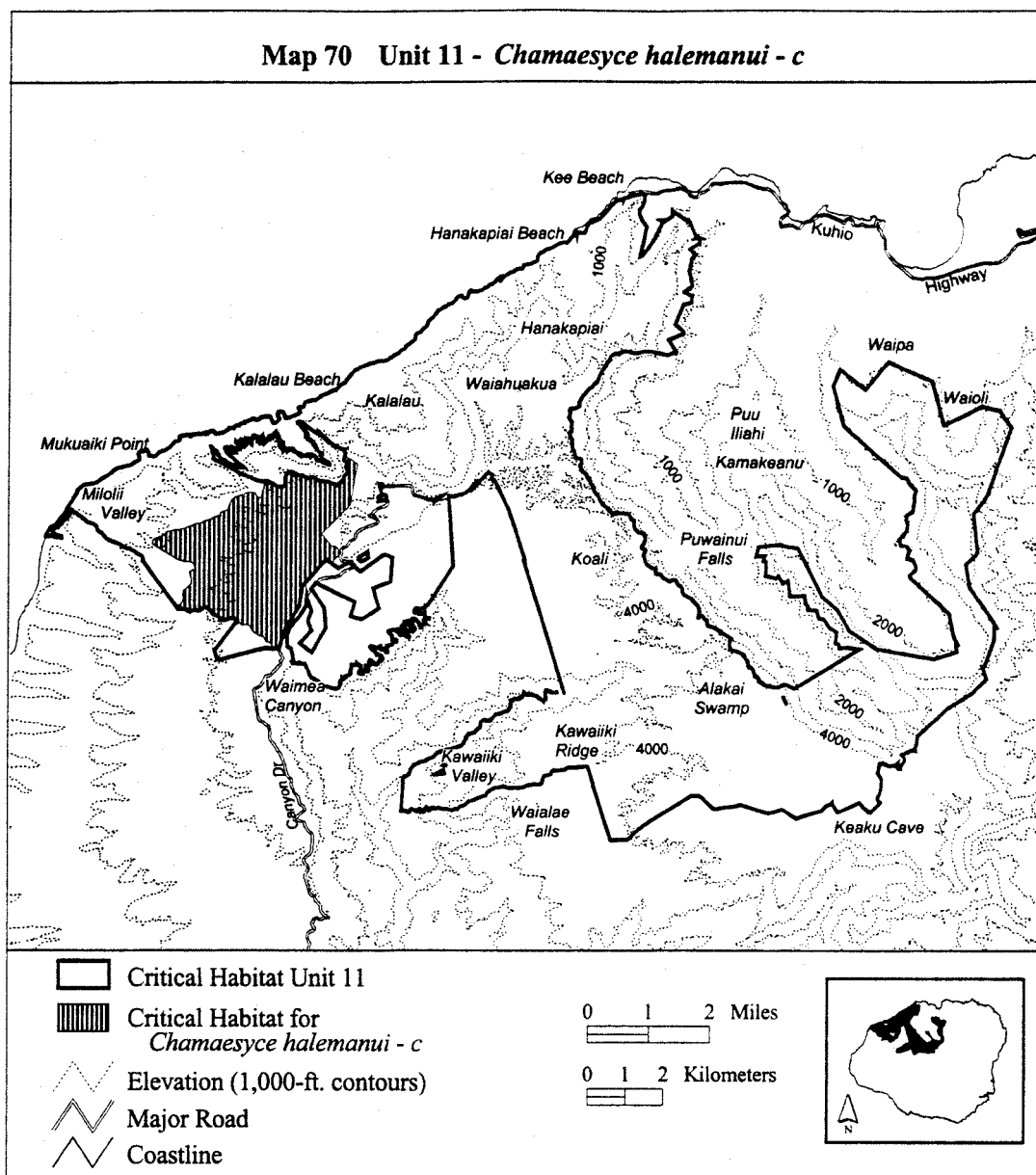
2450272; 432752, 2450270; 432768, 2450266; 432797, 2450260; 432826, 2450224; 432630, 2449144; 431875, 2448395; 432139, 2448086; 432281, 2448051; 432381, 2447879; 432133, 2447631; 432001, 2447726; 431369, 2447027; 431298, 2446522; 430955, 2445963; 430827, 2445619; 430786, 2445492; 430766, 2445492; 430727, 2445433; 430705, 2445408; 430574, 2445414; 430574, 2445437; 430570, 2445519; 430534, 2445558; 430444, 2445594; 430409, 2445613; 430386, 2445672; 430350, 2445711; 430264, 2445727; 430174, 2445786; 430060, 2445860; 430029, 2445923; 429990, 2446009; 429904, 2446040; 429857, 2446017; 429790, 2446025; 429708, 2446076; 429602, 2446170; 429547, 2446209; 429441, 2446185; 429335,

2446142; 429226, 2446146; 429202,
2446185; 429182, 2446221; 429128,
2446264; 429026, 2446295; 428990,
2446326; 428967, 2446373; 428920,
2446424; 428842, 2446479; 428791,
2446491; 428744, 2446448; 428669,
2446393; 428622, 2446381; 428548,
2446393; 428532, 2446420; 428469,
2446389; 428414, 2446358; 428359,
2446389; 428293, 2446424; 428242,
2446424; 428164, 2446424; 428093,
2446436; 428069, 2446495; 428101,
2446534; 428144, 2446534; 428218,
2446636; 428230, 2446734; 428226,
2446804; 428234, 2446918; 428312,

2446965; 428450, 2447079; 428450,
2447153; 428450, 2447216; 428422,
2447306; 428383, 2447376; 428407,
2447404; 428528, 2447466; 428548,
2447479; 428507, 2447592; 428472,
2447639; 428405, 2447665; 428282,
2447665; 428095, 2447725; 427746,
2447921; 427530, 2448058; 427416,
2448140; 427416, 2448207; 427479,
2448257; 427571, 2448308; 427733,
2448372; 427790, 2448451; 427901,
2448451; 427977, 2448483; 428009,
2448498; 428069, 2448498; 428158,
2448508; 428240, 2448527; 428266,
2448530; 428351, 2448581; 428421,

2448590; 428564, 2448666; 428694,
2448666; 428830, 2448749; 428948,
2448780; 429037, 2448822; 429113,
2448860; 429170, 2448891; 429208,
2448873; 429198, 2448944; 429399,
2449015; 429429, 2449039; 429423,
2449098; 429476, 2449205; 429494,
2449275; 429571, 2449358; 429683,
2449388; 429801, 2449435; 429819,
2449400; 429867, 2449476; 429991,
2449500; 430109, 2449500; 430156,
2449376; 430233, 2449358; 430287,
2449352; return to starting point.

(B) Note: Map 70 follows:



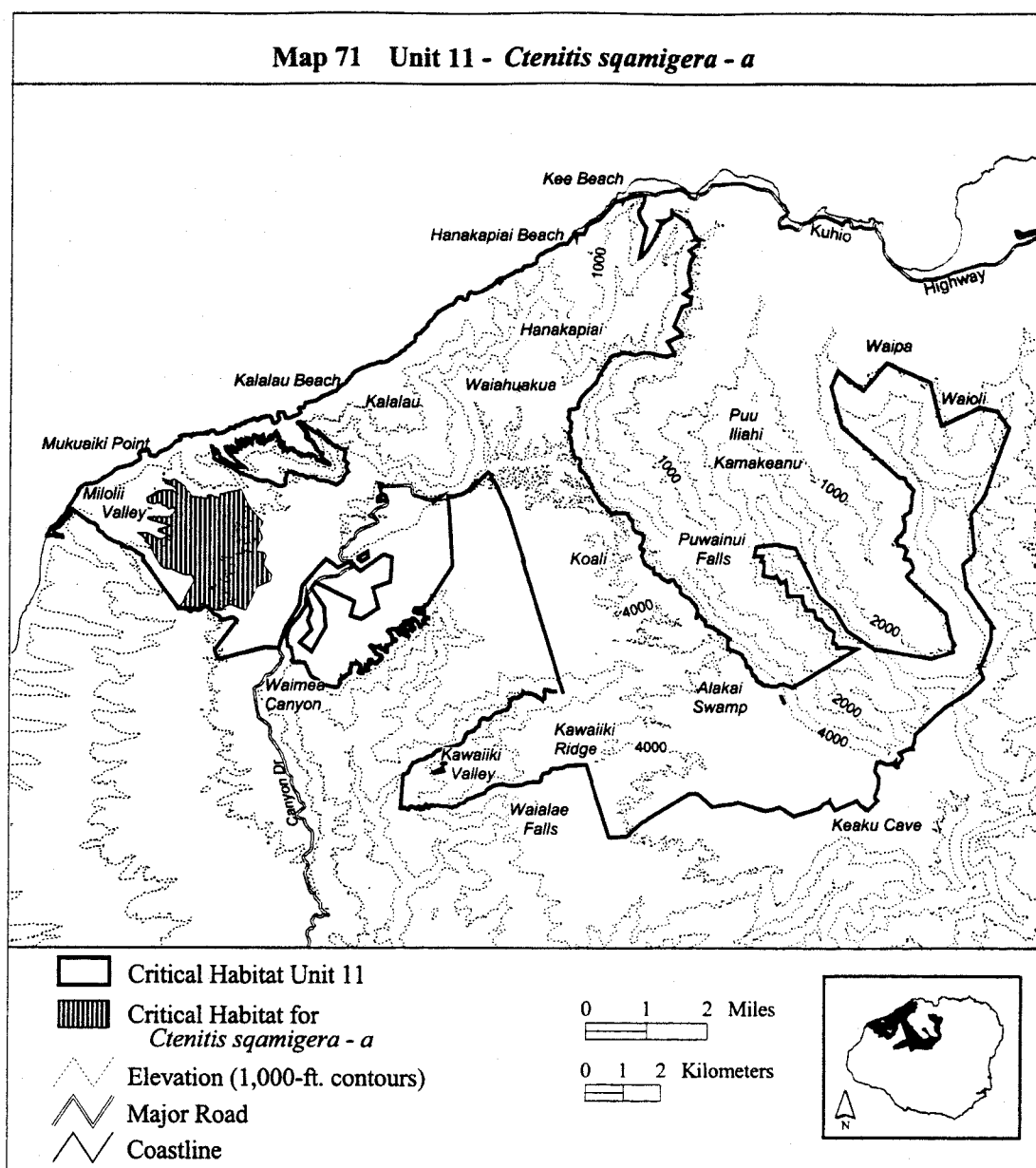
(lxxi) Kauai 11—*Ctenitis squamigera*—a
(735 ha; 1,817 ac)

(A) Unit consists of the following 95 boundary points: Start at 429915, 2449188; 429965, 2449062; 430201, 2448831; 430327, 2448700; 430306, 2448648; 430232, 2448495; 430290, 2448327; 430311, 2448243; 430232, 2448128; 430180, 2448034; 430159, 2447929; 430359, 2447892; 430411, 2447803; 430380, 2447729; 430348, 2447629; 430353, 2447566; 430558, 2447320; 430527, 2447152; 430190, 2446989; 430070, 2446732; 429881, 2446390; 429644, 2446469; 429497, 2446543; 429366, 2446511; 429303, 2446427; 429257, 2446389; 429094,

2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428656, 2446475; 428599, 2446448; 428476, 2446463; 428396, 2446447; 428285, 2446458; 428164, 2446469; 428132, 2446490; 428200, 2446564; 428331, 2446837; 428510, 2447146; 428442, 2447304; 428247, 2447309; 428011, 2447409; 427922, 2447451; 427738, 2447467; 427607, 2447561; 427533, 2447692; 427386, 2447950; 427387, 2447965; 427327, 2448019; 427380, 2448042; 427201, 2448195; 427217, 2448242; 427012, 2448409; 427258, 2448415; 427607, 2448226; 427862, 2448339; 427544, 2448453; 427563, 2448503; 427874, 2448588; 427289, 2448764; 427276,

2448805; 427868, 2448846; 428032, 2449016; 427928, 2449075; 427852, 2449025; 427777, 2449101; 427632, 2449142; 427604, 2449204; 427487, 2449201; 427456, 2449157; 427267, 2449217; 427242, 2449308; 427289, 2449362; 427563, 2449519; 427915, 2449547; 428063, 2449431; 427988, 2449619; 427758, 2449701; 427651, 2449852; 427830, 2449773; 427975, 2449824; 428258, 2449632; 428274, 2449547; 428356, 2449494; 428447, 2449371; 428840, 2449311; 428840, 2449396; 428957, 2449415; 428994, 2449368; 429164, 2449330; 429174, 2449437; 429740, 2449559; 429916, 2449188; return to starting point.

(B) Note: Map 71 follows:



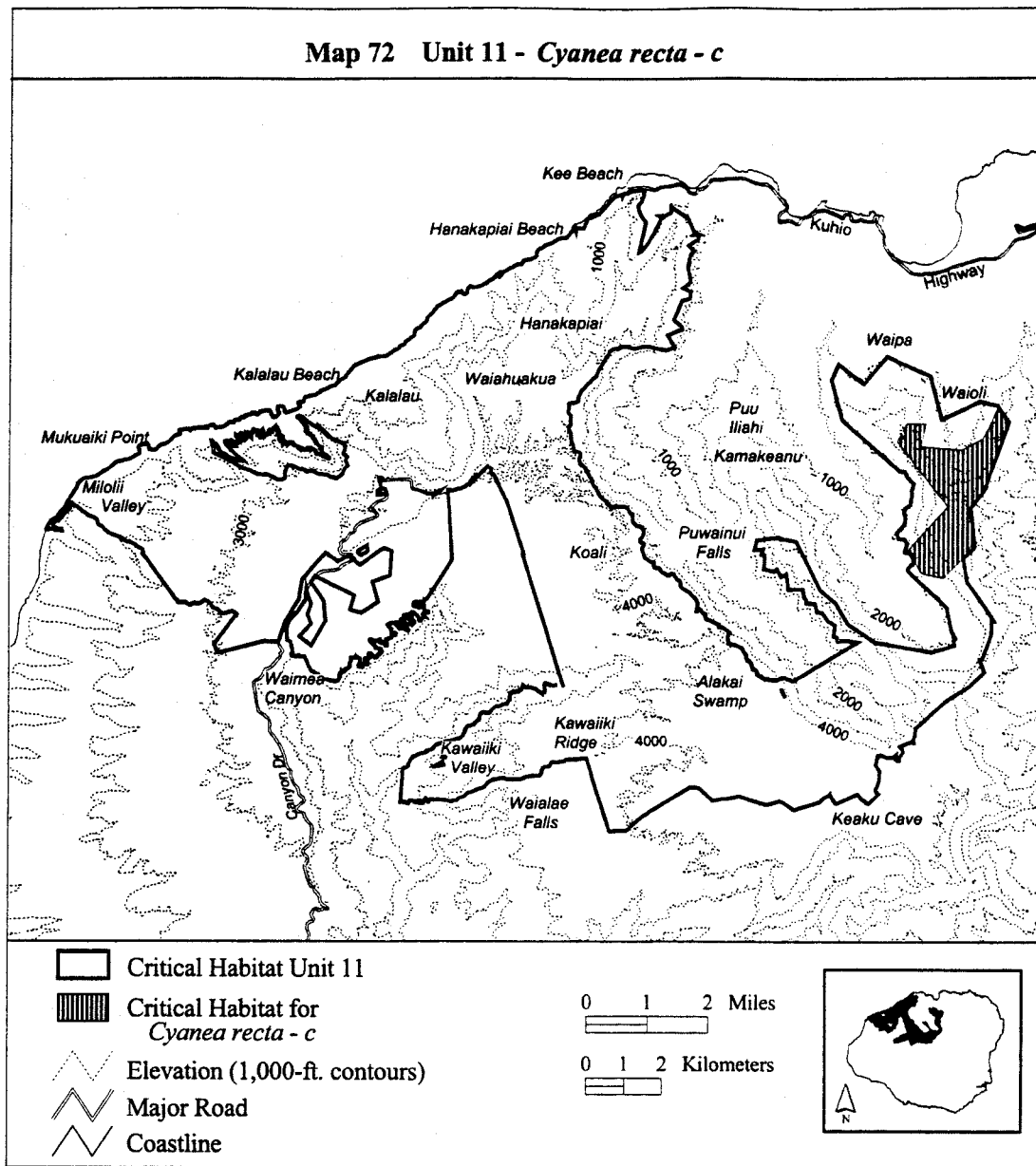
(lxxii) Kauai 11—*Cyanea recta*—c (553 ha; 1,367 ac)

(A) Unit consists of the following 21 boundary points: Start at 449858, 2451521; 450073, 2451227; 449432,

2449395; 449073, 2448923; 449139, 2447988; 449020, 2447860; 448992, 2447717; 448881, 2447609; 448339, 2447084; 447861, 2447198; 447734, 2447260; 447428, 2447829; 448470, 2448968; 447125, 2450677; 447365,

2451166; 447874, 2451166; 447753, 2450562; 448823, 2450472; 449385, 2450762; 449623, 2451217; 449789, 2451615; return to starting point.

(B) Note: Map 72 follows:



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

(A) Unit consists of the following 95 boundary points: Start at 439347, 2452789; 439324, 2452794; 439098, 2452402; 438924, 2452225; 438576, 2451872; 438558, 2451853; 438541, 2451836; 438516, 2451811; 438493, 2451829; 438494, 2451843; 438496, 2451871; 438498, 2451889; 438597, 2453123; 438761, 2453483; 439385,

2453352; 439352, 2454138; 439582, 2455646; 439652, 2455480; 439844, 2455023; 441271, 2456733; 441363, 2456677; 441568, 2456107; 441546, 2456104; 441531, 2456098; 441511, 2456077; 441498, 2456050; 441482, 2456033; 441462, 2456017; 441414, 2455967; 441393, 2455942; 441365, 2455913; 441354, 2455880; 441351, 2455829; 441342, 2455800; 441333, 2455787; 441292, 2455760; 441264, 2455739; 441233, 2455700; 441199,

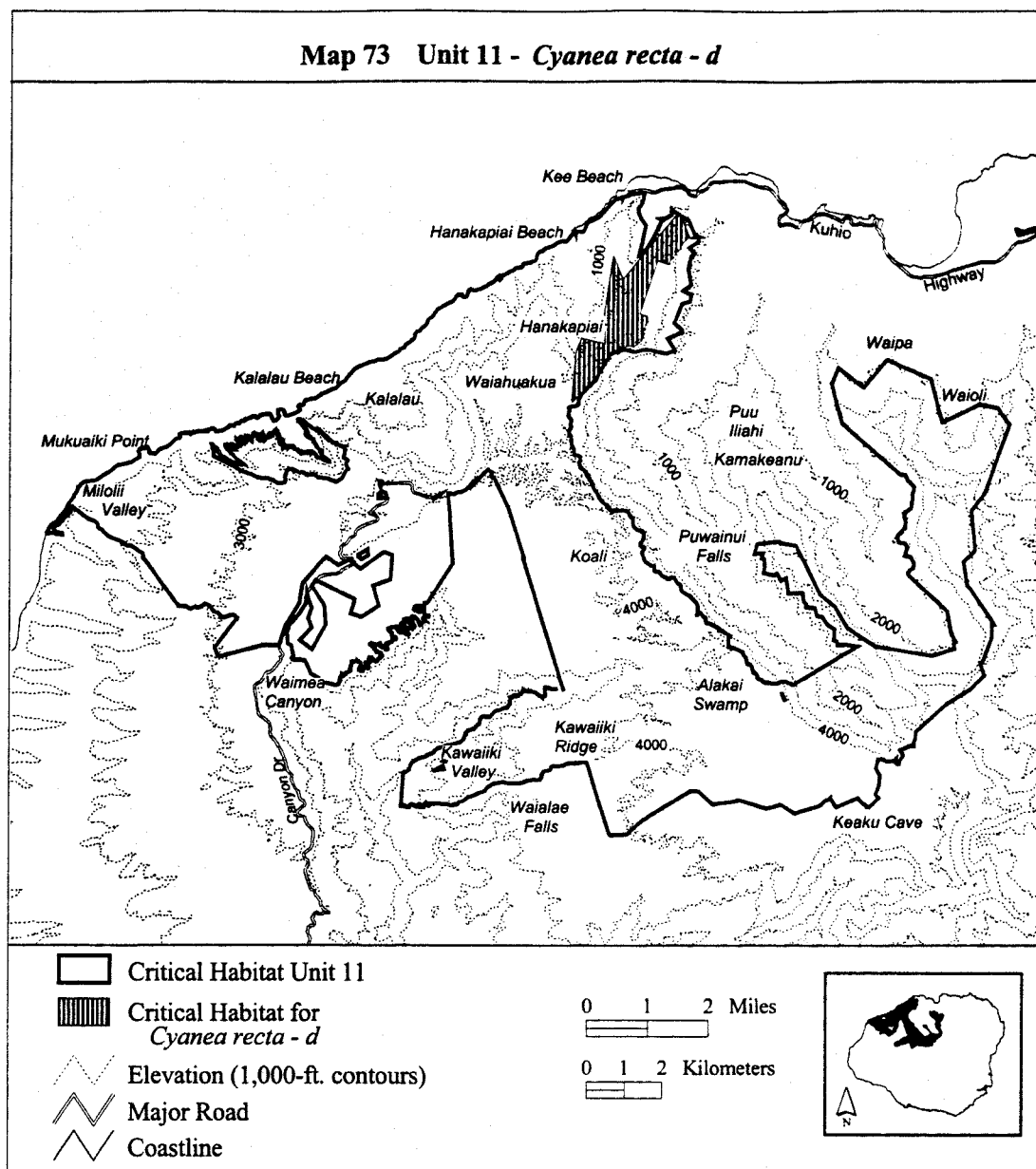
2455663; 441185, 2455633; 441176, 2455603; 441164, 2455584; 441148, 2455564; 441094, 2455523; 441060, 2455488; 441059, 2455449; 441071, 2455421; 441074, 2455406; 441073, 2455402; 440747, 2455513; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384,

2453655; 440378, 2453623; 440380,
2453590; 440370, 2453517; 440363,
2453496; 440355, 2453461; 440350,
2453451; 440333, 2453428; 440315,
2453408; 440288, 2453388; 440275,
2453381; 440244, 2453334; 440223,

2453322; 440199, 2453305; 440147,
2453289; 440119, 2453282; 440093,
2453280; 439987, 2453284; 439962,
2453283; 439924, 2453275; 439905,
2453264; 439787, 2453162; 439724,
2453135; 439639, 2453119; 439600,

2453107; 439553, 2453082; 439503,
2453046; 439481, 2453022; 439473,
2452985; 439464, 2452963; 439414,
2452909; 439390, 2452876; 439355,
2452801; return to starting point.

(B) Note: Map 73 follows:



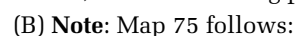
(lxxiv) Kauai 11—*Cyanea remyi*—c (365 ha; 901 ac)

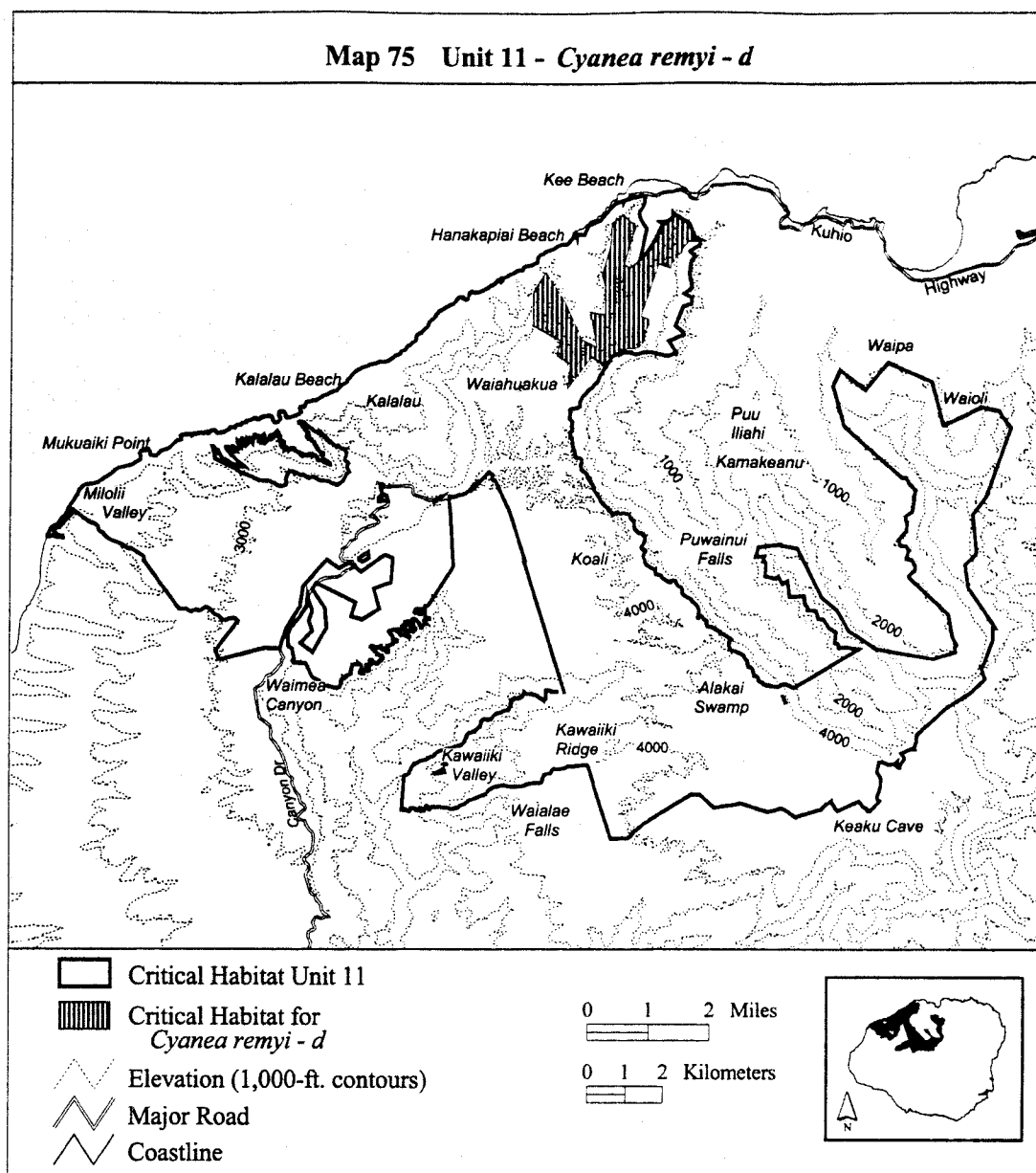
(A) Unit consists of the following 15 boundary points: Start at 448511,

2450831; 449003, 2450929; 449335, 2451756; 449751, 2451666; 449858, 2451521; 450073, 2451227; 449580, 2449817; 449301, 2449658; 449293, 2449649; 449066, 2449578; 448089,

2449815; 447754, 2449877; 447125, 2450677; 447365, 2451166; 448229, 2451166; return to starting point.

(B) Note: Map 74 follows:





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

(A) Unit consists of the following 243 boundary points: coastline; 436143, 2454005; 435790, 2454155; 435524, 2454345; 435470, 2454260; 435347, 2454246; 435388, 2454013; 435219, 2454036; 435223, 2453904; 435026, 2453931; 435040, 2453758; 434757, 2453703; 434734, 2453379; 434601, 2453383; 434455, 2453232; 434121, 2453118; 433837, 2452844; 433499, 2452785; 433778, 2452049; 433636, 2451866; 433009, 2452049; 432973, 2452150; 432840, 2452050; 432813, 2452159; 432735, 2452082; 432689, 2452182; 432483, 2452063; 432424, 2451917; 432378, 2451881; 432273, 2451876; 432232, 2451707; 432173, 2451699; 432163, 2451570; 431916,

2451812; 431811, 2451702; 431683, 2451766; 431518, 2451629; 431445, 2451593; 431440, 2451515; 431326, 2451415; 431115, 2451323; 430997, 2451374; 431134, 2451200; 431102, 2451054; 431303, 2450848; 431051, 2450912; 430942, 2451017; 430859, 2450994; 430850, 2451168; 430745, 2451186; 430713, 2451255; 430544, 2451223; 430489, 2451269; 430475, 2451150; 430379, 2451209; 430352, 2451045; 430237, 2451109; 430201, 2451040; 430141, 2451068; 430068, 2451200; 429995, 2451049; 429908, 2451100; 429899, 2451013; 429862, 2450990; 429807, 2451031; 429798, 2450944; 429670, 2451086; 429647, 2450908; 429519, 2450985; 429524, 2450839; 429441, 2450876; 429428, 2450775; 429368, 2450839; 429295,

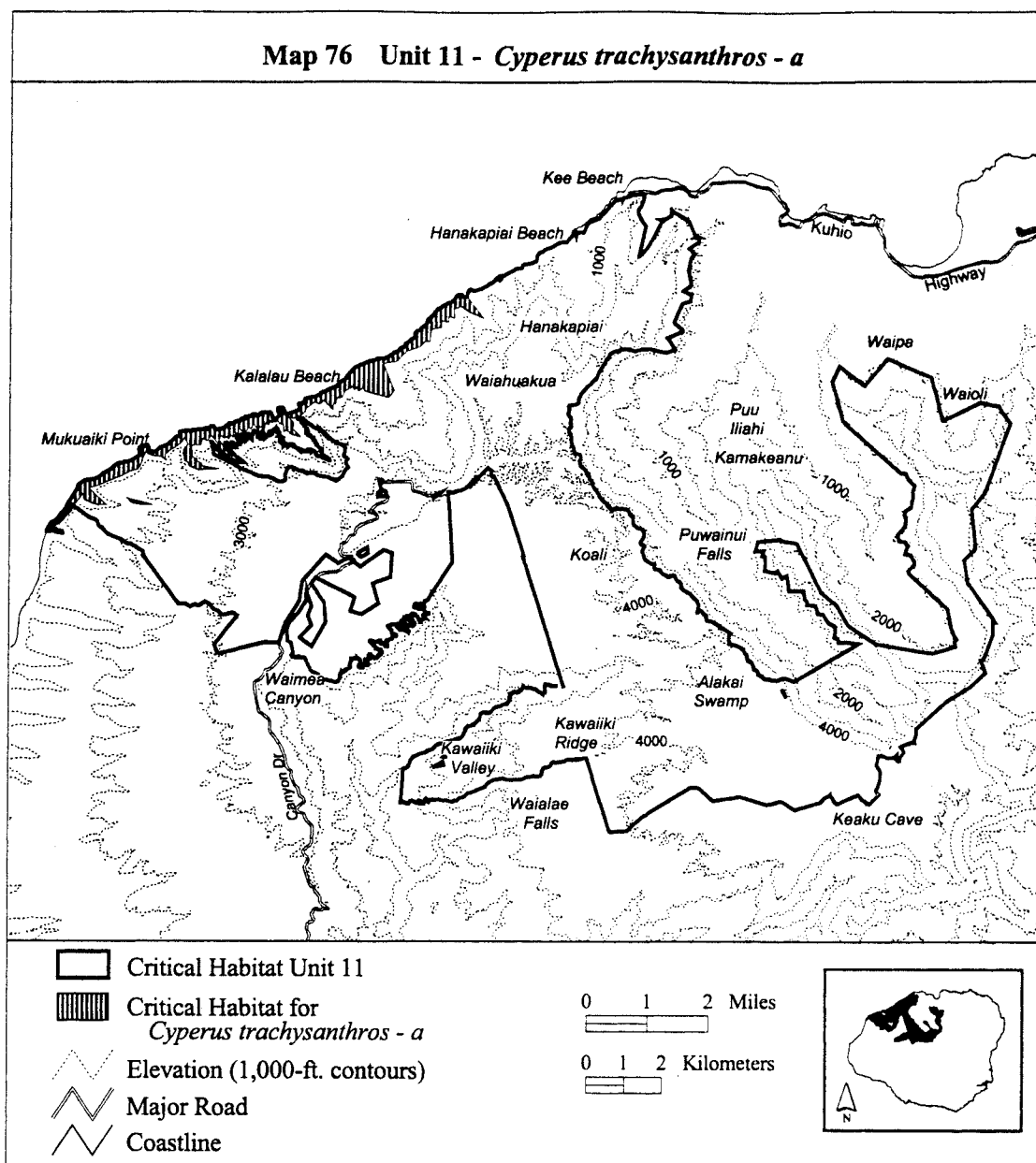
2450803; 429194, 2450889; 429176, 2450832; 429167, 2450752; 429341, 2450469; 429501, 2450314; 429277, 2450419; 429121, 2450684; 429066, 2450711; 429016, 2450803; 428947, 2450867; 428852, 2450725; 428718, 2450784; 428677, 2450629; 428494, 2450620; 428439, 2450574; 428467, 2450286; 428563, 2450254; 428577, 2450181; 428696, 2450131; 428718, 2450058; 429126, 2449985; 428627, 2449953; 428357, 2450071; 428348, 2450154; 428247, 2450209; 428256, 2450282; 428202, 2450373; 428234, 2450515; 428334, 2450643; 428229, 2450807; 428192, 2450711; 428032, 2450579; 427849, 2450474; 427735, 2450364; 427730, 2450273; 427767, 2450222; 427607, 2450314; 427424, 2450332; 427278, 2450382; 427232,

2450464; 427187, 2450350; 427044,
2450030; 426976, 2449971; 426802,
2449921; 426583, 2449806; 426111,
2449624; 426084, 2449592; 425722,
2449473; 425854, 2449326; 426171,
2449034; 425960, 2449029; 425741,
2449098; 425576, 2449176; 425548,
2449331; 425490, 2449258; 425402,
2449098; 425340, 2449032; 425322,
2448983; 425322, 2448984; 425310,
2448993; 425272, 2449039; 425267,
2449033; 425258, 2449022; 425253,
2449013; 425252, 2449003; 425253,
2448996; 425251, 2448992; 425242,
2448981; 425239, 2448972; 425231,
2448956; 425224, 2448934; 425222,
2448911; 425223, 2448900; 425224,
2448891; 425223, 2448883; 425218,
2448877; 425212, 2448878; 425208,
2448876; 425201, 2448872; 425192,
2448867; 425181, 2448859; 425172,
2448853; 425162, 2448844; 425158,
2448833; 425157, 2448818; 425153,

2448809; 425148, 2448807; 425136,
2448801; 425124, 2448795; 425120,
2448790; 425112, 2448785; 425100,
2448774; 425094, 2448768; 425081,
2448757; 425070, 2448745; 425062,
2448734; 425053, 2448723; 425044,
2448711; 425043, 2448695; 425029,
2448684; 425024, 2448675; 425017,
2448667; 425011, 2448659; 424999,
2448650; 424991, 2448642; 424980,
2448628; 424973, 2448615; 424956,
2448592; 424936, 2448587; 424929,
2448581; 424924, 2448574; 424917,
2448569; 424910, 2448561; 424906,
2448551; 424898, 2448552; 424886,
2448554; 424877, 2448554; 424871,
2448552; 424863, 2448548; 424849,
2448543; 424840, 2448538; 424824,
2448534; 424811, 2448524; 424803,
2448521; 424795, 2448511; 424785,
2448498; 424778, 2448484; 424774,
2448461; 424778, 2448445; 424791,
2448421; 424819, 2448402; 424832,

2448389; 424848, 2448376; 424871,
2448368; 424900, 2448356; 424929,
2448346; 424953, 2448337; 424973,
2448335; 424990, 2448333; 424997,
2448333; 425003, 2448327; 425006,
2448318; 425009, 2448308; 425011,
2448298; 425013, 2448289; 425015,
2448280; 425010, 2448272; 424998,
2448277; 424991, 2448284; 424983,
2448288; 424971, 2448291; 424957,
2448291; 424948, 2448290; 424933,
2448287; 424927, 2448284; 424915,
2448289; 424892, 2448299; 424874,
2448301; 424841, 2448311; 424823,
2448330; 424803, 2448337; 424777,
2448336; 424735, 2448339; 424711,
2448334; 424677, 2448333; 424664,
2448328; 424648, 2448323; 424633,
2448323; 424603, 2448328; 435703,
2454582; coastline.

(B) **Note:** Map 76 follows:



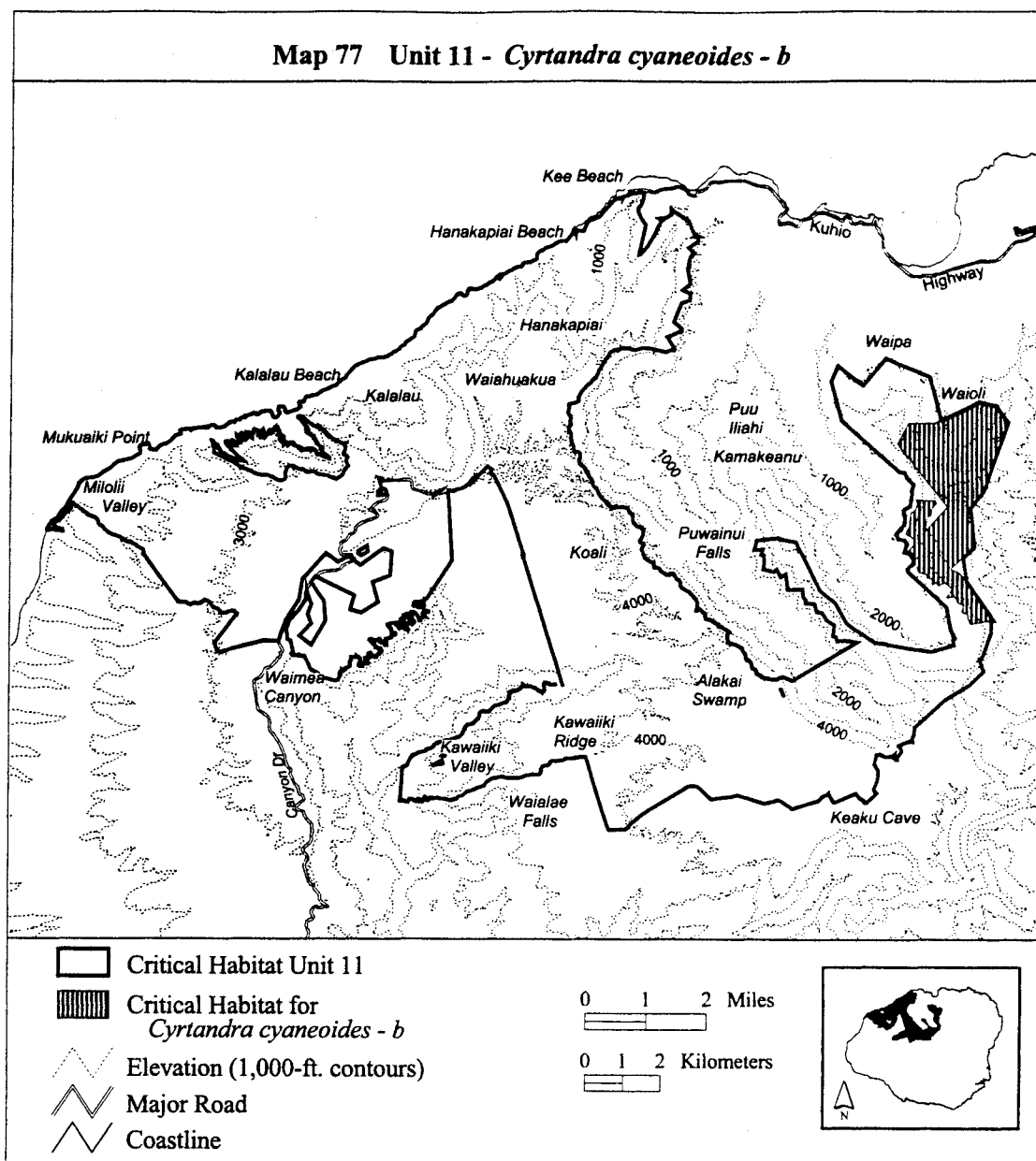
(lxxvii) Kauai 11—*Cyrtandra cyaneoides*—b (848 ha; 2,095 ac)

(A) Unit consists of the following 75 boundary points: Start at 449861, 2451529; 450084, 2451212; 449426, 2449387; 449074, 2448967; 449179, 2447924; 448876, 2447641; 448557, 2447345; 448557, 2447312; 448681, 2447286; 448798, 2447208; 448908, 2447104; 448960, 2446994; 448980, 2446982; 449012, 2446961; 449637, 2446073; 449643, 2446064; 449701, 2445980; 449643, 2445970; 449090, 2445877; 449051, 2445968; 449012,

2446098; 448993, 2446163; 448869, 2446202; 448902, 2446403; 448798, 2446409; 448720, 2446481; 448694, 2446585; 448629, 2446617; 448460, 2446578; 448603, 2446812; 448408, 2446975; 448219, 2446884; 448174, 2446975; 448076, 2446916; 448076, 2447072; 447927, 2447098; 447912, 2447199; 447715, 2447234; 447448, 2447822; 447569, 2447951; 447569, 2448073; 447563, 2448144; 447368, 2448248; 447394, 2448358; 447465, 2448443; 447459, 2448592; 447472, 2448677; 447491, 2448806; 447615, 2448891; 447680, 2449047; 447621,

2449157; 448135, 2449124; 448161, 2449040; 448102, 2449001; 448089, 2448962; 448044, 2448930; 448044, 2448891; 448037, 2448845; 448037, 2448793; 448011, 2448754; 447992, 2448715; 447946, 2448722; 447914, 2448618; 447901, 2448514; 447888, 2448371; 447903, 2448341; 448447, 2448963; 447139, 2450654; 447435, 2451197; 448110, 2451196; 448295, 2451280; 448295, 2451280; 448306, 2451285; 449344, 2451755; 449772, 2451656; return to starting point.

(B) **Note:** Map 77 follows:



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

(A) Unit consists of the following 94 boundary points: Start at 449346, 2444938; 449459, 2444635; 449081, 2444273; 448798, 2444099; 448808, 2444095; 448479, 2443895; 448470, 2443888; 448470, 2443889; 448458, 2443882; 447645, 2443146; 447630, 2442948; 447577, 2442842; 447599, 2442773; 447508, 2442781; 447227, 2442660; 447295, 2442584; 447303, 2442515; 447197, 2442356; 447197, 2442303; 447151, 2442303; 447113, 2442348; 447128, 2442447; 447060, 2442386; 446885, 2442379; 446771, 2442439; 446645, 2442430; 446392,

2442475; 446233, 2442597; 445958, 2442590; 445854, 2442727; 445527, 2442820; 445264, 2443031; 445101, 2443109; 444763, 2443280; 444640, 2443388; 444336, 2443592; 444214, 2443918; 444073, 2444237; 443984, 2444419; 444071, 2444486; 444162, 2444498; 444398, 2444392; 446102, 2445409; 445791, 2445455; 445563, 2445432; 445555, 2445554; 445464, 2445569; 445495, 2445850; 445297, 2445979; 445160, 2446184; 445023, 2446199; 444955, 2446412; 444727, 2446435; 444727, 2446518; 444674, 2446572; 444636, 2446799; 444256, 2446777; 444203, 2447187; 444066, 2447118; 443960, 2447308; 443876, 2447248; 443595, 2447316; 443618,

2447460; 443610, 2447688; 443542, 2447696; 443580, 2447840; 443352, 2447817; 443420, 2448068; 444020, 2448144; 444089, 2448098; 444454, 2448029; 445092, 2446769; 445495, 2446450; 445821, 2445880; 446566, 2445401; 446809, 2445363; 446811, 2445362; 447161, 2445302; 447195, 2445249; 447262, 2445171; 447352, 2445171; 447396, 2444981; 447463, 2444948; 447564, 2444981; 447631, 2444981; 447665, 2444858; 447754, 2444858; 447676, 2444668; 447682, 2444602; 448036, 2444548; 448629, 2444567; 449056, 2444698; 449077, 2445069; 449193, 2445350; return to starting point.

(B) **Note:** Map 78 follows:

Map 78 Unit 11 - *Cyrtandra cyaneoides* - c

The map displays the following features:

- Coastline:** Indicated by a solid line.
- Major Road:** Indicated by a line with cross-ticks.
- Elevation (1,000-ft. contours):** Represented by dashed lines.
- Critical Habitat Unit 11:** Shaded with a light stippled pattern.
- Critical Habitat for *Cyrtandra cyaneoides* - c:** Shaded with a diagonal line pattern.

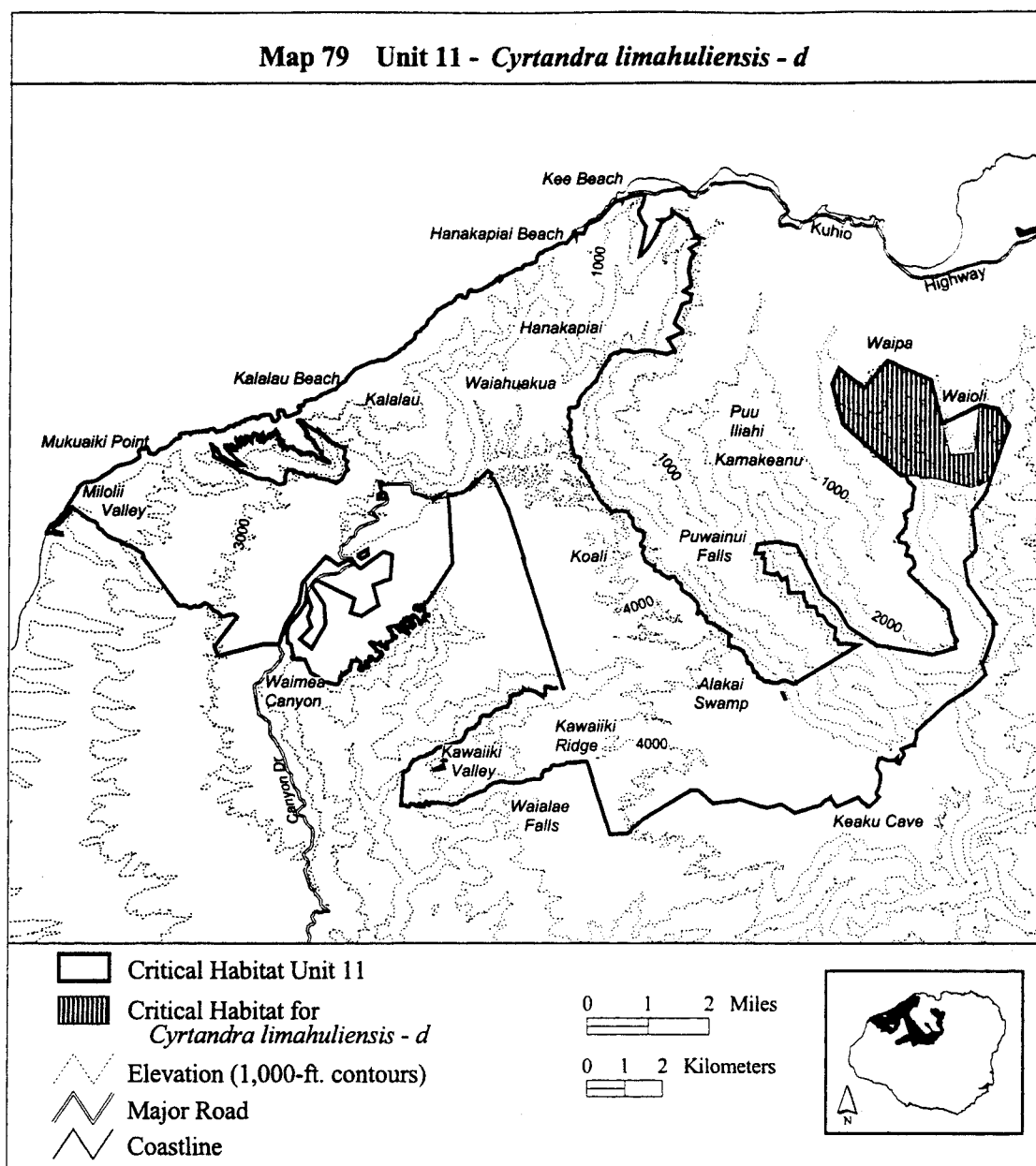
Geographical labels include: Kee Beach, Hanakapi'ai Beach, Hanakapi'ai, Waiahuakua, Kalalau Beach, Kalalau, Mukuiaiki Point, Miloli'i Valley, Waimea Canyon, Kawaiiki Valley, Kawaiiki Ridge, Waialeale Falls, Puu Iliahi, Kamakeeuanu, Puwainui Falls, Alakai Swamp, Keaku Cave, Waipa, Waioli, and Highway.

Scale bars are provided in miles (0 to 2) and kilometers (0 to 2). An inset map shows the location of the study area within the state of Hawaii.

(A) Unit consists of the following 33 boundary points: Start at 448313, 2451213; 448519, 2450440; 448878, 2450478; 449147, 2450506; 449269, 2451755; 449288, 2451766; 449751,

2452722; 446226, 2452194; 446834,
2452923; 446988, 2452850; 447991,
2452420; 448004, 2452370; 448015,
2452365; 448045, 2452217; 448294,
2451285; 448295, 2451280; 448295,
2451280; return to starting point.

(B) **Note:** Map 79 follows:



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

(A) Unit consists of the following 132 boundary points: Start at 439377, 2452849; 439385, 2452892; 439375, 2452895; 439303, 2452917; 439254, 2452860; 439091, 2452982; 438975, 2453018; 438381, 2452259; 438382, 2452266; 438335, 2452205; 438433, 2452860; 438072, 2453090; 438113, 2453336; 438084, 2453513; 437456, 2453744; 437460, 2453870; 437449, 2453877; 437449, 2454762; 437600, 2455005; 437720, 2455261; 437744, 2455234; 437777, 2455286; 437998, 2454941; 438150, 2454766; 438447, 2454337; 438660, 2453669; 438688, 2453607; 439106, 2453412; 439045, 2453751; 438876, 2454238; 438959,

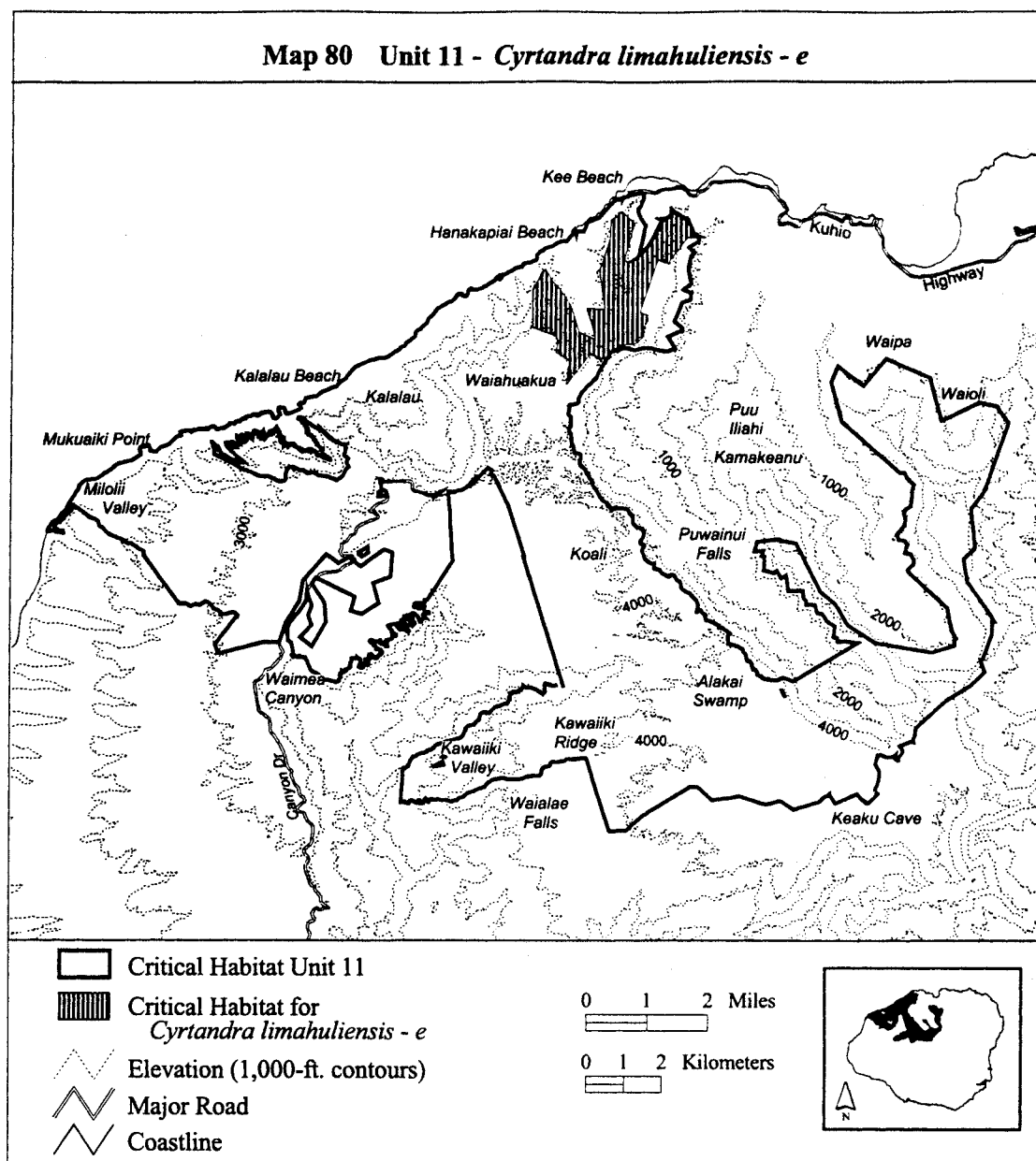
2454233; 438958, 2454237; 439001, 2454230; 439352, 2454206; 439352, 2454221; 439352, 2454326; 439206, 2455228; 439438, 2455920; 439489, 2456098; 439516, 2456564; 439685, 2456695; 439735, 2456777; 439762, 2456755; 439800, 2456784; 439811, 2456793; 440139, 2456498; 440126, 2456452; 440131, 2456448; 440083, 2456303; 439860, 2455537; 439966, 2455458; 440428, 2455755; 440674, 2456209; 440829, 2456531; 441205, 2456774; 441566, 2456551; 441751, 2456130; 441694, 2456118; 441663, 2456114; 441635, 2456115; 441546, 2456104; 441531, 2456098; 441511, 2456077; 441498, 2456050; 441482, 2456033; 441462, 2456017; 441414, 2455967; 441393, 2455942; 441365,

2455913; 441354, 2455880; 441351, 2455829; 441342, 2455800; 441333, 2455787; 441292, 2455760; 441264, 2455739; 441233, 2455700; 441199, 2455663; 441185, 2455633; 441176, 2455603; 441164, 2455584; 441148, 2455564; 441094, 2455523; 441060, 2455488; 441059, 2455449; 441071, 2455421; 441074, 2455406; 441073, 2455402; 440747, 2455513; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350,

2453451; 440333, 2453428; 440315,
2453408; 440288, 2453388; 440275,
2453381; 440244, 2453334; 440223,
2453322; 440199, 2453305; 440147,
2453289; 440119, 2453282; 440093,

2453280; 439987, 2453284; 439962,
2453283; 439924, 2453275; 439905,
2453264; 439787, 2453162; 439724,
2453135; 439639, 2453119; 439600,
2453107; 439553, 2453082; 439503,

2453046; 439481, 2453022; 439473,
2452985; 439464, 2452963; 439414,
2452909; 439390, 2452876; return to
starting point.
(B) Note: Map 80 follows:



(lxxxix) Kauai 11—*Delissea rhytidosperra*—b (258 ha; 638 ac)

(A) Unit consists of the following 68 boundary points: Start at 427512, 2447661; 427401, 2447626; 427168, 2447697; 427158, 2447803; 427006, 2447889; 426818, 2448021; 426691, 2448046; 426610, 2448067; 426798, 2448132; 426899, 2448153; 426955, 2448021; 427229, 2448036; 427289, 2448036; 427386, 2448046; 427325, 2448122; 427325, 2448229; 427355,

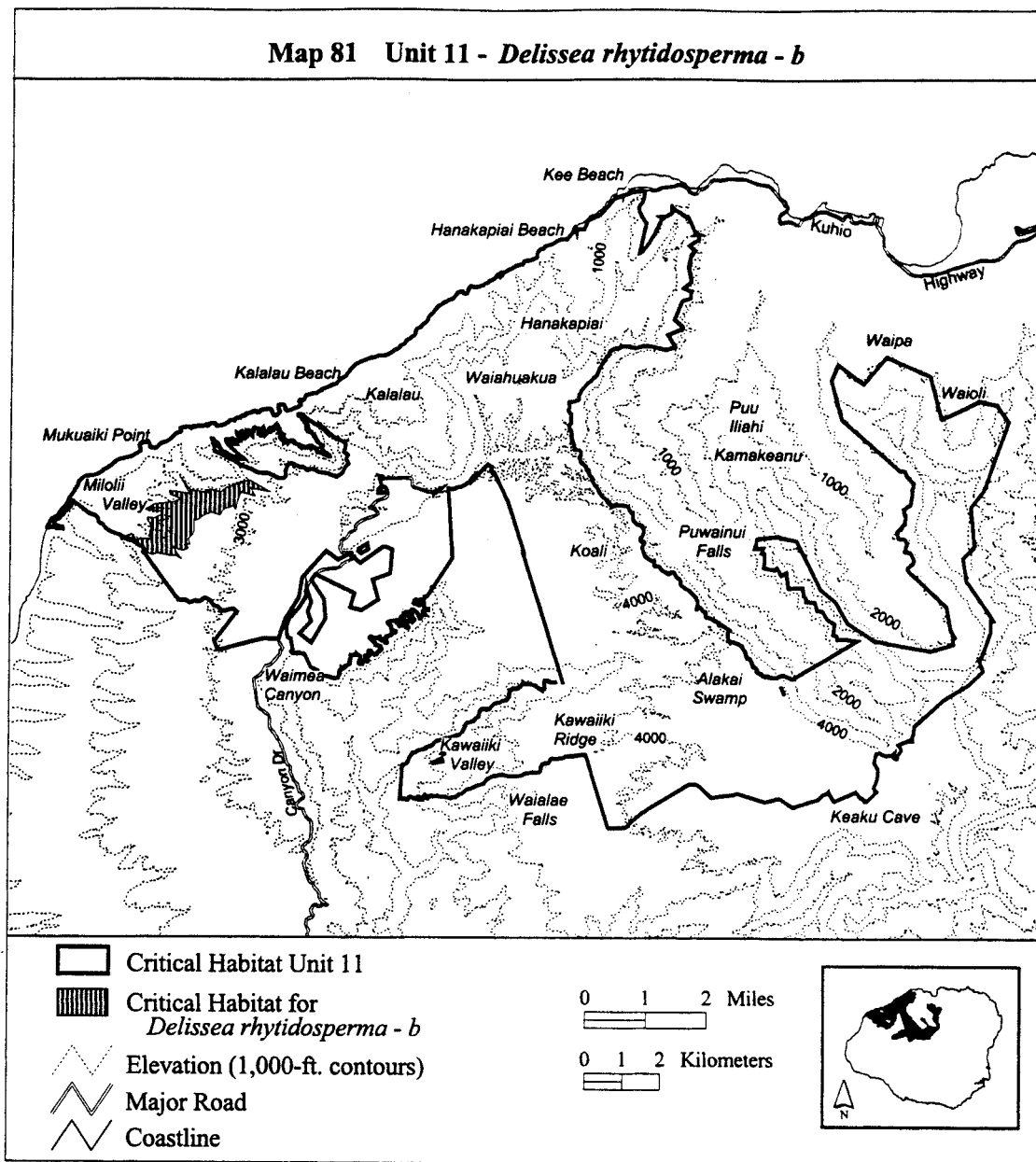
2448249; 427355, 2448360; 427300, 2448487; 427259, 2448528; 427269, 2448599; 427446, 2448578; 427558, 2448644; 427624, 2448639; 427634, 2448766; 427502, 2448766; 427208, 2448806; 427418, 2448938; 427406, 2448942; 428005, 2449021; 428147, 2449092; 427847, 2449218; 427847, 2449312; 428375, 2449234; 428131, 2449675; 428399, 2449328; 428880, 2449265; 428888, 2449352; 429187, 2449281; 429353, 2449407; 429952,

2449596; 430487, 2449296; 429983, 2449391; 430109, 2449178; 429723, 2449281; 429636, 2449029; 429597, 2448816; 429534, 2448918; 429282, 2448824; 429179, 2448666; 428958, 2448753; 428730, 2448635; 428596, 2448556; 428509, 2448525; 428496, 2448530; 428491, 2448254; 428475, 2448168; 428338, 2448036; 428389, 2447899; 428298, 2447925; 428338, 2447788; 428237, 2447742; 428115, 2447757; 427948, 2447828; 428060,

2447646; 428161, 2447535; 427999,

2447606; 427867, 2447600; return to starting point.

(B) Note: Map 81 follows:



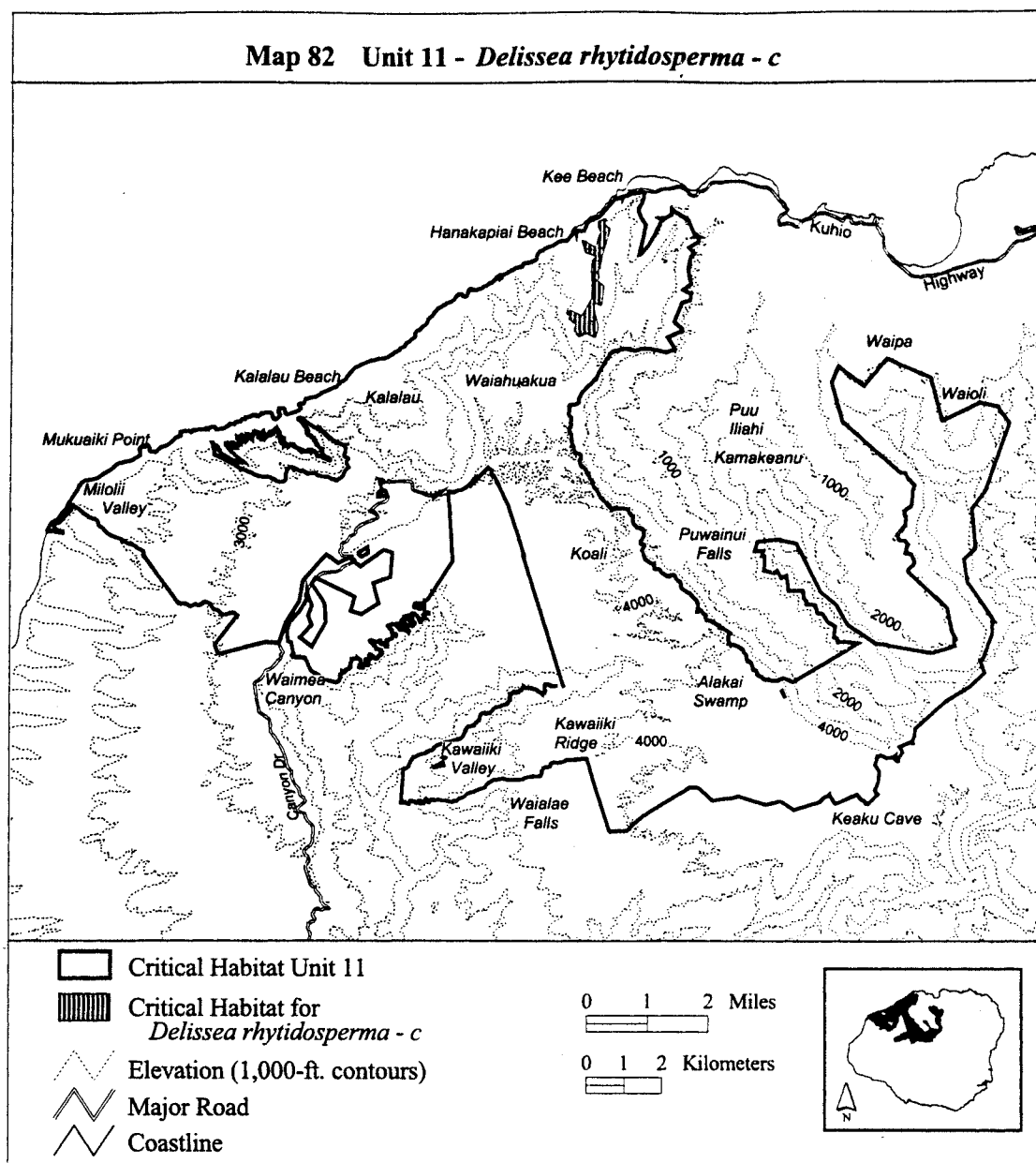
(lxxxii) Kauai 11—*Delissea rhytidosperma*—c (103 ha; 254 ac)

(A) Unit consists of the following 39 boundary points: Start at 438364, 2454097; 438437, 2454207; 438755, 2454060; 439018, 2454506; 439006, 2454940; 438994, 2455239; 439012, 2455501; 439122, 2455605; 438829,

2455709; 438743, 2456014; 438786, 2456026; 439085, 2455849; 439128, 2455935; 439177, 2456124; 439244, 2456234; 439165, 2456393; 439165, 2456515; 439361, 2456606; 439367, 2456521; 439336, 2456441; 439489, 2456325; 439275, 2455605; 439238, 2455397; 439159, 2455226; 439208, 2455062; 439153, 2454964; 439336,

2454829; 439275, 2454329; 439092, 2454390; 439067, 2454286; 439073, 2454201; 439189, 2453737; 439104, 2453474; 438878, 2453590; 438676, 2453486; 438560, 2453682; 438596, 2453822; 438413, 2453981; 438468, 2454054; return to starting point.

(B) Note: Map 82 follows:



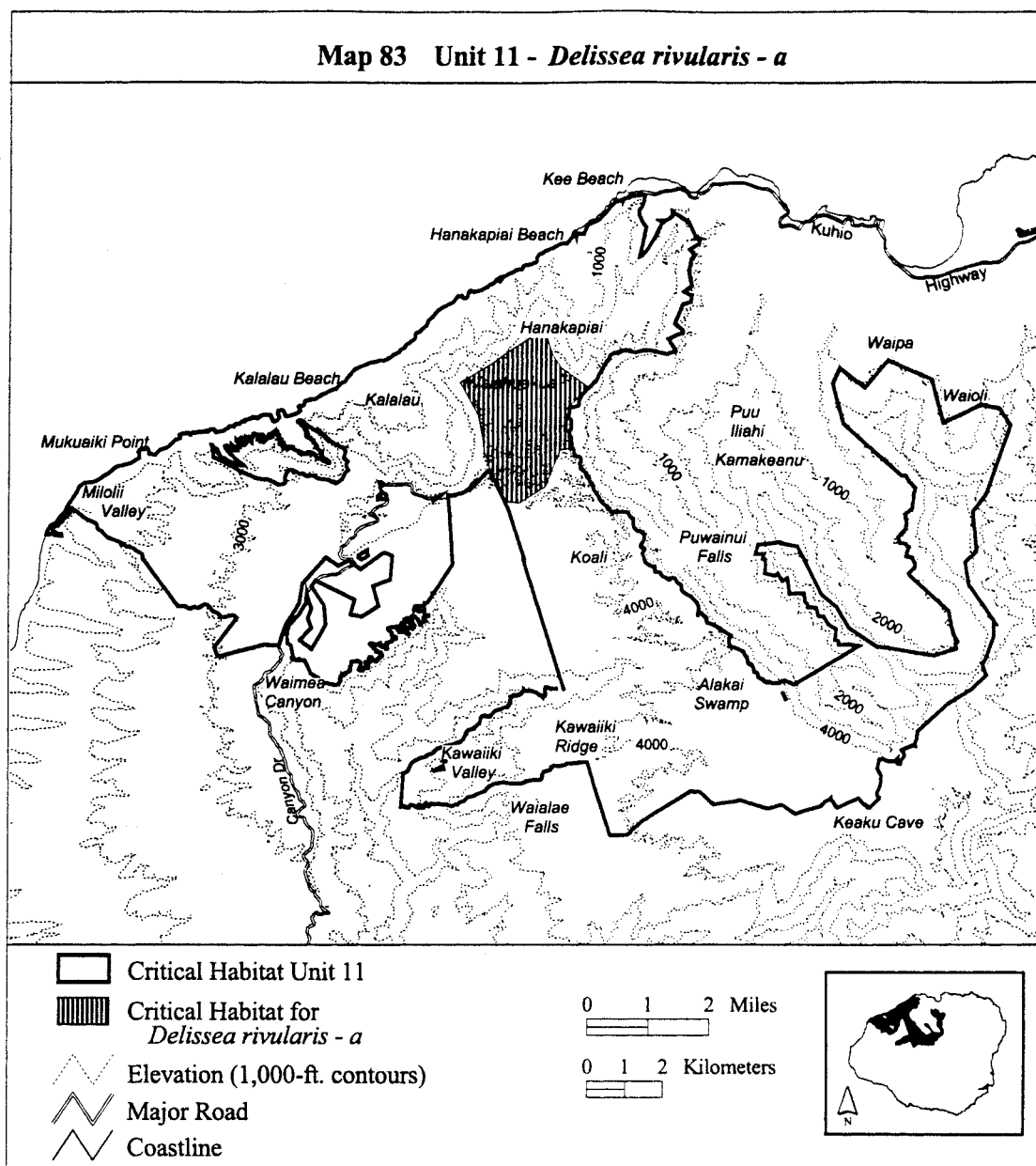
(lxxxiii) Kauai 11—*Delissea rivularis*—a (850 ha; 2,100 ac)

(A) Unit consists of the following 31 boundary points: Start at 438480, 2450624; 438190, 2450564; 438025, 2450154; 437804, 2449609; 437124, 2449170; 436726, 2449208; 436361,

2450013; 436328, 2450087; 436322, 2450079; 436197, 2450481; 436114, 2451018; 436027, 2451473; 435769, 2451955; 435533, 2452339; 435549, 2452356; 435856, 2452536; 436367, 2452827; 436965, 2453265; 437639, 2453676; 437771, 2453681; 437810,

2453604; 437963, 2453122; 438210, 2452738; 438819, 2452300; 438913, 2452214; 438478, 2451772; 438422, 2451715; 438390, 2451682; 438377, 2451065; 438401, 2450962; 438479, 2450630; return to starting point.

(B) **Note:** Map 83 follows:



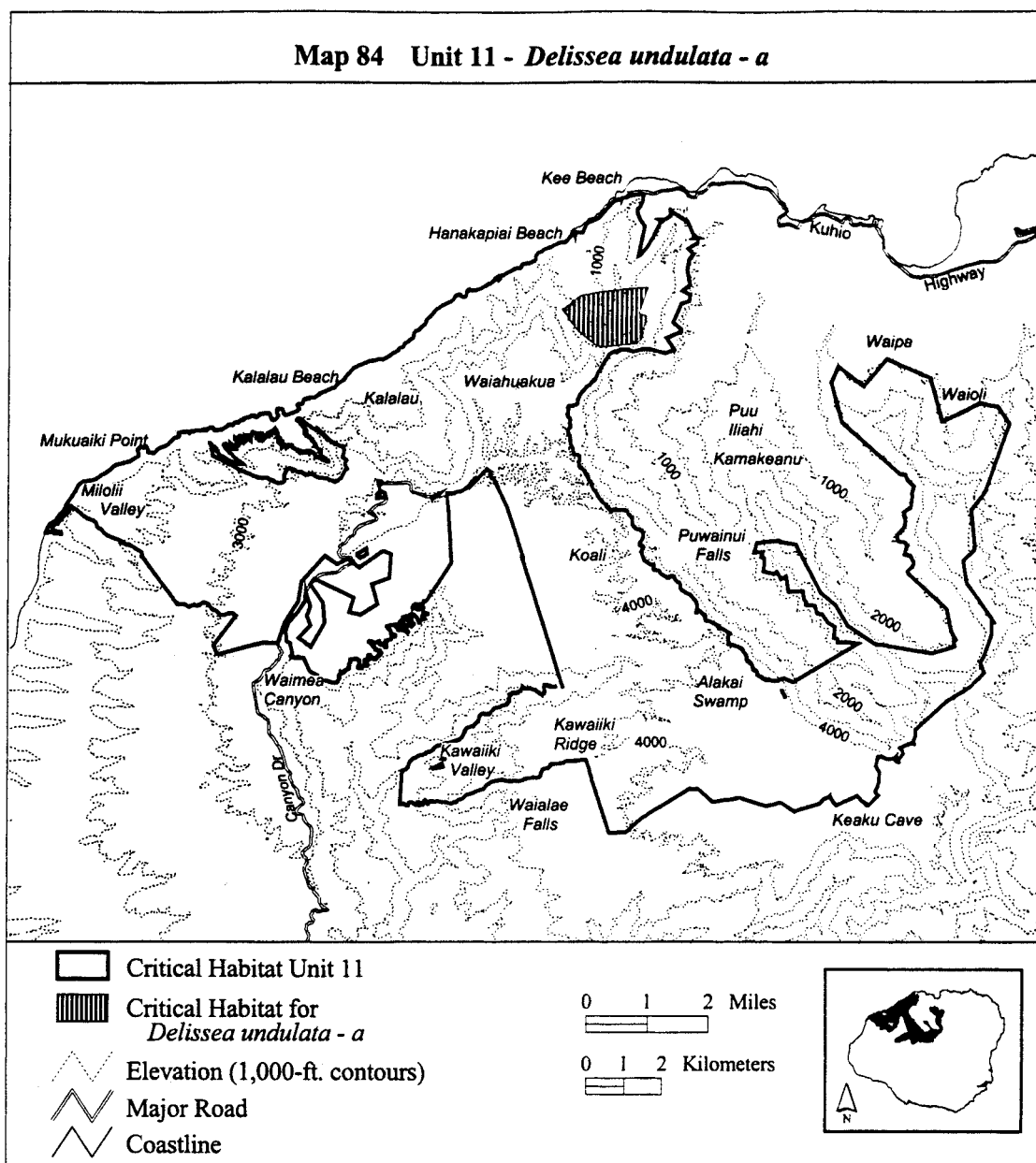
(lxxxiv) Kauai 11—*Delissea undulata*—a (257 ha; 635 ac)

(A) Unit consists of the following 35 boundary points: Start at 440245, 2453335; 439623, 2453274; 439296, 2453242; 439152, 2453286; 438673, 2453669; 438255, 2454243; 438351,

2454304; 438747, 2454599; 439309, 2454708; 439737, 2454756; 440202, 2454807; 440517, 2454810; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410,

2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; return to starting point.

(B) **Note:** Map 84 follows:



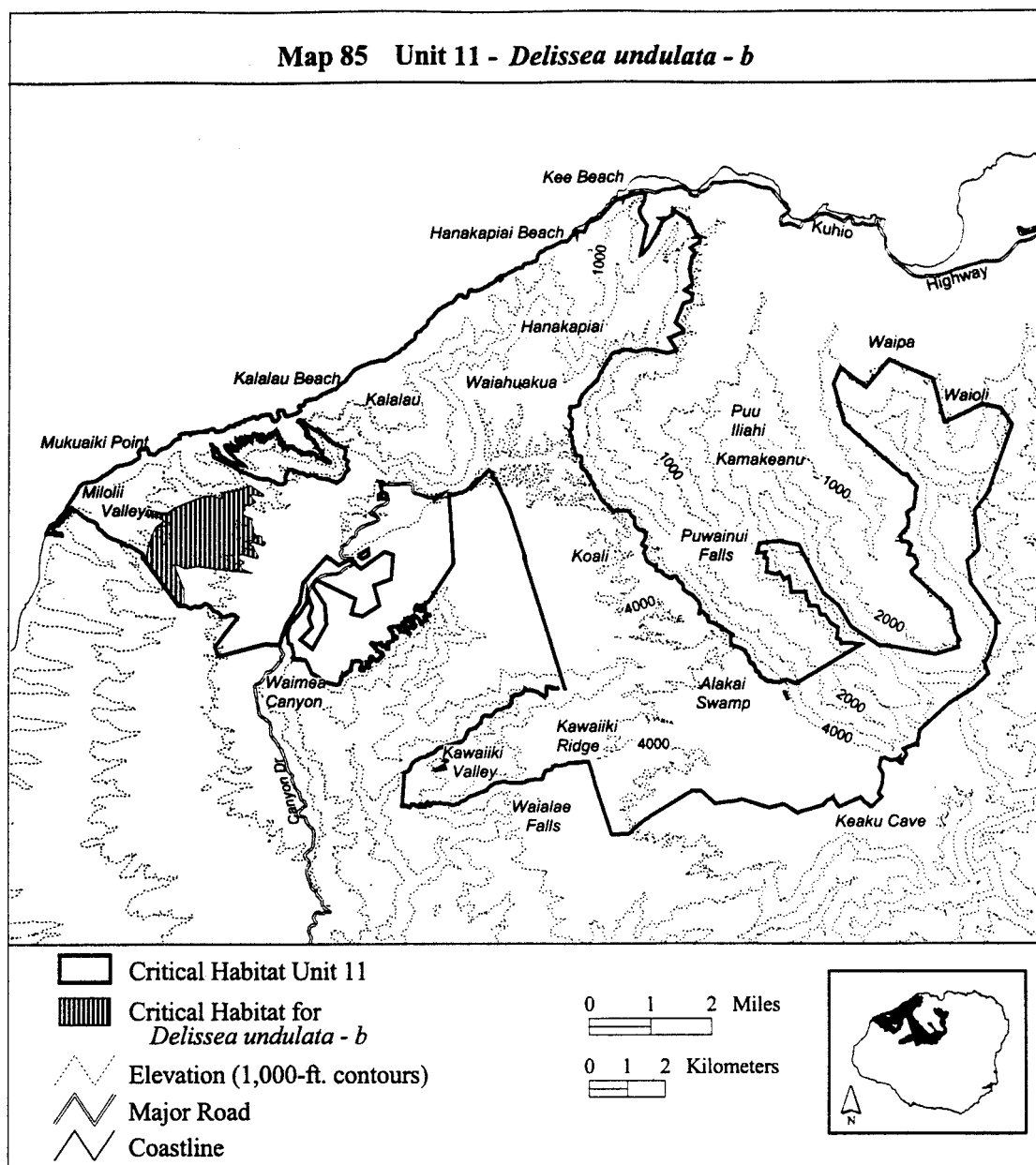
(lxxxv) Kauai 11—*Delissea undulata*—b
(532 ha; 1,314 ac)

(A) Unit consists of the following 90 boundary points: Start at 428237, 2446901; 428241, 2446462; 428116, 2446474; 428047, 2446484; 427205, 2447633; 427225, 2447691; 427222, 2447694; 427270, 2447855; 427313, 2448038; 427392, 2448290; 427457, 2448429; 427496, 2448503; 427596, 2448586; 427679, 2448656; 427688, 2448708; 427671, 2448747; 427596, 2448756; 427401, 2448799; 427039, 2448843; 426991, 2448882; 426969, 2448912; 426987, 2448952; 427057, 2449030; 427122, 2449004; 427666, 2448886; 427814, 2448886; 427954,

2448999; 428083, 2449050; 428079, 2449052; 428687, 2449290; 428949, 2449350; 429218, 2449266; 429218, 2449403; 429731, 2449517; 429987, 2449618; 430333, 2449379; 430316, 2449326; 430059, 2449379; 429970, 2449362; 430029, 2449298; 430122, 2449180; 429949, 2449083; 429883, 2449088; 429820, 2449047; 429848, 2448974; 429795, 2448931; 429797, 2448840; 429892, 2448775; 429896, 2448772; 430004, 2448754; 430046, 2448712; 430016, 2448610; 430076, 2448477; 430058, 2448363; 430137, 2448297; 430251, 2448279; 430299, 2448243; 430287, 2448141; 430377, 2448105; 430383, 2448063; 430347,

2448021; 430191, 2448063; 430076, 2448105; 429998, 2448093; 429974, 2448039; 430064, 2448003; 430076, 2447949; 430203, 2447726; 430179, 2447678; 429758, 2447786; 429662, 2447744; 429692, 2447648; 429818, 2447594; 429824, 2447540; 429740, 2447522; 429722, 2447504; 429770, 2447396; 429860, 2447366; 430010, 2447294; 429000, 2447414; 428586, 2447474; 428465, 2447432; 428291, 2447414; 428039, 2447510; 427984, 2447510; 427984, 2447511; 427980, 2447502; 427934, 2447525; 427983, 2447490; 428217, 2446900; return to starting point.

(B) Note: Map 85 follows:



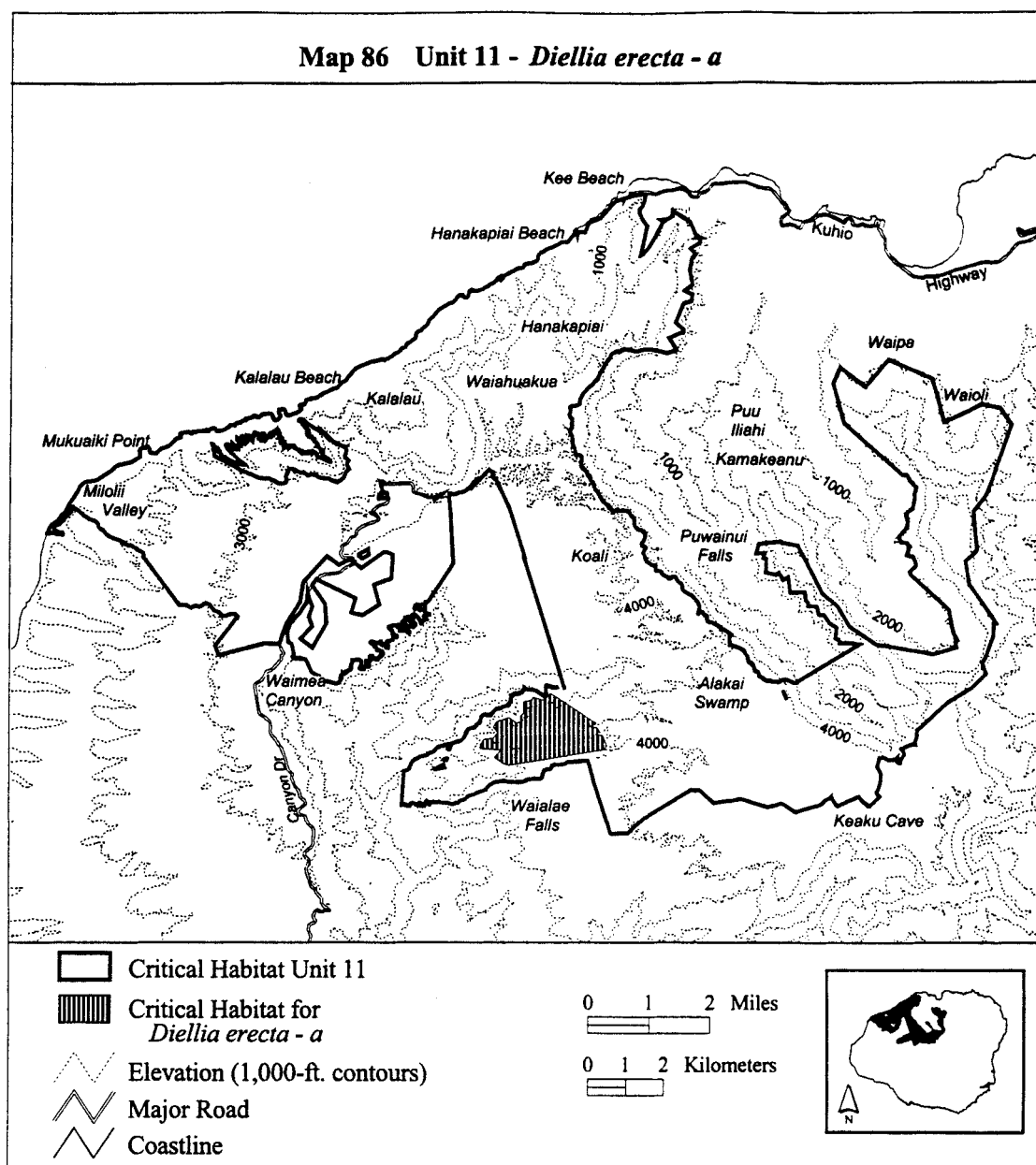
(lxxxvi) Kauai 11—*Diellia erecta*—a
(364 ha; 901 ac)

(A) Unit consists of the following 30 boundary points: Start at 437962, 2444106; 439160, 2443328; 439020, 2443250; 439191, 2443203; 439238, 2443125; 439168, 2443024; 439316,

2443017; 439440, 2442729; 439378, 2442635; 436857, 2442223; 436732, 2442270; 436483, 2442441; 436654, 2442636; 436102, 2442659; 436086, 2442721; 436188, 2442916; 436452, 2442939; 436553, 2443095; 436444, 2443235; 436522, 2443367; 436857,

2443468; 437067, 2443336; 437176, 2443359; 437160, 2443499; 437246, 2443585; 437246, 2443733; 437246, 2443888; 437479, 2443943; 437487, 2444013; 437760, 2443935; return to starting point.

(B) **Note:** Map 86 follows:



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

(A) Unit consists of the following 181 boundary points: Start at 426612, 2448093; 426664, 2448093; 426740, 2448131; 426778, 2448146; 426847, 2448184; 426900, 2448169; 426968, 2448086; 427044, 2448078; 427082, 2448063; 427143, 2448040; 427196, 2448048; 427280, 2448010; 427341, 2448010; 427402, 2448025; 427402, 2448040; 427303, 2448093; 427219, 2448169; 427227, 2448222; 427196, 2448314; 427136, 2448314; 427037, 2448359; 426999, 2448420; 427067, 2448390; 427120, 2448390; 427219, 2448405; 427288, 2448352; 427348, 2448298; 427394, 2448291; 427463, 2448268; 427599, 2448238; 427615,

2448154; 427653, 2448101; 427698, 2448048; 427729, 2448040; 427744, 2448055; 427721, 2448108; 427713, 2448146; 427774, 2448222; 427827, 2448215; 427881, 2448200; 427919, 2448200; 427852, 2448318; 427706, 2448338; 427555, 2448483; 427878, 2448586; 427308, 2448763; 427308, 2448817; 427841, 2448838; 428023, 2449021; 427927, 2449075; 427846, 2449021; 427287, 2449220; 427243, 2449338; 427421, 2449381; 427604, 2449467; 427572, 2449510; 427905, 2449553; 428050, 2449424; 427970, 2449634; 427749, 2449709; 427706, 2449768; 427841, 2449784; 428077, 2449779; 428249, 2449634; 428352, 2449494; 428448, 2449360; 428868, 2449317; 428836, 2449381; 428932,

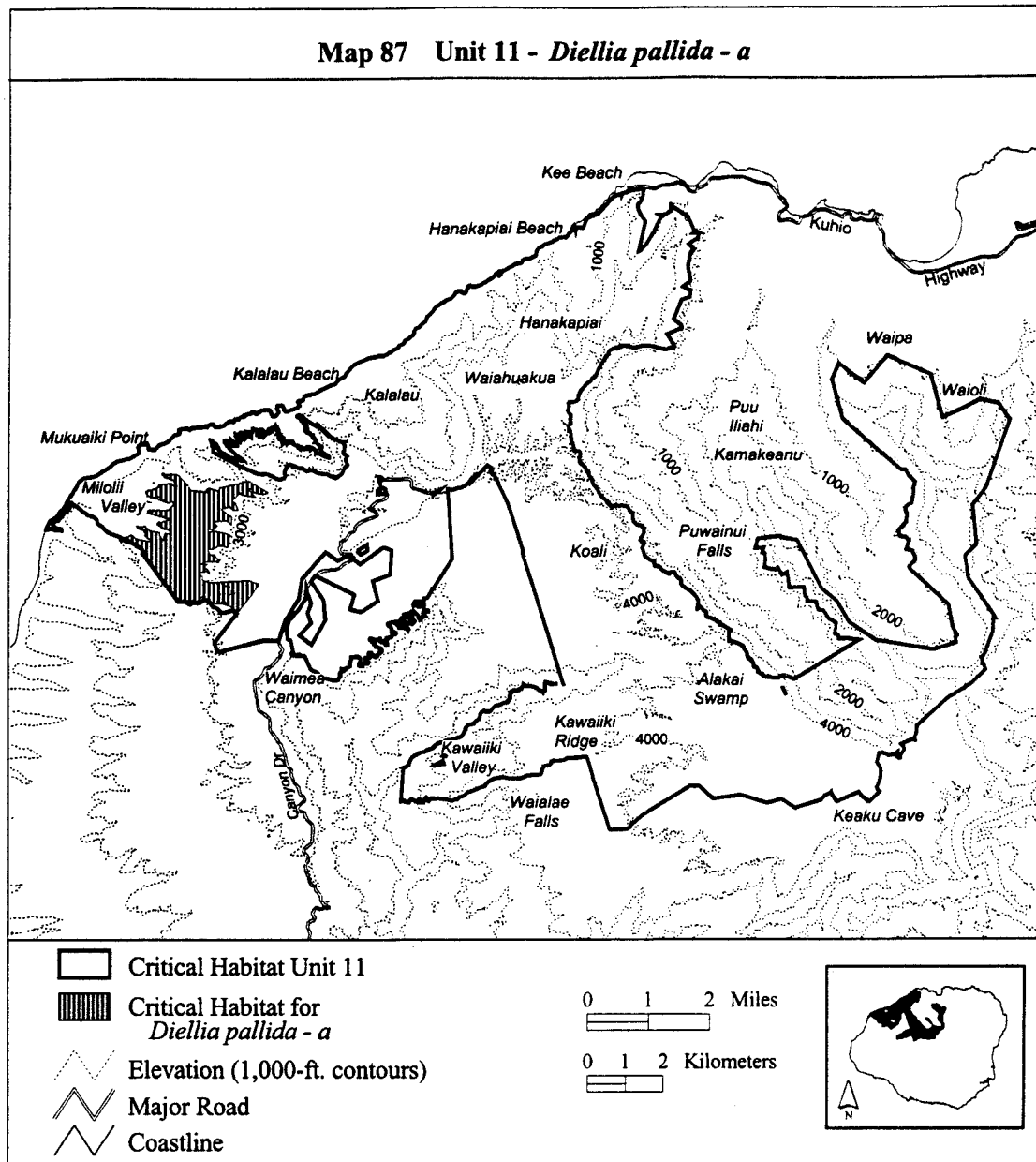
2449419; 429158, 2449338; 429196, 2449430; 429702, 2449537; 429922, 2449601; 429955, 2449612; 430471, 2449300; 430347, 2449252; 430067, 2449311; 430030, 2449397; 429955, 2449392; 430143, 2449177; 429739, 2449258; 429729, 2449301; 429508, 2449075; 429605, 2449037; 429675, 2448822; 429562, 2448817; 429465, 2448924; 429239, 2448849; 429508, 2448650; 429492, 2448446; 429406, 2448553; 429045, 2448542; 429126, 2448408; 429019, 2448317; 428868, 2448344; 428916, 2448236; 429013, 2448295; 429379, 2448214; 429675, 2448059; 429417, 2447935; 429411, 2447843; 429234, 2447908; 429226, 2447910; 429150, 2447895; 429112, 2447865; 429105, 2447827; 429014,

2447812; 428899, 2447797; 428884,
2447766; 428922, 2447721; 428945,
2447675; 428983, 2447645; 429021,
2447645; 429044, 2447683; 429067,
2447652; 429097, 2447607; 429120,
2447569; 429173, 2447538; 429242,
2447553; 429166, 2447447; 429105,
2447500; 428983, 2447470; 428960,
2447493; 428854, 2447477; 428709,
2447417; 428793, 2447417; 428869,
2447401; 428793, 2447371; 428808,
2447310; 428869, 2447295; 428915,
2447181; 428854, 2447234; 428778,

2447204; 428694, 2447204; 428641,
2447173; 428737, 2447103; 428743,
2447006; 428931, 2446939; 429484,
2446970; 429961, 2446989; 430253,
2446887; 430028, 2446579; 429664,
2446148; 429580, 2446182; 429485,
2446305; 429263, 2446389; 429094,
2446389; 428972, 2446421; 428904,
2446474; 428793, 2446542; 428740,
2446564; 428655, 2446474; 428602,
2446447; 428476, 2446463; 428396,
2446447; 428285, 2446458; 428116,
2446474; 428047, 2446484; 427185,

2447661; 427161, 2447669; 427157,
2447676; 427157, 2447711; 427175,
2447754; 427176, 2447775; 427171,
2447800; 427160, 2447815; 427124,
2447837; 427084, 2447847; 427039,
2447867; 426997, 2447892; 426981,
2447902; 426958, 2447923; 426944,
2447941; 426907, 2447965; 426847,
2447992; 426819, 2447998; 426798,
2448010; 426758, 2448005; 426737,
2448009; 426722, 2448015; 426613,
2448093; return to starting point.

(B) Note: Map 87 follows:



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

(A) Unit consists of the following 120
boundary points: Start at 437314,

2444224; 437517, 2444006; 437424,
2443802; 437257, 2443672; 437121,
2443437; 437053, 2443332; 436979,
2443480; 436849, 2443518; 436688,

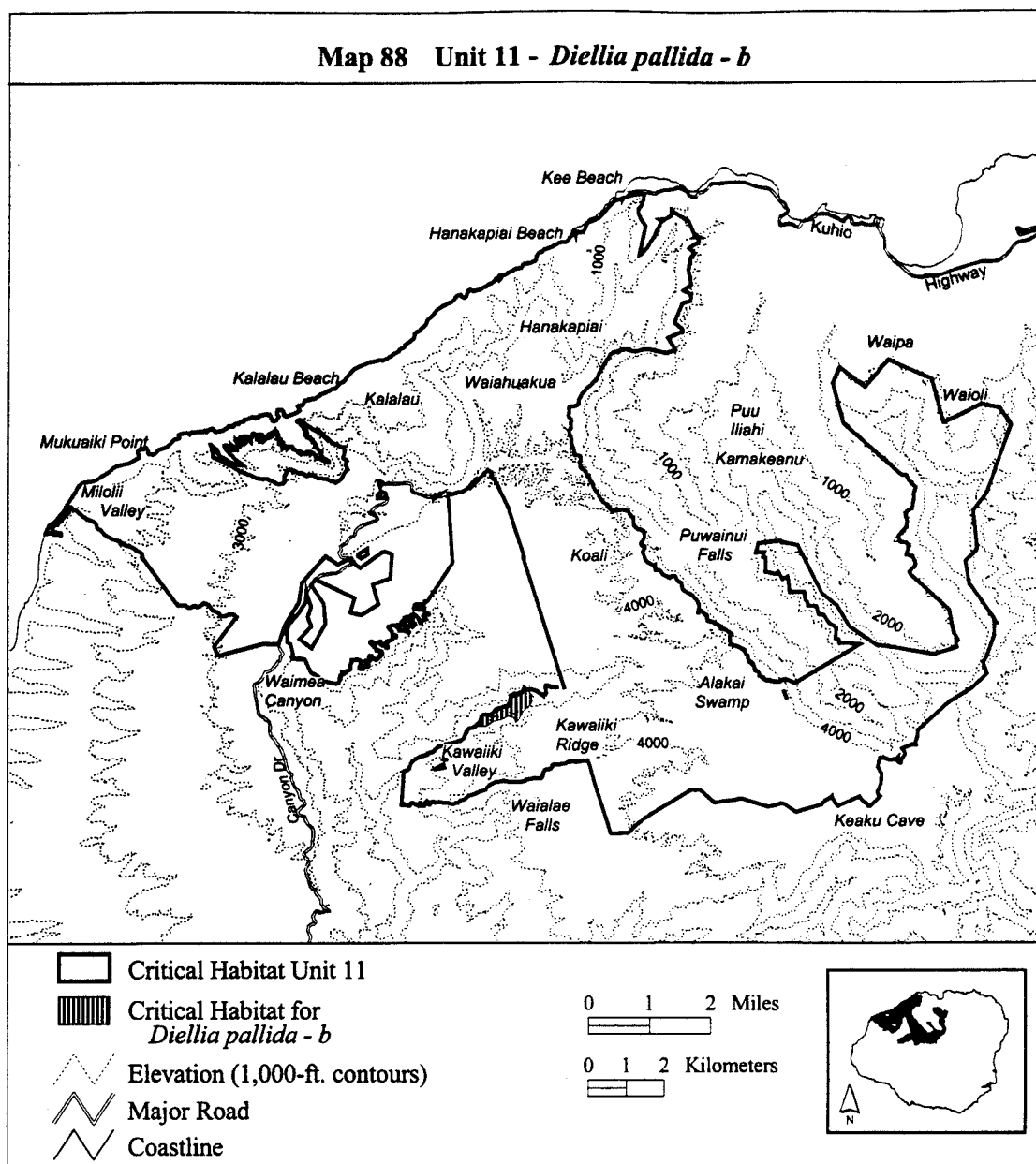
2443443; 436465, 2443375; 436280,
2443264; 435945, 2443237; 435949,
2443246; 435958, 2443255; 435969,
2443263; 435979, 2443271; 435993,

2443281; 436010, 2443297; 436032,
2443316; 436048, 2443332; 436064,
2443343; 436080, 2443358; 436089,
2443375; 436095, 2443390; 436100,
2443403; 436107, 2443421; 436113,
2443456; 436118, 2443477; 436123,
2443502; 436134, 2443520; 436146,
2443534; 436160, 2443543; 436175,
2443554; 436190, 2443560; 436213,
2443563; 436227, 2443563; 436240,
2443562; 436254, 2443557; 436265,
2443552; 436274, 2443547; 436287,
2443540; 436300, 2443537; 436315,
2443532; 436328, 2443529; 436337,
2443528; 436348, 2443531; 436357,
2443536; 436369, 2443546; 436380,
2443558; 436392, 2443572; 436403,
2443585; 436421, 2443611; 436438,

2443631; 436460, 2443655; 436478,
2443676; 436497, 2443688; 436518,
2443696; 436534, 2443700; 436558,
2443707; 436576, 2443711; 436597,
2443714; 436611, 2443716; 436630,
2443718; 436644, 2443720; 436655,
2443724; 436666, 2443731; 436678,
2443742; 436697, 2443756; 436708,
2443763; 436726, 2443769; 436745,
2443772; 436758, 2443775; 436771,
2443776; 436788, 2443776; 436799,
2443778; 436808, 2443781; 436818,
2443785; 436823, 2443786; 436829,
2443790; 436837, 2443797; 436841,
2443801; 436845, 2443807; 436852,
2443819; 436861, 2443831; 436870,
2443847; 436882, 2443863; 436890,
2443877; 436900, 2443900; 436911,

2443923; 436914, 2443936; 436914,
2443948; 436913, 2443962; 436910,
2443981; 436910, 2443981; 436979,
2444055; 437013, 2444108; 437026,
2444105; 437049, 2444100; 437067,
2444092; 437076, 2444089; 437106,
2444090; 437119, 2444096; 437128,
2444104; 437133, 2444112; 437137,
2444122; 437144, 2444130; 437156,
2444135; 437169, 2444141; 437183,
2444150; 437191, 2444154; 437202,
2444165; 437212, 2444177; 437228,
2444198; 437239, 2444213; 437245,
2444227; 437254, 2444239; 437263,
2444246; 437278, 2444240; 437294,
2444234; 437310, 2444225; return to
starting point.

(B) Note: Map 88 follows:



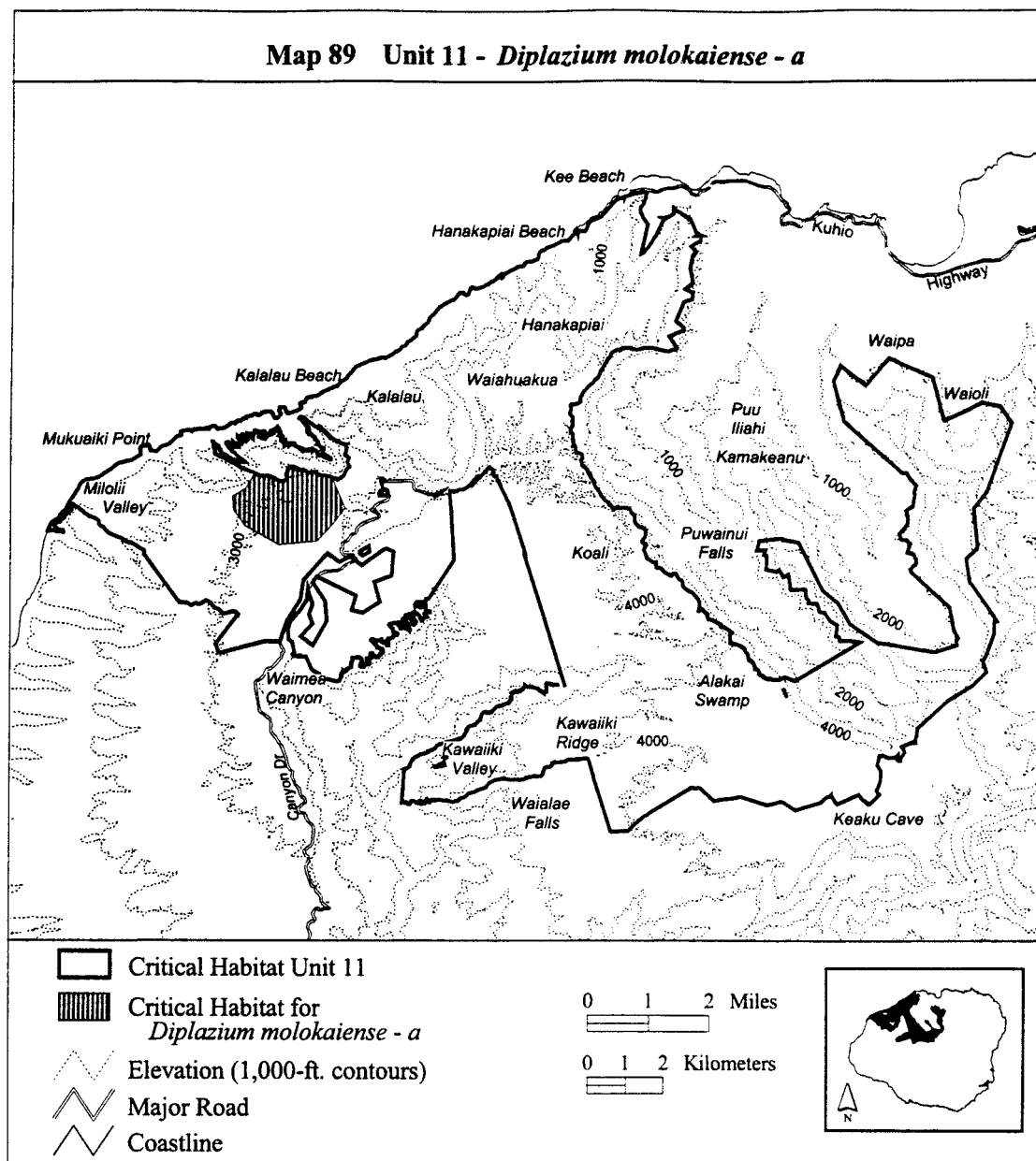
(lxxxix) Kauai 11—*Diplazium molokaiense*—a (430 ha; 1,062 ac)

(A) Unit consists of the following 48 boundary points: Start at 429805, 2448471; 429520, 2448889; 429479, 2449236; 429836, 2449450; 430021, 2449760; 430088, 2449848; 430172, 2449815; 430207, 2449804; 430261, 2449795; 430317, 2449781; 430340, 2449778; 430365, 2449787; 430392,

2449798; 430408, 2449802; 430410, 2449802; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285,

2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432456, 2448919; 432171, 2448512; 431732, 2448053; 430713, 2447962; return to starting point.

(B) Note: Map 89 follows:

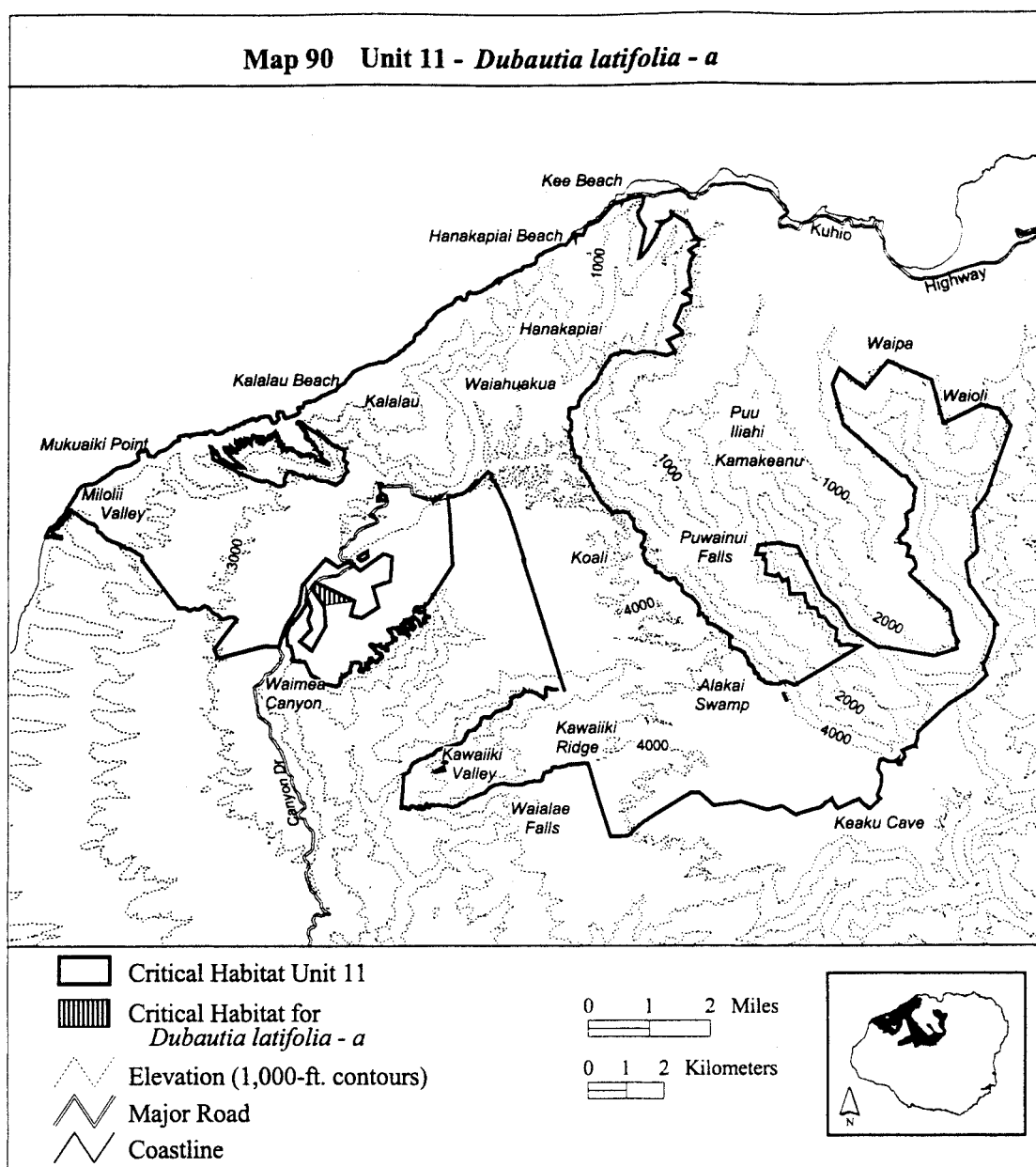


(xc) Kauai 11—*Dubautia latifolia*—a (31 ha; 76 ac)

(A) Unit consists of the following 6 boundary points: Start at 432758,

2446605; 432729, 2446601; 431947, 2446508; 431624, 2446959; 431732, 2447115; 432759, 2446609; return to starting point.

(B) Note: Map 90 follows:



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

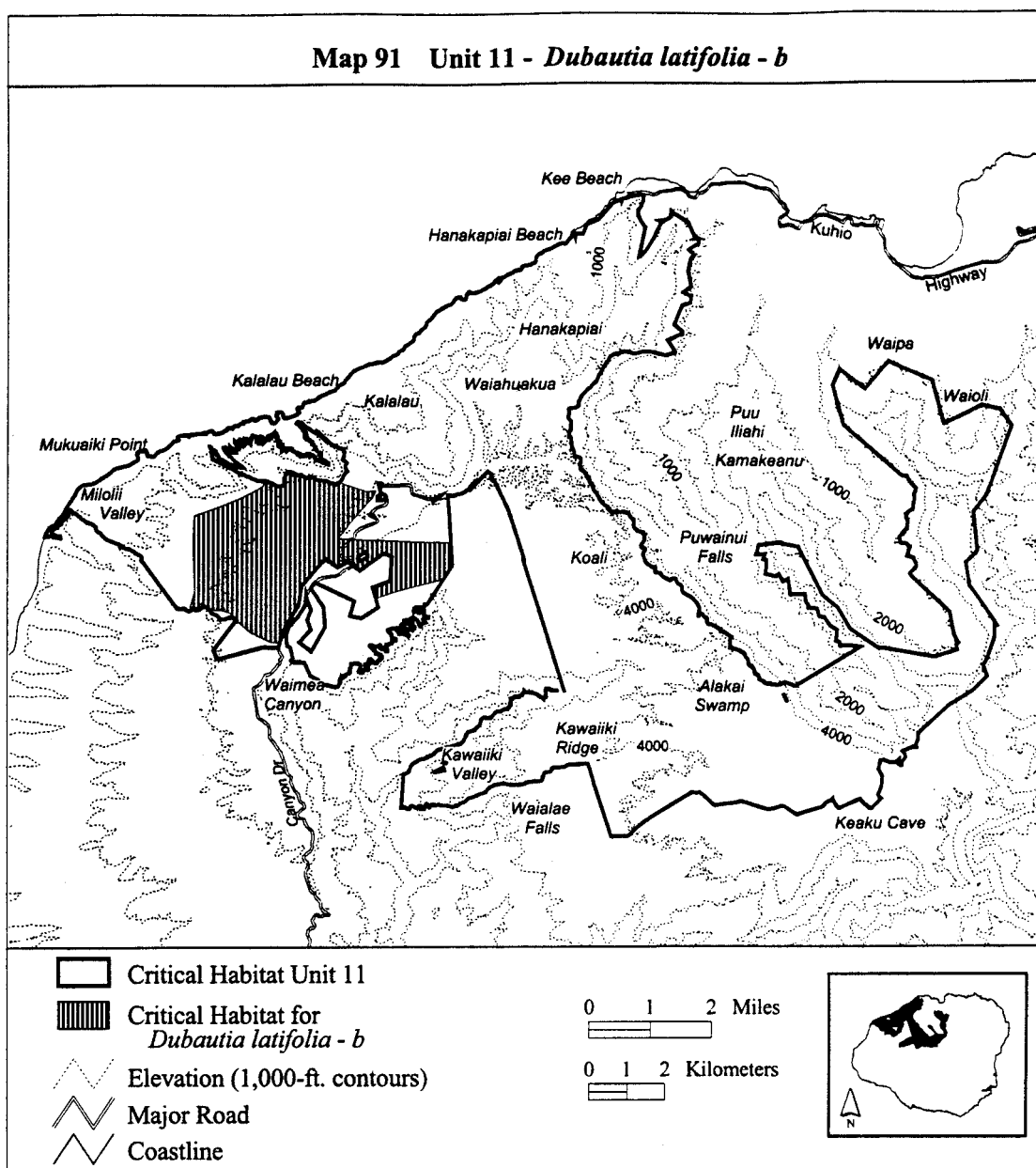
(A) Unit consists of the following 95 boundary points: Start at 431300, 2446537; 431298, 2446522; 431294, 2446516; 430955, 2445963; 430827, 2445619; 430800, 2445534; 430575, 2445540; 430038, 2445808; 429654, 2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428438, 2446456; 428548, 2446851; 428540, 2447350; 428511, 2448118; 428533, 2448848; 429226, 2449093; 429778, 2449324; 430158, 2449533; 430352, 2449651; 430348, 2449666; 430376,

2449750; 430384, 2449766; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432217, 2449712; 432259, 2449679; 432344, 2449744; 432716, 2449615; 432716, 2449616; 432975, 2449532; 433094, 2449480; 433347,

2449509; 433235, 2449316; 432751, 2448757; 432364, 2448281; 432337, 2448239; 433100, 2448204; 433370, 2448192; 434350, 2448157; 435242, 2448139; 435320, 2448130; 435360, 2447538; 435147, 2447216; 435091, 2447171; 434274, 2446962; 433872, 2446863; 433405, 2446700; 433330, 2446689; 433257, 2446958; 433706, 2447138; 433746, 2447766; 433527, 2447856; 432918, 2447407; 432609, 2447647; 432320, 2447497; 432136, 2447629; 432001, 2447726; 431369, 2447027; return to starting point.

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

(C) Note: Map 91 follows:



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

(A) Unit consists of the following 263 boundary points: Start at 436896, 2441784; 437321, 2443428; 437328, 2443431; 437033, 2443650; 436902, 2443906; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026,

2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482,

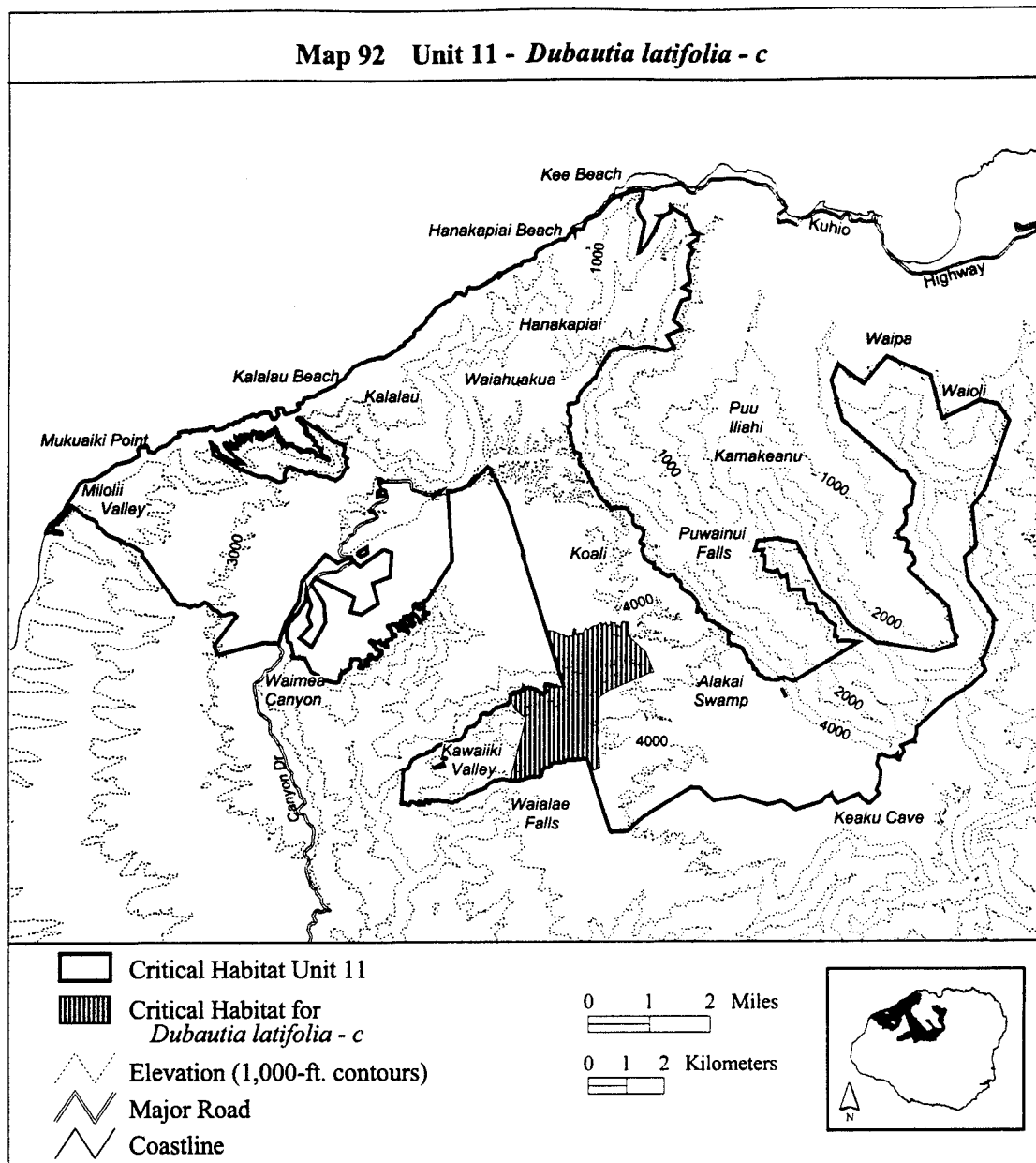
2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444102; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843,

2444322; 437854, 2444327; 437871,
2444328; 437887, 2444323; 437909,
2444314; 437933, 2444302; 437960,
2444289; 437984, 2444274; 438007,
2444260; 438028, 2444258; 438048,
2444258; 438072, 2444260; 438087,
2444266; 438109, 2444271; 438133,
2444273; 438164, 2444270; 438196,
2444263; 438335, 2444214; 437851,
2445719; 438006, 2445710; 438168,
2445654; 438335, 2445593; 438342,
2445599; 438397, 2445569; 438522,
2445580; 438541, 2445610; 438552,
2445665; 438574, 2445746; 438592,
2445779; 438625, 2445761; 438633,
2445658; 438633, 2445614; 438647,
2445614; 438695, 2445639; 438721,
2445676; 438740, 2445676; 438758,
2445628; 438802, 2445647; 438839,
2445698; 438872, 2445765; 438905,
2445783; 438928, 2445776; 438931,
2445765; 438942, 2445724; 438961,
2445728; 438983, 2445765; 439020,
2445798; 439112, 2445842; 439215,
2445864; 439234, 2445879; 439274,
2445915; 439289, 2445949; 439300,
2445934; 439333, 2445879; 439363,
2445875; 439403, 2445904; 439422,
2445938; 439440, 2445934; 439436,
2445897; 439444, 2445864; 439492,

2445853; 439539, 2445871; 439539,
2445974; 439580, 2445934; 439680,
2445941; 439661, 2445860; 439694,
2445831; 439739, 2445860; 439772,
2445827; 439820, 2445842; 439838,
2445897; 439856, 2445963; 439904,
2445960; 440033, 2445941; 440026,
2445595; 440472, 2445178; 440708,
2444629; 440605, 2444611; 440155,
2444412; 439514, 2444151; 439264,
2443956; 439218, 2442724; 439294,
2442160; 439259, 2442078; 439037,
2442031; 438934, 2442351; 438866,
2442347; 438838, 2442340; 438821,
2442339; 438757, 2442331; 438721,
2442329; 438704, 2442326; 438694,
2442327; 438679, 2442324; 438656,
2442321; 438626, 2442315; 438609,
2442314; 438561, 2442316; 438535,
2442314; 438523, 2442310; 438517,
2442310; 438496, 2442310; 438460,
2442320; 438453, 2442321; 438436,
2442321; 438433, 2442319; 438418,
2442311; 438392, 2442294; 438376,
2442278; 438355, 2442265; 438305,
2442256; 438254, 2442248; 438238,
2442248; 438219, 2442244; 438157,
2442234; 438130, 2442234; 438114,
2442232; 438098, 2442237; 438065,
2442246; 438049, 2442246; 438030,

2442243; 438012, 2442229; 438000,
2442216; 437998, 2442205; 437996,
2442188; 437984, 2442167; 437973,
2442147; 437954, 2442136; 437939,
2442128; 437926, 2442125; 437912,
2442123; 437873, 2442121; 437839,
2442110; 437826, 2442106; 437806,
2442092; 437791, 2442074; 437777,
2442052; 437766, 2442017; 437758,
2441998; 437754, 2441991; 437751,
2441981; 437745, 2441950; 437740,
2441938; 437736, 2441928; 437717,
2441899; 437711, 2441887; 437705,
2441878; 437689, 2441877; 437674,
2441875; 437647, 2441866; 437635,
2441866; 437617, 2441866; 437602,
2441867; 437566, 2441876; 437532,
2441880; 437522, 2441879; 437495,
2441869; 437460, 2441862; 437391,
2441858; 437366, 2441852; 437346,
2441845; 437332, 2441842; 437317,
2441835; 437287, 2441816; 437274,
2441809; 437240, 2441796; 437224,
2441791; 437181, 2441781; 437150,
2441777; 437111, 2441777; 437096,
2441779; 437062, 2441776; 437008,
2441775; 436960, 2441776; 436912,
2441780; return to starting point.

(B) **Note:** Map 92 follows:



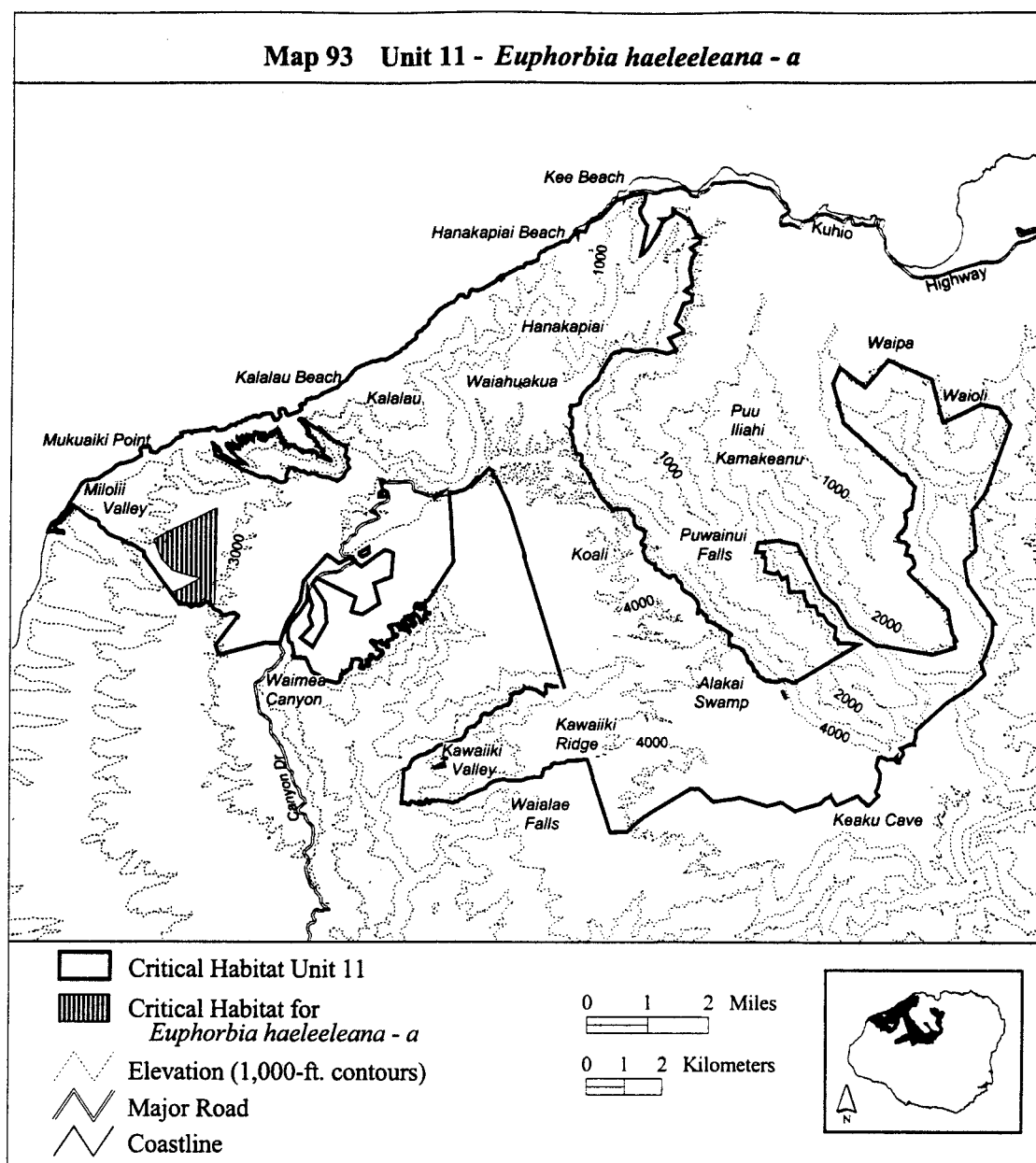
(xciii) Kauai 11—*Euphorbia haelealeana*—a (263 ha; 649 ac)

(A) Unit consists of the following 23 boundary points: Start at 429092, 2448965; 429045, 2446580; 429011,

2446411; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428396, 2446447; 428285, 2446458; 428116, 2446474; 428047, 2446484; 427870,

2446726; 428195, 2446854; 428654, 2447111; 428405, 2447158; 427917, 2447317; 427606, 2447620; 427403, 2448126; 427935, 2448397; 428502, 2448676; return to starting point.

(B) **Note:** Map 93 follows:



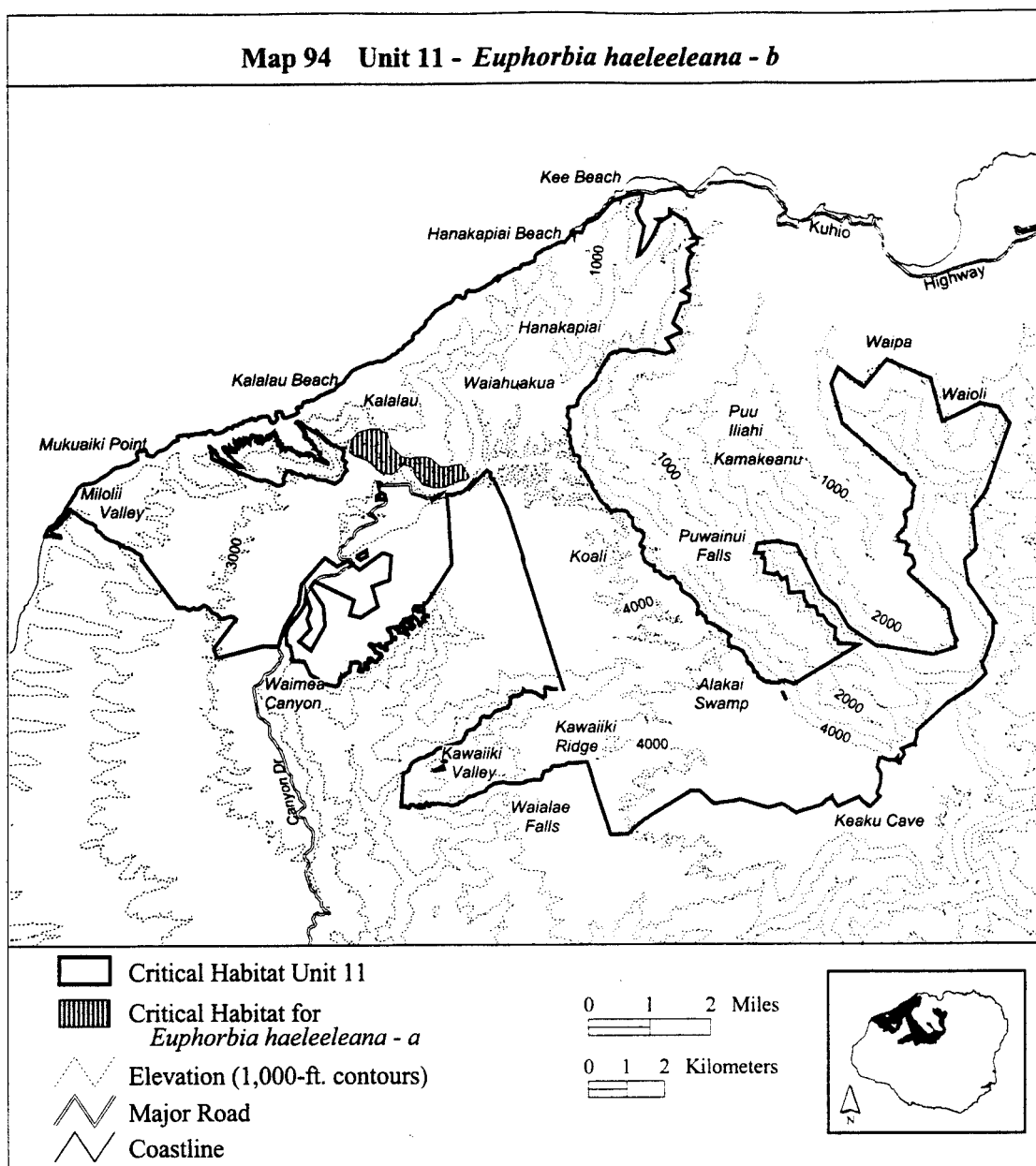
(xciv) Kauai 11—*Euphorbia haeleeleana*—b (192 ha; 476 ac)

(A) Unit consists of the following 35 boundary points: Start at 432645, 2450526; 432703, 2450873; 432886, 2451057; 433147, 2451134; 433370, 2451144; 433640, 2451018; 433737,

2450690; 434027, 2450400; 434288, 2450342; 434607, 2450400; 434801, 2450351; 434926, 2450235; 435062, 2450119; 435226, 2450119; 435458, 2450167; 435613, 2450187; 435777, 2449935; 435816, 2449848; 435748, 2449771; 435603, 2449733; 435468, 2449704; 435187, 2449569; 434888,

2449559; 434598, 2449646; 434395, 2449888; 434346, 2450061; 434279, 2450139; 434095, 2450177; 433911, 2450033; 433786, 2449917; 433505, 2449975; 433379, 2450081; 433234, 2450216; 433138, 2450294; 432770, 2450448; return to starting point.

(B) **Note:** Map 94 follows:



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

(A) Unit consists of the following 270 boundary points: Start at 435336,

2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704,

2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113,

2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655,

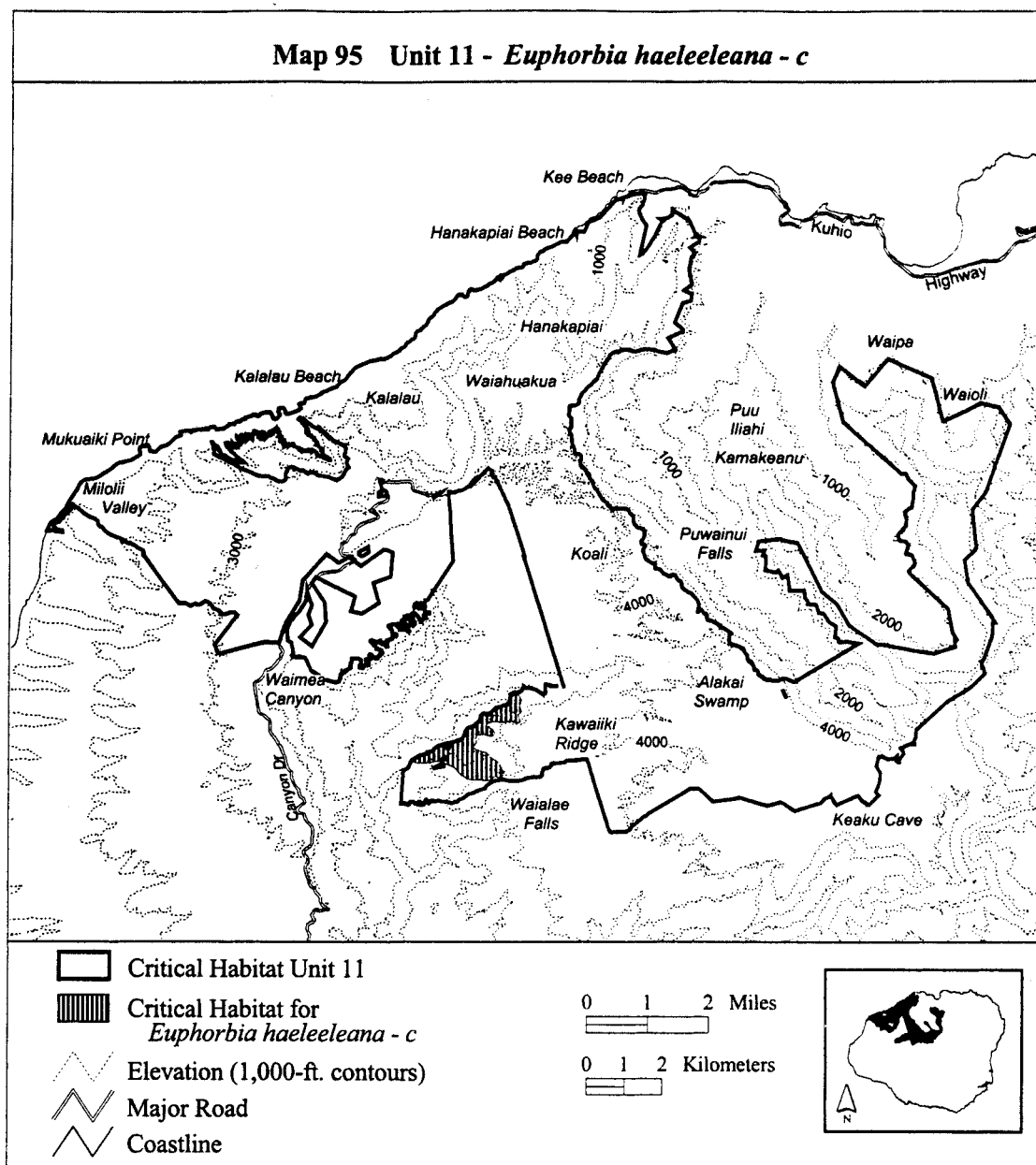
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2443778; 436808, 2443781; 436818,
2443785; 436823, 2443786; 436829,
2443790; 436837, 2443797; 436841,
2443801; 436845, 2443807; 436852,
2443819; 436861, 2443831; 436870,
2443847; 436882, 2443863; 436890,
2443877; 436900, 2443900; 436911,
2443923; 436914, 2443936; 436914,
2443948; 436913, 2443962; 436910,
2443981; 436908, 2443995; 436908,
2444013; 436911, 2444027; 436918,
2444040; 436926, 2444047; 436933,
2444055; 436942, 2444065; 436951,
2444073; 436961, 2444084; 436969,
2444094; 436975, 2444098; 436983,
2444102; 436994, 2444107; 437009,
2444108; 437026, 2444105; 437049,
2444100; 437064, 2444094; 437157,
2443993; 437206, 2443914; 437183,
2443812; 437147, 2443756; 437174,
2443690; 437210, 2443612; 437151,
2443552; 437114, 2443520; 437128,
2443441; 437177, 2443342; 437124,
2443309; 437022, 2443322; 436940,
2443353; 436940, 2443345; 436805,

2443342; 436677, 2443316; 436579,
2443332; 436440, 2443336; 436368,
2443326; 436312, 2443306; 436273,
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2443046; 436463, 2442974; 436401,
2442954; 436289, 2442981; 436187,
2443010; 436056, 2442984; 436006,
2442968; 435980, 2442889; 436016,
2442826; 436000, 2442774; 435924,
2442695; 435964, 2442629; 436105,
2442566; 436286, 2442527; 436339,
2442465; 436408, 2442386; 436585,
2442277; 436671, 2442169; 436726,
2442037; 436746, 2441942; 436703,
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2441902; 436467, 2441866; 436368,
2441797; 436250, 2441781; 436079,
2441817; 435970, 2441801; 435786,
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2442248; 434484, 2442248; 434320,
2442284; 434307, 2442297; 434298,
2442319; 434308, 2442329; 434330,
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2442387; 434416, 2442397; 434439,
2442410; 434458, 2442423; 434486,
2442437; 434504, 2442450; 434522,

2442454; 434537, 2442457; 434563,
2442460; 434590, 2442462; 434610,
2442464; 434628, 2442472; 434643,
2442483; 434664, 2442490; 434680,
2442493; 434700, 2442502; 434713,
2442515; 434725, 2442524; 434735,
2442532; 434755, 2442542; 434775,
2442551; 434800, 2442556; 434822,
2442562; 434842, 2442574; 434862,
2442596; 434883, 2442613; 434896,
2442626; 434916, 2442647; 434934,
2442668; 434949, 2442681; 434972,
2442699; 434986, 2442705; 434997,
2442708; 435006, 2442713; 435012,
2442717; 435026, 2442719; 435039,
2442722; 435061, 2442727; 435081,
2442733; 435100, 2442739; 435119,
2442747; 435135, 2442754; 435150,
2442764; 435164, 2442771; 435184,
2442774; 435201, 2442777; 435219,
2442778; 435237, 2442782; 435251,
2442783; 435228, 2442762; 435237,
2442643; 435284, 2442631; return to
starting point.

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

(C) **Note:** Map 95 follows:



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

(A) Unit consists of the following 284 boundary points: Start at 443067, 2445215; 443066, 2445209; 443066, 2445190; 443083, 2445171; 443103, 2445152; 443122, 2445132; 443135, 2445115; 443140, 2445105; 443144, 2445096; 443150, 2445078; 443152, 2445059; 443153, 2445040; 443153, 2445020; 443156, 2445003; 443158, 2444995; 443163, 2444984; 443175, 2444965; 443177, 2444962; 443193, 2444946; 443196, 2444944; 443215, 2444938; 443234, 2444932; 443240, 2444927; 443252, 2444914; 443260, 2444907; 443271, 2444898; 443281, 2444890; 443290, 2444876; 443294, 2444870; 443301, 2444851; 443307,

2444833; 443309, 2444829; 443313, 2444815; 443320, 2444796; 443327, 2444778; 443333, 2444758; 443341, 2444740; 443346, 2444728; 443352, 2444721; 443366, 2444706; 443373, 2444702; 443385, 2444699; 443403, 2444695; 443423, 2444686; 443435, 2444664; 443440, 2444655; 443443, 2444647; 443444, 2444627; 443447, 2444608; 443452, 2444591; 443459, 2444579; 443464, 2444570; 443478, 2444555; 443483, 2444551; 443497, 2444548; 443516, 2444546; 443534, 2444543; 443553, 2444537; 443557, 2444532; 443571, 2444521; 443579, 2444514; 443598, 2444493; 443610, 2444483; 443617, 2444477; 443628, 2444469; 443647, 2444460; 443666, 2444456; 443677, 2444459; 443685,

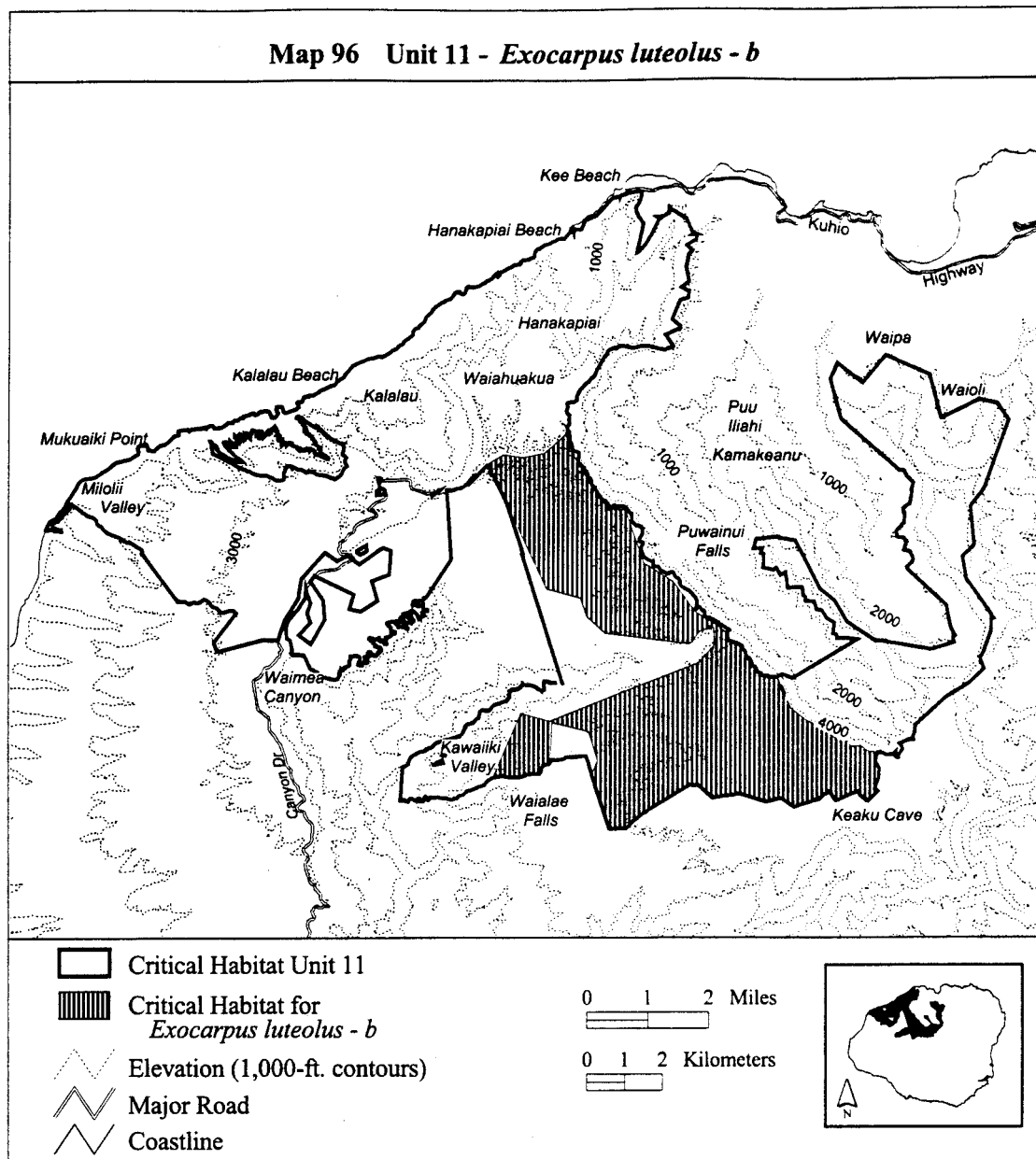
2444463; 443703, 2444469; 443722, 2444464; 443732, 2444458; 443740, 2444454; 443760, 2444446; 443769, 2444440; 443987, 2444415; 444047, 2444337; 444117, 2444107; 444210, 2443933; 444299, 2443729; 444347, 2443603; 444425, 2443555; 444600, 2443428; 444759, 2443295; 445253, 2443054; 445513, 2442838; 445854, 2442734; 445951, 2442593; 446214, 2442612; 446381, 2442489; 446652, 2442437; 446591, 2442195; 446694, 2442007; 446686, 2441764; 446640, 2441627; 446587, 2441543; 446587, 2441501; 446641, 2441436; 446651, 2441424; 446673, 2441408; 446400, 2441154; 446228, 2441279; 446214, 2441291; 446122, 2441415; 445886, 2441308; 445551, 2441162; 445510,

2441194; 445395, 2441389; 445392, 2441392; 445380, 2441414; 445344, 2441376; 444480, 2440997; 444455, 2440990; 444124, 2441223; 444113, 2441221; 444109, 2441224; 444083, 2441215; 444062, 2441230; 443889, 2441172; 443707, 2441132; 443023, 2441344; 443016, 2441342; 442976, 2441356; 442843, 2441314; 442723, 2441295; 442384, 2441249; 441968, 2441515; 441900, 2441576; 441774, 2441575; 441672, 2441599; 441656, 2441573; 441650, 2441573; 441637, 2441552; 440469, 2440833; 440464, 2440832; 440457, 2440826; 440236, 2440690; 440188, 2440625; 440119, 2440532; 440075, 2440494; 440035, 2440463; 439551, 2440431; 439093, 2441857; 439236, 2442224; 439011, 2442986; 438032, 2443222; 437997, 2442203; 437913, 2442147; 437887, 2442121; 437873, 2442121; 437839, 2442110; 437826, 2442106; 437806, 2442092; 437791, 2442074; 437777, 2442052; 437766, 2442017; 437758, 2441998; 437754, 2441991; 437751, 2441981; 437747, 2441961; 437697, 2441878; 437689, 2441877; 437674, 2441875; 437647, 2441866; 437635, 2441866; 437617, 2441866; 437602, 2441867; 437566, 2441876; 437532,

2441880; 437522, 2441879; 437495, 2441869; 437460, 2441862; 437391, 2441858; 437366, 2441852; 437346, 2441845; 437332, 2441842; 437317, 2441835; 437287, 2441816; 437274, 2441809; 437240, 2441796; 437224, 2441791; 437181, 2441781; 437150, 2441777; 437111, 2441777; 437096, 2441779; 437062, 2441776; 437008, 2441775; 436960, 2441776; 436912, 2441780; 436895, 2441784; 436825, 2441795; 436799, 2441801; 436777, 2441809; 436730, 2441820; 436695, 2441811; 436666, 2441808; 436638, 2441803; 436618, 2441796; 436593, 2441792; 436583, 2441789; 436541, 2441785; 436492, 2441773; 436474, 2441767; 437185, 2443389; 437209, 2443474; 437983, 2443266; 440213, 2444149; 441921, 2444804; 442324, 2445260; 442300, 2445723; 441960, 2445633; 441686, 2445291; 439436, 2445571; 438948, 2446021; 438786, 2446508; 437886, 2446746; 436739, 2449180; 436361, 2450013; 436335, 2450071; 436340, 2450096; 436658, 2450273; 436694, 2450293; 436737, 2450317; 437249, 2450242; 437337, 2450259; 437337, 2450259; 437824, 2450354; 437835, 2450364; 437999, 2450507; 438000, 2450508; 438124,

2450616; 438399, 2450871; 438418, 2450889; 438479, 2450630; 438530, 2450411; 438960, 2449644; 438961, 2449642; 438964, 2449637; 439170, 2449270; 439197, 2449222; 439463, 2448950; 439523, 2448880; 439531, 2448880; 439559, 2448851; 439829, 2448862; 439943, 2448855; 439948, 2448855; 439955, 2448835; 440448, 2447444; 441222, 2446944; 441810, 2446157; 442167, 2445934; 442409, 2445783; 442668, 2445560; 442673, 2445515; 442668, 2445494; 442667, 2445490; 442671, 2445471; 442675, 2445453; 442682, 2445433; 442689, 2445419; 442694, 2445414; 442709, 2445399; 442727, 2445386; 442743, 2445378; 442747, 2445377; 442765, 2445370; 442785, 2445364; 442798, 2445359; 442804, 2445357; 442821, 2445353; 442842, 2445347; 442858, 2445342; 442862, 2445341; 442877, 2445336; 442898, 2445330; 442915, 2445323; 442934, 2445314; 442952, 2445303; 442956, 2445301; 442972, 2445292; 442981, 2445284; 442990, 2445276; 443006, 2445268; return to starting point.

(B) **Note:** Map 96 follows:



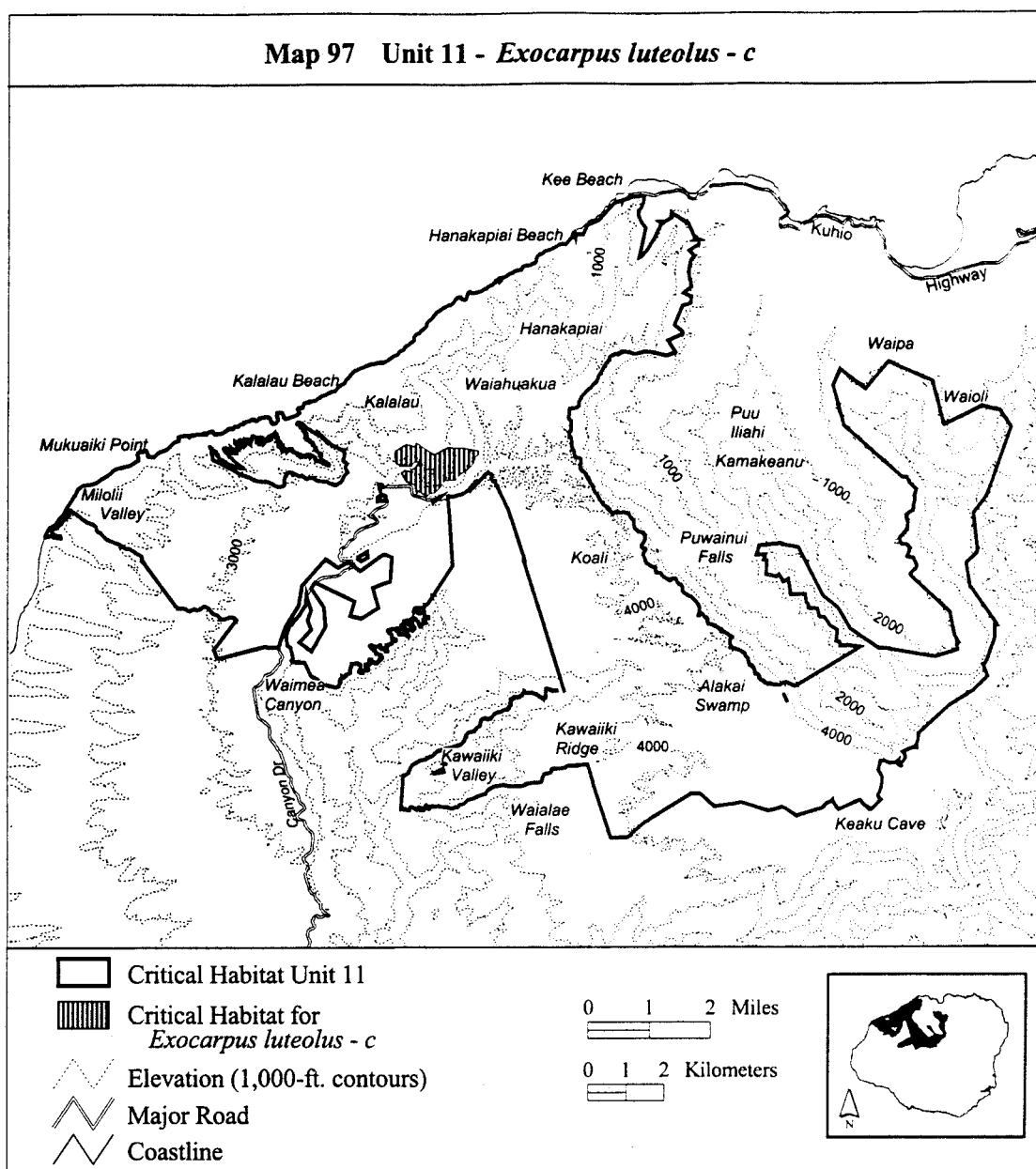
(xcvii) Kauai 11—*Exocarpus luteolus*—c
(177 ha; 438 ac)

(A) Unit consists of the following 38 boundary points: Start at 435446, 2449836; 435434, 2449822; 435414, 2449822; 435150, 2449822; 435055, 2449650; 434888, 2449475; 434758, 2449469; 434652, 2449371; 434451,

2449532; 434408, 2449452; 434362, 2449581; 434342, 2449704; 434239, 2449705; 434124, 2449782; 434000, 2449989; 434081, 2450086; 434224, 2450046; 434405, 2450190; 434405, 2450226; 434486, 2450310; 434354, 2450310; 434265, 2450198; 434026, 2450187; 433839, 2450267; 433808, 2450497; 433845, 2450589; 434133,

2450756; 434359, 2450700; 434398, 2450813; 434864, 2450480; 435213, 2450674; 435667, 2450661; 436040, 2450572; 436040, 2450490; 435945, 2450427; 435907, 2450263; 435749, 2450093; 435554, 2449961; return to starting point.

(B) **Note:** Map 97 follows:



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

(A) Unit consists of the following 185 boundary points: Start at 434845, 2446760; 434768, 2446801; 434674, 2446862; 434650, 2446703; 434674, 2446584; 434706, 2446552; 434700, 2446542; 434681, 2446520; 434675, 2446517; 434664, 2446523; 434636, 2446529; 434623, 2446526; 434620, 2446512; 434628, 2446479; 434625, 2446467; 434618, 2446459; 434582, 2446443; 434558, 2446439; 434533, 2446441; 434514, 2446449; 434500, 2446448; 434471, 2446422; 434457, 2446416; 434447, 2446420; 434434, 2446428; 434423, 2446441; 434416, 2446441; 434403, 2446435; 434400,

2446429; 434386, 2446417; 434371, 2446414; 434363, 2446417; 434355, 2446417; 434351, 2446414; 434333, 2446375; 434335, 2446361; 434340, 2446352; 434353, 2446346; 434368, 2446352; 434403, 2446359; 434411, 2446354; 434417, 2446344; 434421, 2446327; 434434, 2446306; 434469, 2446291; 434479, 2446288; 434499, 2446297; 434514, 2446317; 434528, 2446325; 434559, 2446322; 434568, 2446320; 434585, 2446324; 434595, 2446329; 434614, 2446349; 434620, 2446349; 434621, 2446342; 434611, 2446321; 434609, 2446262; 434614, 2446240; 434625, 2446221; 434647, 2446210; 434667, 2446205; 434694, 2446206; 434717, 2446208; 434723, 2446192; 434729, 2446169; 434717,

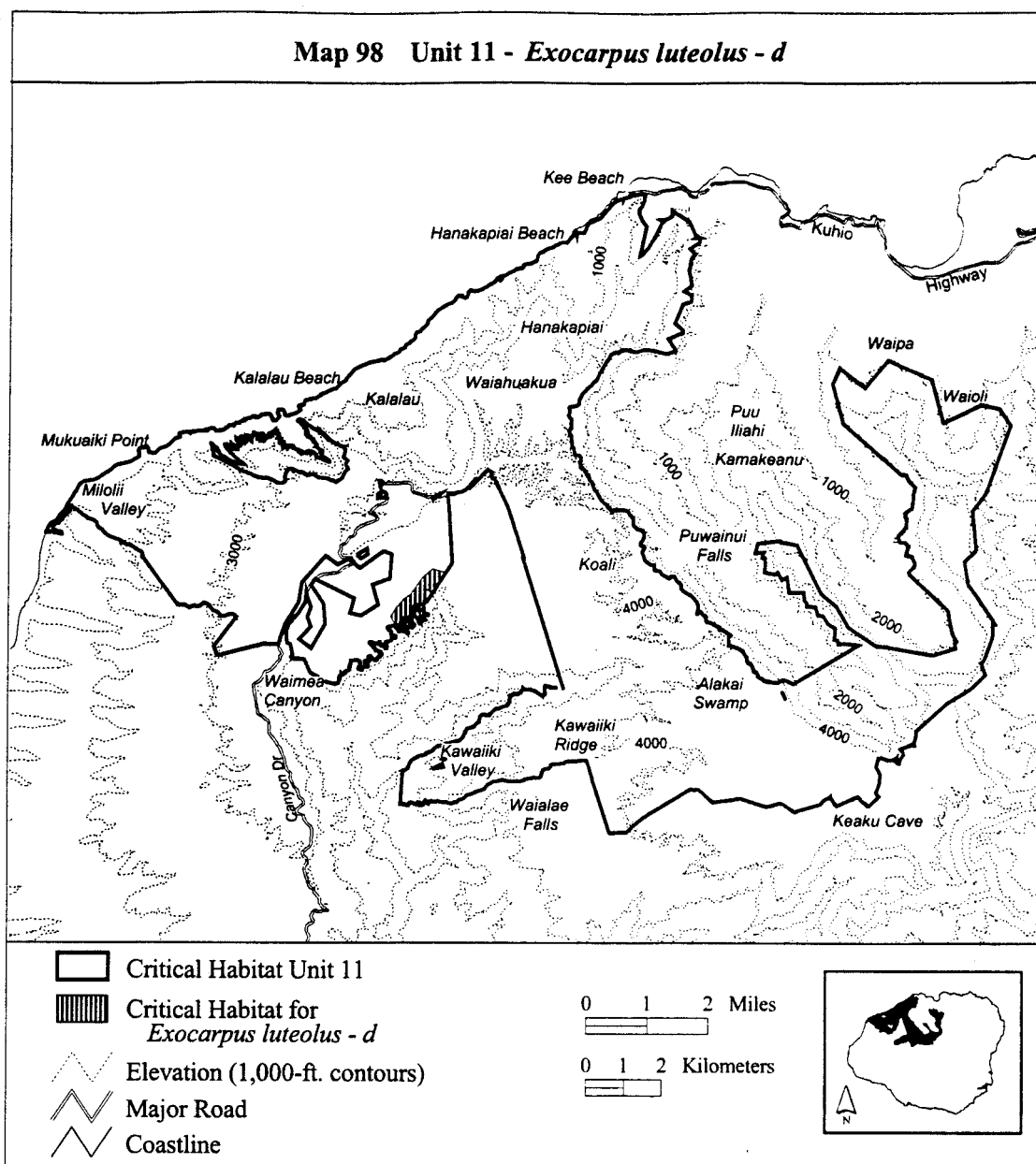
2446164; 434599, 2446152; 434582, 2446145; 434576, 2446128; 434582, 2446114; 434603, 2446087; 434642, 2446062; 434647, 2446055; 434645, 2446046; 434604, 2446029; 434573, 2446022; 434556, 2446012; 434542, 2445989; 434482, 2445992; 434482, 2445989; 434477, 2446004; 434469, 2446036; 434437, 2446093; 434413, 2446116; 434381, 2446163; 434367, 2446175; 434336, 2446186; 434315, 2446192; 434302, 2446189; 434283, 2446179; 434270, 2446164; 434263, 2446144; 434271, 2446125; 434305, 2446079; 434308, 2446060; 434307, 2446049; 434301, 2446035; 434289, 2446026; 434273, 2446018; 434244, 2446023; 434235, 2446033; 434230, 2446049; 434232, 2446066; 434225,

2446086; 434215, 2446102; 434204,
2446112; 434185, 2446122; 434162,
2446123; 434150, 2446121; 434115,
2446106; 434097, 2446102; 434080,
2446091; 434072, 2446078; 434077,
2446064; 434091, 2446053; 434110,
2446044; 434160, 2446032; 434179,
2446026; 434195, 2446010; 434209,
2445991; 434227, 2445977; 434247,
2445969; 434271, 2445965; 434324,
2445970; 434336, 2445961; 434340,
2445952; 434341, 2445940; 434355,
2445930; 434361, 2445922; 434358,
2445902; 434337, 2445880; 434326,

2445859; 434311, 2445845; 434298,
2445842; 434283, 2445847; 434262,
2445859; 434230, 2445868; 434184,
2445859; 434167, 2445860; 434147,
2445871; 434110, 2445908; 434089,
2445947; 434074, 2445985; 434062,
2445995; 434039, 2446003; 434031,
2446004; 434014, 2445998; 434001,
2445989; 433994, 2445980; 434002,
2445963; 434016, 2445942; 434022,
2445924; 434035, 2445898; 434077,
2445846; 434186, 2445754; 434202,
2445733; 434205, 2445721; 434204,
2445697; 434190, 2445688; 434158,

2445694; 434142, 2445707; 434130,
2445726; 434108, 2445744; 434086,
2445750; 434053, 2445750; 434008,
2445764; 433994, 2445763; 433947,
2445788; 433945, 2445790; 433946,
2445837; 433944, 2445864; 433927,
2445891; 433905, 2445911; 433891,
2445905; 433882, 2445891; 433879,
2445879; 433845, 2445926; 433743,
2446143; 433882, 2446368; 434094,
2446596; 434249, 2446723; 434580,
2447160; 434858, 2447393; 435197,
2447292; return to starting point.

(B) Note: Map 98 follows:



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

(A) Unit consists of the following 153
boundary points: Start at 431279,

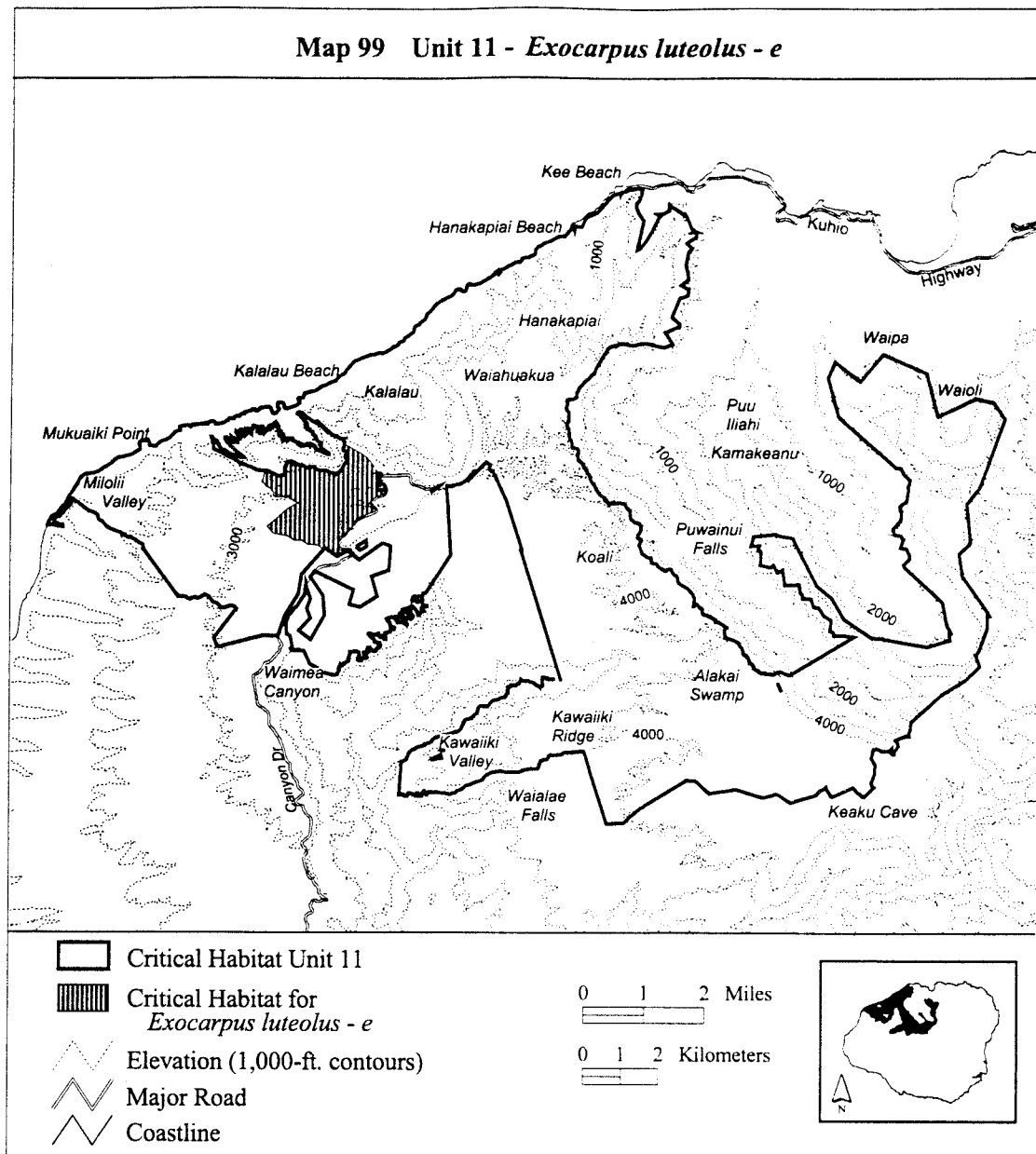
2448913; 431273, 2448922; 431027,
2449068; 431020, 2449089; 431006,
2449097; 430984, 2449094; 430970,
2449080; 430815, 2449080; 430799,
2449081; 430797, 2449080; 430686,
2449080; 430677, 2449084; 430643,
2449106; 430629, 2449119; 430619,
2449138; 430616, 2449156; 430623,
2449173; 430623, 2449194; 430616,
2449214; 430604, 2449229; 430559,
2449254; 430545, 2449277; 430533,
2449310; 430527, 2449321; 430485,
2449333; 430474, 2449342; 430463,
2449355; 430451, 2449363; 430430,
2449364; 430437, 2449371; 430418,
2449395; 430369, 2449433; 430355,
2449451; 430349, 2449466; 430335,
2449474; 430318, 2449477; 430307,
2449482; 430312, 2449517; 430313,
2449532; 430320, 2449553; 430331,
2449565; 430346, 2449596; 430354,
2449622; 430355, 2449641; 430348,
2449666; 430376, 2449750; 430384,
2449766; 430406, 2449796; 430471,
2449787; 430527, 2449754; 430583,
2449736; 430635, 2449693; 430696,

2449656; 430720, 2449646; 430819,
2449646; 430899, 2449674; 430918,
2449717; 430904, 2449834; 430927,
2449905; 430955, 2449985; 430993,
2450032; 431068, 2450041; 431153,
2450008; 431238, 2449970; 431285,
2449942; 431360, 2449956; 431449,
2449886; 431497, 2449867; 431605,
2449895; 431657, 2449890; 431699,
2449876; 431765, 2449810; 431864,
2449801; 431981, 2449792; 432047,
2449787; 432113, 2449740; 432217,
2449712; 432259, 2449679; 432344,
2449744; 432419, 2449806; 432471,
2449904; 432504, 2449961; 432579,
2450036; 432551, 2450083; 432523,
2450130; 432523, 2450182; 432565,
2450262; 432523, 2450304; 432475,
2450313; 432452, 2450337; 432461,
2450375; 432480, 2450426; 432490,
2450478; 432501, 2450529; 432504,
2450523; 432515, 2450503; 432523,
2450483; 432671, 2450388; 432937,
2450257; 433110, 2450122; 433260,
2449930; 433339, 2449809; 433405,
2449720; 433407, 2449708; 433399,
2449709; 433419, 2449599; 433426,
2449556; 433437, 2449592; 433549,
2449510; 433671, 2449267; 433615,
2449141; 433358, 2449090; 433236,

2448950; 433199, 2448903; 433176,
2448898; 433386, 2448749; 433344,
2448697; 433119, 2448609; 432890,
2448469; 432746, 2448300; 432657,
2448221; 432521, 2448030; 432395,
2447960; 432395, 2447894; 432372,
2447829; 432381, 2447775; 432386,
2447745; 432456, 2447707; 432610,
2447684; 432685, 2447670; 432661,
2447623; 432720, 2447605; 432719,
2447599; 432672, 2447598; 432609,
2447647; 432507, 2447594; 432195,
2447587; 432136, 2447629; 432001,
2447726; 431937, 2447655; 431895,
2447735; 431816, 2447810; 431535,
2447815; 431395, 2447918; 431213,
2447932; 430998, 2448049; 430820,
2448072; 430610, 2448119; 430460,
2448306; 430741, 2448535; 430998,
2448759; 431263, 2448926; 431275,
2448914; return to starting point.

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

(C) **Note:** Map 99 follows:



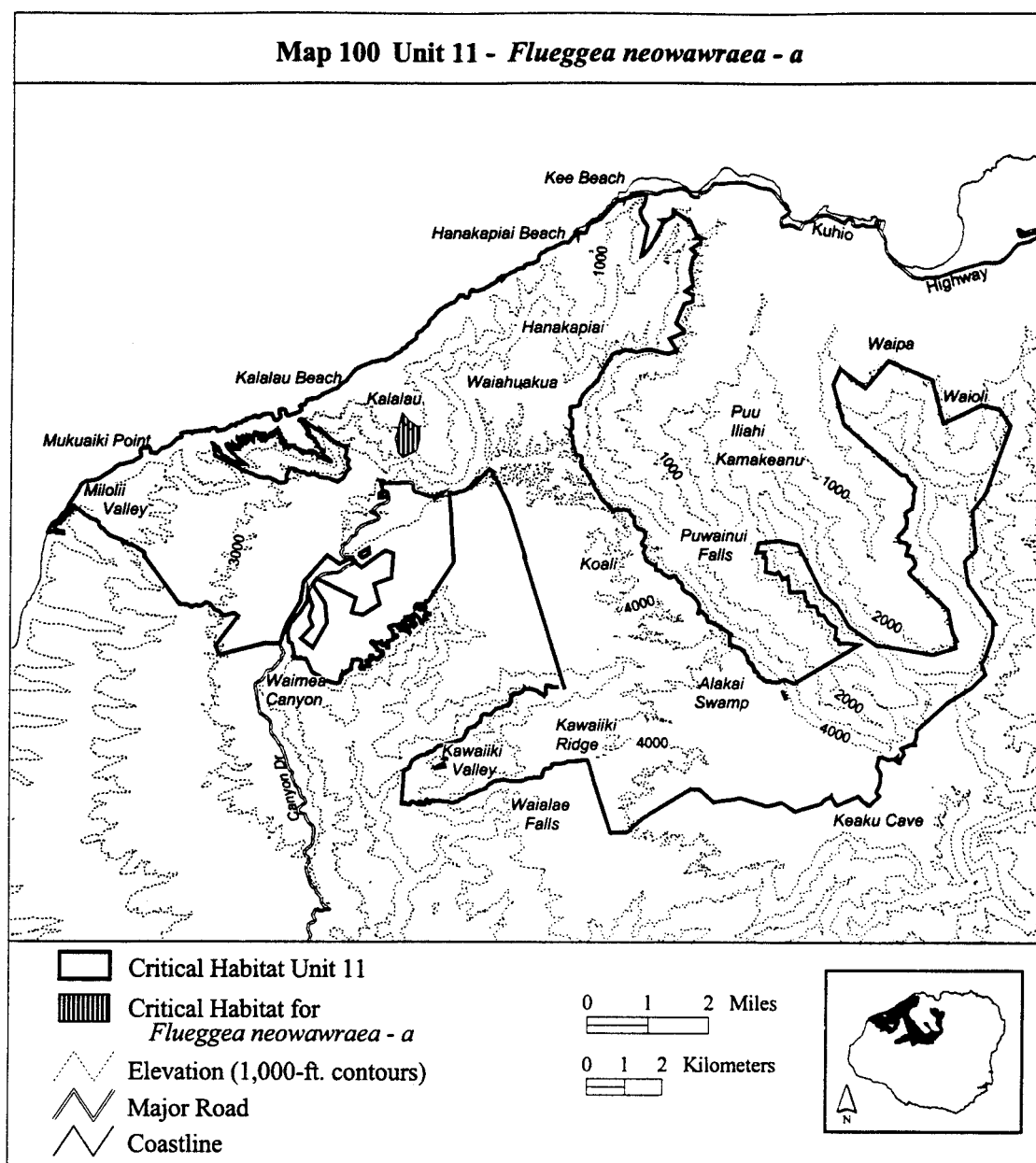
(c) Kauai 11—*Flueggea neowawraea*—a (51 ha; 126 ac)

(A) Unit consists of the following 12 boundary points: Start at 434000,

2450312; 433949, 2450368; 433864, 2450473; 433785, 2450832; 433850, 2451030; 433910, 2451245; 433941, 2451386; 433969, 2451525; 434153,

2451307; 434439, 2451106; 434442, 2450846; 434368, 2450518; return to starting point.

(B) **Note:** Map 100 follows:



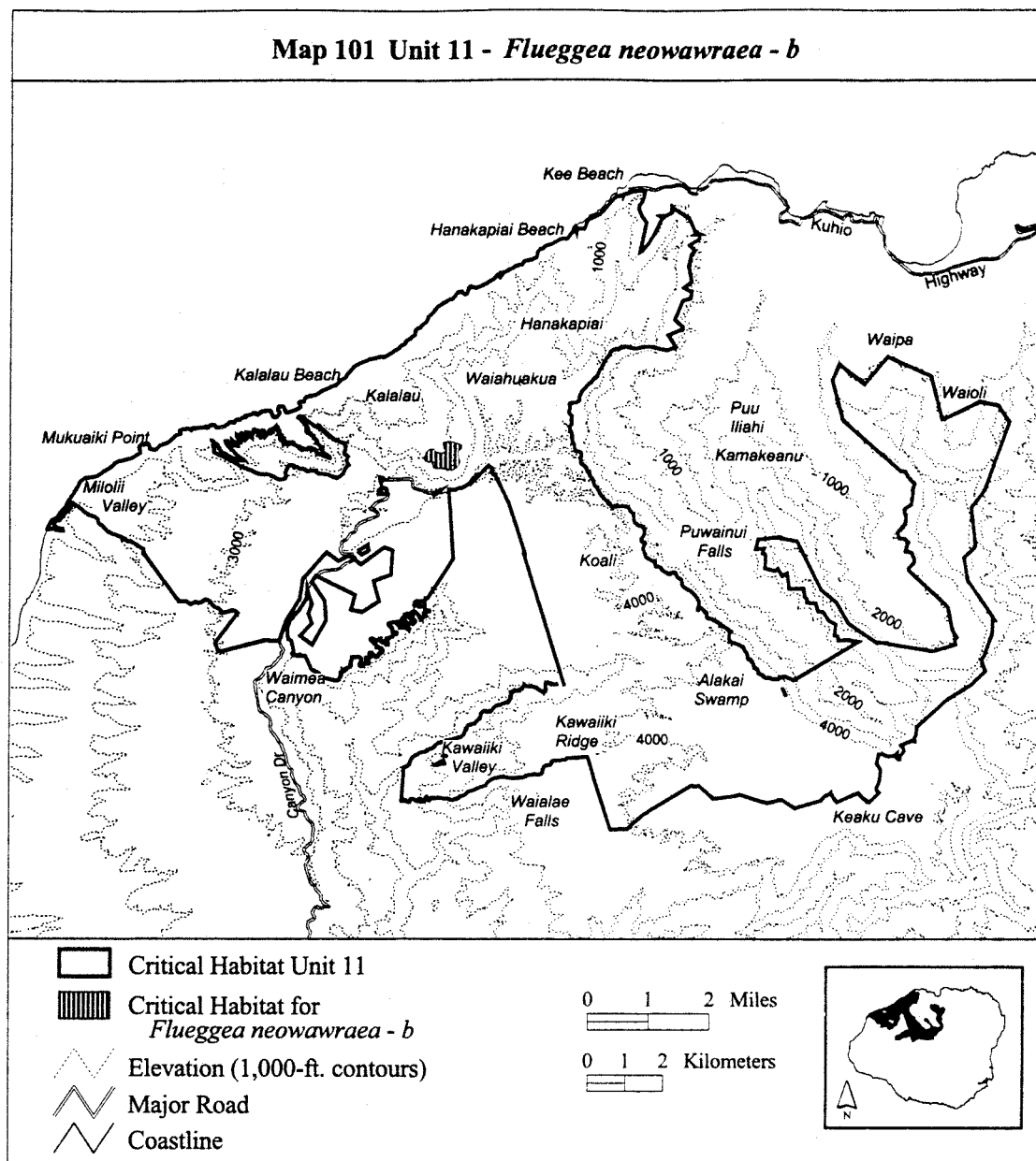
(ci) Kauai 11—*Flueggea neowawraea*—b
(47 ha; 117 ac)

(A) Unit consists of the following 28
boundary points: Start at 435053,
2450333; 435166, 2450421; 435094,
2450487; 435075, 2450618; 435179,

2450654; 435308, 2450654; 435574,
2450555; 435574, 2450470; 435476,
2450413; 435470, 2450325; 435489,
2450207; 435514, 2450108; 435498,
2450032; 435434, 2449958; 435330,
2449897; 435215, 2449903; 435042,
2449944; 434910, 2449936; 434836,

2449952; 434773, 2450128; 434628,
2450122; 434573, 2450194; 434633,
2450366; 434705, 2450440; 434776,
2450462; 434839, 2450454; 434883,
2450386; 434935, 2450358; return to
starting point.

(B) **Note:** Map 101 follows:



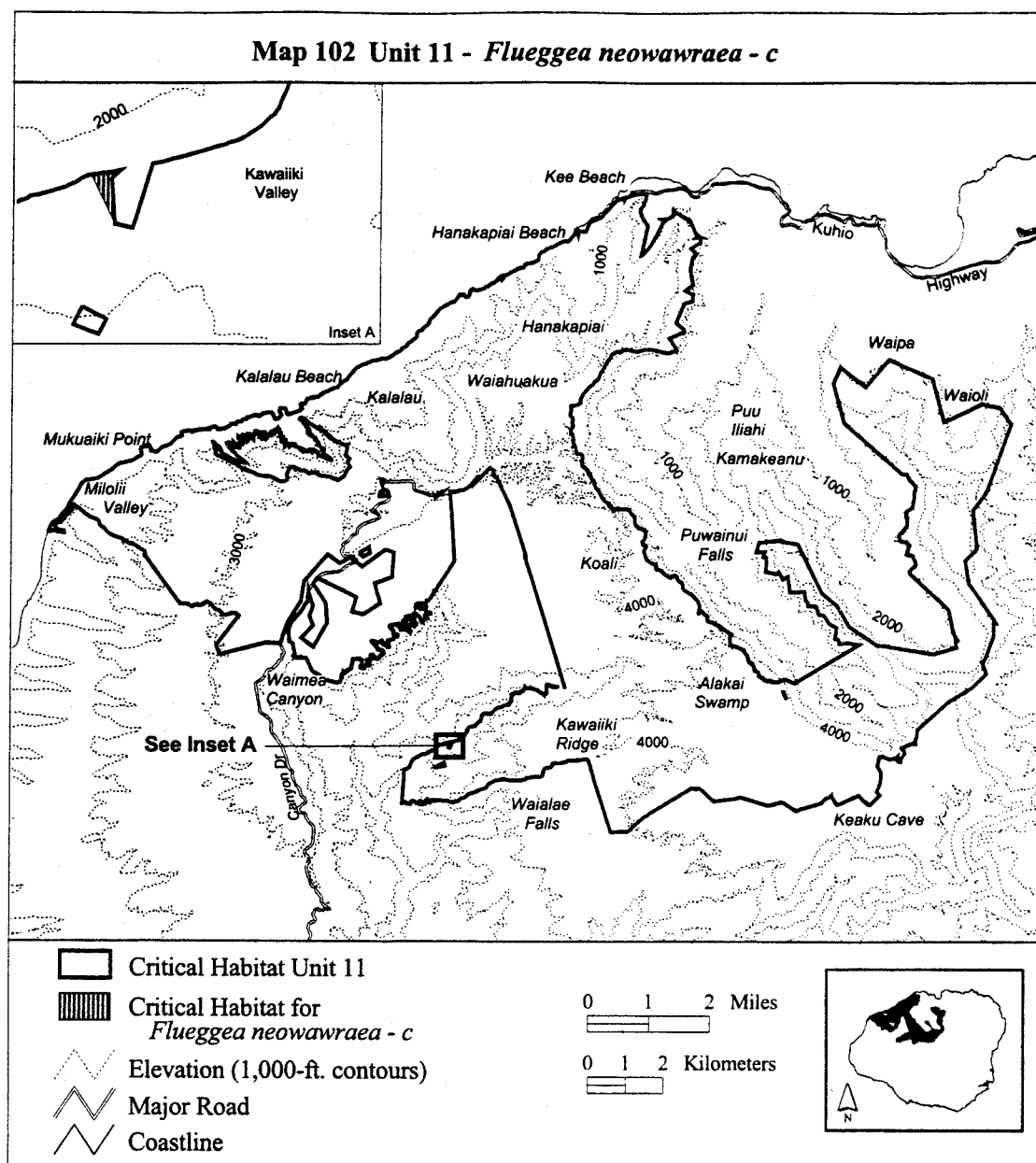
(cii) Kauai 11—*Flueggea neowawraea*—
c (152 ha; 376 ac)

(A) Unit consists of the following 8
boundary points: Start at 435236,

2442644; 435172, 2442772; 435184,
2442774; 435201, 2442777; 435219,
2442778; 435237, 2442782; 435251,

2442783; 435228, 2442762; return to
starting point.

(B) **Note:** Map 102 follows:



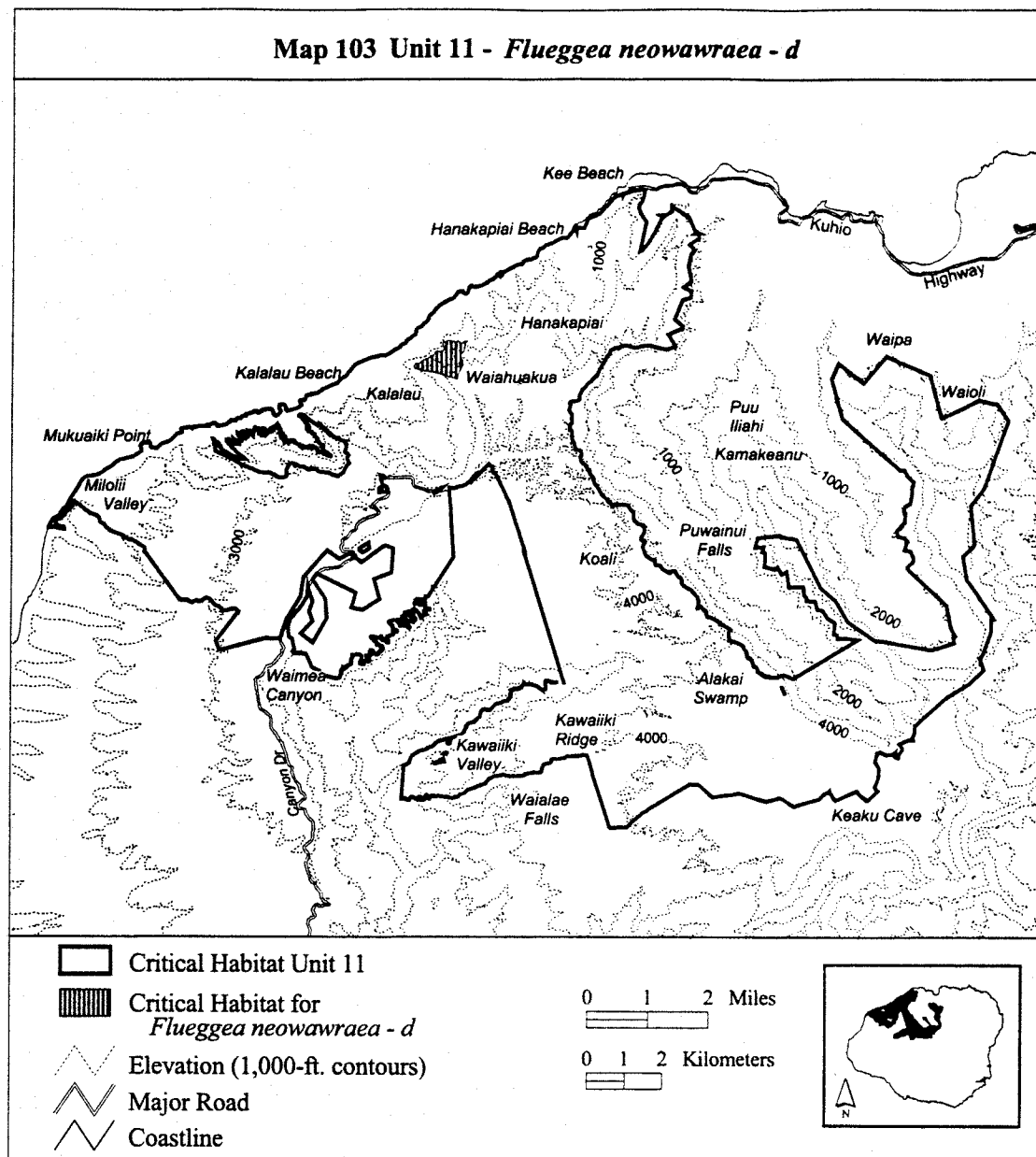
(ciii) Kauai 11—*Flueggea neowawraea*—
d (77 ha; 191 ac)

(A) Unit consists of the following 51
boundary points: Start at 435601,
2453022; 435552, 2452987; 435543,
2452967; 435543, 2452858; 435585,
2452742; 435585, 2452645; 435523,
2452533; 435465, 2452417; 435436,
2452291; 435369, 2452311; 435179,
2452369; 435037, 2452423; 434866,

2452465; 434660, 2452501; 434508,
2452517; 434392, 2452562; 434308,
2452585; 434282, 2452639; 434331,
2452707; 434382, 2452717; 434437,
2452733; 434476, 2452758; 434508,
2452794; 434534, 2452807; 434647,
2452852; 434698, 2452881; 434724,
2452926; 434798, 2452942; 434853,
2453003; 434901, 2453042; 434934,
2453038; 434966, 2453025; 434995,
2453025; 435062, 2453058; 435072,

2453103; 435066, 2453164; 435043,
2453238; 435069, 2453273; 435104,
2453293; 435143, 2453296; 435156,
2453306; 435169, 2453344; 435278,
2453315; 435401, 2453280; 435417,
2453296; 435459, 2453315; 435488,
2453286; 435511, 2453247; 435556,
2453251; 435610, 2453302; 435675,
2453302; return to starting point.

(B) **Note:** Map 103 follows:



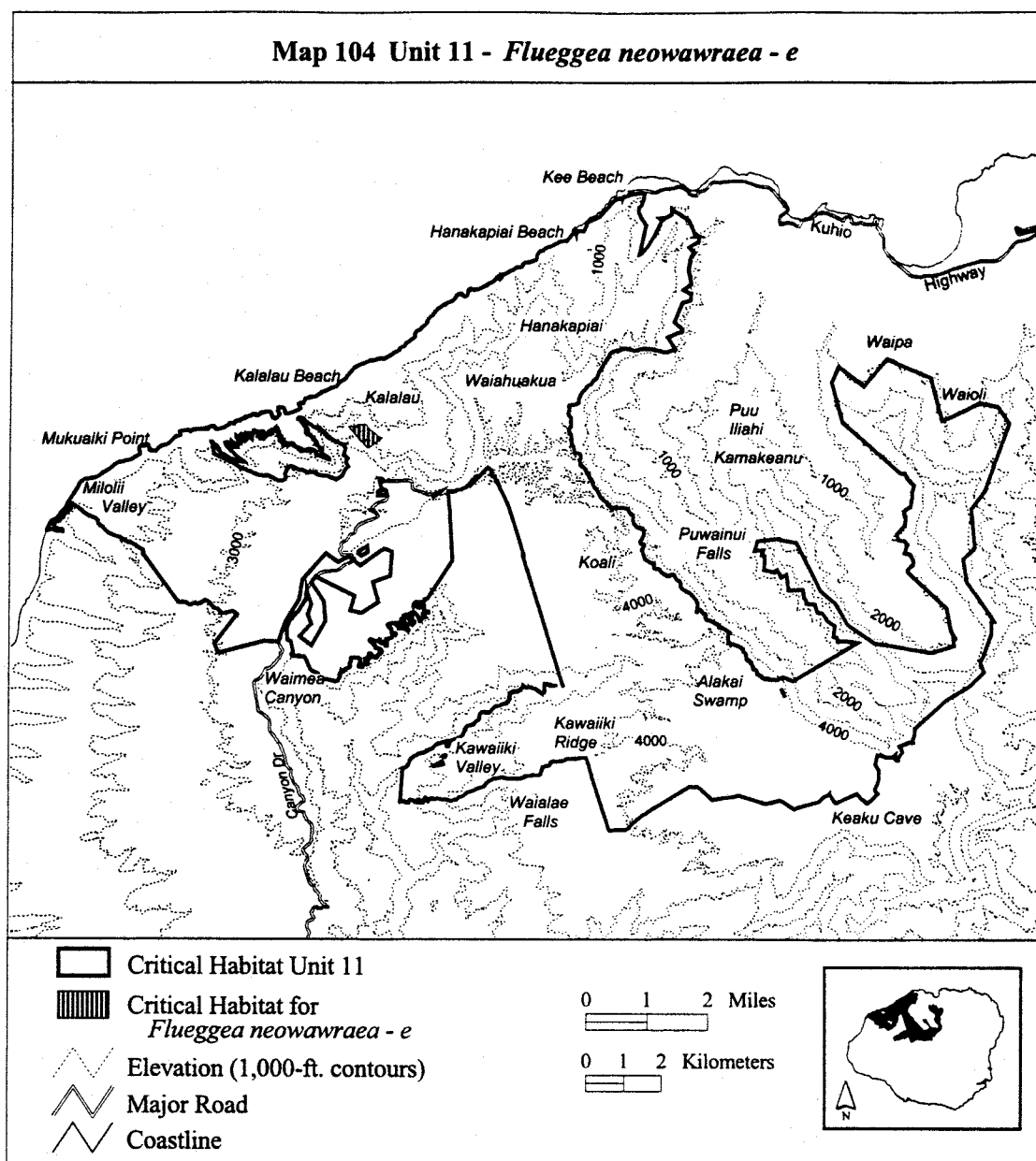
(civ) Kauai 11—*Flueggea neowawraea*—
e (27 ha; 67 ac)

(A) Unit consists of the following 14
boundary points: Start at 432615,

2451107; 432699, 2451108; 433006,
2451176; 433021, 2451179; 433036,
2451174; 433144, 2451038; 433233,
2450957; 433419, 2450821; 433475,
2450808; 433290, 2450648; 433095,

2450524; 432852, 2450782; 432650,
2451016; 432594, 2451102; return to
starting point.

(B) **Note:** Map 104 follows:



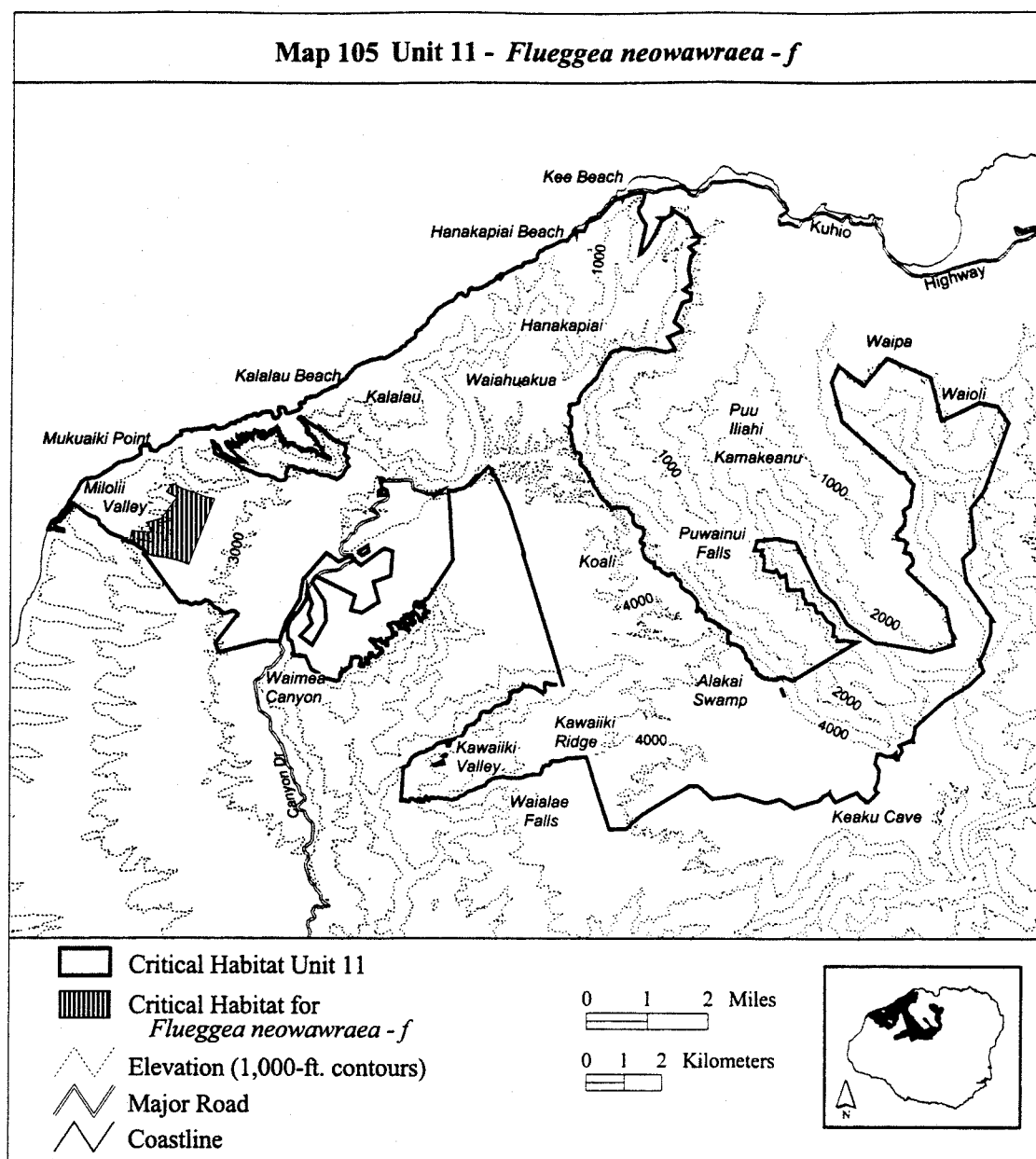
(cv) Kauai 11—*Flueggea neowawraea*—f (240 ha; 594 ac)

(A) Unit consists of the following 27 boundary points: Start at 426767, 2448021; 426831, 2448310; 427314, 2448265; 427337, 2448374; 427206,

2448518; 427613, 2448631; 428020, 2449196; 427749, 2449350; 427898, 2449558; 427966, 2449562; 428160, 2449427; 428391, 2449359; 428802, 2449205; 429028, 2449155; 428345, 2447429; 428165, 2447501; 427884, 2447569; 427464, 2447641; 427418,

2447641; 427233, 2447691; 427161, 2447827; 427130, 2447833; 427124, 2447837; 427084, 2447847; 427065, 2447855; 426993, 2447931; 426885, 2447998; return to starting point.

(B) **Note:** Map 105 follows:



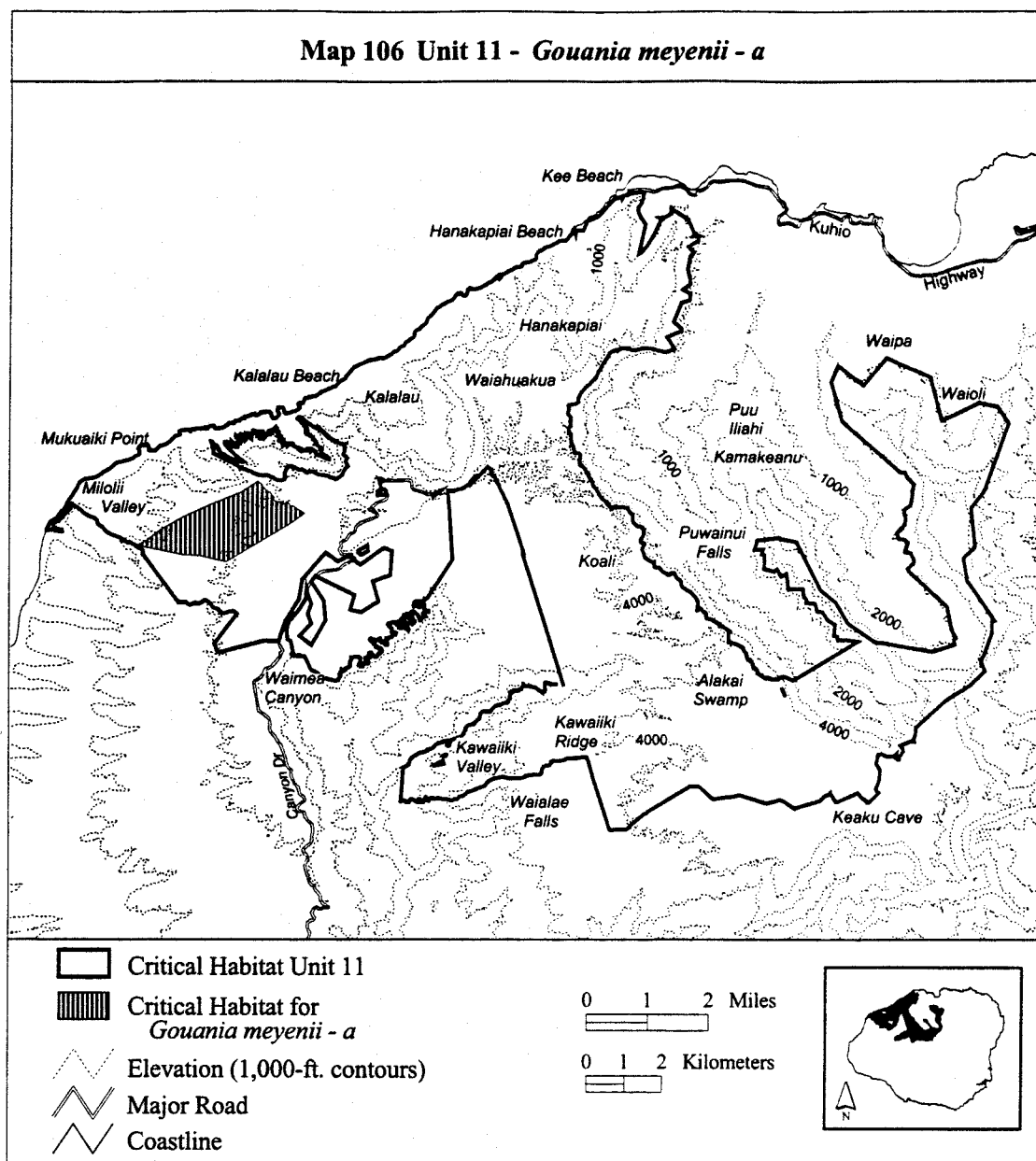
(cvi) Kauai 11—*Gouania meyenii*—a (443 ha; 1,094 ac)

(A) Unit consists of the following 61 boundary points: Start at 429367, 2447493; 428683, 2447645; 428241, 2447686; 427018, 2447921; 427281, 2448080; 427605, 2448322; 428213, 2448667; 428883, 2448977; 429740, 2449322; 430202, 2449633; 430314, 2449534; 430313, 2449532; 430312, 2449517; 430307, 2449482; 430318, 2449477; 430335, 2449474; 430349,

2449466; 430355, 2449451; 430369, 2449433; 430418, 2449395; 430437, 2449371; 430430, 2449364; 430451, 2449363; 430463, 2449355; 430474, 2449342; 430485, 2449333; 430527, 2449321; 430533, 2449310; 430545, 2449277; 430559, 2449254; 430604, 2449229; 430616, 2449214; 430623, 2449194; 430623, 2449173; 430616, 2449156; 430619, 2449138; 430629, 2449119; 430643, 2449106; 430677, 2449084; 430699, 2449074; 430717,

2449071; 430748, 2449070; 430773, 2449073; 430799, 2449081; 430825, 2449080; 430875, 2449032; 430881, 2449027; 430905, 2449022; 430921, 2449029; 430944, 2449045; 430955, 2449058; 431025, 2449016; 431024, 2449005; 431035, 2448975; 431050, 2448960; 431066, 2448956; 431086, 2448957; 431093, 2448962; 431099, 2448970; 431432, 2448770; 431052, 2448487; return to starting point.

(B) **Note:** Map 106 follows:



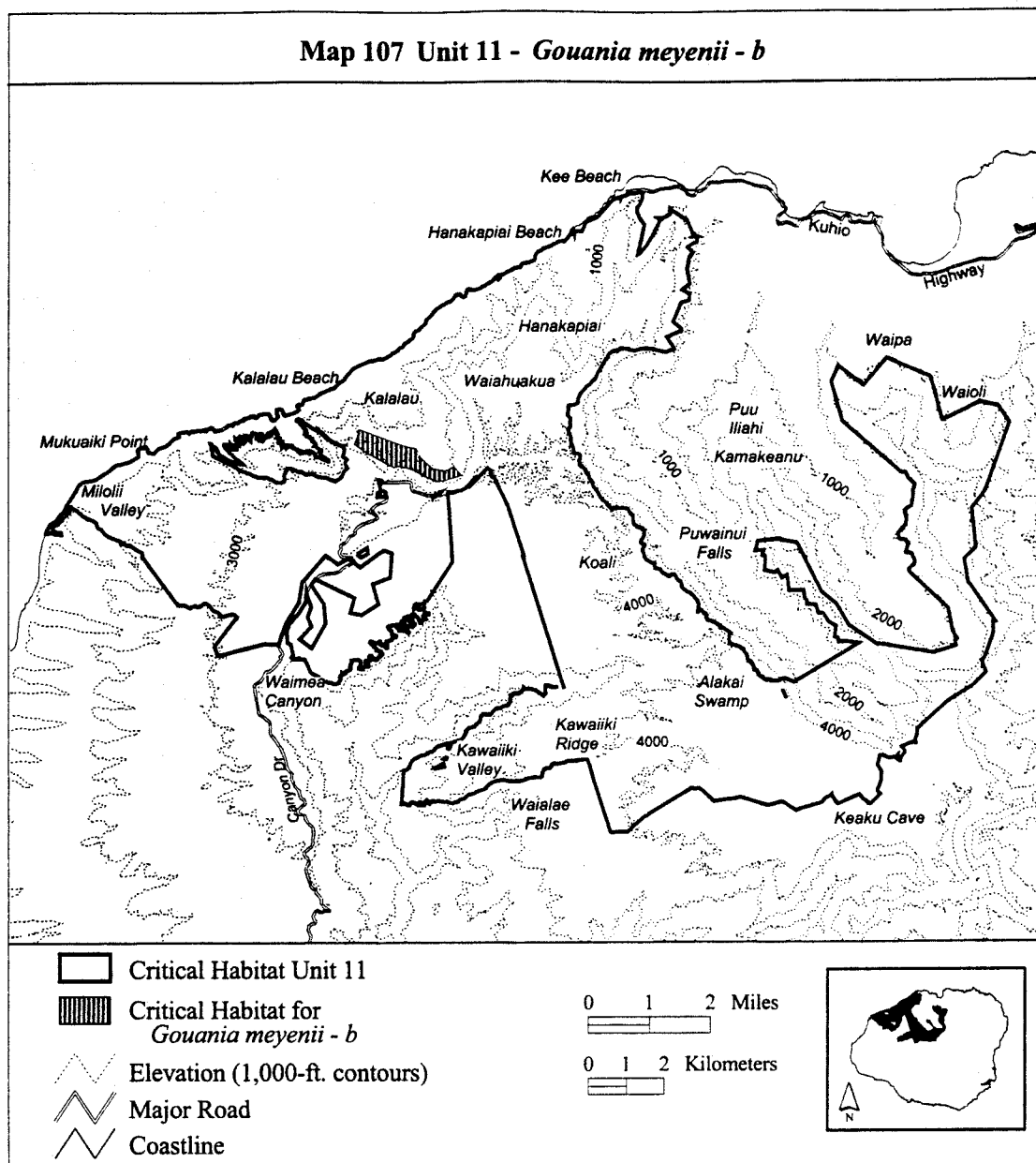
(cvii) Kauai 11—*Gouania meyenii*—b
(128 ha; 316 ac)

(A) Unit consists of the following 20
boundary points: Start at 432908,
2451056; 433375, 2450880; 433953,

2450654; 434234, 2450563; 434395,
2450548; 434531, 2450292; 434832,
2450011; 435169, 2449930; 435405,
2450056; 435596, 2449830; 435124,
2449679; 434943, 2449669; 434611,
2449820; 434330, 2449971; 434234,

2450006; 433943, 2450071; 433807,
2450051; 433641, 2450127; 433053,
2450458; 432767, 2450674; return to
starting point.

(B) **Note:** Map 107 follows:



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

(A) Unit consists of the following 246 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704,

2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113,

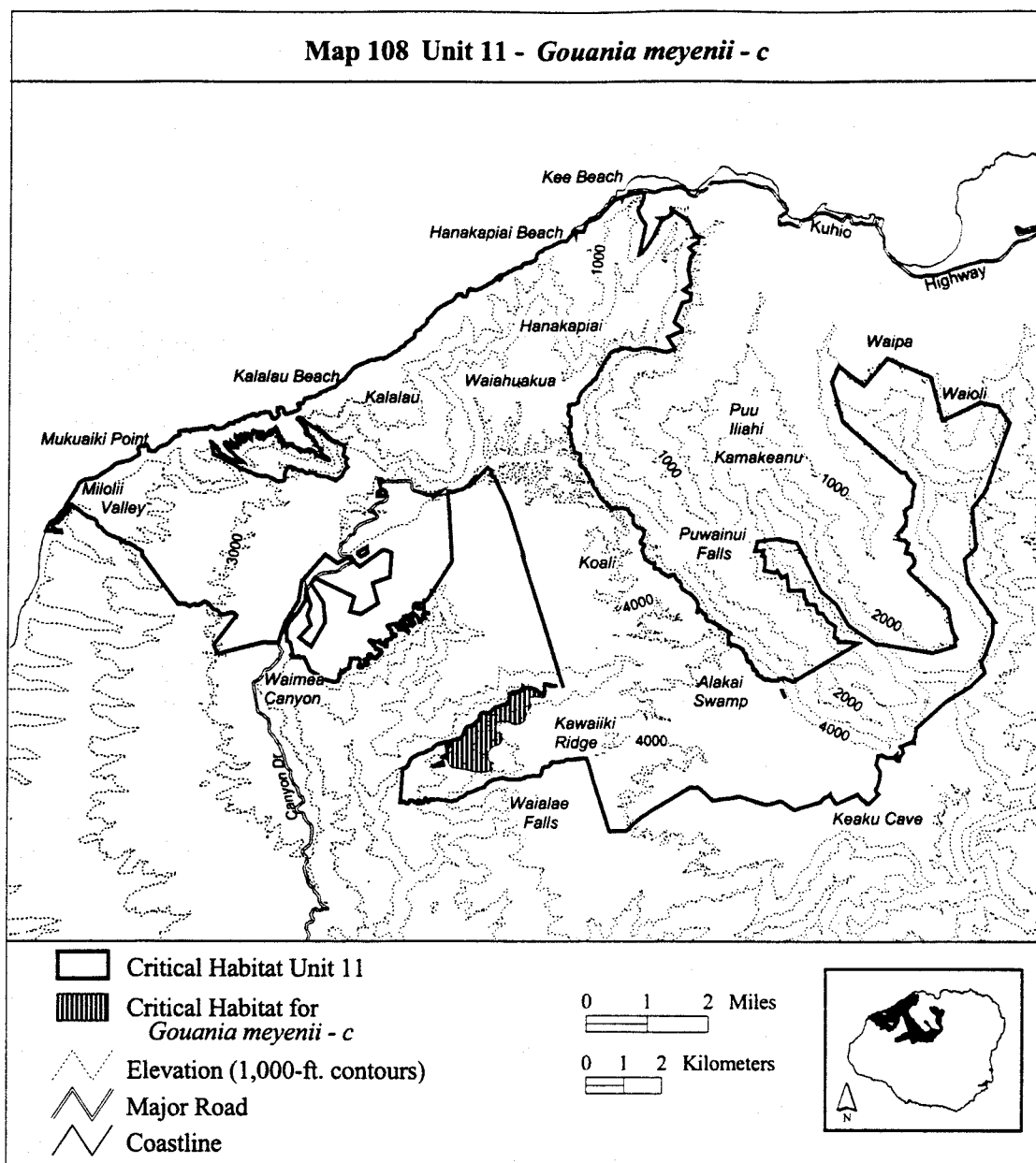
2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655,

2443724; 436666, 2443731; 436678,
2443742; 436697, 2443756; 436708,
2443763; 436726, 2443769; 436745,
2443772; 436758, 2443775; 436771,
2443776; 436788, 2443776; 436799,
2443778; 436808, 2443781; 436818,
2443785; 436823, 2443786; 436829,
2443790; 436837, 2443797; 436841,
2443801; 436845, 2443807; 436852,
2443819; 436861, 2443831; 436870,
2443847; 436882, 2443863; 436890,
2443877; 436900, 2443900; 436911,
2443923; 436914, 2443936; 436914,
2443948; 436913, 2443962; 436910,
2443981; 436908, 2443995; 436908,
2444013; 436911, 2444027; 436918,
2444040; 436926, 2444047; 436933,
2444055; 436942, 2444065; 436951,
2444073; 436961, 2444084; 436969,
2444094; 436975, 2444098; 436983,
2444102; 436994, 2444107; 437009,
2444108; 437026, 2444105; 437049,
2444100; 437067, 2444092; 437076,
2444089; 437106, 2444090; 437119,
2444096; 437128, 2444104; 437133,

2444112; 437137, 2444122; 437144,
2444130; 437156, 2444135; 437169,
2444141; 437183, 2444150; 437191,
2444154; 437202, 2444165; 437212,
2444177; 437228, 2444198; 437239,
2444213; 437245, 2444227; 437254,
2444239; 437263, 2444246; 437278,
2444240; 437294, 2444234; 437310,
2444225; 437332, 2444217; 437351,
2444217; 437370, 2444223; 437391,
2444223; 437412, 2444226; 437428,
2444226; 437445, 2444223; 437462,
2444219; 437482, 2444211; 437497,
2444205; 437541, 2444190; 437563,
2444183; 437578, 2444179; 437593,
2444170; 437610, 2444160; 437624,
2444146; 437636, 2444132; 437651,
2444119; 437671, 2444112; 437691,
2444102; 437703, 2444093; 437722,
2444082; 437732, 2444069; 437749,
2444061; 437758, 2444058; 437768,
2444060; 437780, 2444066; 437801,
2444076; 437842, 2444038; 437854,
2443995; 437806, 2443948; 437692,
2443963; 437605, 2443975; 437466,

2443983; 437423, 2443920; 437450,
2443829; 437474, 2443766; 437454,
2443683; 437383, 2443608; 437340,
2443533; 437320, 2443410; 437265,
2443311; 437193, 2443264; 437047,
2443248; 436838, 2443339; 436581,
2443312; 436553, 2443248; 436553,
2443153; 436557, 2443035; 436660,
2443003; 436727, 2442849; 436672,
2442719; 436470, 2442644; 436351,
2442513; 436324, 2442387; 436363,
2442276; 436462, 2442225; 436506,
2442150; 436450, 2442031; 436280,
2441980; 435996, 2441980; 435723,
2442051; 435675, 2442051; 435351,
2442106; 435304, 2442181; 435245,
2442312; 435181, 2442774; 435184,
2442774; 435201, 2442777; 435219,
2442778; 435237, 2442782; 435251,
2442783; 435228, 2442762; 435237,
2442643; 435284, 2442631; return to
starting point.

(B) **Note:** Map 108 follows:



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

(A) Unit consists of the following 197 boundary points: Start at 439564, 2456133; 439459, 2455948; 439445, 2455829; 439379, 2455816; 439379, 2455578; 439326, 2455446; 439326, 2455300; 439234, 2455208; 439247, 2455089; 439234, 2455036; 439459, 2454944; 439459, 2454838; 439393, 2454745; 439445, 2454666; 439379, 2454560; 439393, 2454455; 439419, 2454402; 439393, 2454296; 439287, 2454177; 439088, 2454296; 439075, 2454164; 439022, 2454138; 439154, 2454006; 439115, 2453913; 439221, 2453847; 439168, 2453741; 439181, 2453517; 439207, 2453332; 439181, 2453279; 439075, 2453345; 439022,

2453451; 438810, 2453530; 438652, 2453477; 438533, 2453649; 438519, 2453808; 438506, 2453860; 438400, 2453860; 438400, 2453913; 438347, 2453953; 438387, 2454045; 438281, 2454072; 438321, 2454204; 438228, 2454217; 438374, 2454323; 438427, 2454455; 438334, 2454468; 438281, 2454482; 438268, 2454574; 438109, 2454535; 438136, 2454653; 438109, 2454772; 438017, 2454746; 437964, 2454812; 437964, 2454931; 437884, 2454931; 437884, 2455090; 437937, 2455129; 438017, 2455142; 437924, 2455195; 437858, 2455208; 437818, 2455354; 437739, 2455354; 437765, 2455169; 437752, 2455010; 437739, 2454944; 437646, 2454931; 437607, 2454878; 437527, 2454839; 437593,

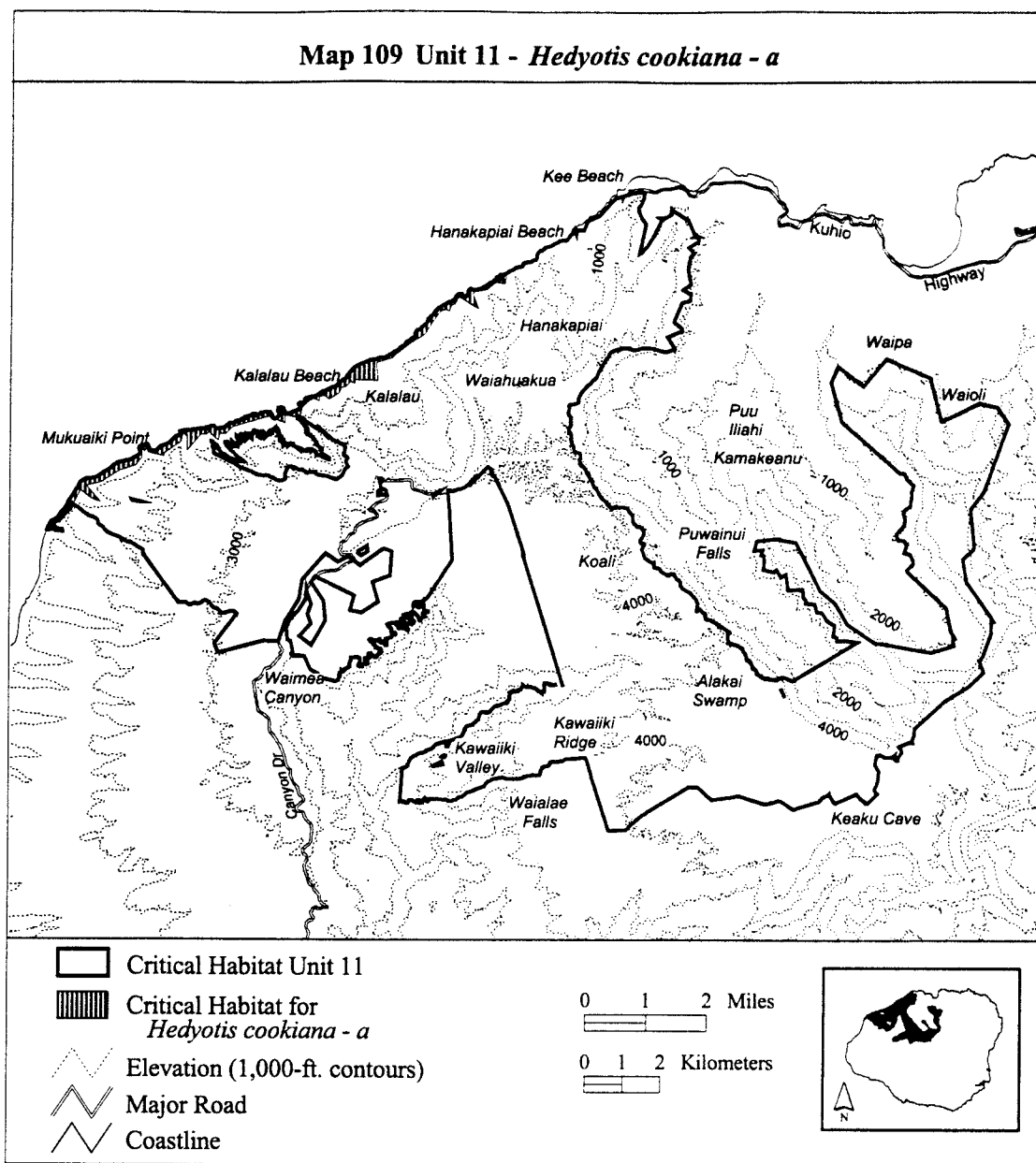
2454733; 437514, 2454707; 437421, 2454733; 437421, 2454680; 437342, 2454680; 437316, 2454601; 437236, 2454707; 437197, 2454693; 437144, 2454839; 437130, 2454799; 437117, 2454614; 437144, 2454561; 437197, 2454469; 437157, 2454416; 437223, 2454284; 437091, 2454218; 437091, 2453993; 437011, 2453980; 436853, 2454112; 436800, 2454046; 436747, 2454086; 436707, 2454297; 436707, 2454363; 436562, 2454429; 436376, 2454601; 436310, 2454548; 436495, 2454350; 436482, 2454244; 436535, 2454191; 436482, 2454099; 436562, 2453954; 436694, 2453663; 436694, 2453557; 436522, 2453584; 436165, 2453637; 436138, 2453518; 435979, 2453214; 435834, 2453267; 435834,

2453425; 435808, 2453690; 435794,
2453822; 435702, 2454020; 435649,
2453861; 435636, 2453637; 435530,
2453531; 435530, 2453399; 435397,
2453412; 435080, 2453373; 435120,
2453254; 435001, 2453254; 435053,
2453108; 434908, 2453082; 434233,
2452673; 434339, 2452355; 434432,
2452250; 434604, 2452210; 434710,
2451866; 434842, 2451470; 434815,
2451020; 434802, 2450875; 434207,
2450875; 433545, 2450836; 433162,
2450968; 433029, 2451206; 433096,
2451589; 432699, 2451761; 432633,
2452197; 432778, 2452092; 432924,
2452105; 433016, 2452052; 433201,

2452052; 433532, 2451801; 433810,
2452012; 433704, 2452224; 433612,
2452514; 433519, 2452699; 433532,
2452792; 433850, 2452845; 434127,
2453135; 434432, 2453228; 434590,
2453412; 434776, 2453346; 434762,
2453637; 434802, 2453743; 435040,
2453756; 435001, 2453914; 435225,
2453928; 435186, 2454073; 435384,
2454020; 435358, 2454218; 435503,
2454324; 436019, 2454086; 436151,
2453993; 436112, 2454337; 436085,
2454482; 436032, 2454641; 436284,
2454720; 436482, 2454813; 436839,
2454627; 436853, 2454799; 436813,
2454971; 436800, 2455143; 437091,

2455235; 437263, 2455024; 437316,
2455195; 437514, 2455275; 437448,
2455354; 437660, 2455592; 437805,
2455605; 437924, 2455750; 438215,
2455895; 438281, 2455591; 438242,
2455433; 438467, 2455235; 438519,
2454944; 438705, 2454719; 438797,
2454534; 438903, 2454812; 438916,
2455076; 438837, 2455287; 438916,
2455406; 438850, 2455604; 438758,
2455671; 438731, 2455803; 438678,
2455895; 438638, 2456146; 438691,
2456199; 439022, 2456067; 439022,
2456278; return to starting point.

(B) Note: Map 109 follows:



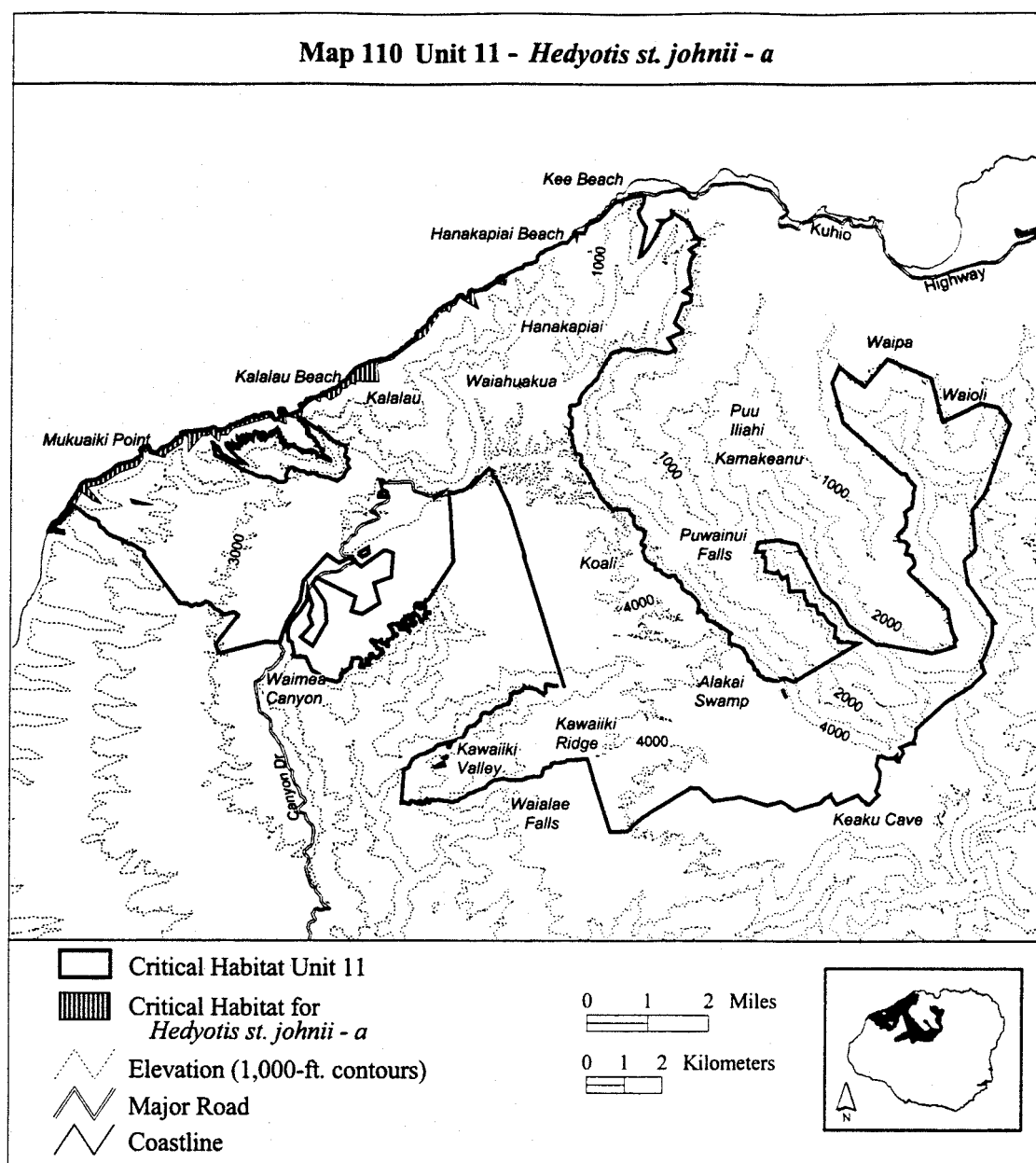
(cx) Kauai 11—*Hedyotis st. johnii*—a
(240 ha; 593 ac)

(A) Unit consists of the following 183
boundary points: coastline; 436761,
2455184; 436712, 2454892; 436479,
2454944; 436221, 2454738; 435934,
2454699; 435854, 2454648; 435988,
2454247; 435497, 2454557; 435394,
2454376; 435291, 2454325; 435239,
2454170; 435110, 2454222; 434981,
2454144; 434803, 2453887; 434586,
2453544; 434231, 2453319; 433798,
2452984; 433752, 2452923; 433308,
2452782; 433353, 2452312; 432747,
2452333; 432742, 2452243; 432641,
2452288; 432573, 2452247; 432525,
2452167; 432394, 2452127; 432333,
2452001; 432061, 2451822; 431939,
2451935; 431794, 2451884; 431798,
2451784; 431661, 2451854; 431544,
2451797; 431338, 2451616; 431318,
2451426; 431183, 2451358; 430888,
2451421; 430898, 2451203; 430666,
2451294; 430535, 2451320; 430469,
2451390; 430149, 2451281; 429503,
2451074; 429338, 2450901; 429167,
2450919; 429131, 2450729; 429064,
2450790; 428883, 2450945; 428817,
2450876; 428676, 2450881; 428314,
2450455; 428314, 2450842; 428181,
2450916; 428156, 2450755; 428141,
2450689; 427991, 2450578; 427711,

2450396; 427696, 2450306; 427356,
2450395; 427289, 2450413; 427226,
2450518; 427181, 2450422; 427120,
2450518; 427099, 2450470; 427120,
2450270; 426959, 2450063; 426506,
2449913; 426060, 2449619; 425852,
2449550; 425640, 2449518; 426014,
2449089; 425788, 2449164; 425489,
2449387; 425301, 2449004; 425272,
2449039; 425267, 2449033; 425258,
2449022; 425253, 2449013; 425252,
2449003; 425253, 2448996; 425251,
2448992; 425242, 2448981; 425239,
2448972; 425231, 2448956; 425224,
2448934; 425222, 2448911; 425223,
2448900; 425224, 2448891; 425223,
2448883; 425218, 2448877; 425212,
2448878; 425208, 2448876; 425201,
2448872; 425192, 2448867; 425181,
2448859; 425172, 2448853; 425162,
2448844; 425158, 2448833; 425157,
2448818; 425153, 2448809; 425148,
2448807; 425136, 2448801; 425124,
2448795; 425120, 2448790; 425112,
2448785; 425100, 2448774; 425094,
2448768; 425081, 2448757; 425070,
2448745; 425062, 2448734; 425053,
2448723; 425044, 2448711; 425043,
2448695; 425029, 2448684; 425024,
2448675; 425017, 2448667; 425011,
2448659; 424999, 2448650; 424991,
2448642; 424980, 2448628; 424973,
2448615; 424956, 2448592; 424936,

2448587; 424929, 2448581; 424924,
2448574; 424917, 2448569; 424910,
2448561; 424906, 2448551; 424898,
2448552; 424886, 2448554; 424877,
2448554; 424871, 2448552; 424863,
2448548; 424849, 2448543; 424840,
2448538; 424824, 2448534; 424811,
2448524; 424803, 2448521; 424795,
2448511; 424785, 2448498; 424778,
2448484; 424774, 2448461; 424778,
2448445; 424791, 2448421; 424819,
2448402; 424832, 2448389; 424848,
2448376; 424871, 2448368; 424900,
2448356; 424929, 2448346; 424953,
2448337; 424973, 2448335; 424990,
2448333; 424997, 2448333; 425003,
2448327; 425006, 2448318; 425009,
2448308; 425011, 2448298; 425013,
2448289; 425015, 2448280; 425010,
2448272; 424998, 2448277; 424991,
2448284; 424983, 2448288; 424971,
2448291; 424957, 2448291; 424948,
2448290; 424933, 2448287; 424927,
2448284; 424915, 2448289; 424892,
2448299; 424874, 2448301; 424841,
2448311; 424823, 2448330; 424803,
2448337; 424777, 2448336; 424735,
2448339; 424711, 2448334; 424677,
2448333; 424664, 2448328; 424648,
2448323; 424633, 2448323; 424603,
2448328; coastline.

(B) **Note:** Map 110 follows:



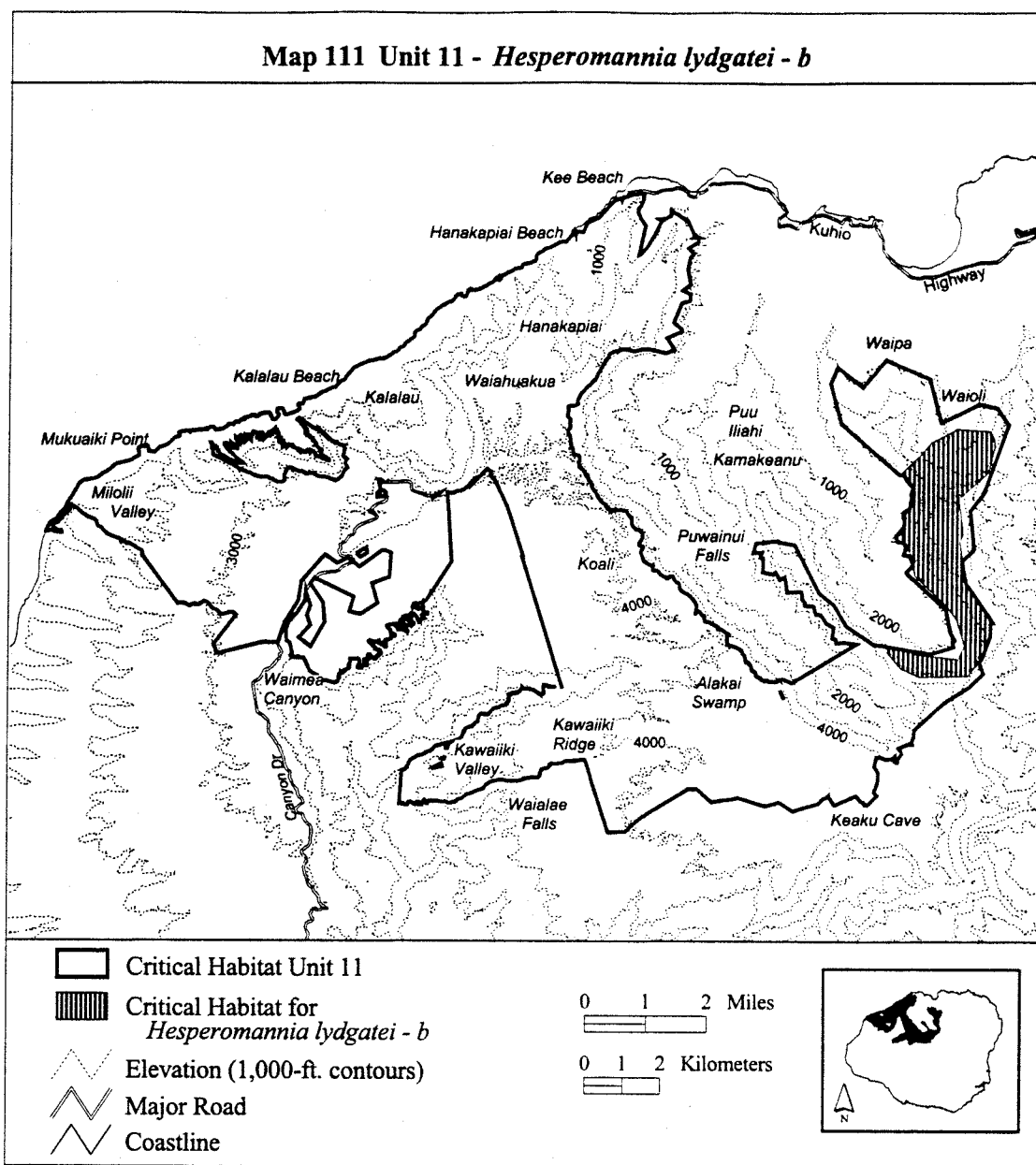
(cxi) Kauai 11—*Hesperomannia lydgatei*—b (913 ha; 2,257 ac)

(A) Unit consists of the following 40 boundary points: Start at 449025, 2444558; 449034, 2444577; 447785, 2444536; 447265, 2444785; 446918, 2445192; 446929, 2445275; 446911, 2445345; 447532, 2445239; 447640,

2445139; 448264, 2445076; 448784, 2445014; 448951, 2445367; 448722, 2446074; 448431, 2446449; 447619, 2447218; 447515, 2447780; 447265, 2448196; 447369, 2448840; 447577, 2449152; 447500, 2449383; 447568, 2449571; 447383, 2449734; 447307, 2449963; 447288, 2449973; 447777, 2450446; 448043, 2450744; 448734,

2451117; 449607, 2451049; 449711, 2450800; 449711, 2450644; 449545, 2449954; 449353, 2449767; 448773, 2449272; 448893, 2448312; 448803, 2448103; 448983, 2446963; 449643, 2446064; 449643, 2445644; 449433, 2445045; 449043, 2444565; return to starting point.

(B) **Note:** Map 111 follows:



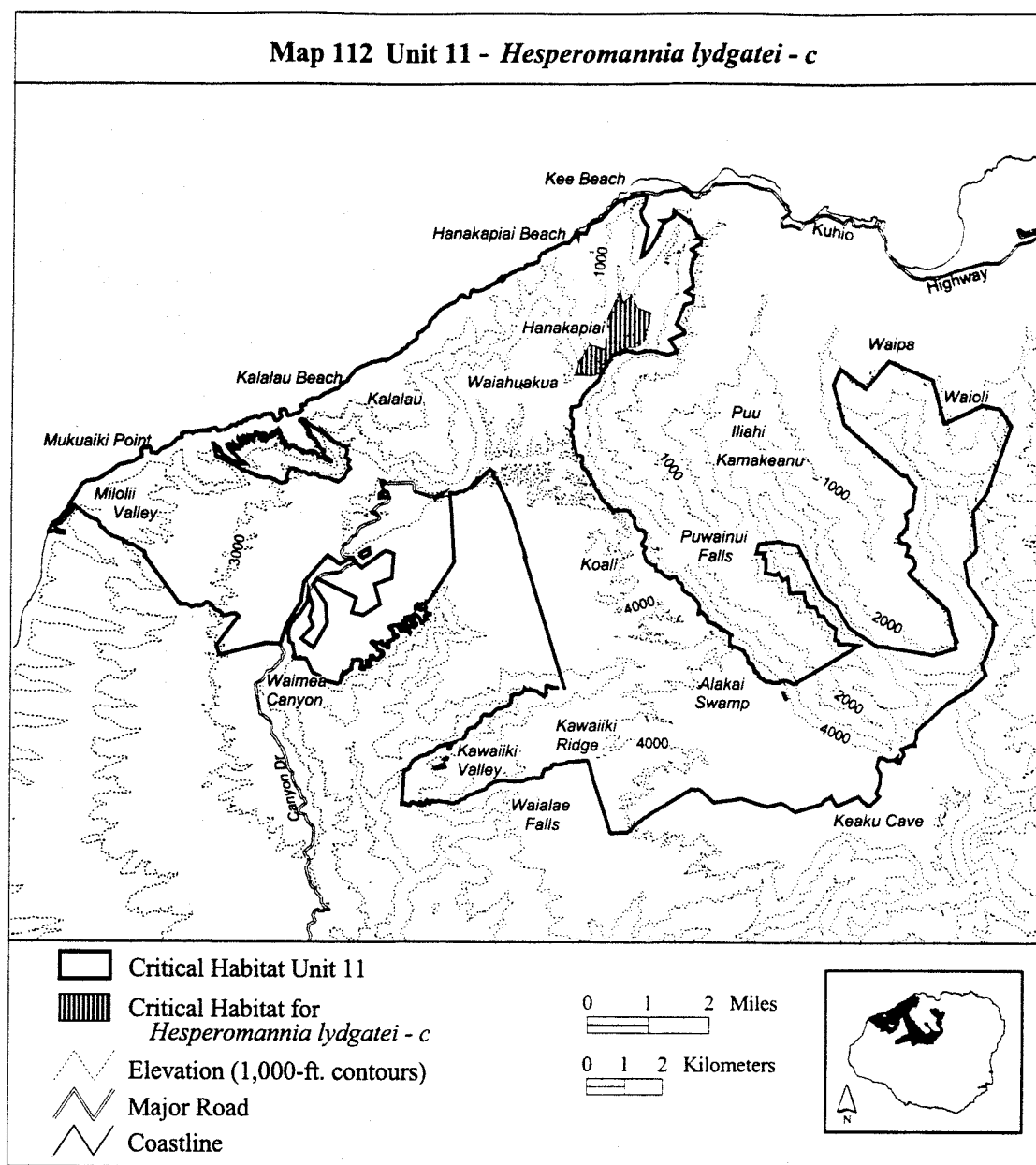
(cxii) Kauai 11—*Hesperomannia lydgatei*—c (180 ha; 444 ac)

(A) Unit consists of the following 63 boundary points: Start at 439257, 2452630; 439170, 2452590; 439025, 2452523; 438546, 2452544; 438629, 2452877; 438900, 2453355; 439316, 2453230; 439378, 2454041; 439711, 2454768; 439733, 2454651; 439774, 2454435; 440003, 2454643; 440169, 2454310; 440536, 2454173; 440533, 2454158; 440523, 2454133; 440509,

2454110; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119,

2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; 439355, 2452801; 439333, 2452769; 439311, 2452745; 439279, 2452669; return to starting point.

(B) **Note:** Map 112 follows:



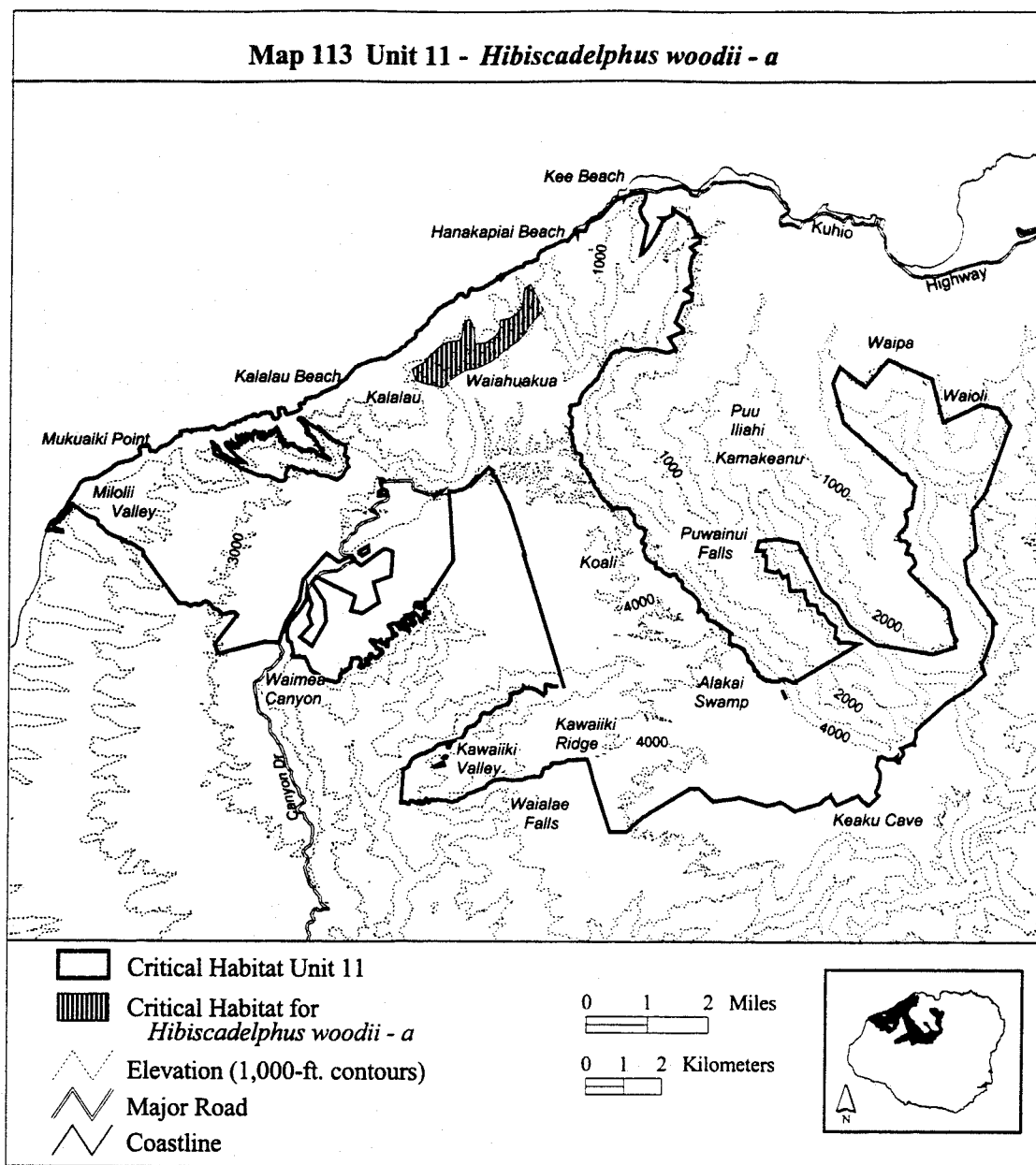
(cxiii) Kauai 11—*Hibiscadelphus woodii*—a (278 ha; 686 ac)

(A) Unit consists of the following 52 boundary points: Start at 437363, 2454888; 437482, 2454647; 437699, 2454229; 437302, 2453742; 437228, 2453583; 437134, 2453505; 437048, 2453382; 437011, 2453374; 436831, 2453251; 436638, 2453088; 436478, 2452949; 436290, 2452826; 435970,

2452683; 435913, 2452666; 435671, 2452621; 435413, 2452470; 435265, 2452364; 435195, 2452253; 435054, 2452153; 434912, 2452191; 434801, 2452221; 434628, 2452243; 434335, 2452343; 434224, 2452634; 434569, 2452839; 434769, 2453060; 434970, 2453248; 435142, 2453350; 435318, 2453395; 435486, 2453407; 435556, 2453530; 435568, 2453678; 435614, 2453870; 435741, 2453972; 435818,

2453862; 435872, 2453677; 435892, 2453485; 435900, 2453366; 435925, 2453325; 436187, 2453346; 436376, 2453473; 436503, 2453604; 436544, 2453710; 436552, 2453845; 436560, 2453947; 436650, 2453964; 436822, 2453996; 436995, 2454115; 437117, 2454254; 437167, 2454479; 437179, 2454676; 437232, 2454790; return to starting point.

(B) **Note:** Map 113 follows:



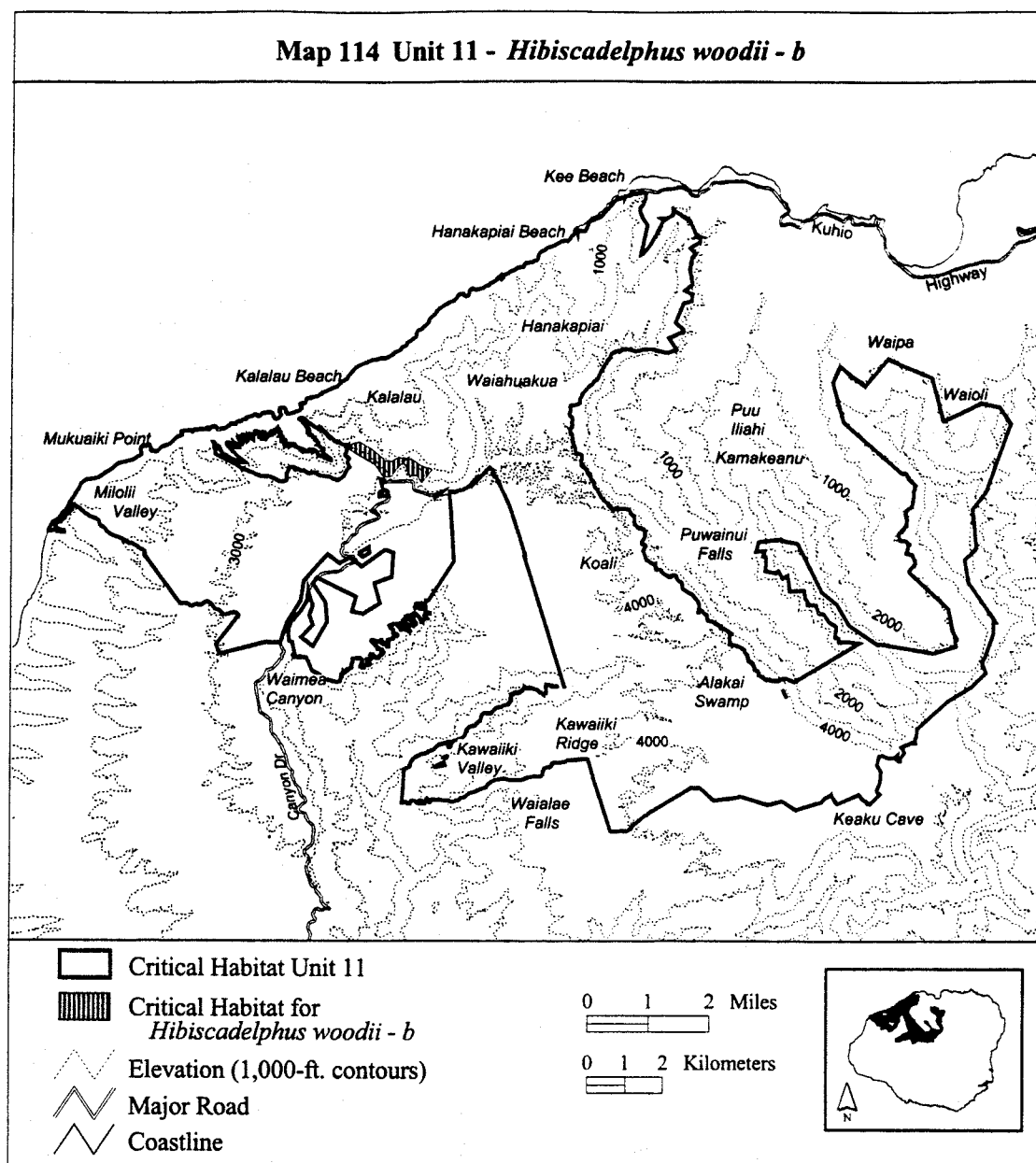
(cxiv) Kauai 11—*Hibiscadelphus woodii*—b (72 ha; 177 ac)

(A) Unit consists of the following 43 boundary points: Start at 432520, 2450579; 432692, 2450669; 432843, 2450694; 432979, 2450628; 433167, 2450501; 433306, 2450399; 433446, 2450268; 433511, 2450202; 433704, 2450174; 433839, 2450268; 434081,

2450272; 434290, 2450198; 434437, 2450087; 434577, 2450030; 434737, 2449985; 434753, 2449956; 434716, 2449895; 434642, 2449793; 434536, 2449666; 434478, 2449604; 434388, 2449772; 434360, 2449817; 434245, 2449793; 434155, 2449817; 434097, 2449952; 434069, 2450079; 434007, 2450116; 433933, 2450104; 433876,

2450039; 433806, 2449940; 433753, 2449875; 433720, 2449817; 433667, 2449777; 433573, 2449772; 433495, 2449768; 433429, 2449830; 433376, 2449928; 433323, 2449994; 433233, 2450104; 433085, 2450194; 432839, 2450334; 432704, 2450432; 432589, 2450481; return to starting point.

(B) **Note:** Map 114 follows:



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

(A) Unit consists of the following 180 boundary points: Start at 439800, 2453173; 439754, 2453167; 439692, 2453157; 439557, 2453163; 439532, 2453165; 439441, 2453172; 439409, 2453191; 439363, 2453165; 439230, 2453162; 439059, 2453162; 438983, 2453175; 438983, 2453064; 438942, 2452919; 438866, 2452802; 438796, 2452700; 438701, 2452574; 438505, 2452615; 438362, 2452644; 438261, 2452688; 438188, 2452770; 438014, 2453046; 437944, 2453242; 437874, 2453406; 437858, 2453641; 437801, 2453891; 437763, 2454052; 437719, 2454160; 437675, 2454356; 437584, 2454153; 437374, 2454005; 437347,

2453974; 437348, 2453973; 437291, 2453729; 437199, 2453502; 437184, 2453467; 437047, 2453328; 436790, 2453211; 436648, 2452900; 436559, 2453068; 436417, 2452923; 436281, 2452768; 436157, 2452689; 435967, 2452657; 435831, 2452635; 435770, 2452632; 435698, 2452682; 435644, 2452701; 435488, 2452477; 435444, 2452338; 435397, 2452296; 435352, 2452293; 435251, 2452328; 434963, 2452515; 434978, 2452588; 435029, 2452702; 435086, 2452679; 435131, 2452688; 435131, 2452688; 435131, 2452688; 435132, 2452688; 435132, 2452689; 435132, 2452689; 435133, 2452689; 435133, 2452689; 435134, 2452690; 435134, 2452690; 435135, 2452690; 435135, 2452690; 435135, 2452690;

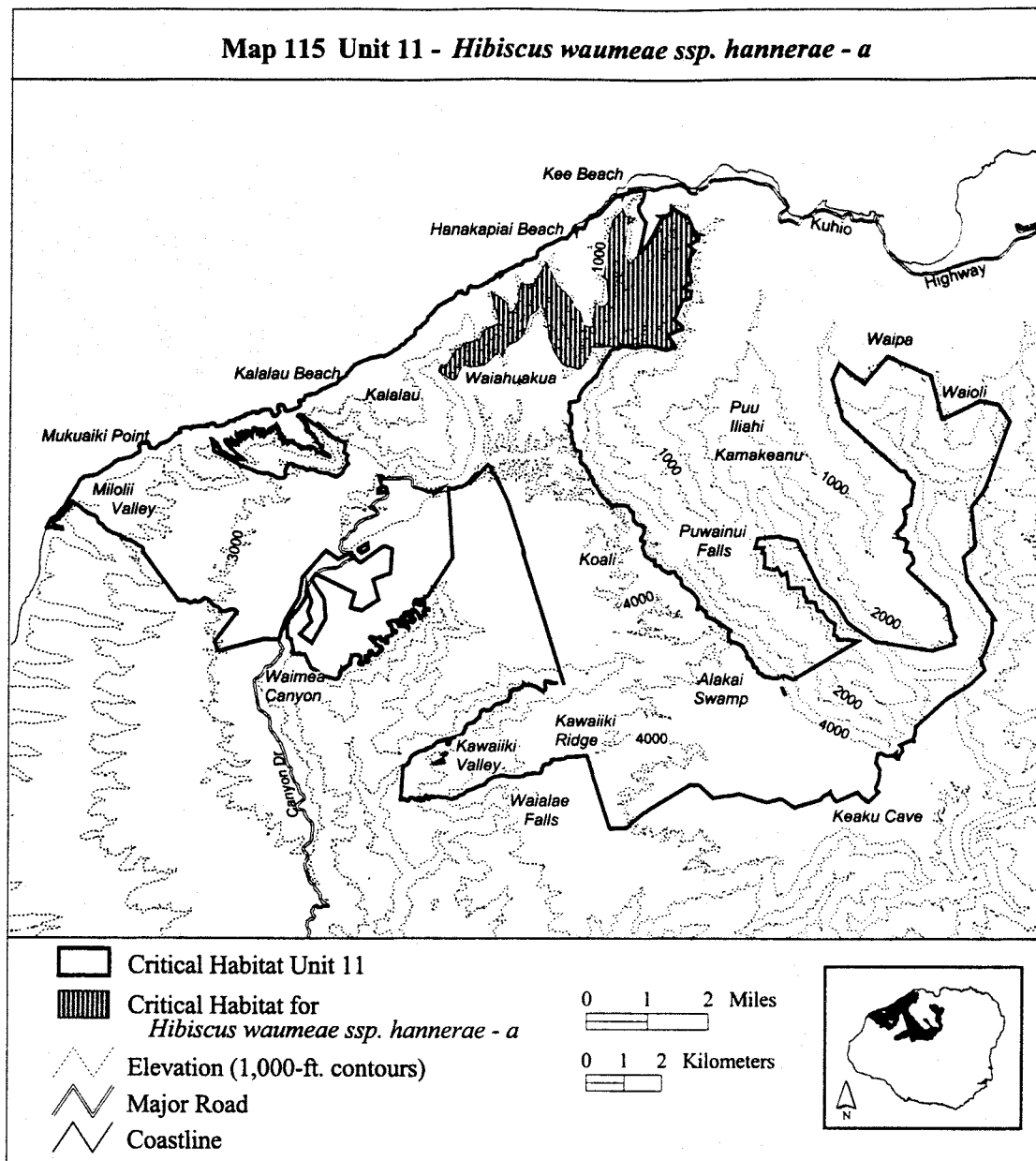
2452690; 435136, 2452690; 435136, 2452691; 435137, 2452691; 435137, 2452691; 435138, 2452691; 435138, 2452691; 435138, 2452691; 435139, 2452691; 435139, 2452692; 435140, 2452692; 435140, 2452692; 435141, 2452692; 435141, 2452692; 435142, 2452692; 435142, 2452692; 435143, 2452692; 435143, 2452692; 435191, 2452717; 435270, 2452863; 435321, 2452945; 435403, 2453072; 435454, 2453129; 435495, 2453141; 435542, 2453151; 435609, 2453249; 435774, 2453290; 436053, 2453389; 436152, 2453608; 436563, 2453790; 436329, 2454620; 436719, 2454372; 436832, 2454059; 436960, 2454143; 436959, 2454144; 437063, 2454388; 437095, 2454691; 437123, 2454847; 437299,

2454806; 437456, 2454831; 437810,
2455391; 438080, 2454797; 438434,
2454464; 438587, 2454169; 438692,
2454087; 438723, 2453966; 438774,
2453808; 438828, 2453723; 438942,
2453681; 439028, 2453685; 439066,
2454067; 439088, 2454131; 439085,
2454138; 439096, 2454216; 439096,
2454271; 439119, 2454321; 439151,
2454295; 439187, 2454235; 439234,
2454221; 439271, 2454221; 439370,
2454258; 439422, 2454331; 439438,
2454388; 439444, 2454416; 439440,

2454421; 439391, 2454938; 439235,
2455037; 439299, 2455455; 439412,
2455858; 439540, 2456495; 439815,
2456763; 439823, 2456771; 439894,
2456601; 440128, 2456530; 439944,
2456367; 439859, 2455603; 440015,
2455348; 440865, 2456289; 440893,
2456544; 441127, 2456650; 441142,
2456810; 441443, 2456623; 441460,
2456466; 441609, 2456381; 441609,
2456254; 441799, 2456137; 441783,
2456137; 441761, 2456132; 441835,
2456125; 441835, 2456004; 441578,

2455834; 441704, 2455698; 441624,
2455592; 441558, 2455280; 441634,
2454883; 441432, 2454722; 441629,
2454611; 441614, 2454455; 441412,
2454395; 441196, 2453892; 441412,
2453696; 441402, 2453646; 441025,
2453470; 441231, 2453168; 440989,
2453082; 440546, 2453183; 440390,
2453178; 440234, 2453133; 440153,
2453118; 439932, 2453184; 439811,
2453179; 439809, 2453180; return to
starting point.

(B) Note: Map 115 follows:



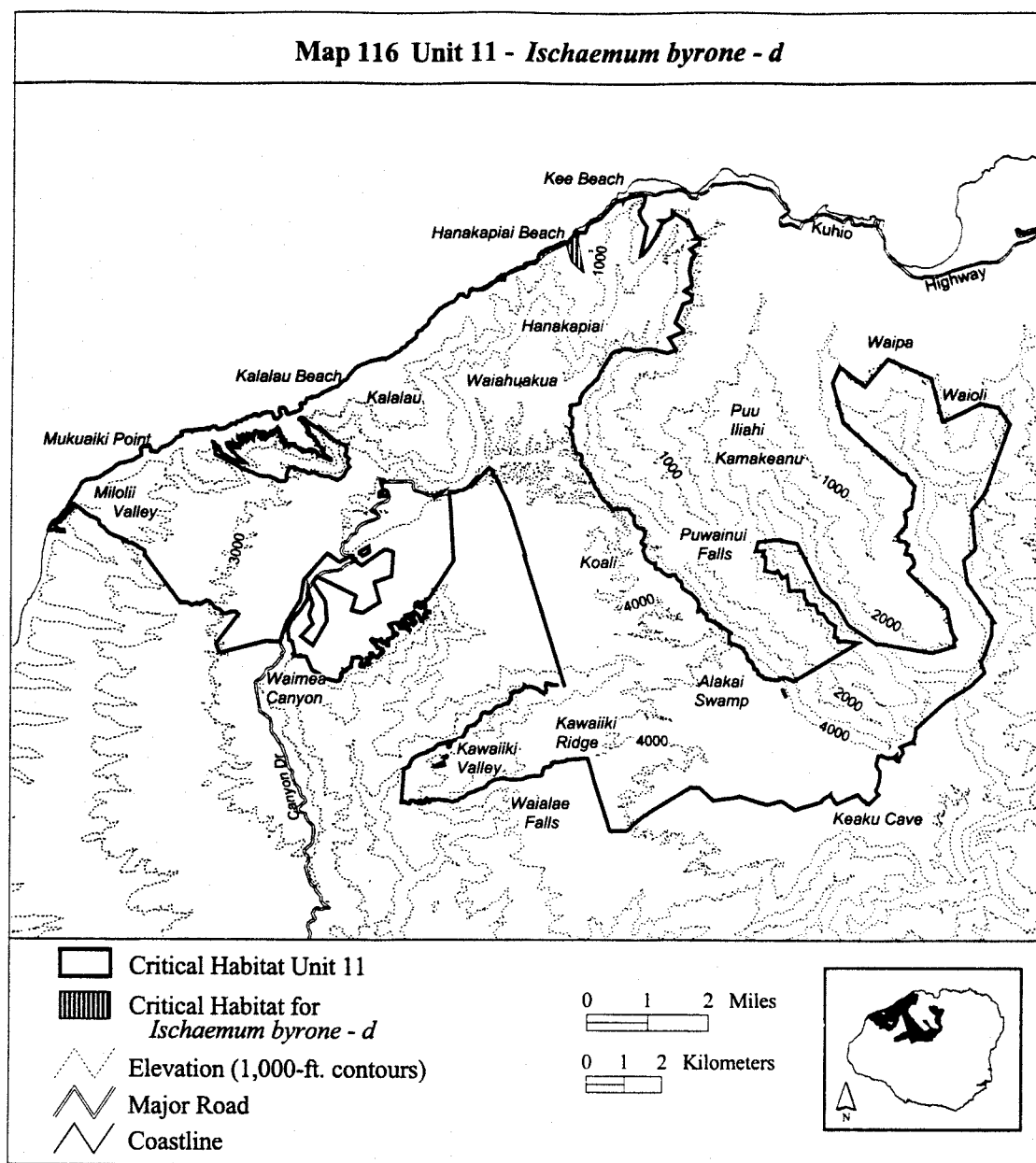
(cxvi) Kauai 11—*Ischaemum byrone*—d
(45 ha; 111 ac)

(A) Unit consists of the following 16
boundary points: coastline; 438535,

2456321; 438601, 2456128; 438762,
2455202; 438425, 2455523; 438279,
2455967; 437712, 2455654; 437482,
2455417; 437305, 2455401; 437190,

2455271; 437106, 2455279; 436707,
2455118; 436684, 2454957; 436524,
2454988; 436179, 2454736; 436046,
2454695; 436030, 2454762; coastline.

(B) Note: Map 116 follows:



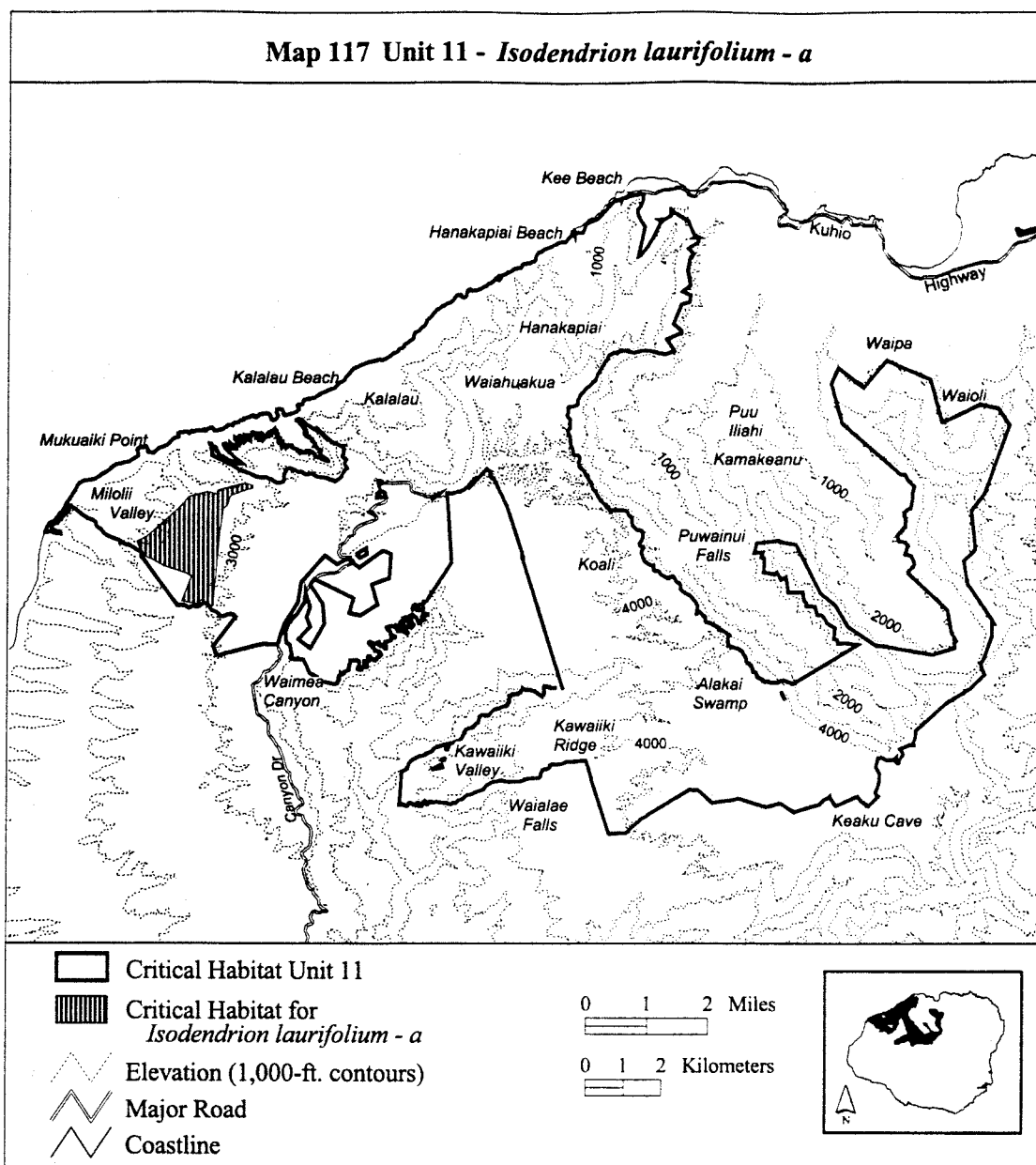
(cxvii) Kauai 11—*Isodendron laurifolium*—a (401 ha; 991 ac)

(A) Unit consists of the following 39 boundary points: Start at 428398, 2449289; 428405, 2449288; 428911, 2449402; 429148, 2449342; 429159, 2449457; 429516, 2449545; 429785, 2449616; 429961, 2449622; 430088,

2449567; 430093, 2449517; 429829, 2449413; 429500, 2449298; 429428, 2449040; 429329, 2448974; 429323, 2448976; 429220, 2448345; 429046, 2446402; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428632, 2446462; 428222, 2446540; 428481, 2447196; 428330, 2447269; 427752,

2447450; 427517, 2447597; 427171, 2447746; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427131, 2447833; 427028, 2448086; 427253, 2448194; 427464, 2448370; 427811, 2448673; 428207, 2449040; return to starting point.

(B) Note: Map 117 follows:



(cxviii) Kauai 11—*Isodendron laurifolium*—b (400 ha; 988 ac)

(A) Unit consists of the following 320 boundary points: Start at 439006, 2444193; 438997, 2444039; 438903, 2443983; 438775, 2443979; 438637, 2443979; 438509, 2444013; 438402, 2443987; 438346, 2443863; 438269, 2443722; 438175, 2443641; 438098, 2443628; 437961, 2443649; 437871, 2443726; 437815, 2443769; 437772, 2443769; 437614, 2443714; 437438, 2443645; 437421, 2443559; 437412, 2443448; 437391, 2443384; 437228, 2443294; 437009, 2443230; 436941, 2443114; 436949, 2443011; 436962, 2442891; 436988, 2442758; 437031, 2442613; 437146, 2442527; 437356, 2442407; 437494, 2442356; 437569,

2442295; 437605, 2442210; 437648, 2442107; 437613, 2441906; 437601, 2441867; 437566, 2441876; 437532, 2441880; 437522, 2441879; 437495, 2441869; 437460, 2441862; 437391, 2441858; 437366, 2441852; 437346, 2441845; 437332, 2441842; 437317, 2441835; 437287, 2441816; 437274, 2441809; 437240, 2441796; 437224, 2441791; 437181, 2441781; 437150, 2441777; 437111, 2441777; 437096, 2441779; 437062, 2441776; 437008, 2441775; 436960, 2441776; 436912, 2441780; 436895, 2441784; 436825, 2441795; 436799, 2441801; 436777, 2441809; 436730, 2441820; 436695, 2441811; 436666, 2441808; 436638, 2441803; 436618, 2441796; 436593, 2441792; 436583, 2441789; 436541,

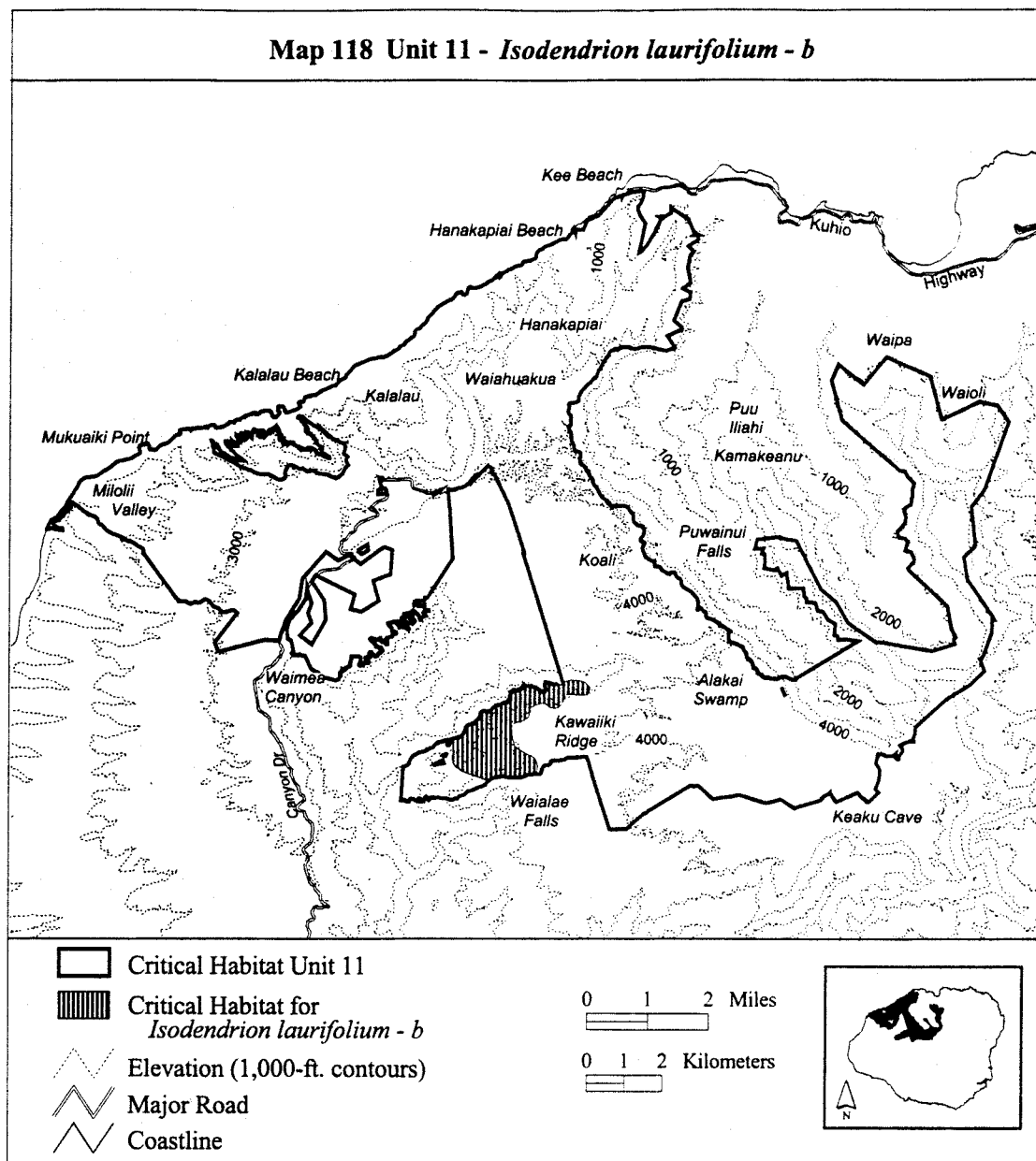
2441785; 436492, 2441773; 436453, 2441759; 436419, 2441739; 436408, 2441737; 436374, 2441718; 436362, 2441711; 436277, 2441726; 435977, 2441829; 435771, 2441906; 435621, 2441970; 435488, 2442048; 435398, 2442150; 435364, 2442279; 435368, 2442352; 435394, 2442442; 435390, 2442519; 435390, 2442630; 435386, 2442776; 435382, 2442812; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658,

2442932; 435668, 2442948; 435673,
2442959; 435681, 2442977; 435688,
2442995; 435693, 2443006; 435698,
2443024; 435704, 2443036; 435708,
2443047; 435715, 2443064; 435722,
2443078; 435725, 2443086; 435729,
2443093; 435735, 2443103; 435738,
2443112; 435743, 2443127; 435749,
2443138; 435753, 2443149; 435757,
2443155; 435766, 2443169; 435778,
2443179; 435790, 2443186; 435804,
2443188; 435821, 2443194; 435842,
2443199; 435861, 2443202; 435874,
2443204; 435889, 2443208; 435904,
2443211; 435933, 2443223; 435942,
2443232; 435949, 2443246; 435958,
2443255; 435969, 2443263; 435979,
2443271; 435993, 2443281; 436010,
2443297; 436032, 2443316; 436048,
2443332; 436064, 2443343; 436080,
2443358; 436089, 2443375; 436095,
2443390; 436100, 2443403; 436107,
2443421; 436113, 2443456; 436118,
2443477; 436123, 2443502; 436134,
2443520; 436146, 2443534; 436160,
2443543; 436175, 2443554; 436190,
2443560; 436213, 2443563; 436227,
2443563; 436240, 2443562; 436254,
2443557; 436265, 2443552; 436274,
2443547; 436287, 2443540; 436300,
2443537; 436315, 2443532; 436328,
2443529; 436337, 2443528; 436348,
2443531; 436357, 2443536; 436369,
2443546; 436380, 2443558; 436392,
2443572; 436403, 2443585; 436421,
2443611; 436438, 2443631; 436460,
2443655; 436478, 2443676; 436497,

2443688; 436518, 2443696; 436534,
2443700; 436558, 2443707; 436576,
2443711; 436597, 2443714; 436611,
2443716; 436630, 2443718; 436644,
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2443731; 436678, 2443742; 436697,
2443756; 436708, 2443763; 436726,
2443769; 436745, 2443772; 436758,
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2443776; 436799, 2443778; 436808,
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2443807; 436852, 2443819; 436861,
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2443863; 436890, 2443877; 436900,
2443900; 436911, 2443923; 436914,
2443936; 436914, 2443948; 436913,
2443962; 436910, 2443981; 436908,
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2444065; 436951, 2444073; 436961,
2444084; 436969, 2444094; 436975,
2444098; 436983, 2444102; 436994,
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2444122; 437144, 2444130; 437156,
2444135; 437169, 2444141; 437183,
2444150; 437191, 2444154; 437202,
2444165; 437212, 2444177; 437228,
2444198; 437239, 2444213; 437245,
2444227; 437254, 2444239; 437263,
2444246; 437278, 2444240; 437294,

2444234; 437310, 2444225; 437332,
2444217; 437351, 2444217; 437370,
2444223; 437391, 2444223; 437412,
2444226; 437428, 2444226; 437445,
2444223; 437462, 2444219; 437482,
2444211; 437497, 2444205; 437541,
2444190; 437563, 2444183; 437578,
2444179; 437593, 2444170; 437610,
2444160; 437624, 2444146; 437636,
2444132; 437651, 2444119; 437671,
2444112; 437691, 2444102; 437703,
2444093; 437722, 2444082; 437732,
2444069; 437749, 2444061; 437758,
2444058; 437768, 2444060; 437780,
2444066; 437810, 2444080; 437821,
2444088; 437831, 2444100; 437833,
2444111; 437835, 2444126; 437833,
2444139; 437827, 2444163; 437822,
2444185; 437820, 2444206; 437818,
2444236; 437824, 2444265; 437828,
2444292; 437836, 2444314; 437843,
2444322; 437854, 2444327; 437871,
2444328; 437887, 2444323; 437909,
2444314; 437933, 2444302; 437960,
2444289; 437984, 2444274; 438007,
2444260; 438028, 2444258; 438048,
2444258; 438072, 2444260; 438087,
2444266; 438109, 2444271; 438133,
2444273; 438164, 2444270; 438196,
2444263; 438335, 2444214; 438294,
2444342; 438355, 2444334; 438488,
2444377; 438732, 2444360; 438787,
2444347; 438895, 2444313; return to
starting point.

(B) **Note:** Map 118 follows:



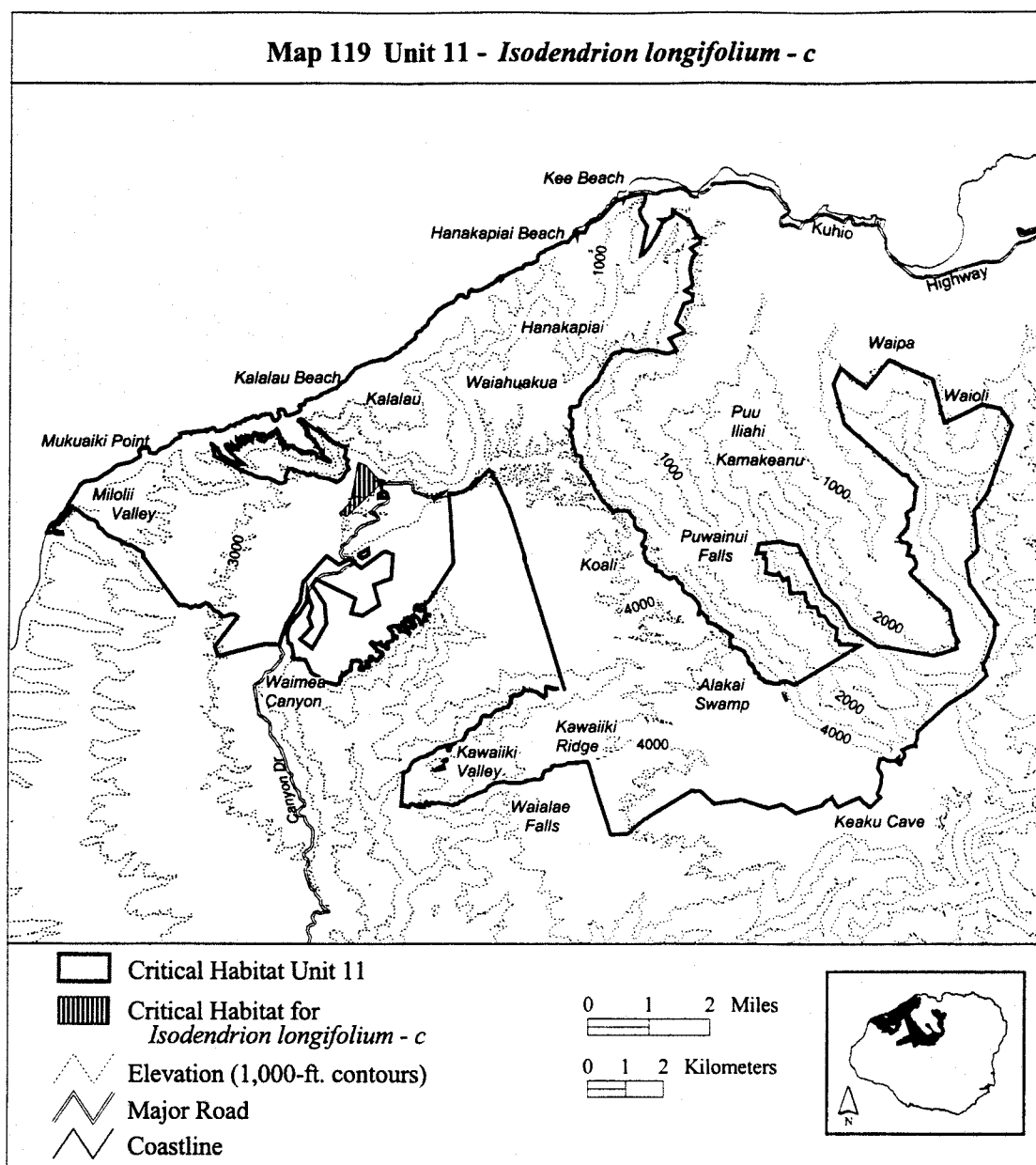
(cxix) Kauai 11—*Isodendron longifolium*—c (59 ha; 146 ac)

(A) Unit consists of the following 12 boundary points: Start at 432793,

2450043; 432799, 2450073; 432822, 2450200; 432971, 2450144; 433043, 2450118; 433310, 2449821; 433426, 2449707; 433399, 2449709; 433414,

2449628; 432530, 2448758; 432335, 2448851; 432630, 2449144; return to starting point.

(B) **Note:** Map 119 follows:



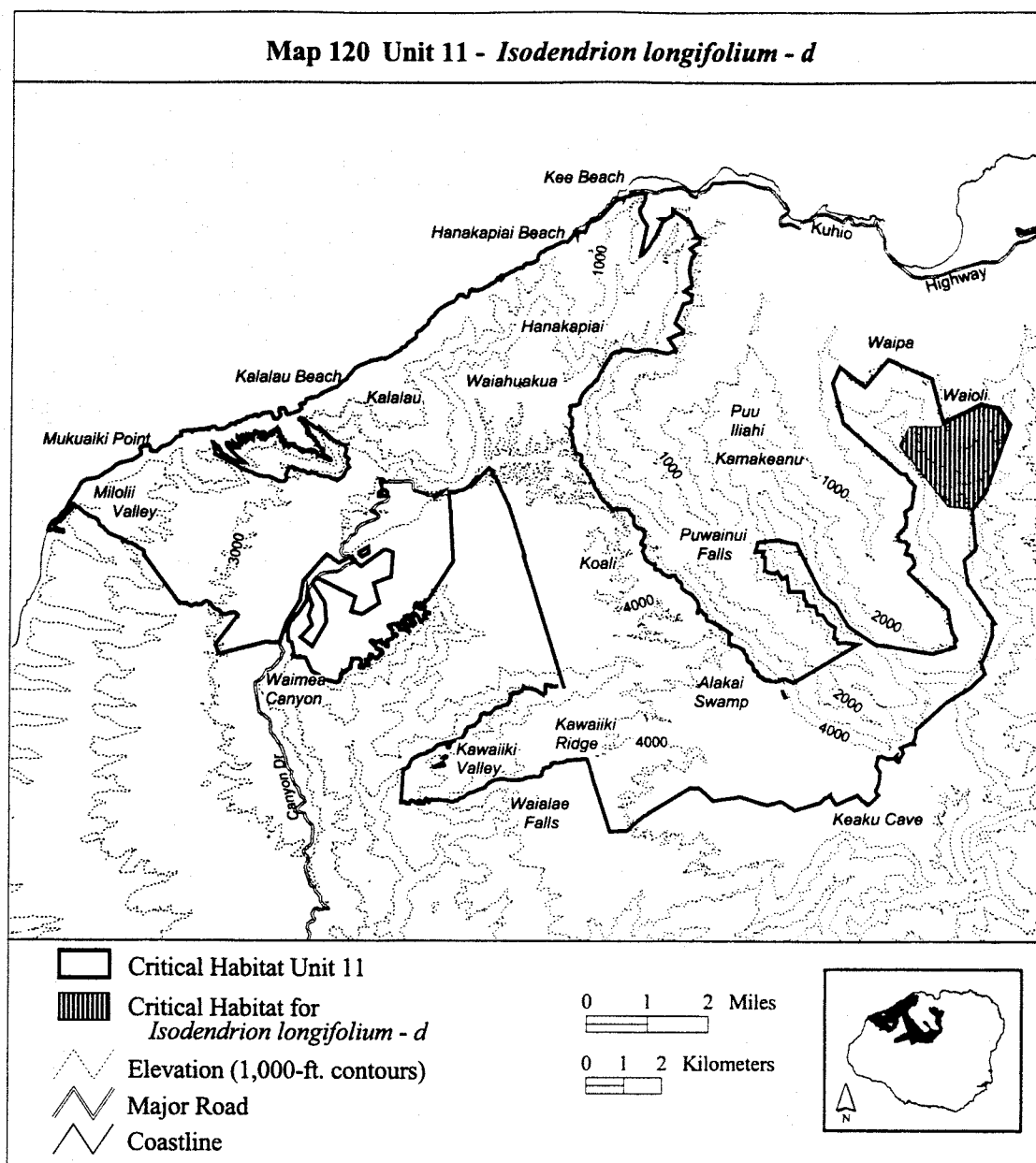
(cxx) Kauai 11—*Isodendron longifolium*—d (493 ha; 1,218 ac)

(A) Unit consists of the following 16 boundary points: Start at 449855,

2451511; 450071, 2451219; 449928, 2450811; 449449, 2449480; 449073, 2448969; 449073, 2448966; 448431, 2449017; 447240, 2450530; 447143, 2450657; 447406, 2451160; 447518,

2451166; 448229, 2451166; 448981, 2451592; 449257, 2451734; 449665, 2451685; 449738, 2451669; return to starting point.

(B) **Note:** Map 120 follows:



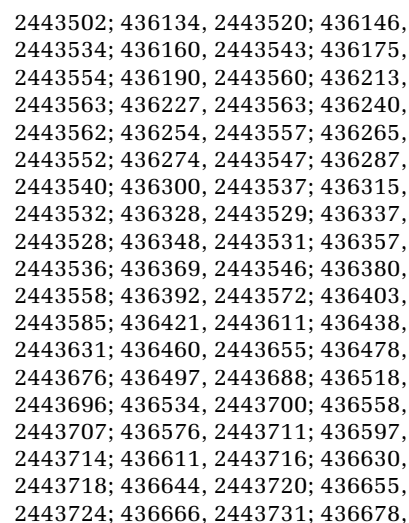
(cxxi) Kauai 11—*Isodendron longifolium*—e (381 ha; 941 ac)

(A) Unit consists of the following 68 boundary points: Start at 439819, 2453189; 439579, 2453181; 439568, 2453181; 438996, 2453168; 438990, 2453040; 438932, 2452880; 438715, 2452573; 438651, 2452573; 438247, 2452701; 438151, 2452817; 438029, 2453034; 437888, 2453367; 437856, 2453610; 437760, 2454032; 437658, 2454372; 437626, 2454410; 437568, 2454359; 437427, 2454103; 437389,

2454054; 437334, 2453949; 437268, 2454075; 437222, 2454245; 437297, 2454346; 437277, 2454462; 437175, 2454700; 437209, 2454781; 437465, 2454839; 437933, 2454775; 438708, 2454103; 438727, 2453962; 438766, 2453795; 438830, 2453706; 439003, 2453693; 439035, 2453846; 439035, 2454026; 439080, 2454269; 439150, 2454345; 439208, 2454256; 439355, 2454288; 439445, 2454461; 439464, 2454563; 439730, 2454563; 440002, 2454563; 440423, 2454521; 440294, 2454127; 440493, 2454062; 440438,

2453967; 440361, 2453776; 440361, 2453571; 440372, 2453534; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; return to starting point.

(B) **Note:** Map 121 follows:

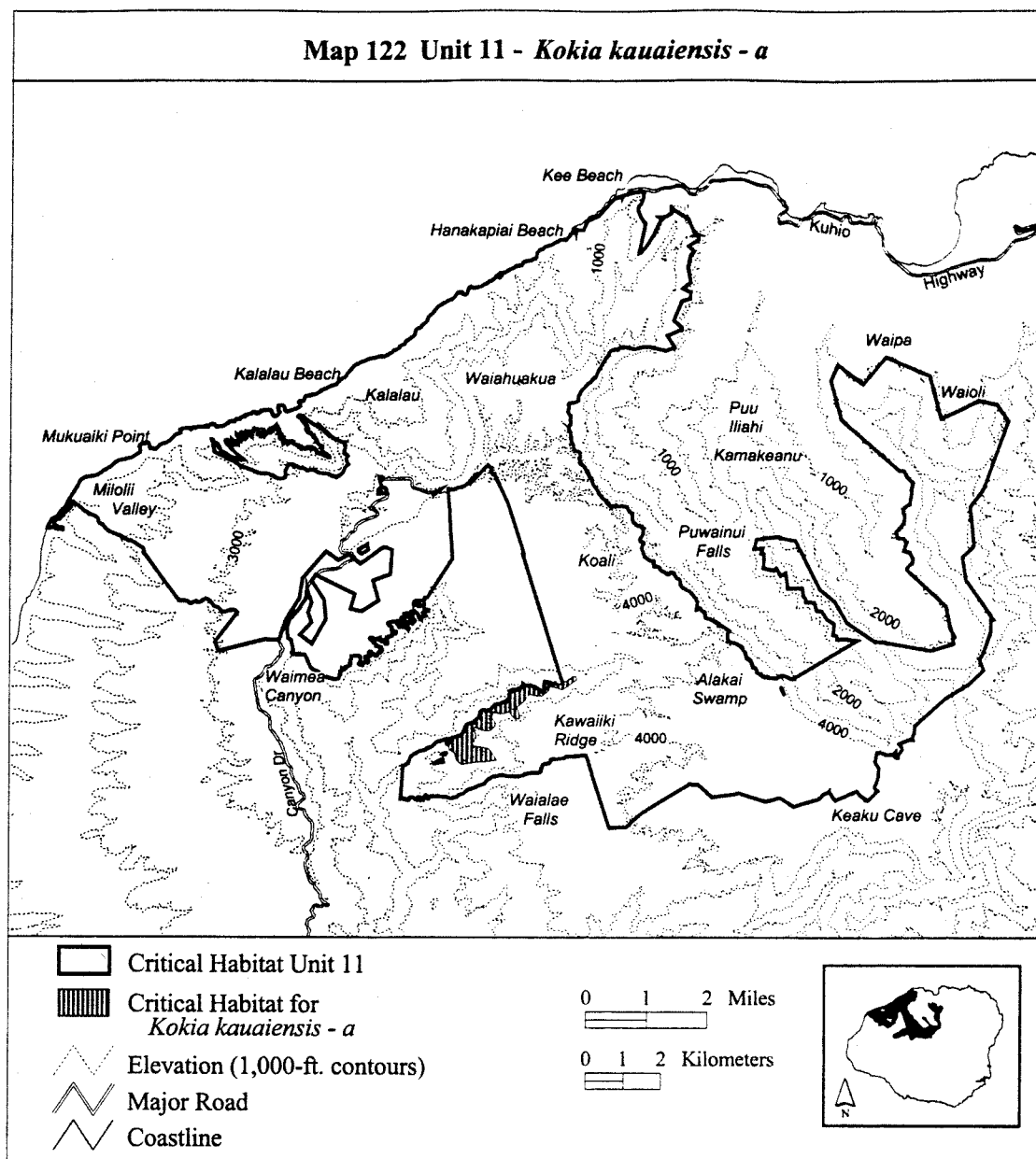


2443742; 436697, 2443756; 436708,
2443763; 436726, 2443769; 436745,
2443772; 436758, 2443775; 436771,
2443776; 436788, 2443776; 436799,
2443778; 436808, 2443781; 436818,
2443785; 436823, 2443786; 436829,
2443790; 436837, 2443797; 436841,
2443801; 436845, 2443807; 436852,
2443819; 436861, 2443831; 436870,
2443847; 436882, 2443863; 436890,
2443877; 436900, 2443900; 436911,
2443923; 436914, 2443936; 436914,
2443948; 436913, 2443962; 436910,
2443981; 436908, 2443995; 436908,
2444013; 436911, 2444027; 436918,
2444040; 436926, 2444047; 436933,
2444055; 436942, 2444065; 436951,
2444073; 436961, 2444084; 436969,
2444094; 436975, 2444098; 436983,
2444102; 436994, 2444107; 437009,
2444108; 437026, 2444105; 437049,
2444100; 437067, 2444092; 437076,
2444089; 437106, 2444090; 437119,
2444096; 437128, 2444104; 437133,
2444112; 437137, 2444122; 437144,
2444130; 437156, 2444135; 437169,
2444141; 437183, 2444150; 437191,
2444154; 437202, 2444165; 437212,
2444177; 437228, 2444198; 437239,
2444213; 437245, 2444227; 437254,
2444239; 437263, 2444246; 437278,

2444240; 437294, 2444234; 437310,
2444225; 437332, 2444217; 437351,
2444217; 437370, 2444223; 437391,
2444223; 437412, 2444226; 437428,
2444226; 437445, 2444223; 437462,
2444219; 437482, 2444211; 437497,
2444205; 437541, 2444190; 437563,
2444183; 437578, 2444179; 437593,
2444170; 437610, 2444160; 437624,
2444146; 437636, 2444132; 437651,
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2444102; 437703, 2444093; 437722,
2444082; 437732, 2444069; 437749,
2444061; 437758, 2444058; 437768,
2444060; 437780, 2444066; 437810,
2444080; 437821, 2444088; 437831,
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2444163; 437822, 2444185; 437820,
2444206; 437818, 2444236; 437824,
2444265; 437828, 2444292; 437836,
2444314; 437843, 2444322; 437854,
2444327; 437871, 2444328; 437887,
2444323; 437909, 2444314; 437933,
2444302; 437960, 2444289; 437984,
2444274; 438007, 2444260; 438028,
2444258; 438048, 2444258; 438072,
2444260; 438087, 2444266; 438109,
2444271; 438133, 2444273; 438164,
2444270; 438196, 2444263; 438335,
2444214; 438301, 2444319; 438397,

2444313; 438592, 2444451; 438657,
2444444; 438672, 2444357; 438317,
2444096; 438078, 2444169; 437969,
2444183; 437940, 2444089; 437897,
2444038; 437759, 2443930; 437658,
2443937; 437505, 2443959; 437433,
2443973; 437310, 2443806; 437194,
2443712; 437092, 2443618; 437136,
2443502; 437179, 2443386; 437165,
2443328; 437056, 2443328; 436969,
2443401; 436933, 2443437; 436911,
2443517; 436730, 2443459; 436643,
2443452; 436513, 2443510; 436433,
2443372; 436428, 2443340; 436447,
2443339; 436521, 2443215; 436516,
2443118; 436436, 2443037; 436319,
2442983; 436198, 2443018; 436044,
2443075; 435968, 2443092; 435954,
2443025; 436027, 2442845; 435961,
2442776; 435920, 2442719; 435916,
2442648; 435965, 2442591; 436089,
2442570; 436229, 2442546; 436345,
2442534; 436417, 2442451; 436557,
2442214; 436200, 2442166; 436089,
2442159; 435837, 2442138; 435657,
2442104; 435578, 2442135; 435488,
2442216; 435441, 2442399; 435320,
2442501; 435244, 2442641; 435284,
2442631; return to starting point.

(B) Note: Map 122 follows:



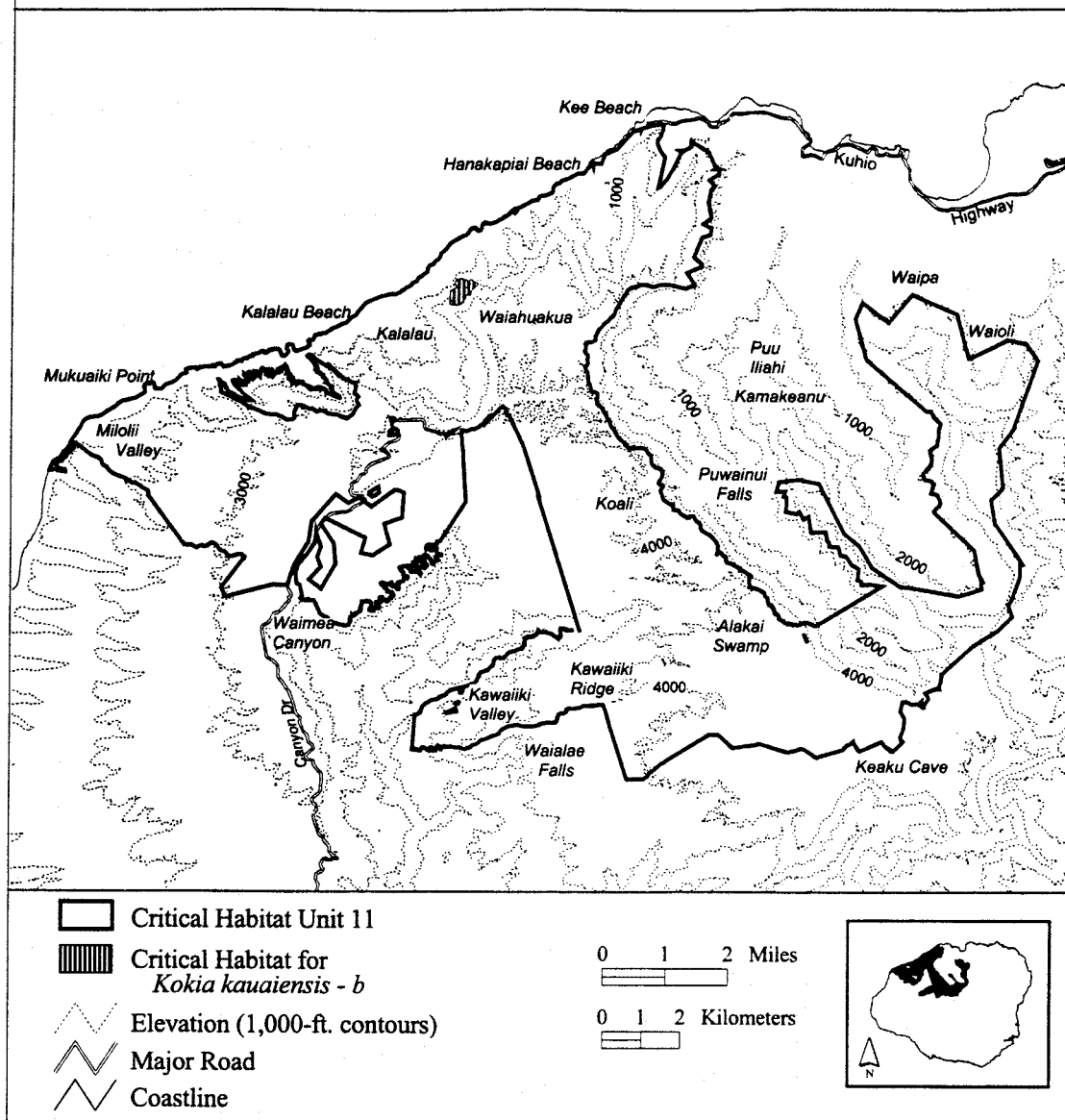
(cxxiii) Kauai 11—*Kokia kauaiensis*—b
(30 ha; 74 ac)

(A) Unit consists of the following 54 boundary points: Start at 435047, 2453176; 435038, 2453207; 435043, 2453230; 435058, 2453257; 435101, 2453291; 435145, 2453300; 435165, 2453304; 435176, 2453317; 435166, 2453322; 435166, 2453344; 435180, 2453345; 435202, 2453340; 435247, 2453319; 435294, 2453296; 435330,

2453290; 435354, 2453284; 435385, 2453266; 435395, 2453260; 435412, 2453266; 435433, 2453285; 435451, 2453304; 435463, 2453300; 435533, 2453250; 435651, 2453203; 435601, 2453135; 435551, 2453094; 435476, 2453038; 435457, 2452994; 435458, 2452931; 435428, 2452886; 435384, 2452889; 435354, 2452910; 435334, 2452903; 435320, 2452860; 435308, 2452793; 435265, 2452778; 435249,

2452760; 435231, 2452714; 435212, 2452666; 435180, 2452651; 435149, 2452645; 435048, 2452639; 434944, 2452655; 434906, 2452674; 434899, 2452697; 434904, 2452924; 434927, 2453016; 434958, 2453016; 435012, 2453066; 435029, 2453085; 435052, 2453083; 435086, 2453084; 435092, 2453120; 435071, 2453148; return to starting point.

(B) **Note:** Map 123 follows:

Map 123 Unit 11 - *Kokia kauaiensis* - b

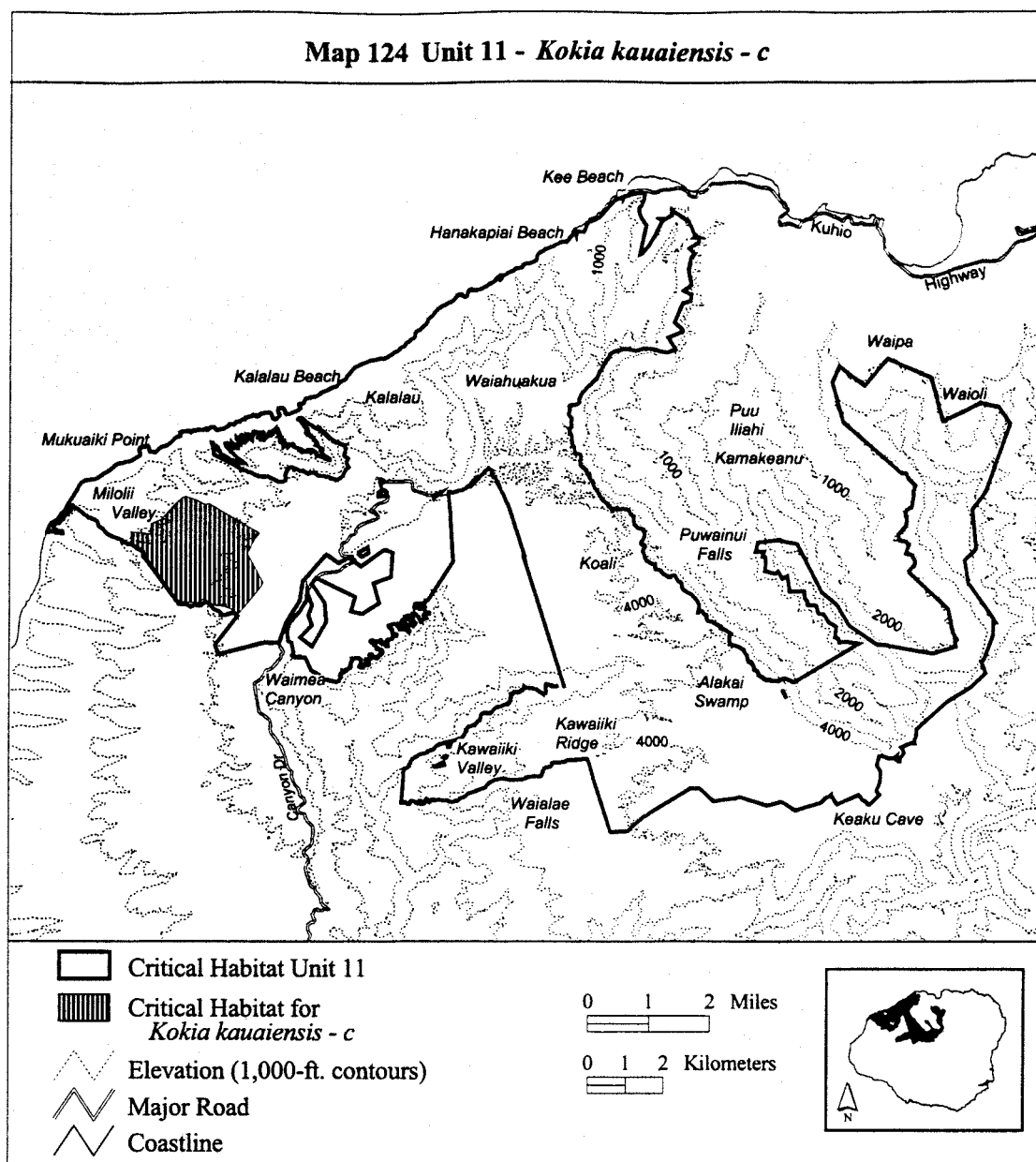
(cxxiv) Kauai 11—*Kokia kauaiensis*—c
(667 ha; 1,647 ac)

(A) Unit consists of the following 43 boundary points: Start at 426834, 2447995; 426824, 2448315; 427350, 2448274; 427355, 2448413; 427360, 2448542; 427618, 2448645; 427973, 2449036; 428190, 2449221; 428282, 2449268; 428566, 2449160; 428787,

2449046; 428885, 2449062; 428912, 2449075; 430225, 2448294; 430075, 2448099; 429914, 2447762; 430322, 2447000; 430283, 2446894; 429631, 2446128; 429468, 2446319; 429267, 2446382; 429075, 2446396; 428941, 2446434; 428749, 2446569; 428619, 2446458; 428049, 2446487; 427178, 2447664; 427161, 2447669; 427157,

2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 426997, 2447892; 426981, 2447902; 426958, 2447923; 426944, 2447941; 426907, 2447965; 426847, 2447992; return to starting point.

(B) Note: Map 124 follows:



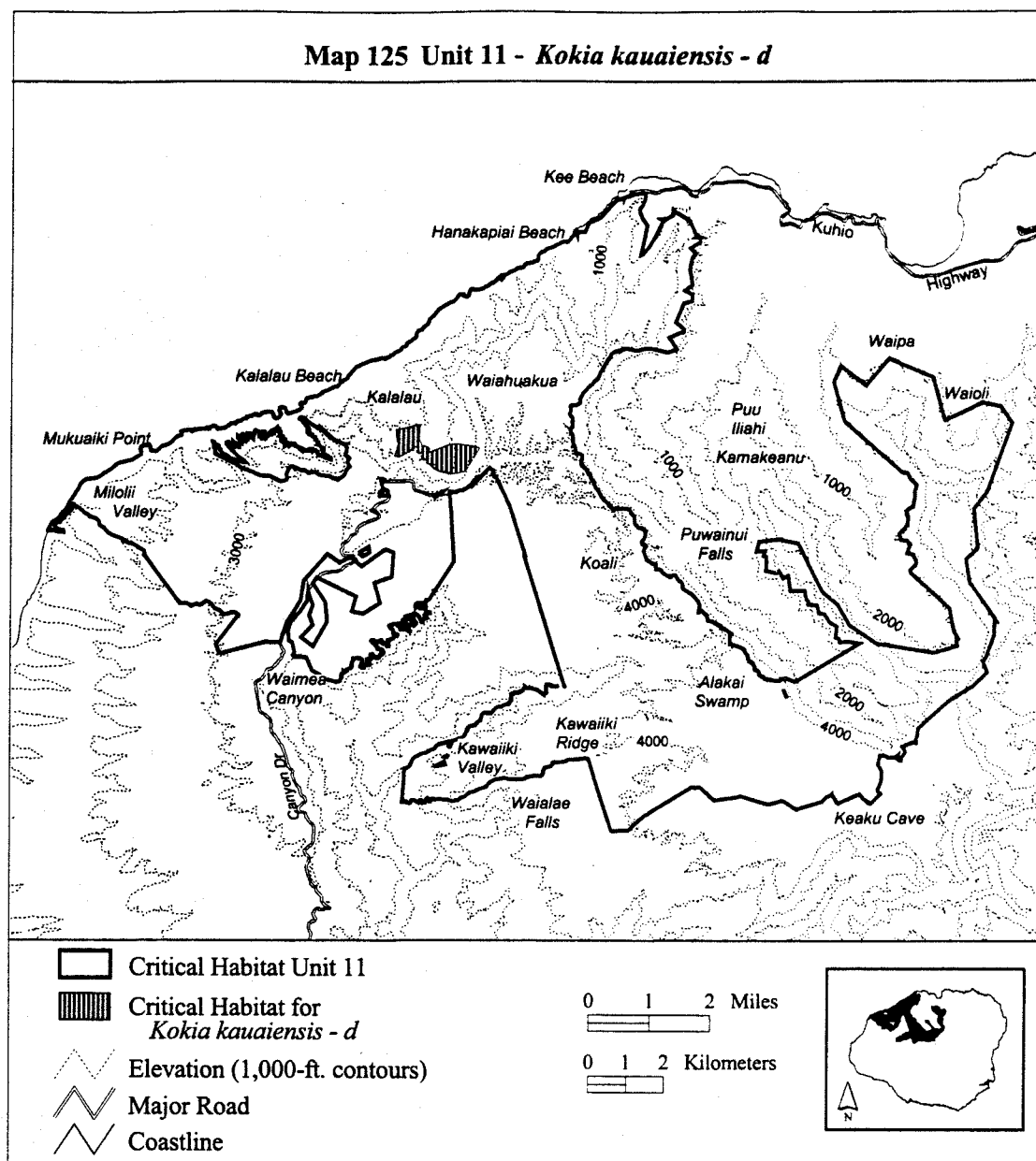
(cxxv) Kauai 11—*Kokia kauaiensis*—d
(126 ha; 312 ac)

(A) Unit consists of the following 39 boundary points: Start at 433942, 2450326; 433919, 2450316; 433897, 2450291; 433798, 2450316; 433790, 2450354; 433815, 2450483; 433861, 2450632; 433808, 2450794; 433798,

2451025; 434439, 2451161; 434407, 2450754; 434451, 2450695; 434487, 2450604; 434546, 2450588; 434662, 2450569; 434676, 2450537; 434681, 2450418; 435237, 2450644; 435423, 2450648; 435669, 2450630; 435811, 2450601; 436011, 2450551; 436007, 2450518; 435652, 2449941; 435563, 2449909; 435229, 2449844; 434917,

2449931; 434795, 2450008; 434633, 2450148; 434626, 2450212; 434566, 2450245; 434481, 2450245; 434512, 2450334; 434526, 2450381; 434443, 2450405; 434392, 2450424; 434382, 2450448; 434359, 2450589; 434355, 2450584; return to starting point.

(B) **Note:** Map 125 follows:



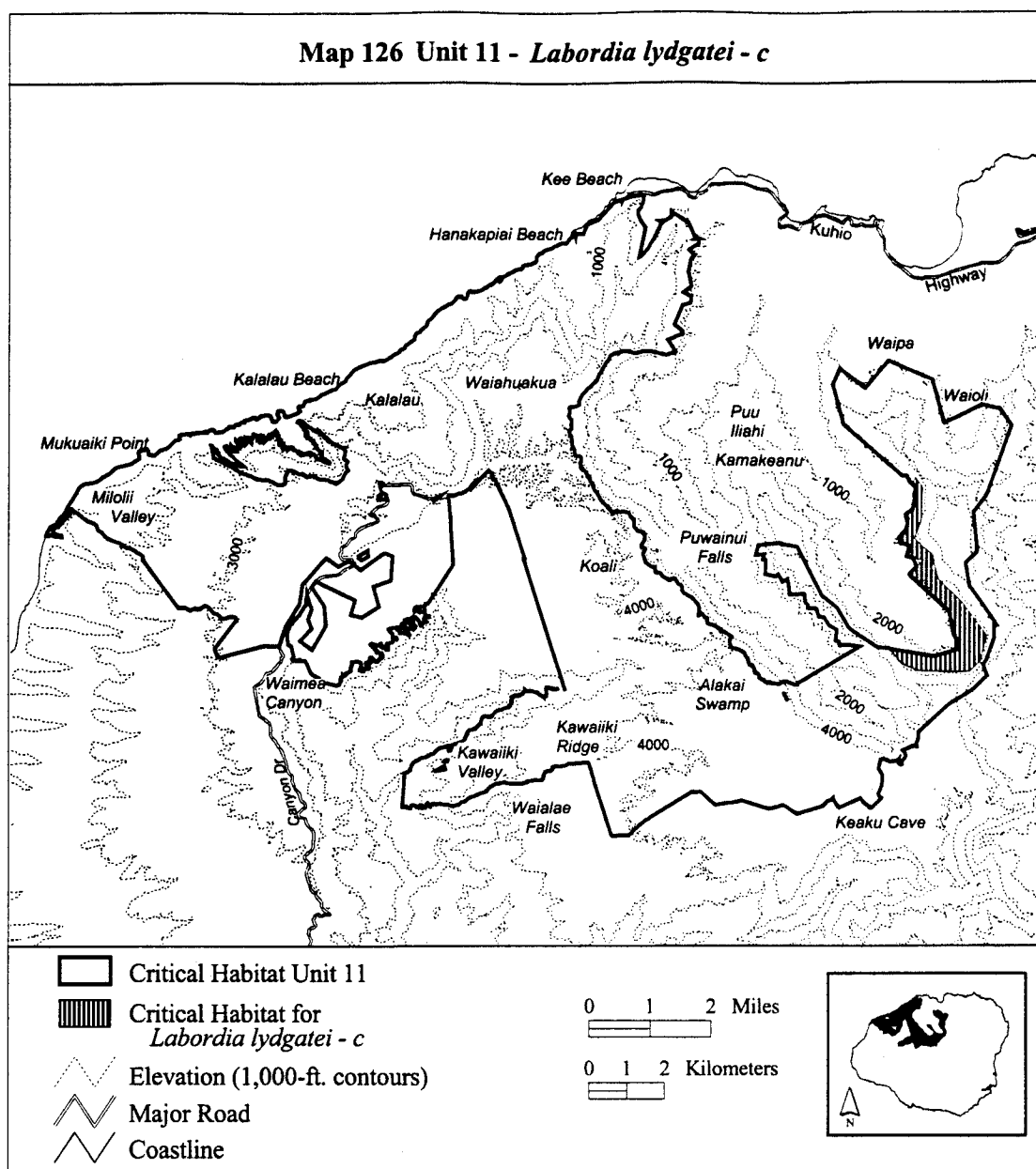
(cxxvi) Kauai 11—*Labordia lydgatei*—c (325 ha; 803 ac)

(A) Unit consists of the following 37 boundary points: Start at 447594, 2447520; 447758, 2447683; 447472, 2447746; 447323, 2447780; 447420, 2448093; 447153, 2448108; 447107, 2448255; 447371, 2448552; 447293,

2448807; 447329, 2448906; 447468, 2449010; 447589, 2449589; 447461, 2449701; 447554, 2449852; 447733, 2449589; 447709, 2448696; 447516, 2448238; 447673, 2448097; 447975, 2447828; 448168, 2447176; 448240, 2447107; 448748, 2446621; 449448, 2445704; 449279, 2445028; 448989,

2444738; 448289, 2444739; 447637, 2444763; 447202, 2444956; 446885, 2445349; 448070, 2445147; 448658, 2445334; 448629, 2445470; 448699, 2445511; 448577, 2445718; 448450, 2446319; 447413, 2447271; 447397, 2447323; return to starting point.

(B) **Note:** Map 126 follows:



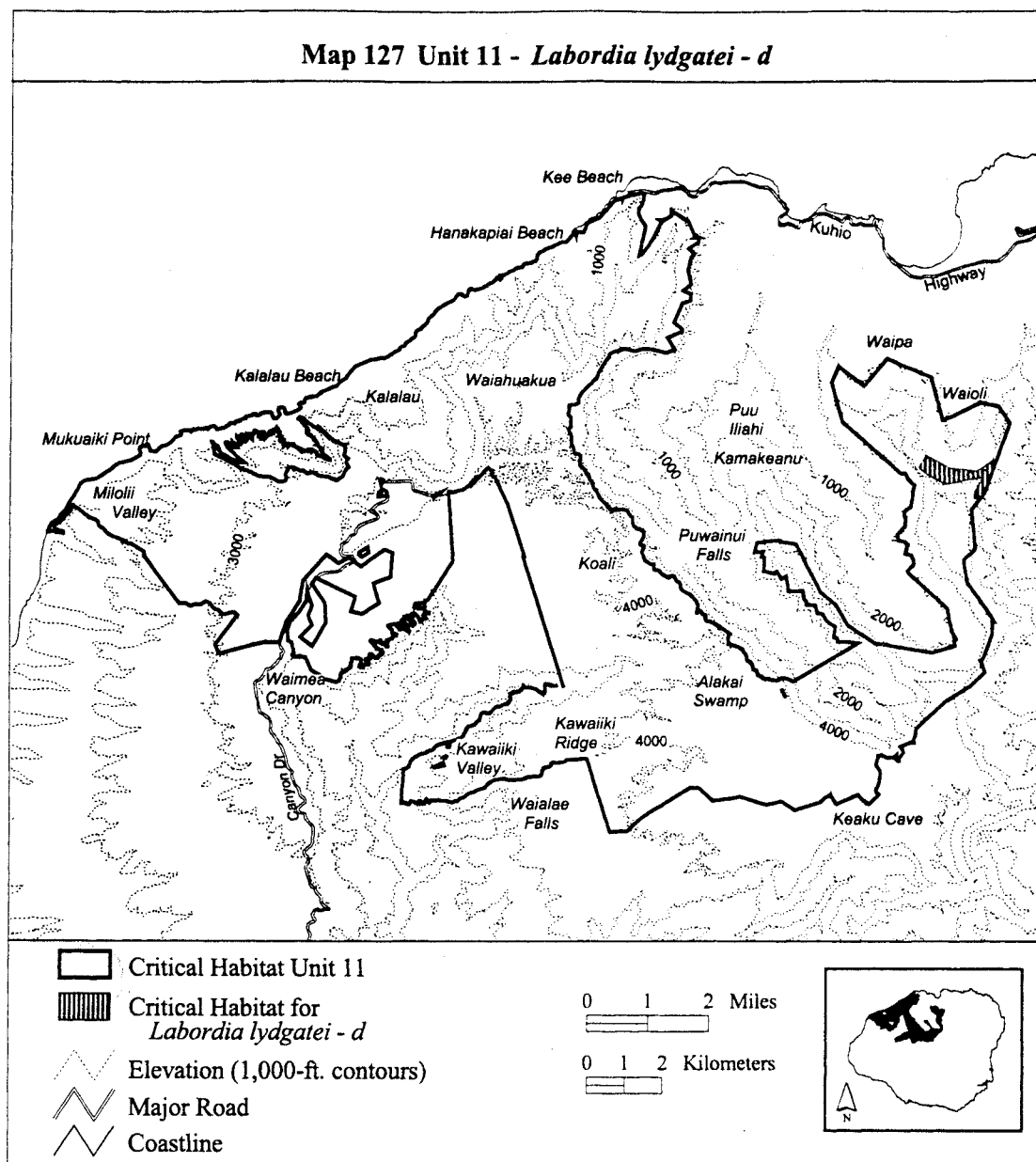
(cxxvii) Kauai 11—*Labordia lydgatei*—d
(82 ha; 203 ac)

(A) Unit consists of the following 18
boundary points: Start at 447872,
2450364; 448482, 2450047; 449119,

2449962; 449207, 2449950; 449624,
2450214; 449665, 2450240; 449712,
2450194; 449432, 2449395; 449310,
2449234; 449214, 2449211; 449158,
2449396; 449395, 2449797; 449400,

2449806; 449060, 2449740; 448772,
2449685; 448385, 2449589; 447902,
2449855; 447675, 2450047; return to
starting point.

(B) **Note:** Map 127 follows:



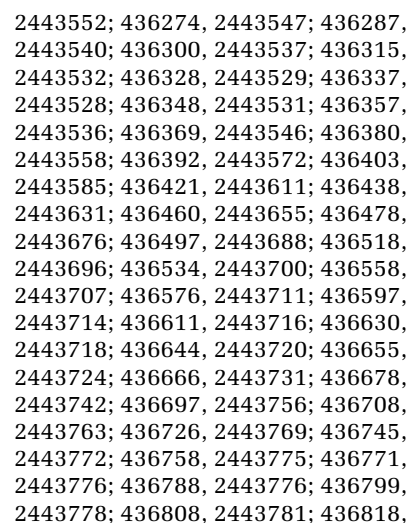
(cxxviii) Kauai 11—*Labordia lydgatei*—e (117 ha; 290 ac)

(A) Unit consists of the following 54 boundary points: Start at 439373, 2452840; 439379, 2452900; 439425, 2453389; 439571, 2453718; 439601, 2453807; 439697, 2454089; 439714, 2454139; 439933, 2454779; 439960, 2454816; 440497, 2454749; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484,

2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223, 2453322; 440199, 2453305; 440147,

2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; return to starting point.

(B) **Note:** Map 128 follows:

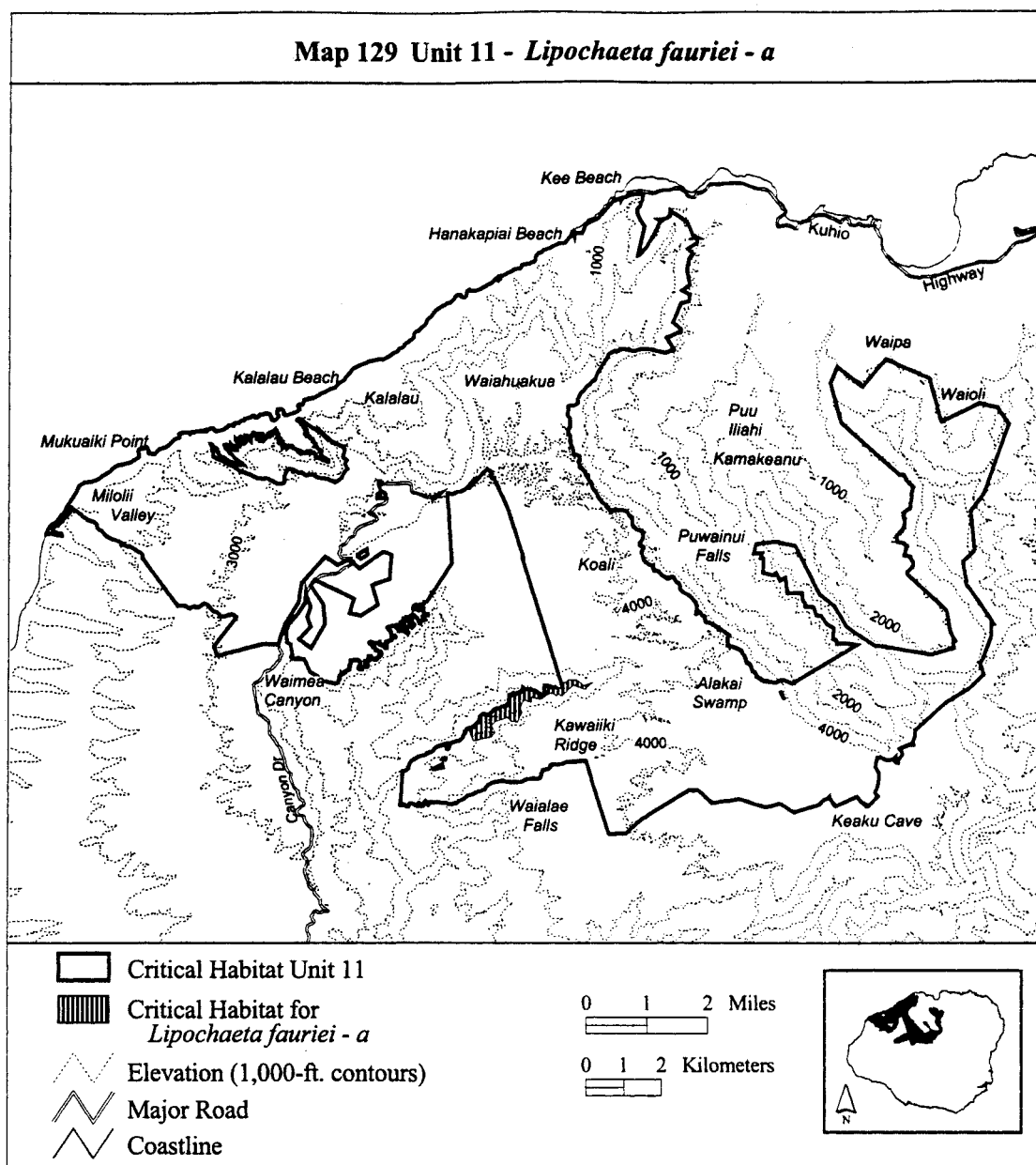


2443785; 436823, 2443786; 436829,
2443790; 436837, 2443797; 436841,
2443801; 436845, 2443807; 436852,
2443819; 436861, 2443831; 436870,
2443847; 436882, 2443863; 436890,
2443877; 436900, 2443900; 436911,
2443923; 436914, 2443936; 436914,
2443948; 436914, 2443952; 436916,
2443955; 436913, 2443964; 436910,
2443981; 436908, 2443995; 436908,
2444013; 436911, 2444027; 436918,
2444040; 436926, 2444047; 436933,
2444055; 436942, 2444065; 436951,
2444073; 436961, 2444084; 436969,
2444094; 436975, 2444098; 436983,
2444102; 436994, 2444107; 437009,
2444108; 437026, 2444105; 437049,
2444100; 437067, 2444092; 437076,
2444089; 437106, 2444090; 437119,
2444096; 437128, 2444104; 437133,

2444112; 437137, 2444122; 437144,
2444130; 437156, 2444135; 437169,
2444141; 437183, 2444150; 437191,
2444154; 437202, 2444165; 437212,
2444177; 437228, 2444198; 437239,
2444213; 437245, 2444227; 437254,
2444239; 437263, 2444246; 437278,
2444240; 437294, 2444234; 437310,
2444225; 437332, 2444217; 437351,
2444217; 437370, 2444223; 437391,
2444223; 437412, 2444226; 437428,
2444226; 437445, 2444223; 437462,
2444219; 437482, 2444211; 437497,
2444205; 437541, 2444190; 437563,
2444183; 437578, 2444179; 437593,
2444170; 437610, 2444160; 437624,
2444146; 437636, 2444132; 437651,
2444119; 437671, 2444112; 437691,
2444102; 437703, 2444093; 437722,
2444082; 437732, 2444069; 437749,

2444061; 437758, 2444058; 437768,
2444060; 437780, 2444066; 437810,
2444080; 437821, 2444088; 437831,
2444100; 437833, 2444111; 437835,
2444126; 437833, 2444139; 437827,
2444163; 437822, 2444185; 437820,
2444206; 437818, 2444236; 437824,
2444265; 437828, 2444292; 437836,
2444314; 437843, 2444322; 437854,
2444327; 437871, 2444328; 437887,
2444323; 437909, 2444314; 437933,
2444302; 437960, 2444289; 437984,
2444274; 438007, 2444260; 438028,
2444258; 438048, 2444258; 438072,
2444260; 438087, 2444266; 438109,
2444271; 438133, 2444273; 438164,
2444270; 438196, 2444263; 438335,
2444214; return to starting point.

(B) **Note:** Map 129 follows:



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

(A) Unit consists of the following 125 boundary points: Start at 427560, 2448644; 427186, 2448690; 426974, 2448883; 427525, 2448944; 427595, 2449029; 427167, 2449118; 426897, 2449284; 426885, 2449330; 426974, 2449445; 427105, 2449399; 427240, 2449511; 427082, 2449526; 426943, 2449646; 427440, 2449757; 427583, 2449646; 427618, 2449680; 427398, 2449919; 427865, 2449846; 428011, 2449885; 428188, 2449777; 428304, 2449623; 428428, 2449542; 428420, 2449472; 428694, 2449411; 428790, 2449353; 428825, 2449426; 428917, 2449457; 429041, 2449399; 429145, 2449376; 429160, 2449464; 429287,

2449491; 429446, 2449526; 429623, 2449565; 429696, 2449549; 429769, 2449595; 429912, 2449630; 430487, 2449303; 430645, 2449087; 430564, 2449079; 430271, 2449172; 430271, 2449087; 430359, 2448921; 430174, 2448944; 430082, 2449056; 429816, 2449094; 429870, 2448987; 429781, 2448929; 429816, 2448813; 430016, 2448736; 429893, 2448636; 429939, 2448528; 429789, 2448524; 429634, 2448671; 429604, 2448543; 429650, 2448482; 429496, 2448297; 429634, 2448176; 429739, 2448229; 429966, 2448239; 430066, 2448292; 430130, 2448260; 430145, 2448155; 430019, 2448139; 429813, 2448076; 429761, 2447976; 430019, 2447912; 429913, 2447865; 429676, 2447849; 429565,

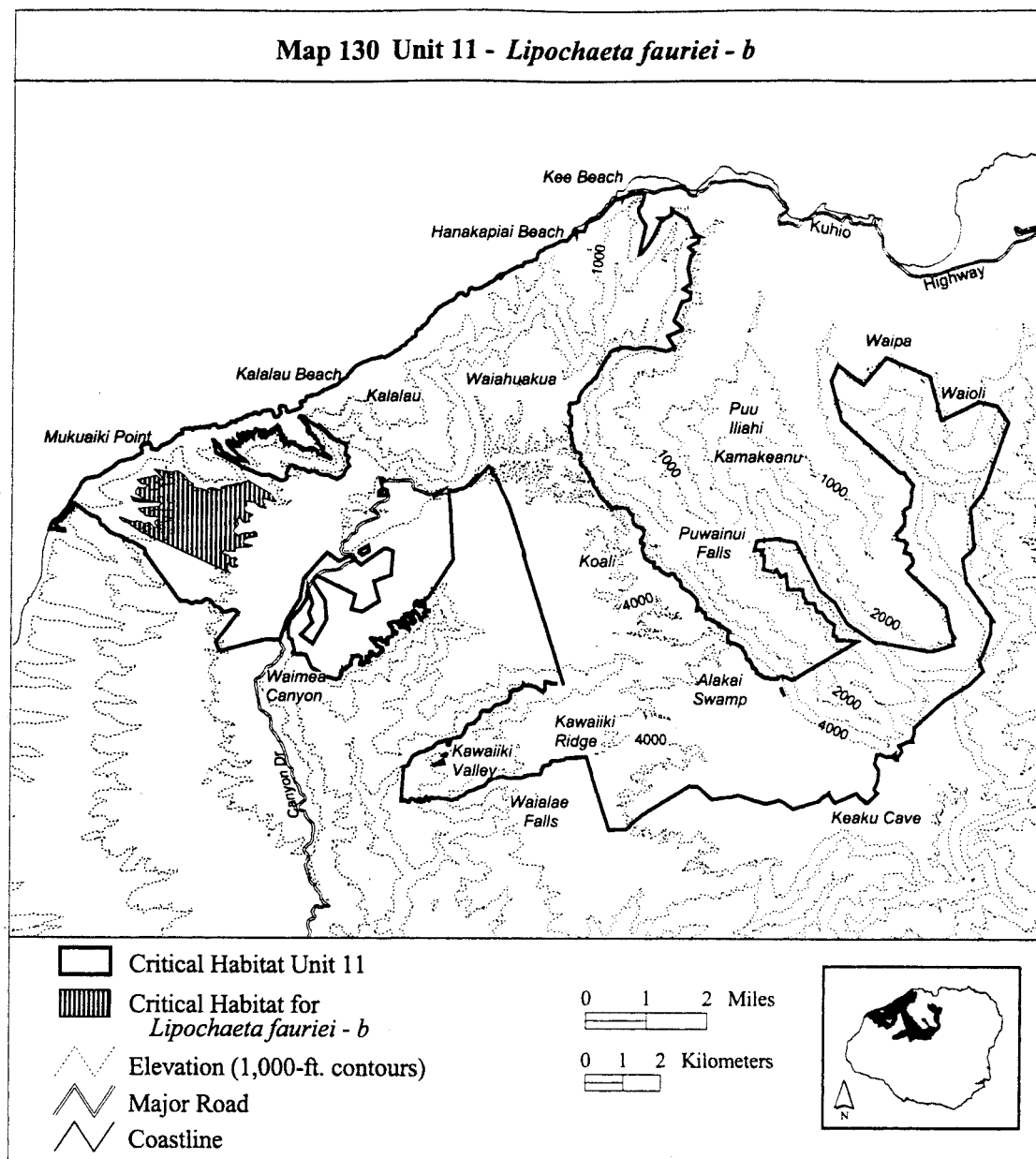
2447833; 429560, 2447786; 429555, 2447760; 429397, 2447754; 429323, 2447754; 429281, 2447807; 429223, 2447749; 429244, 2447681; 429307, 2447686; 429397, 2447639; 429418, 2447591; 429497, 2447581; 429544, 2447612; 429623, 2447549; 429555, 2447517; 429550, 2447459; 429550, 2447407; 429634, 2447375; 429587, 2447349; 429539, 2447328; 429486, 2447338; 429423, 2447380; 429386, 2447438; 429349, 2447422; 429355, 2447338; 429349, 2447307; 429381, 2447238; 429415, 2447204; 429378, 2447191; 427051, 2448261; 426945, 2448329; 426845, 2448398; 426782, 2448408; 426734, 2448482; 426608, 2448535; 426534, 2448566; 426465, 2448640; 426518, 2448645; 426603,

2448608; 426766, 2448550; 426866,
2448524; 426908, 2448556; 427040,
2448556; 427124, 2448471; 427277,
2448524; 427330, 2448445; 427356,

2448398; 427393, 2448376; 427441,
2448376; 427483, 2448366; 427552,
2448329; 427573, 2448329; 427536,
2448387; 427462, 2448424; 427425,

2448466; 427409, 2448508; 427409,
2448540; return to starting point.

(B) Note: Map 130 follows:



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

(A) Unit consists of the following 161 boundary points: Start at 437819, 2444222; 437929, 2444255; 437929, 2444124; 437901, 2444021; 437814, 2443944; 437514, 2443802; 437432, 2443802; 437241, 2443671; 437055, 2443306; 437028, 2441843; 436689, 2441952; 436285, 2441925; 436029, 2442618; 435914, 2442984; 435859, 2443120; 435831, 2443197; 435842, 2443199; 435861, 2443202; 435874,

2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190,

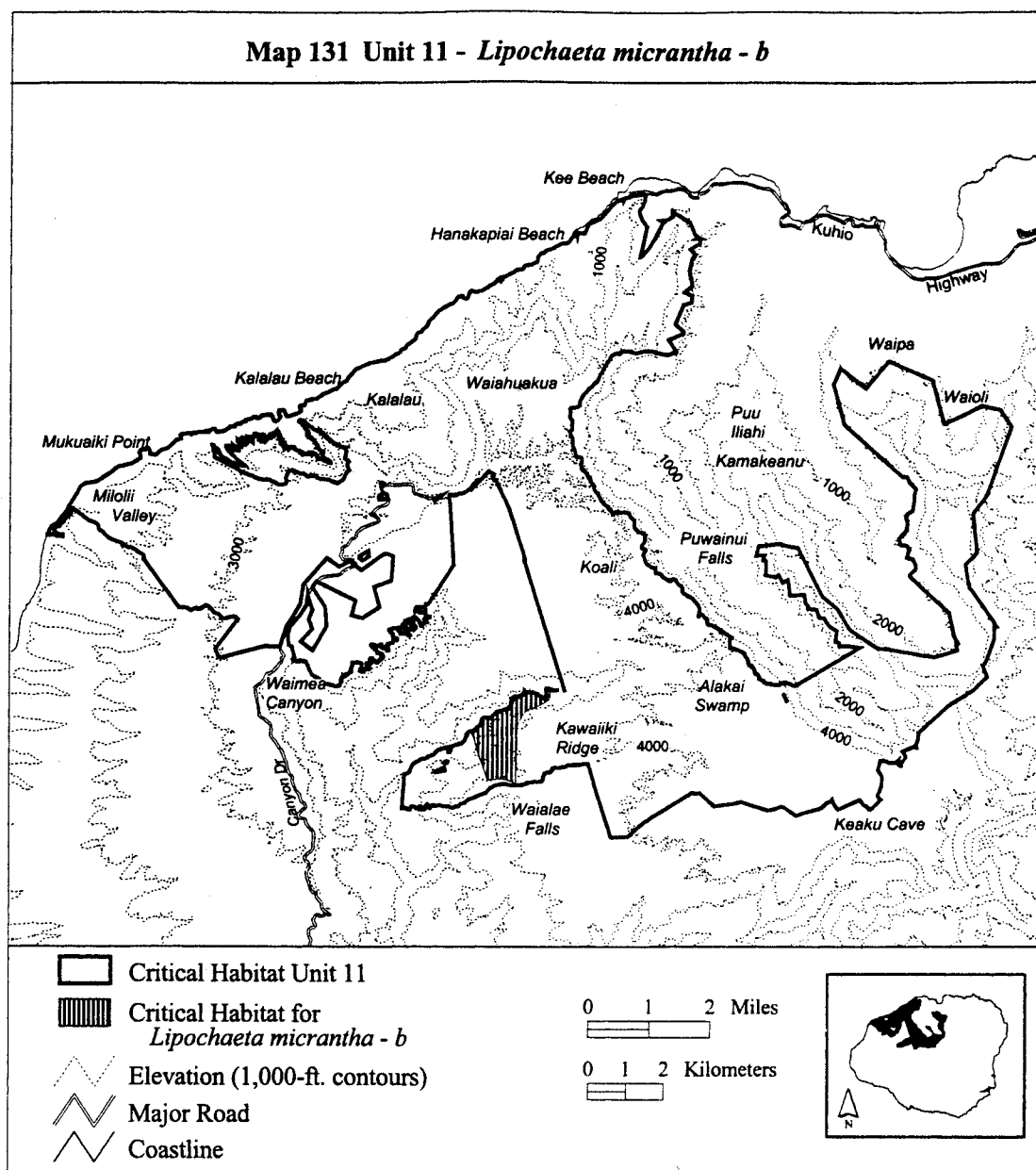
2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576,

2443711; 436597, 2443714; 436611,
2443716; 436630, 2443718; 436644,
2443720; 436655, 2443724; 436666,
2443731; 436678, 2443742; 436697,
2443756; 436708, 2443763; 436726,
2443769; 436745, 2443772; 436758,
2443775; 436771, 2443776; 436788,
2443776; 436799, 2443778; 436808,
2443781; 436818, 2443785; 436823,
2443786; 436829, 2443790; 436837,
2443797; 436841, 2443801; 436845,
2443807; 436852, 2443819; 436861,
2443831; 436870, 2443847; 436882,
2443863; 436890, 2443877; 436900,
2443900; 436909, 2443918; 436968,
2443955; 437037, 2444102; 437049,

2444100; 437067, 2444092; 437076,
2444089; 437106, 2444090; 437119,
2444096; 437128, 2444104; 437133,
2444112; 437137, 2444122; 437144,
2444130; 437156, 2444135; 437169,
2444141; 437183, 2444150; 437191,
2444154; 437202, 2444165; 437212,
2444177; 437228, 2444198; 437239,
2444213; 437245, 2444227; 437254,
2444239; 437263, 2444246; 437278,
2444240; 437294, 2444234; 437310,
2444225; 437332, 2444217; 437351,
2444217; 437370, 2444223; 437391,
2444223; 437412, 2444226; 437428,
2444226; 437445, 2444223; 437462,
2444219; 437482, 2444211; 437497,

2444205; 437541, 2444190; 437563,
2444183; 437578, 2444179; 437593,
2444170; 437610, 2444160; 437624,
2444146; 437636, 2444132; 437651,
2444119; 437671, 2444112; 437691,
2444102; 437703, 2444093; 437722,
2444082; 437732, 2444069; 437749,
2444061; 437758, 2444058; 437768,
2444060; 437780, 2444066; 437810,
2444080; 437821, 2444088; 437831,
2444100; 437833, 2444111; 437835,
2444126; 437833, 2444139; 437827,
2444163; 437822, 2444185; 437820,
2444206; return to starting point.

(B) Note: Map 131 follows:



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

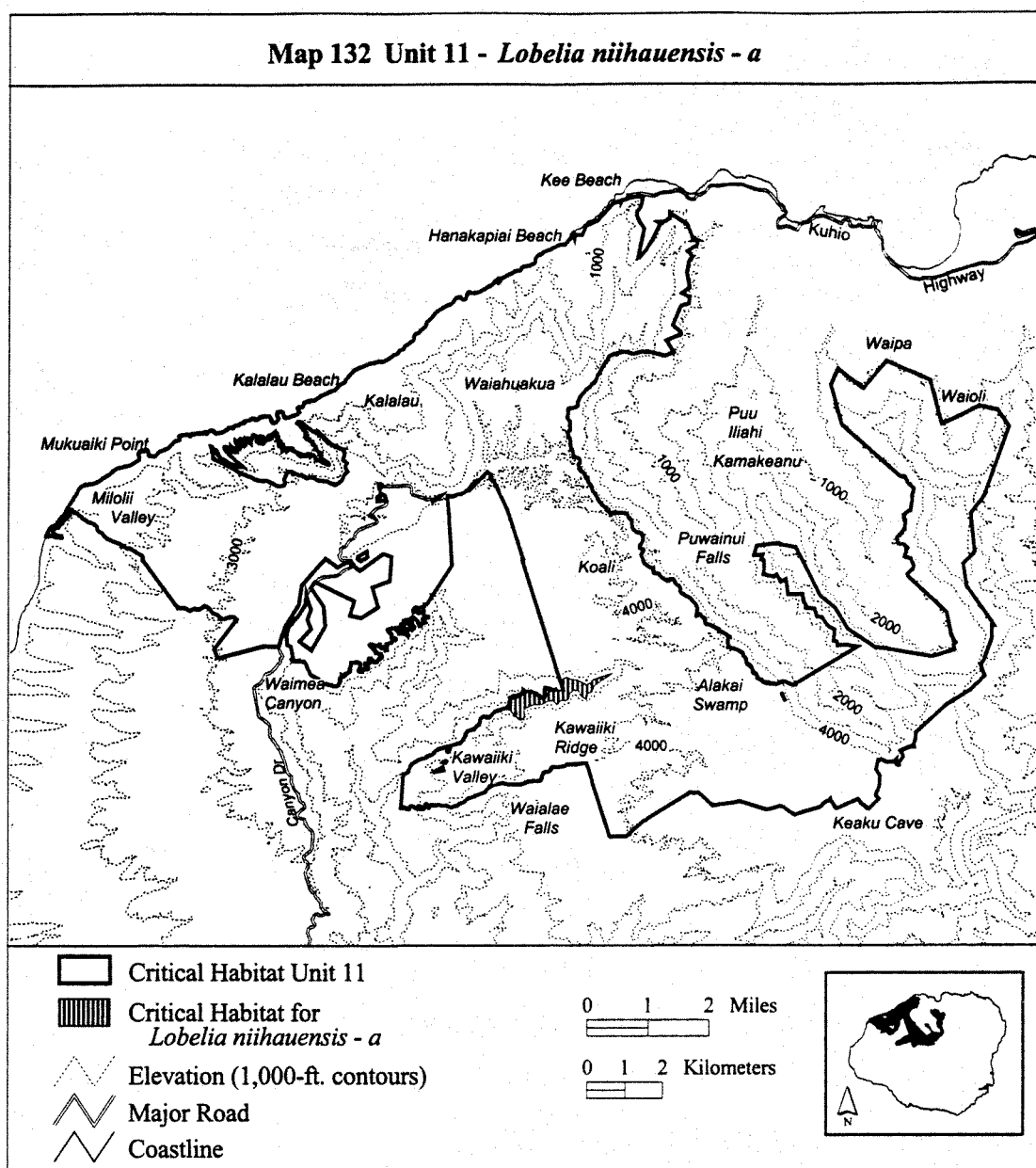
(A) Unit consists of the following 143
boundary points: Start at 438259,

2444449; 438306, 2444552; 438419,
2444604; 438532, 2444542; 438686,
2444532; 438810, 2444470; 438933,
2444398; 439036, 2444449; 439108,
2444521; 439344, 2444614; 439611,
2444696; 439313, 2444501; 439149,
2444388; 439077, 2444223; 438974,
2444162; 438943, 2444018; 438769,
2444131; 438707, 2444254; 438584,
2444254; 438481, 2444152; 438460,
2444028; 438378, 2443977; 438255,
2443977; 438152, 2443864; 438059,
2443987; 437905, 2443957; 437782,
2443885; 437535, 2443874; 437361,
2443813; 437268, 2443741; 437299,
2443546; 437179, 2443460; 436834,
2443794; 436837, 2443797; 436841,
2443801; 436845, 2443807; 436852,
2443819; 436861, 2443831; 436870,
2443847; 436882, 2443863; 436890,
2443877; 436900, 2443900; 436911,

2443923; 436914, 2443936; 436914,
2443948; 436913, 2443962; 436910,
2443981; 436908, 2443995; 436908,
2444013; 436911, 2444027; 436918,
2444040; 436926, 2444047; 436933,
2444055; 436942, 2444065; 436951,
2444073; 436961, 2444084; 436969,
2444094; 436975, 2444098; 436983,
2444102; 436994, 2444107; 437009,
2444108; 437026, 2444105; 437049,
2444100; 437067, 2444092; 437076,
2444089; 437106, 2444090; 437119,
2444096; 437128, 2444104; 437133,
2444112; 437137, 2444122; 437144,
2444130; 437156, 2444135; 437169,
2444141; 437183, 2444150; 437191,
2444154; 437202, 2444165; 437212,
2444177; 437228, 2444198; 437239,
2444213; 437245, 2444227; 437254,
2444239; 437263, 2444246; 437278,
2444240; 437294, 2444234; 437310,
2444225; 437332, 2444217; 437351,
2444217; 437370, 2444223; 437391,
2444223; 437412, 2444226; 437428,
2444226; 437445, 2444223; 437462,
2444219; 437482, 2444211; 437497,

2444205; 437541, 2444190; 437563,
2444183; 437578, 2444179; 437593,
2444170; 437610, 2444160; 437624,
2444146; 437636, 2444132; 437651,
2444119; 437671, 2444112; 437691,
2444102; 437703, 2444093; 437722,
2444082; 437732, 2444069; 437749,
2444061; 437758, 2444058; 437768,
2444060; 437780, 2444066; 437810,
2444080; 437821, 2444088; 437831,
2444100; 437833, 2444111; 437835,
2444126; 437833, 2444139; 437827,
2444163; 437822, 2444185; 437820,
2444206; 437818, 2444236; 437824,
2444265; 437828, 2444292; 437836,
2444314; 437843, 2444322; 437854,
2444327; 437871, 2444328; 437887,
2444323; 437909, 2444314; 437933,
2444302; 437960, 2444289; 437984,
2444274; 438007, 2444260; 438028,
2444258; 438048, 2444258; 438072,
2444260; 438087, 2444266; 438109,
2444271; 438133, 2444273; 438164,
2444270; 438196, 2444263; 438335,
2444214; return to starting point.

(B) **Note:** Map 132 follows:



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

(A) Unit consists of the following 117 boundary points: Start at 432783, 2450812; 432645, 2451038; 432384, 2452020; 432426, 2452045; 432733, 2452216; 433075, 2452284; 433587, 2452284; 433211, 2452557; 433337, 2452799; 433777, 2452923; 433907, 2453037; 433997, 2453103; 434388, 2453374; 434591, 2453578; 434851, 2454007; 434988, 2454058; 435043, 2454198; 435247, 2454164; 435227, 2454251; 435315, 2454323; 435507, 2454503; 435959, 2454232; 435835, 2454695; 436208, 2454763; 436490, 2454954; 436731, 2454808; 436705, 2455135; 437089, 2455293; 437180,

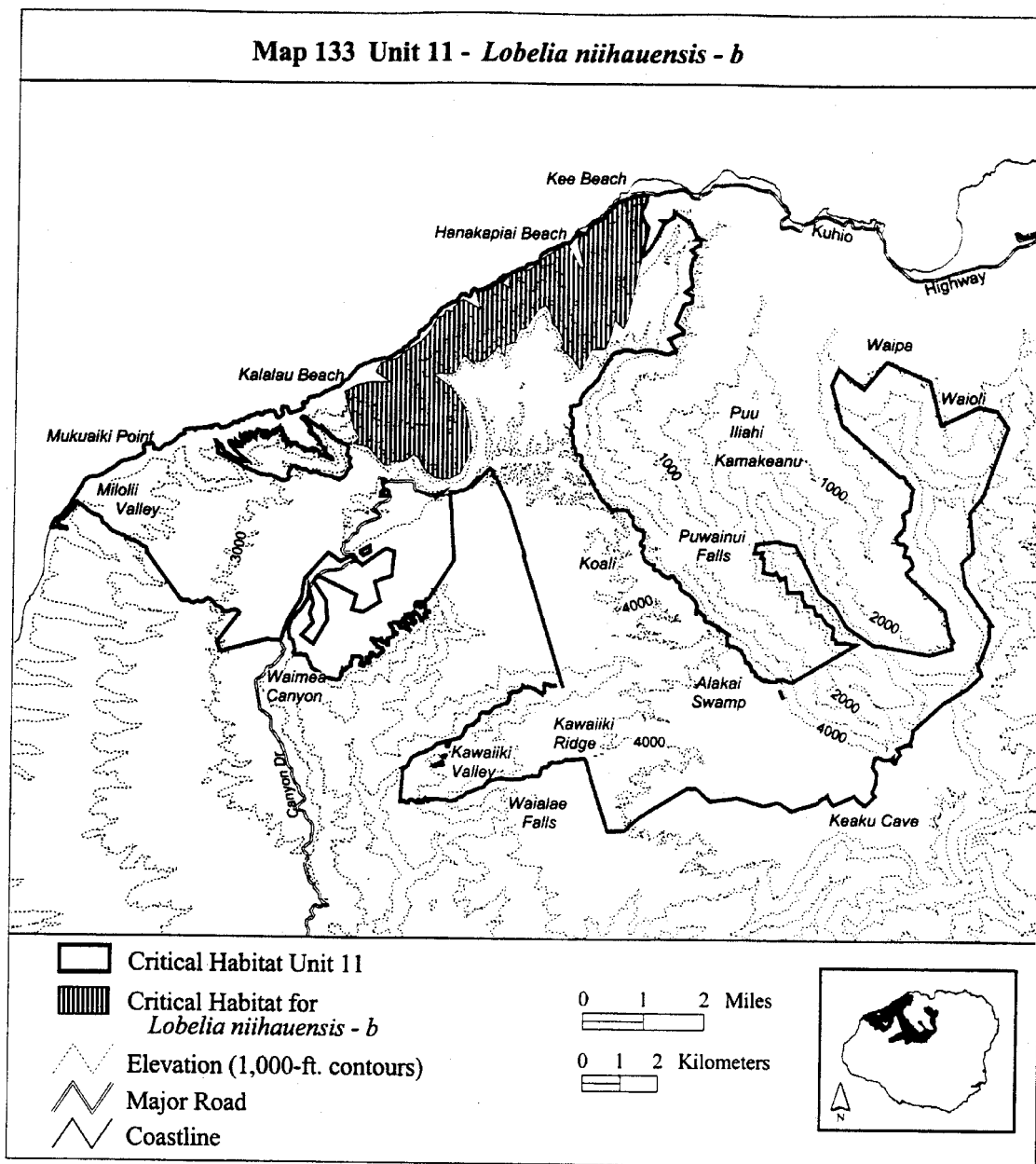
2455248; 437507, 2455462; 437653, 2455627; 438253, 2455970; 438308, 2455956; 438616, 2455368; 438704, 2455385; 438649, 2455642; 438547, 2456015; 438604, 2456274; 438785, 2456263; 438898, 2456511; 439191, 2456650; 439587, 2457085; 439610, 2457109; 439815, 2457168; 439822, 2457153; 439835, 2457174; 439931, 2457201; 439939, 2457196; 439951, 2457207; 440098, 2457249; 440099, 2457249; 440144, 2457261; 440144, 2457262; 440197, 2457277; 440250, 2457274; 440289, 2457294; 440298, 2457298; 440390, 2457272; 440371, 2457184; 440366, 2457125; 440313, 2456964; 440227, 2456872; 440225, 2456766; 440259, 2456708; 440304, 2456601; 440437, 2456434; 439892,

2453948; 439806, 2453749; 439595, 2453953; 439565, 2453982; 439486, 2453621; 439327, 2453203; 439067, 2453192; 438952, 2453169; 438672, 2452605; 438425, 2452972; 438107, 2453238; 438208, 2453351; 438166, 2453511; 438016, 2453768; 437892, 2453870; 437851, 2454115; 437722, 2454364; 437530, 2454243; 437406, 2454051; 437236, 2453746; 437038, 2453682; 436908, 2453374; 436671, 2453283; 436628, 2452965; 436479, 2453283; 436174, 2452934; 436013, 2452829; 435877, 2452897; 435808, 2452795; 435552, 2453013; 435360, 2452572; 435224, 2452516; 435055, 2452516; 434958, 2452552; 434761, 2452505; 435236, 2452144; 435569, 2451669; 435740, 2451054; 435774,

2450474; 435501, 2449893; 435193,
2449723; 434817, 2449757; 434510,
2449996; 434373, 2450269; 434241,

2450382; 433992, 2450213; 433632,
2450160; 433584, 2450069; 433449,

2450088; 433020, 2450563; 432625,
2450654; return to starting point.
(B) Note: Map 133 follows:



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

(A) Unit consists of the following 166 boundary points: Start at 427069, 2447857; 427386, 2447885; 427526, 2447931; 427834, 2447978; 427862, 2448071; 428021, 2448192; 427974, 2448332; 427853, 2448416; 427937, 2448603; 427862, 2448724; 428021, 2448910; 428207, 2449050; 427853, 2449237; 427778, 2449386; 428095, 2449358; 428179, 2449442; 428300, 2449311; 428534, 2449218; 428860, 2449237; 429131, 2449246; 429532,

2449432; 429765, 2449516; 429970, 2449563; 430036, 2449609; 429812, 2449908; 430269, 2449740; 430316, 2449740; 430365, 2449716; 430348, 2449666; 430355, 2449641; 430354, 2449622; 430346, 2449596; 430331, 2449565; 430320, 2449553; 430313, 2449532; 430312, 2449517; 430307, 2449482; 430318, 2449477; 430335, 2449474; 430349, 2449466; 430355, 2449451; 430369, 2449433; 430418, 2449395; 430437, 2449371; 430430, 2449364; 430451, 2449363; 430463, 2449355; 430474, 2449342; 430485,

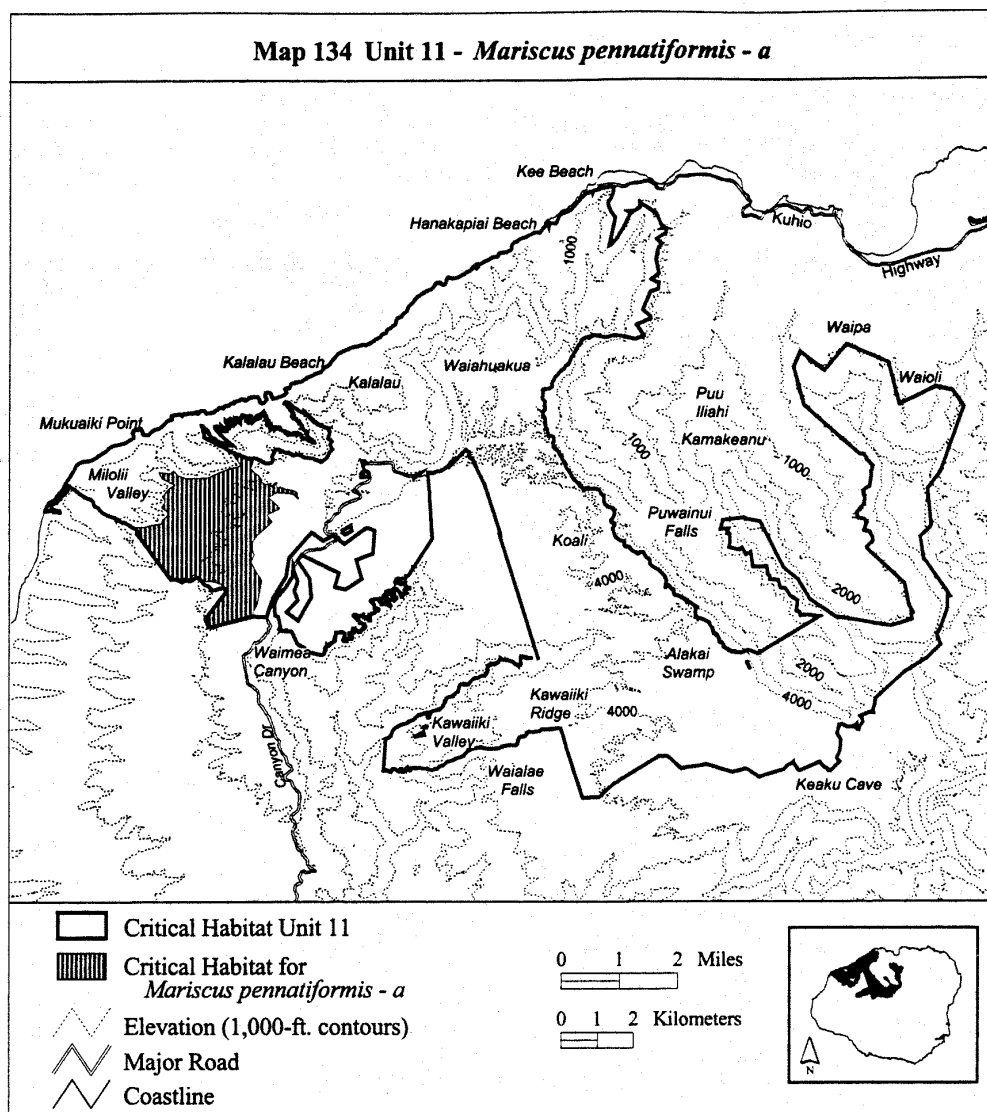
2449333; 430527, 2449321; 430533, 2449310; 430545, 2449277; 430559, 2449254; 430604, 2449229; 430616, 2449214; 430623, 2449194; 430623, 2449173; 430616, 2449156; 430619, 2449138; 430629, 2449119; 430643, 2449106; 430677, 2449084; 430699, 2449074; 430717, 2449071; 430748, 2449070; 430773, 2449073; 430799, 2449081; 430825, 2449080; 430875, 2449032; 430881, 2449027; 430905, 2449022; 430921, 2449029; 430944, 2449045; 430958, 2449061; 430967, 2449077; 430984, 2449094; 431006,

2449097; 431020, 2449089; 431028,
2449064; 431024, 2449005; 431035,
2448975; 431050, 2448960; 431066,
2448956; 431086, 2448957; 431093,
2448962; 431116, 2448991; 431124,
2448994; 431134, 2448988; 431138,
2448981; 431147, 2448955; 431158,
2448950; 431170, 2448954; 431195,
2448966; 431208, 2448969; 431223,
2448964; 431228, 2448960; 431275,
2448914; 431290, 2448911; 431310,
2448912; 431339, 2448927; 431358,
2448923; 431376, 2448914; 431407,
2448903; 431463, 2448902; 431473,
2448899; 431479, 2448891; 431501,
2448872; 431538, 2448867; 431545,

2448867; 431567, 2448859; 431580,
2448844; 431596, 2448824; 431611,
2448789; 431609, 2448764; 431601,
2448750; 431600, 2448733; 431627,
2448682; 431633, 2448663; 431482,
2448789; 431043, 2448845; 430810,
2448705; 431043, 2448490; 431118,
2448378; 430764, 2448220; 430903,
2448015; 430680, 2447800; 430512,
2447661; 430362, 2447493; 430353,
2447260; 430418, 2447101; 430325,
2446914; 430456, 2446653; 430624,
2446420; 430540, 2446010; 430484,
2445730; 430381, 2445543; 430396,
2445420; 429224, 2445116; 429062,
2445354; 429654, 2446125; 429591,

2446167; 429485, 2446305; 429263,
2446389; 429094, 2446389; 428972,
2446421; 428904, 2446474; 428793,
2446542; 428740, 2446564; 428655,
2446474; 428602, 2446447; 428476,
2446463; 428396, 2446447; 428285,
2446458; 428116, 2446474; 428047,
2446484; 427185, 2447661; 427161,
2447669; 427157, 2447676; 427157,
2447711; 427175, 2447754; 427176,
2447775; 427171, 2447800; 427160,
2447815; 427124, 2447837; 427084,
2447847; 427070, 2447853; return to
starting point.

(B) Note: Map 134 follows:



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

(A) Unit consists of the following 198
boundary points: Start at 431912,
2448420; 431913, 2448409; 431890,

2448340; 431898, 2448263; 431898,
2448254; 431900, 2448247; 431922,
2448193; 431934, 2448181; 431929,
2448176; 431931, 2448173; 431918,
2448148; 431909, 2448152; 431904,
2448146; 431867, 2448164; 431806,

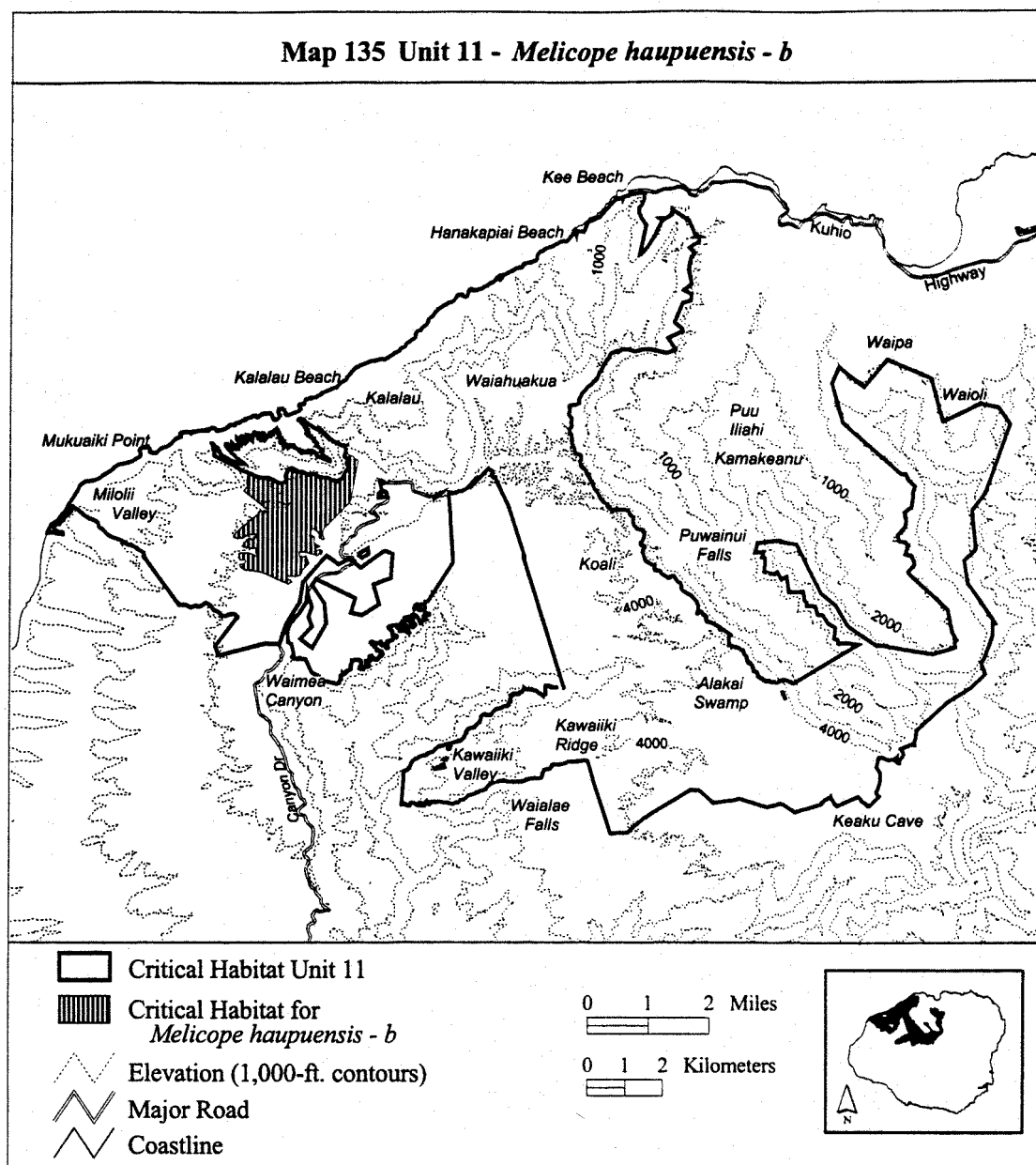
2448187; 431806, 2448233; 431806,
2448249; 431788, 2448341; 431653,
2448421; 431645, 2448424; 431625,
2448424; 431570, 2448341; 431570,
2448273; 431668, 2448210; 431668,
2448205; 431682, 2448198; 431669,

2448173; 431667, 2448147; 431676,
2448133; 431662, 2448106; 431657,
2448061; 431812, 2447974; 431789,
2447963; 431806, 2447957; 431745,
2447927; 431713, 2447927; 431682,
2447912; 431713, 2447862; 431862,
2447874; 431900, 2447812; 431862,
2447756; 431800, 2447769; 431750,
2447725; 431607, 2447769; 431427,
2447825; 431371, 2447818; 431271,
2447819; 431284, 2447719; 431408,
2447694; 431452, 2447725; 431526,
2447520; 431396, 2447383; 431340,
2447315; 431327, 2447259; 431290,
2447215; 431197, 2447172; 430948,
2447197; 430948, 2447135; 431060,
2447066; 431085, 2447029; 431035,
2447023; 431016, 2446985; 430736,
2447091; 430493, 2447209; 430388,
2447253; 430325, 2447290; 430027,
2447346; 429877, 2447340; 429722,
2447421; 429697, 2447495; 429821,
2447520; 429859, 2447576; 429834,
2447620; 429772, 2447626; 429728,
2447607; 429678, 2447645; 429660,
2447676; 429691, 2447725; 429672,
2447775; 429716, 2447806; 429741,
2447788; 429797, 2447806; 429965,
2447794; 430039, 2447769; 430126,
2447725; 430176, 2447719; 430176,

2447750; 430120, 2447788; 430120,
2447931; 430008, 2447931; 429865,
2447956; 429803, 2447962; 429790,
2448012; 429853, 2448080; 429896,
2448155; 429958, 2448179; 430052,
2448148; 430139, 2448211; 430139,
2448298; 430033, 2448304; 429865,
2448242; 429778, 2448186; 429548,
2448204; 429548, 2448279; 429653,
2448385; 429716, 2448422; 429772,
2448497; 429877, 2448559; 430014,
2448702; 430108, 2448758; 430151,
2448795; 430195, 2448888; 430257,
2448913; 430338, 2448876; 430400,
2448882; 430425, 2448913; 430420,
2448957; 429806, 2449454; 429896,
2449552; 429879, 2449729; 429905,
2449923; 429915, 2449923; 429944,
2449910; 429968, 2449904; 430016,
2449884; 430068, 2449856; 430172,
2449815; 430207, 2449804; 430261,
2449795; 430317, 2449781; 430340,
2449778; 430365, 2449787; 430392,
2449798; 430408, 2449802; 430410,
2449802; 430406, 2449796; 430471,
2449787; 430527, 2449754; 430583,
2449736; 430635, 2449693; 430696,
2449656; 430720, 2449646; 430819,
2449646; 430899, 2449674; 430918,
2449717; 430904, 2449834; 430927,

2449905; 430955, 2449985; 430993,
2450032; 431068, 2450041; 431153,
2450008; 431238, 2449970; 431285,
2449942; 431360, 2449956; 431449,
2449886; 431497, 2449867; 431605,
2449895; 431657, 2449890; 431699,
2449876; 431765, 2449810; 431864,
2449801; 431981, 2449792; 432047,
2449787; 432113, 2449740; 432217,
2449712; 432259, 2449679; 432344,
2449744; 432419, 2449806; 432471,
2449904; 432504, 2449961; 432579,
2450036; 432551, 2450083; 432523,
2450130; 432523, 2450182; 432565,
2450262; 432523, 2450304; 432475,
2450313; 432452, 2450337; 432461,
2450375; 432480, 2450426; 432490,
2450478; 432501, 2450529; 432504,
2450523; 432515, 2450503; 432528,
2450468; 432550, 2450412; 432573,
2450385; 432591, 2450373; 432650,
2450343; 432692, 2450330; 432709,
2450317; 432733, 2450275; 432745,
2450272; 432752, 2450270; 432768,
2450266; 432797, 2450260; 432826,
2450224; 432630, 2449144; return to
starting point.

(B) **Note:** Map 135 follows:

Map 135 Unit 11 - *Melicope haupuensis* - b

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

(A) Unit consists of the following 184 boundary points: Start at 438165,

2444743; 438359, 2444869; 438336, 2444973; 438382, 2445065; 438532, 2444973; 438590, 2444869; 438634, 2444680; 438740, 2444673; 438913, 2444615; 438993, 2444767; 439086, 2444765; 439144, 2444811; 439421, 2444984; 439559, 2444972; 439524, 2445099; 439594, 2445249; 439686, 2445238; 439755, 2445318; 439836, 2445261; 439940, 2445249; 440032, 2445238; 440067, 2445203; 440101, 2445203; 440136, 2445145; 440263, 2445099; 440286, 2445007; 440344, 2445030; 440424, 2445041; 440459,

2445111; 440540, 2445099; 440586, 2445099; 440586, 2445157; 440644, 2445203; 440713, 2445180; 440840, 2445191; 440886, 2445099; 440886, 2444984; 440828, 2444891; 440840, 2444765; 440932, 2444834; 441013, 2444903; 441117, 2444903; 441105, 2444799; 440955, 2444707; 440851, 2444638; 440713, 2444649; 440655, 2444857; 440551, 2444788; 440551, 2444718; 440378, 2444661; 440147, 2444661; 440044, 2444788; 440044, 2444730; 439997, 2444696; 440032, 2444615; 439997, 2444534; 439905, 2444511; 439790, 2444361; 439663, 2444430; 439559, 2444361; 439547, 2444292; 439467, 2444280; 439386, 2444131; 439294, 2444142; 439271, 2444038; 439086, 2443981; 439074,

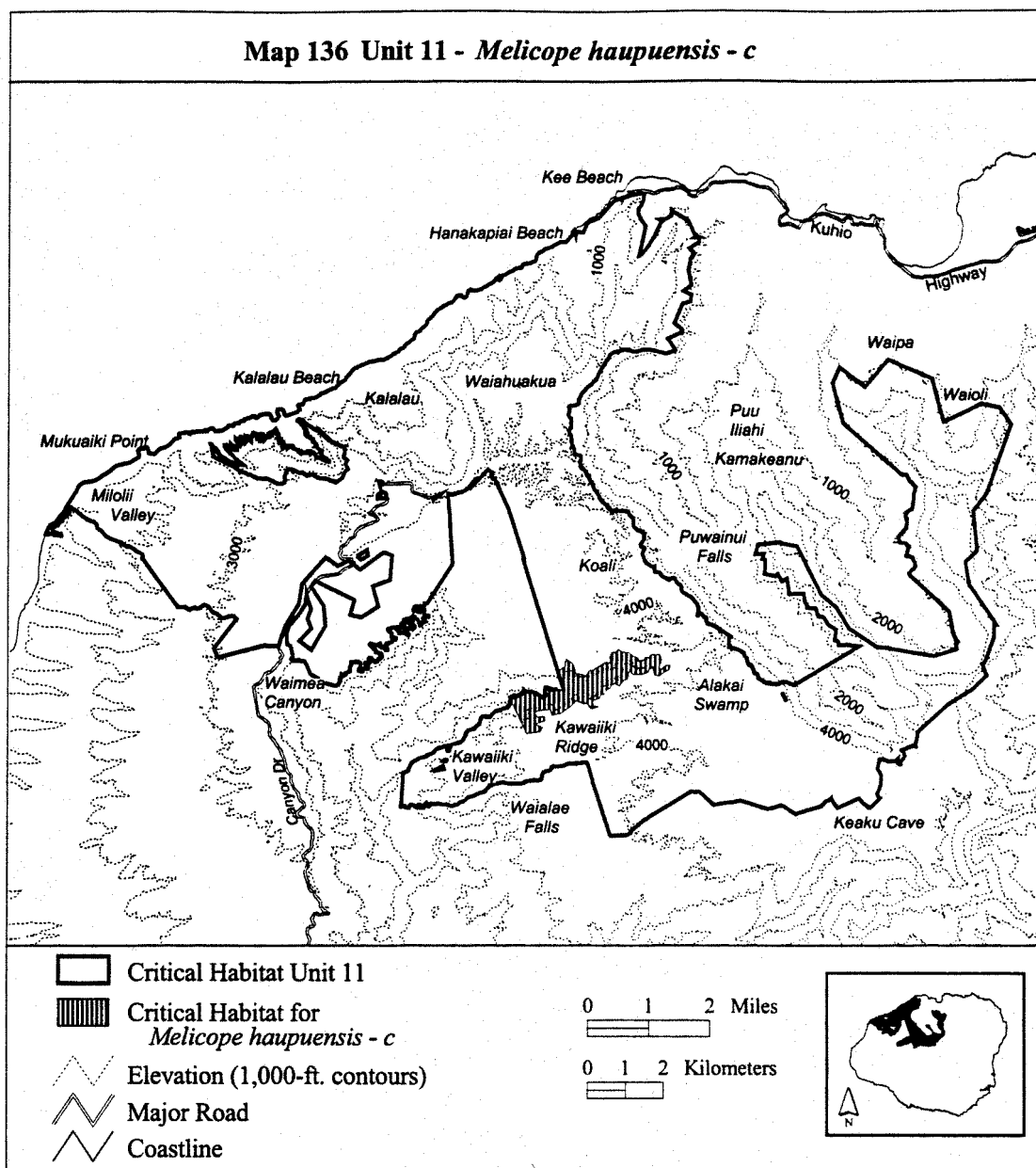
2443935; 439109, 2443831; 439224, 2443831; 439109, 2443762; 439040, 2443762; 438924, 2443912; 438855, 2443877; 438659, 2443969; 438486, 2443808; 438255, 2443635; 438001, 2443600; 437978, 2443727; 437863, 2443727; 437678, 2443716; 437551, 2443670; 437632, 2443531; 437805, 2443543; 437817, 2443450; 437551, 2443358; 437759, 2443266; 437701, 2443150; 437332, 2443104; 436908, 2444000; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067,

2444092; 437076, 2444089; 437106,
2444090; 437119, 2444096; 437128,
2444104; 437133, 2444112; 437137,
2444122; 437144, 2444130; 437156,
2444135; 437169, 2444141; 437183,
2444150; 437191, 2444154; 437202,
2444165; 437212, 2444177; 437228,
2444198; 437239, 2444213; 437245,
2444227; 437254, 2444239; 437263,
2444246; 437278, 2444240; 437294,
2444234; 437310, 2444225; 437332,
2444217; 437351, 2444217; 437370,
2444223; 437391, 2444223; 437412,
2444226; 437428, 2444226; 437445,

2444223; 437462, 2444219; 437482,
2444211; 437497, 2444205; 437541,
2444190; 437563, 2444183; 437578,
2444179; 437593, 2444170; 437610,
2444160; 437624, 2444146; 437636,
2444132; 437651, 2444119; 437671,
2444112; 437691, 2444102; 437703,
2444093; 437722, 2444082; 437732,
2444069; 437749, 2444061; 437758,
2444058; 437768, 2444060; 437780,
2444066; 437810, 2444080; 437821,
2444088; 437831, 2444100; 437833,
2444111; 437835, 2444126; 437833,
2444139; 437827, 2444163; 437822,

2444185; 437820, 2444206; 437818,
2444236; 437824, 2444265; 437828,
2444292; 437836, 2444314; 437843,
2444322; 437854, 2444327; 437871,
2444328; 437887, 2444323; 437909,
2444314; 437933, 2444302; 437960,
2444289; 437984, 2444274; 438007,
2444260; 438028, 2444258; 438048,
2444258; 438072, 2444260; 438087,
2444266; 438109, 2444271; 438133,
2444273; 438164, 2444270; 438196,
2444263; 438335, 2444214; return to
starting point.

(B) Note: Map 136 follows:



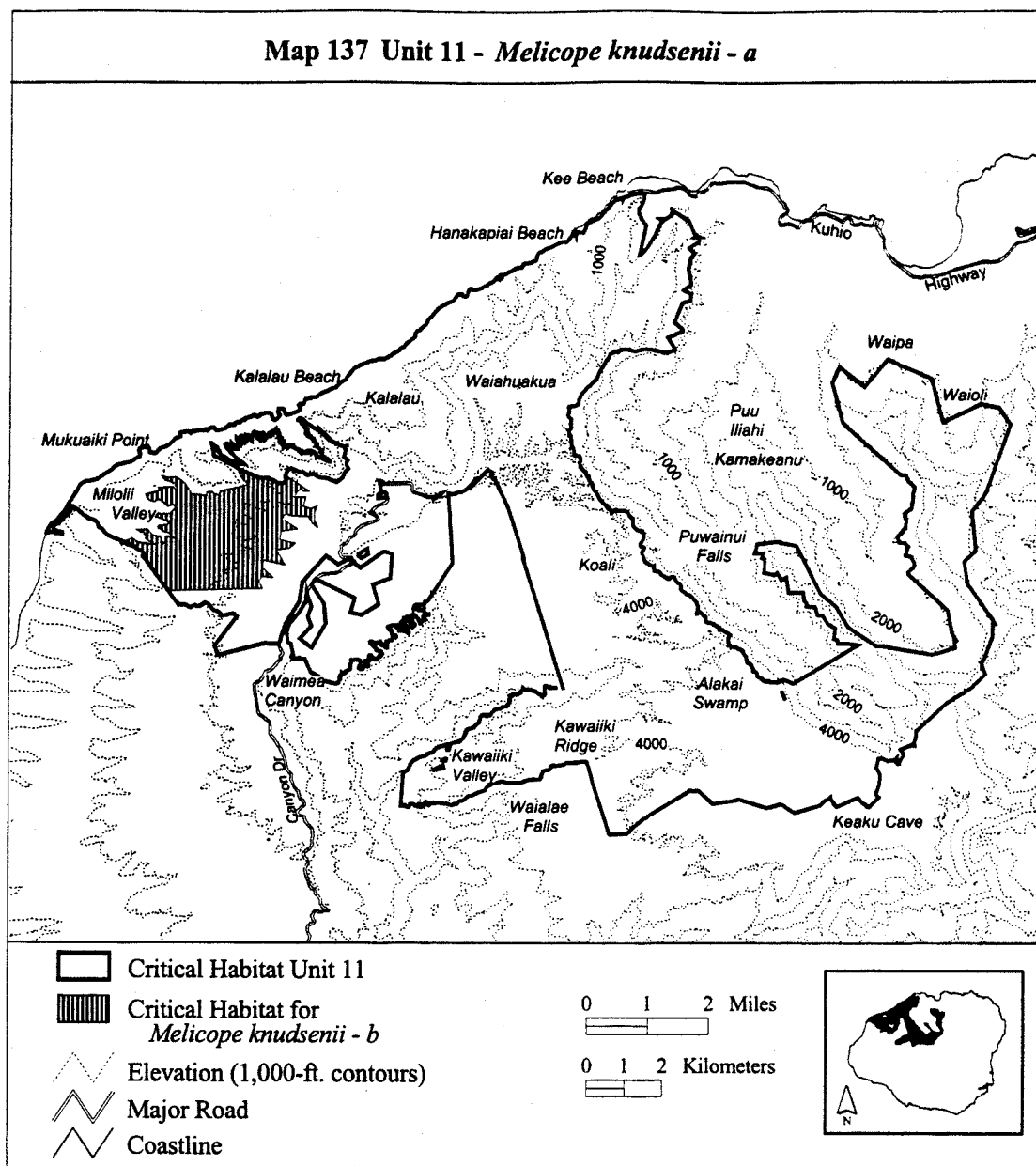
(cxxxvii) Kauai 11—*Melicope knudsenii*—a (966 ha; 2,388 ac)

(A) Unit consists of the following 146 boundary points: Start at 431708, 2448615; 431773, 2448514; 431767, 2448519; 431773, 2448510; 431773, 2448476; 431619, 2448589; 431507, 2448763; 431066, 2448773; 430954, 2448845; 430861, 2448773; 430913, 2448650; 431230, 2448425; 430810, 2448364; 430759, 2448149; 431199, 2448046; 431036, 2447923; 430687, 2447883; 430923, 2447483; 430339, 2447606; 430319, 2447401; 430605, 2447145; 430308, 2447176; 430237, 2447043; 430329, 2446859; 427820, 2446794; 427748, 2446893; 427778, 2446910; 427739, 2446905; 427185, 2447661; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 426997, 2447892; 426981, 2447902; 426958, 2447923; 426944, 2447941; 426907, 2447965; 426847,

2447992; 426819, 2447998; 426798, 2448010; 426758, 2448005; 426737, 2448009; 426722, 2448015; 426635, 2448077; 426856, 2448180; 427000, 2448088; 427461, 2448016; 427235, 2448159; 427184, 2448333; 427000, 2448395; 427287, 2448415; 427389, 2448282; 427604, 2448221; 427686, 2448036; 427778, 2448067; 427737, 2448159; 427788, 2448241; 427963, 2448180; 427829, 2448333; 427707, 2448354; 427543, 2448487; 427881, 2448569; 427748, 2448661; 427512, 2448743; 427287, 2448774; 427287, 2448815; 427870, 2448845; 428045, 2449030; 427942, 2449081; 427809, 2449019; 427604, 2449193; 427502, 2449193; 427471, 2449152; 427276, 2449183; 427215, 2449347; 427635, 2449459; 427553, 2449521; 427932, 2449552; 428065, 2449429; 427993, 2449644; 427727, 2449726; 427635, 2449838; 427819, 2449787; 428014, 2449818; 428270, 2449644; 428424, 2449357; 428823, 2449316; 428833, 2449398; 428966, 2449439; 429038, 2449357; 429171, 2449326; 429182,

2449429; 429940, 2449613; 429735, 2449817; 429642, 2450043; 429648, 2450043; 429717, 2449996; 429751, 2449978; 429791, 2449963; 429830, 2449956; 429860, 2449947; 429944, 2449910; 429968, 2449904; 430016, 2449884; 430068, 2449856; 430172, 2449815; 430207, 2449804; 430261, 2449795; 430317, 2449781; 430340, 2449778; 430365, 2449787; 430392, 2449798; 430408, 2449802; 430410, 2449802; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430913, 2449863; 431548, 2449428; 431415, 2449428; 431292, 2449490; 431138, 2449285; 431445, 2449275; 431384, 2449039; 431589, 2448957; 431763, 2449039; 431681, 2448855; 431681, 2448656; 431678, 2448658; 431680, 2448656; 431681, 2448656; return to starting point.

(B) **Note:** Map 137 follows:



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

(A) Unit consists of the following 305 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704,

2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100,

2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597,

2443714; 436611, 2443716; 436630,
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2443742; 436697, 2443756; 436708,
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2443772; 436758, 2443775; 436771,
2443776; 436788, 2443776; 436799,
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2443981; 436908, 2443994; 436945,
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2444105; 437049, 2444100; 437067,
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2444079; 437282, 2444210; 437602,
2444165; 437610, 2444160; 437624,
2444146; 437636, 2444132; 437651,
2444119; 437671, 2444112; 437691,
2444102; 437703, 2444093; 437722,
2444082; 437732, 2444069; 437749,
2444061; 437758, 2444058; 437768,
2444060; 437780, 2444066; 437810,
2444080; 437821, 2444088; 437831,
2444100; 437833, 2444111; 437835,
2444126; 437833, 2444139; 437827,
2444163; 437822, 2444185; 437820,
2444206; 437818, 2444236; 437824,
2444265; 437828, 2444292; 437836,

2444314; 437843, 2444322; 437854,
2444327; 437871, 2444328; 437887,
2444323; 437909, 2444314; 437933,
2444302; 437960, 2444289; 437984,
2444274; 438007, 2444260; 438028,
2444258; 438048, 2444258; 438072,
2444260; 438087, 2444266; 438109,
2444271; 438133, 2444273; 438164,
2444270; 438196, 2444263; 438335,
2444214; 438237, 2444518; 438277,
2444604; 438343, 2444567; 438362,
2444642; 438465, 2444708; 438550,
2444576; 438803, 2444586; 438897,
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2444614; 439282, 2444689; 439733,
2444745; 439696, 2444914; 439789,
2444951; 439818, 2444801; 439799,
2444707; 439423, 2444538; 439433,
2444482; 439226, 2444407; 439273,
2444294; 439104, 2444248; 439066,
2444135; 439019, 2444210; 439010,
2444003; 438878, 2443975; 438832,
2444088; 438747, 2444060; 438719,
2444201; 438597, 2444201; 438493,
2444097; 438503, 2444013; 438362,
2443929; 438277, 2443947; 438174,
2443797; 438080, 2443797; 438052,
2443929; 437695, 2443844; 437348,
2443788; 437319, 2443656; 437357,
2443572; 437263, 2443516; 437188,
2443328; 436916, 2443356; 436549,
2443281; 436634, 2442999; 436277,
2442859; 436221, 2442755; 436709,
2442793; 436991, 2442586; 436944,
2442549; 436690, 2442502; 437019,
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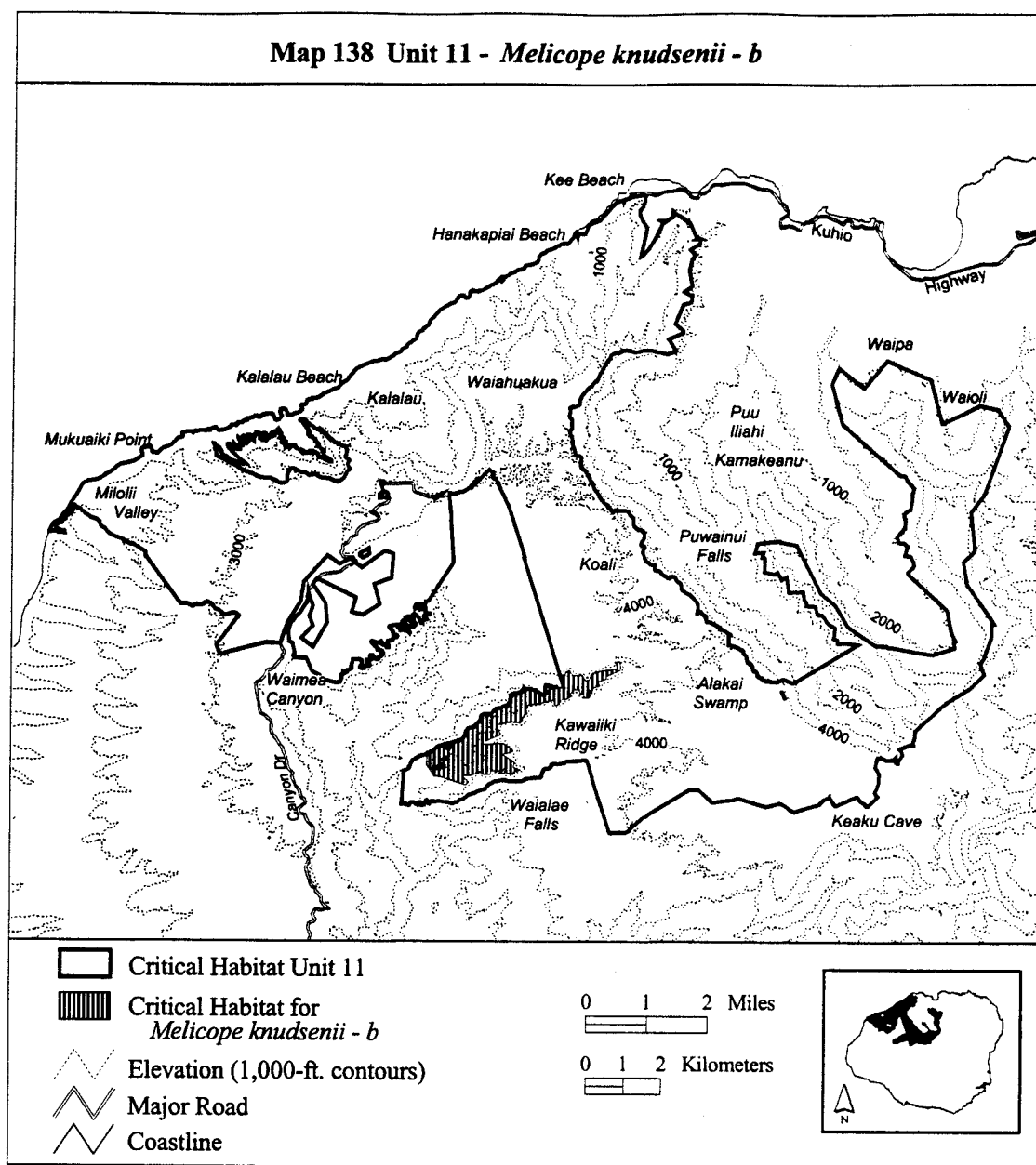
2442117; 436681, 2441995; 436624,
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2442061; 434661, 2442239; 434702,
2442503; 434713, 2442515; 434725,
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2442542; 434775, 2442551; 434800,
2442556; 434822, 2442562; 434842,
2442574; 434862, 2442596; 434883,
2442613; 434896, 2442626; 434916,
2442647; 434934, 2442668; 434949,
2442681; 434972, 2442699; 434986,
2442705; 434997, 2442708; 435006,
2442713; 435012, 2442717; 435026,
2442719; 435039, 2442722; 435061,
2442727; 435081, 2442733; 435100,
2442739; 435119, 2442747; 435135,
2442754; 435150, 2442764; 435164,
2442771; 435184, 2442774; 435201,
2442777; 435219, 2442778; 435237,
2442782; 435251, 2442783; 435228,
2442762; 435237, 2442643; 435284,
2442631; return to starting point.

(B) Excluding 2 areas:

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

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

(C) **Note:** Map 138 follows:



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

(A) Unit consists of the following 124 boundary points: Start at 438204, 2444622; 438280, 2444652; 438296, 2444737; 438496, 2444768; 438565, 2444637; 438888, 2444575; 438934, 2444498; 438996, 2444683; 439180, 2444675; 439288, 2444760; 439465, 2444837; 439527, 2444829; 439673, 2444821; 439696, 2445067; 440050, 2445044; 440219, 2444944; 440280, 2444844; 440419, 2444844; 440265, 2444783; 440142, 2444906; 439957, 2444952; 439834, 2444913; 439896, 2444760; 439850, 2444644; 439780, 2444637; 439773, 2444483; 439665, 2444560; 439488, 2444521; 439504, 2444445; 439457, 2444368; 439319,

2444360; 439334, 2444283; 439319, 2444199; 439211, 2444214; 439150, 2444076; 439050, 2444122; 439011, 2443953; 438765, 2444014; 438696, 2444099; 438596, 2444129; 438496, 2443945; 438296, 2443883; 438296, 2443791; 438080, 2443699; 438011, 2443868; 437404, 2443753; 437365, 2443676; 437457, 2443530; 437342, 2443476; 437133, 2444113; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370,

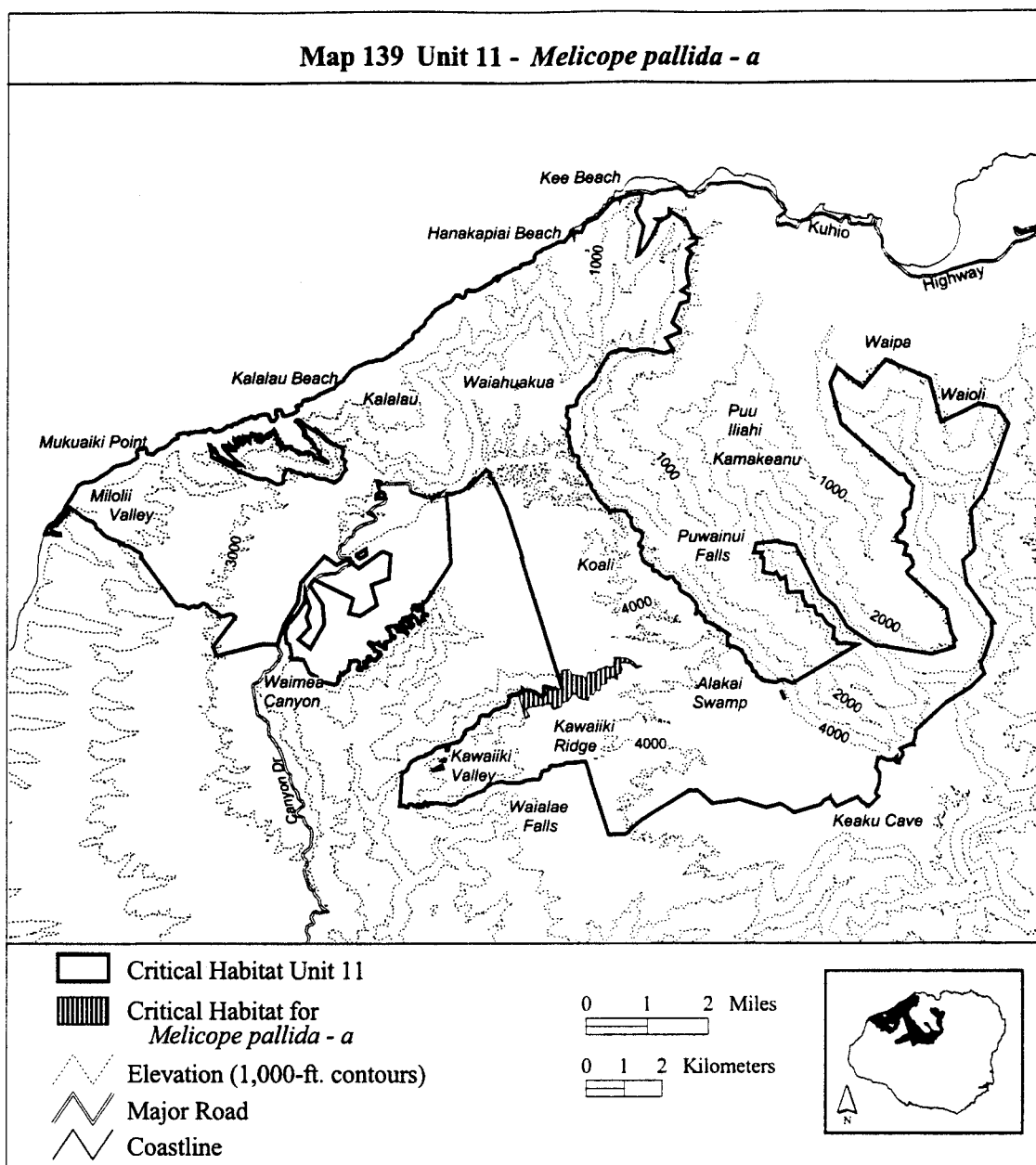
2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691, 2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843,

2444322; 437854, 2444327; 437871,
2444328; 437887, 2444323; 437909,
2444314; 437933, 2444302; 437960,
2444289; 437984, 2444274; 438007,

2444260; 438028, 2444258; 438048,
2444258; 438072, 2444260; 438087,
2444266; 438109, 2444271; 438133,
2444273; 438164, 2444270; 438196,

2444263; 438335, 2444214; return to
starting point.

(B) Note: Map 139 follows:



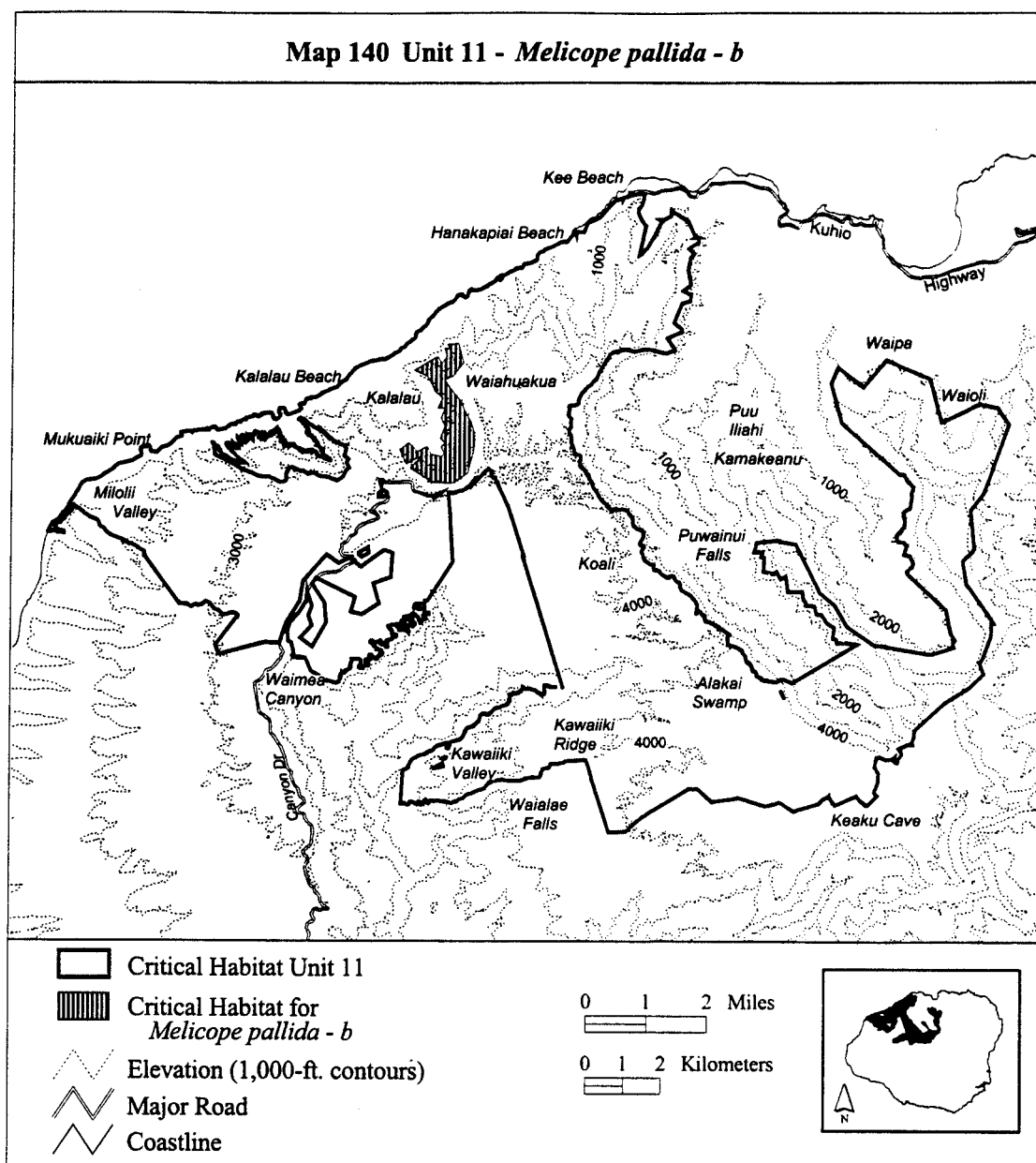
(cxl) Kauai 11—*Melicope pallida*—b
(310 ha; 765 ac)

(A) Unit consists of the following 47
boundary points: Start at 433925,
2450539; 433966, 2450539; 434164,
2450698; 434310, 2450565; 434385,
2450461; 434654, 2450605; 434760,
2450393; 435051, 2450327; 435117,
2450433; 435011, 2450592; 435131,

2450697; 434998, 2450816; 435131,
2451147; 435011, 2451359; 435131,
2451610; 435063, 2451636; 434945,
2451623; 435064, 2451901; 434850,
2452083; 434786, 2452232; 434648,
2452469; 434310, 2452642; 434932,
2452999; 435038, 2452813; 435170,
2452999; 435117, 2453223; 435236,
2453223; 435183, 2453329; 435475,
2453355; 435607, 2452840; 435316,

2452470; 435104, 2452390; 435316,
2452086; 435541, 2451835; 435660,
2451544; 435806, 2451279; 435898,
2450975; 435912, 2450671; 435845,
2450287; 435740, 2449890; 435316,
2449626; 434786, 2449653; 434588,
2449785; 434217, 2450036; 434486,
2450322; 434391, 2450299; 434111,
2450143; return to starting point.

(B) Note: Map 140 follows:



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

(A) Unit consists of the following 761 boundary points: Start at 439647,

2455689; 440015, 2454370; 439805, 2453982; 439692, 2454086; 439594, 2454176; 439465, 2453901; 439303, 2453287; 438947, 2453255; 438672, 2452689; 438477, 2452980; 438186, 2453562; 437975, 2454047; 437668, 2454436; 437376, 2453983; 437020, 2453611; 436583, 2453158; 436535, 2453369; 436065, 2452851; 435839, 2452981; 435822, 2452868; 435612, 2453110; 435207, 2452544; 434851, 2452609; 434738, 2452561; 435013, 2452253; 435466, 2451639; 435709, 2451072; 435677, 2450587; 435580,

2450086; 435337, 2449746; 434851, 2449811; 434462, 2450070; 434268, 2450442; 433702, 2450232; 433459, 2450006; 433167, 2450588; 432698, 2450653; 432811, 2450814; 432649, 2451267; 432536, 2450960; 432277, 2450831; 431872, 2451009; 431914, 2450942; 431912, 2450944; 431844, 2451002; 431798, 2451034; 431748, 2451072; 431700, 2451088; 431641, 2451117; 431591, 2451154; 431525, 2451187; 431489, 2451219; 431446, 2451247; 431433, 2451261; 431373, 2451329; 431370, 2451323; 431360, 2451314; 431351, 2451321; 431337, 2451323; 431318, 2451324; 431304, 2451317; 431293, 2451316; 431287, 2451322; 431281, 2451336; 431277,

2451355; 431264, 2451350; 431245, 2451336; 431233, 2451323; 431242, 2451310; 431267, 2451297; 431294, 2451278; 431312, 2451246; 431348, 2451203; 431384, 2451176; 431402, 2451170; 431407, 2451149; 431415, 2451137; 431428, 2451129; 431432, 2451109; 431442, 2451094; 431457, 2451086; 431456, 2451081; 431450, 2451067; 431455, 2451053; 431467, 2451047; 431486, 2451047; 431488, 2451038; 431482, 2451029; 431481, 2451010; 431487, 2450998; 431505, 2450987; 431504, 2450980; 431486, 2450974; 431476, 2450971; 431456, 2450971; 431449, 2450963; 431452, 2450955; 431457, 2450948; 431476, 2450934; 431497, 2450922; 431502,

2450903; 431509, 2450895; 431530, 2450888; 431555, 2450880; 431580, 2450878; 431577, 2450867; 431580, 2450848; 431591, 2450839; 431606, 2450830; 431626, 2450824; 431655, 2450815; 431653, 2450800; 431650, 2450792; 431645, 2450777; 431653, 2450764; 431671, 2450767; 431665, 2450749; 431661, 2450738; 431675, 2450731; 431689, 2450726; 431698, 2450722; 431699, 2450717; 431702, 2450701; 431710, 2450693; 431720, 2450686; 431733, 2450677; 431733, 2450656; 431729, 2450645; 431735, 2450642; 431736, 2450636; 431739, 2450626; 431752, 2450619; 431763, 2450615; 431769, 2450597; 431786, 2450573; 431798, 2450561; 431822, 2450550; 431829, 2450545; 431845, 2450528; 431860, 2450521; 431873, 2450519; 431885, 2450510; 431899, 2450498; 431900, 2450492; 431891, 2450486; 431874, 2450483; 431852, 2450481; 431839, 2450475; 431835, 2450472; 431841, 2450451; 431856, 2450433; 431874, 2450409; 431900, 2450378; 431933, 2450350; 431949, 2450336; 431983, 2450316; 432009, 2450298; 432026, 2450277; 432049, 2450261; 432065, 2450255; 432065, 2450248; 432065, 2450233; 432072, 2450223; 432081, 2450211; 432076, 2450207; 432058, 2450218; 432042, 2450225; 432024, 2450234; 432006, 2450246; 431989, 2450255; 431968, 2450265; 431949, 2450270; 431917, 2450271; 431900, 2450287; 431882, 2450301; 431864, 2450315; 431840, 2450325; 431808, 2450327; 431770, 2450328; 431762, 2450341; 431752, 2450353; 431730, 2450369; 431726, 2450392; 431720, 2450403; 431709, 2450416; 431692, 2450418; 431691, 2450429; 431687, 2450439; 431677, 2450453; 431664, 2450465; 431652, 2450468; 431635, 2450468; 431615, 2450468; 431608, 2450462; 431598, 2450460; 431597, 2450472; 431596, 2450476; 431591, 2450488; 431585, 2450499; 431576, 2450494; 431566, 2450502; 431549, 2450505; 431537, 2450505; 431516, 2450496; 431511, 2450486; 431505, 2450470; 431499, 2450454; 431488, 2450449; 431479, 2450454; 431467, 2450462; 431459, 2450467; 431443, 2450470; 431425, 2450469; 431409, 2450466; 431404, 2450459; 431392, 2450462; 431381, 2450464; 431372, 2450459; 431358, 2450458; 431339, 2450460; 431334, 2450462; 431330, 2450466; 431328, 2450478; 431323, 2450490; 431313, 2450497; 431303, 2450494; 431299, 2450488; 431292, 2450476; 431283, 2450480; 431281, 2450486; 431278, 2450497; 431272, 2450502; 431263, 2450505; 431263, 2450516; 431258, 2450530; 431249, 2450545; 431236,

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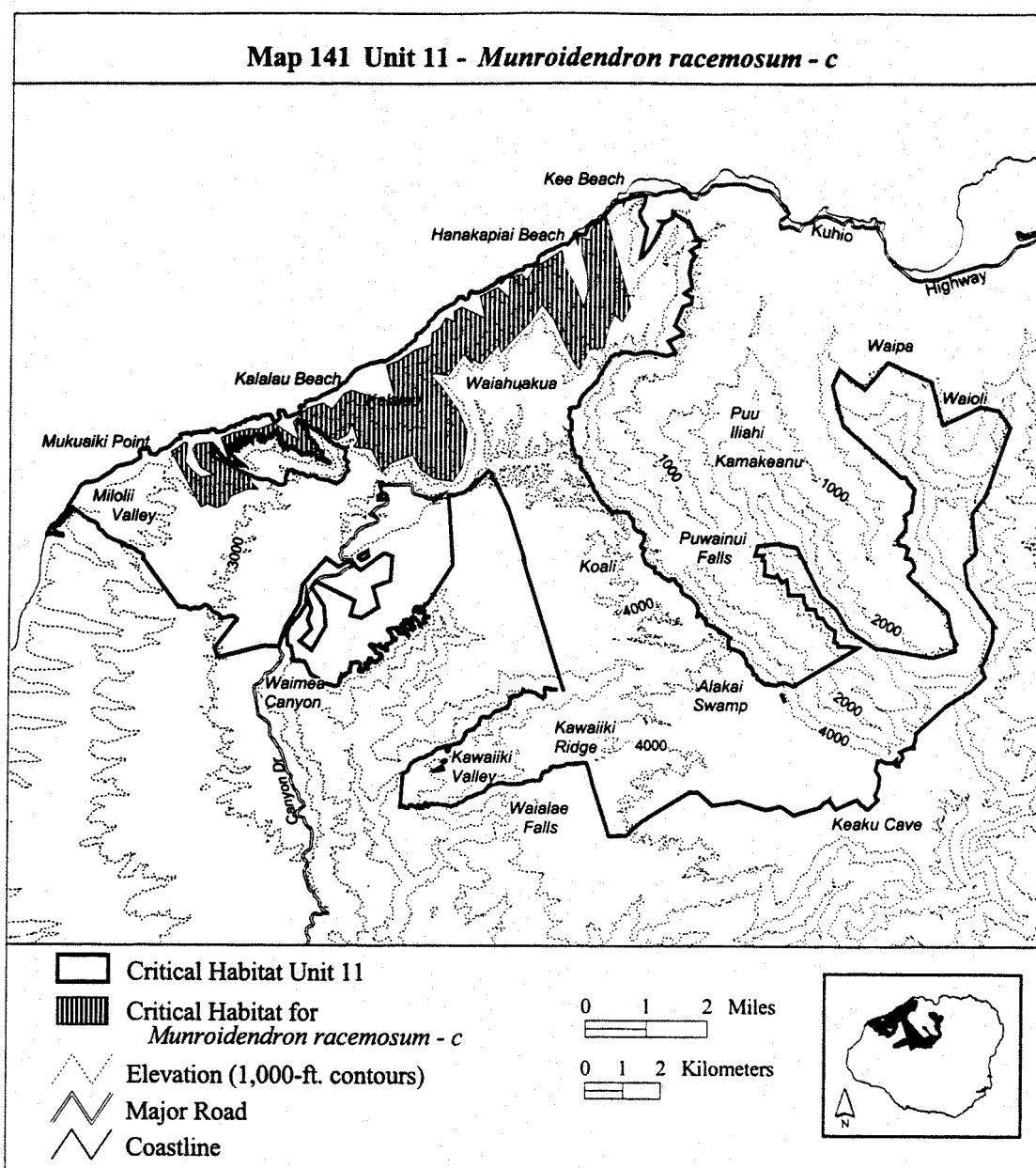
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2455745; 438688, 2456181; 438931,
2456133; 438931, 2456391; 439352,
2456747; return to starting point.

(B) Note: Map 141 follows:



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

(A) Unit consists of the following 285 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704,

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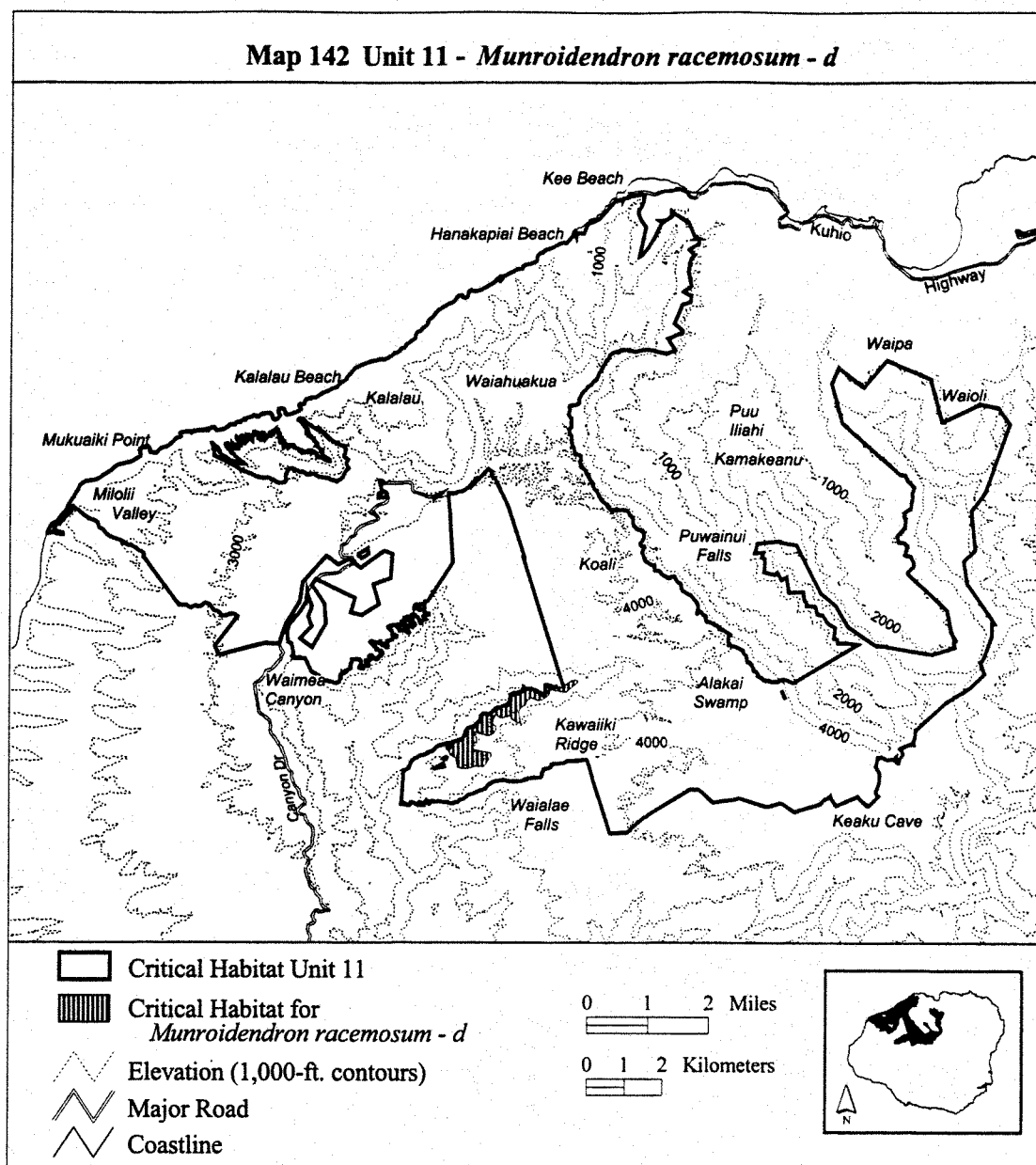
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2442771; 435184, 2442774; 435201,
2442777; 435219, 2442778; 435237,
2442782; 435251, 2442783; 435228,
2442762; 435237, 2442643; 435284,
2442631; return to starting point.

(B) **Note:** Map 142 follows:



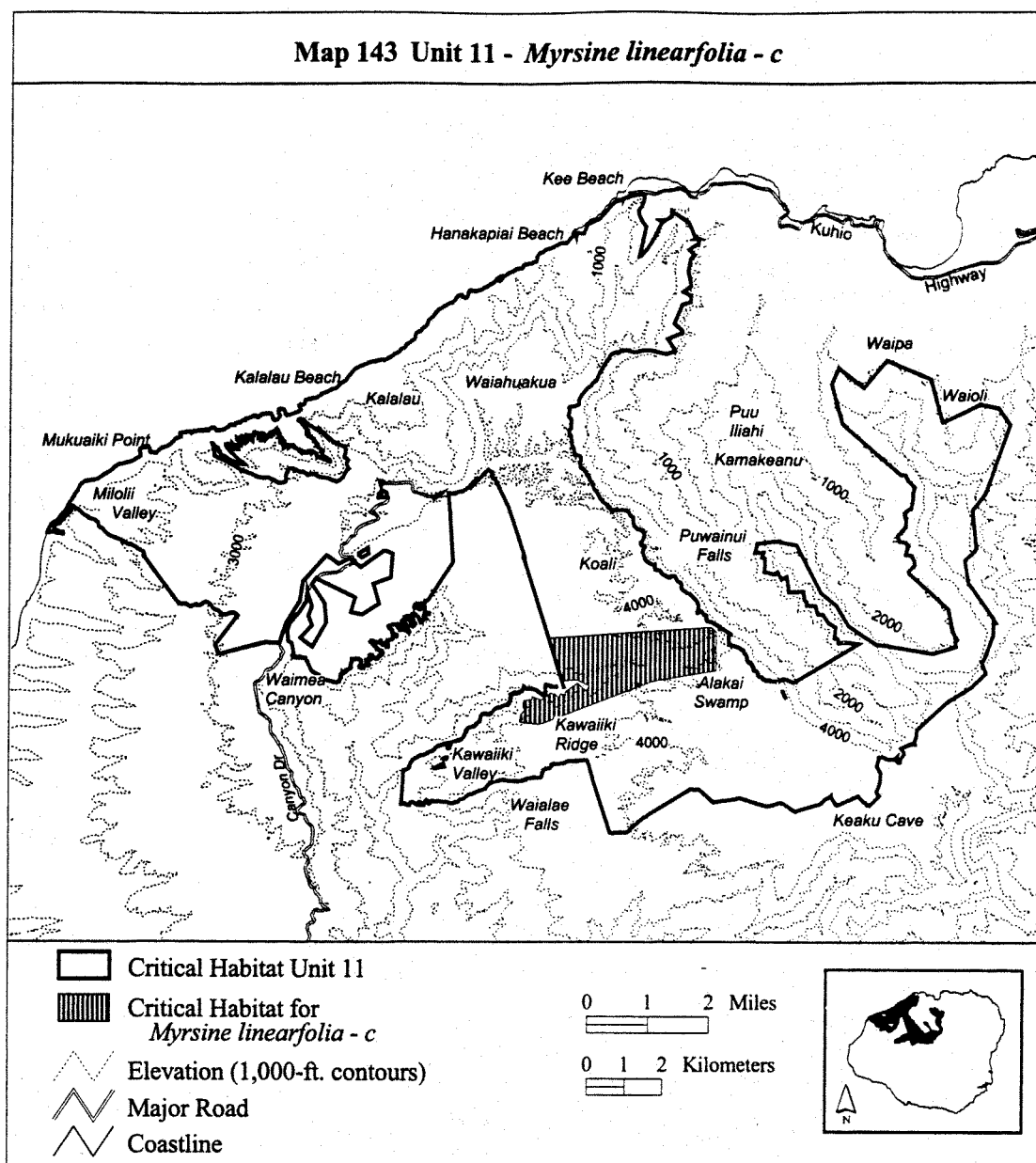
(cxliiii) Kauai 11—*Myrsine linearifolia*—
c (684 ha; 1,691 ac)

(A) Unit consists of the following 28
boundary points: Start at 442333,
2445731; 442333, 2444698; 440696,
2444413; 437673, 2443278; 437145,

2443341; 437172, 2443520; 437271,
2443636; 437235, 2443770; 437262,
2443895; 437467, 2443931; 437476,
2444011; 437718, 2443913; 437915,
2444047; 437977, 2444118; 438031,
2444065; 438076, 2444083; 438174,
2443957; 438237, 2444083; 438353,

2444038; 438362, 2444127; 438675,
2444351; 438907, 2444154; 438997,
2444297; 438675, 2444449; 438344,
2444431; 438272, 2444411; 437909,
2445539; 442203, 2445834; return to
starting point.

(B) **Note:** Map 143 follows:



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

(A) Unit consists of the following 63 boundary points: Start at 439347, 2452789; 439324, 2452794; 439098, 2452402; 438924, 2452225; 438478, 2451772; 438422, 2451715; 438396, 2451689; 438313, 2451903; 438586, 2452835; 438813, 2453426; 439200, 2453198; 439382, 2453721; 439337, 2454084; 439541, 2454152; 439654, 2455463; 439655, 2455470; 440286,

2455134; 440577, 2454992; 440294, 2454127; 440499, 2454060; 440485, 2453995; 440492, 2453950; 440484, 2453922; 440461, 2453865; 440450, 2453851; 440432, 2453815; 440421, 2453780; 440412, 2453745; 440410, 2453716; 440404, 2453694; 440384, 2453655; 440378, 2453623; 440380, 2453590; 440370, 2453517; 440363, 2453496; 440355, 2453461; 440350, 2453451; 440333, 2453428; 440315, 2453408; 440288, 2453388; 440275, 2453381; 440244, 2453334; 440223,

2453322; 440199, 2453305; 440147, 2453289; 440119, 2453282; 440093, 2453280; 439987, 2453284; 439962, 2453283; 439924, 2453275; 439905, 2453264; 439787, 2453162; 439724, 2453135; 439639, 2453119; 439600, 2453107; 439553, 2453082; 439503, 2453046; 439481, 2453022; 439473, 2452985; 439464, 2452963; 439414, 2452909; 439390, 2452876; 439355, 2452801; return to starting point.

(B) Note: Map 144 follows:

Map 144 Unit 11 - *Myrsine linearfolia* - d

Legend:

- Critical Habitat Unit 11
- Critical Habitat for *Myrsine linearfolia* - d
- Elevation (1,000-ft. contours)
- Major Road
- Coastline

Scale:

- 0 1 2 Miles
- 0 1 2 Kilometers

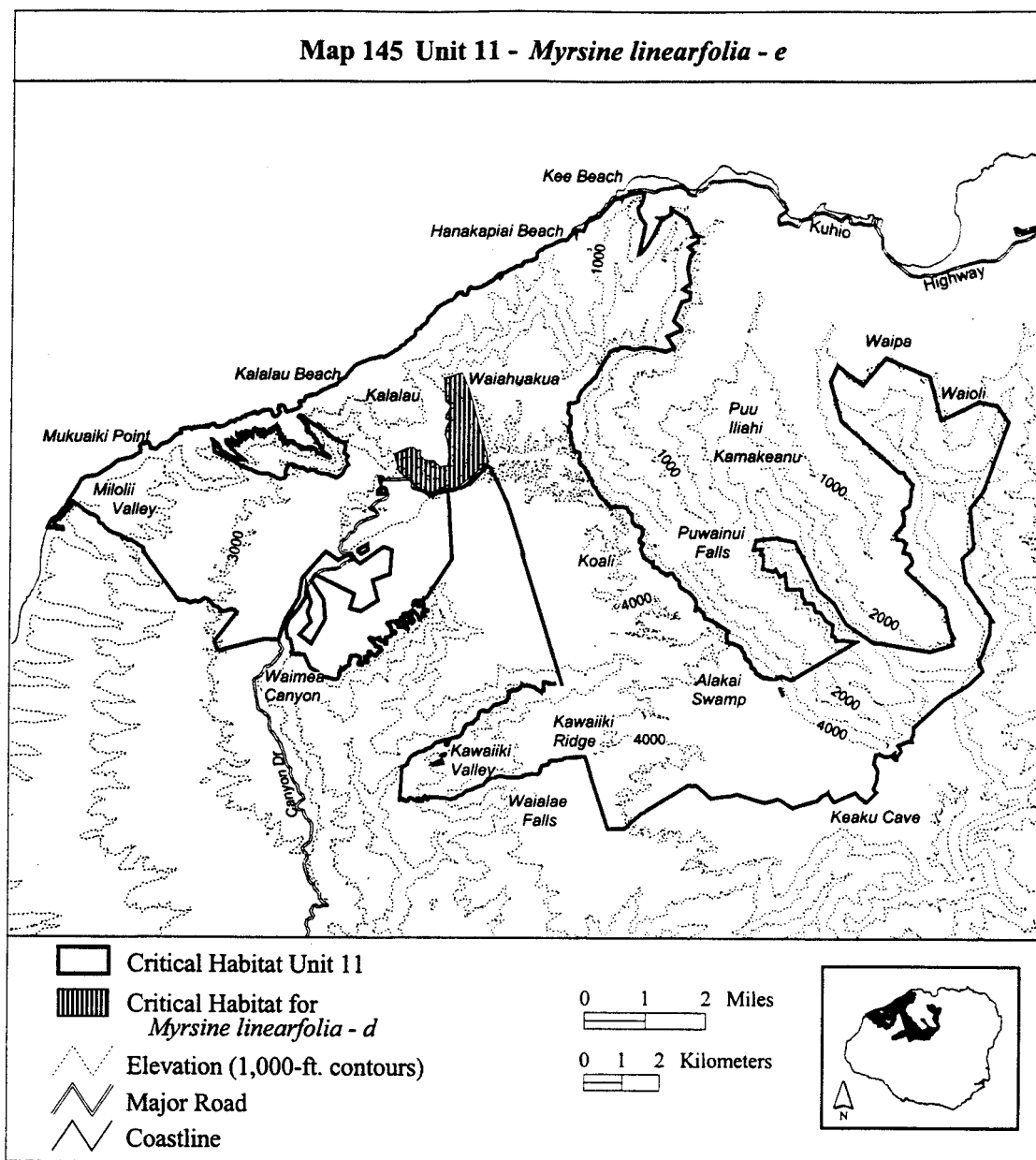
Inset Map:

Shows the location of Unit 11 on the island of Kauai.

(A) Unit consists of the following 37 boundary points: Start at 435236, 2449351; 435214, 2449343; 434747, 2449168; 434654, 2449245; 433915, 2449865; 433804, 2450325; 434145, 2450488; 434338, 2450503; 434390, 2450429; 434502, 2450436; 434502, 2450273; 434628, 2450169; 434865, 2450147; 435006, 2450006; 435214,

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

(C) **Note:** Map 145 follows:



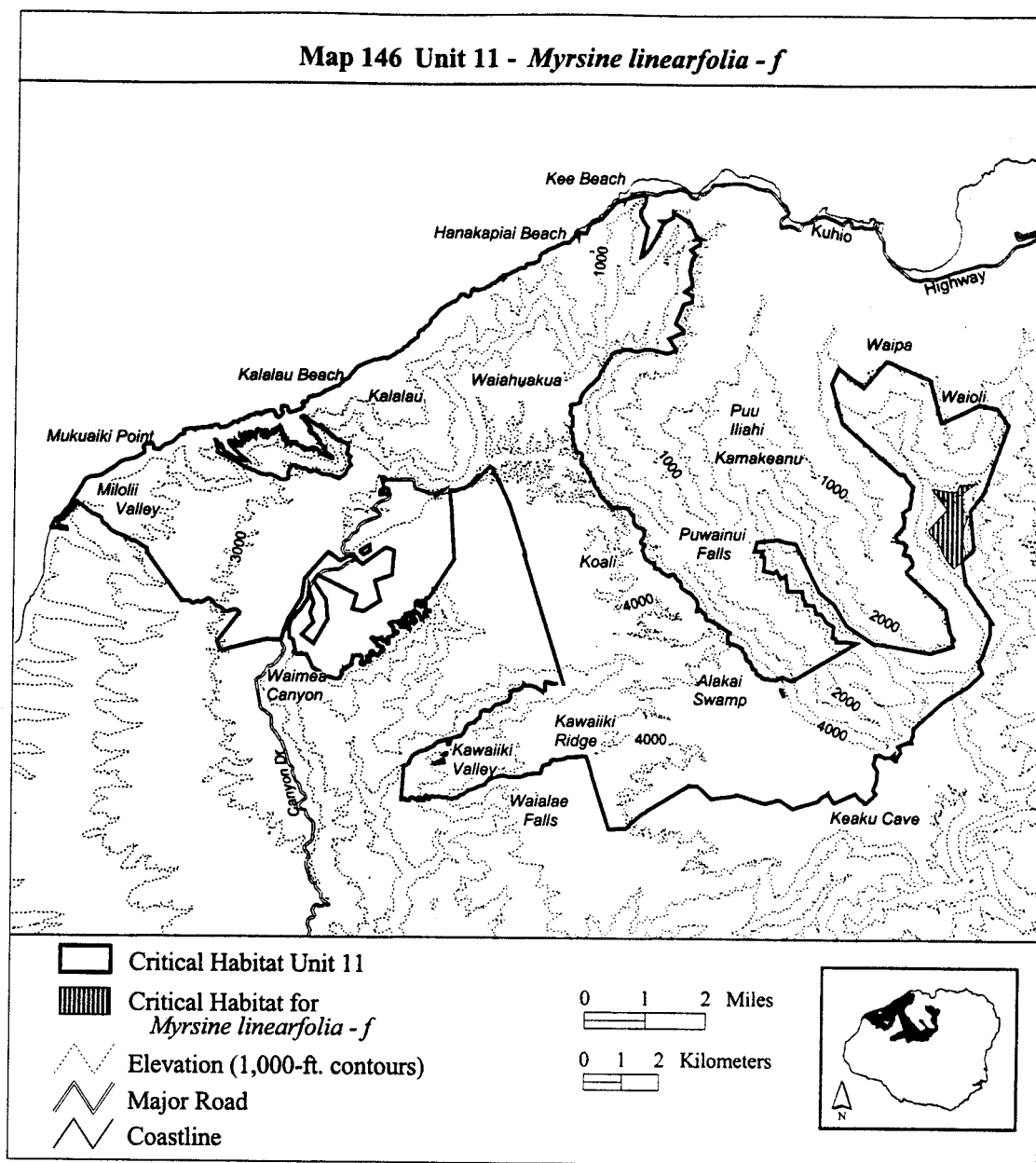
(cxlvii) Kauai 11—*Myrsine linearifolia*—f (135 ha; 334 ac)

(A) Unit consists of the following 30 boundary points: Start at 448856, 2449342; 448879, 2449102; 448899, 2448999; 449002, 2448742; 448894, 2448428; 448894, 2448078; 448920,

2447996; 448961, 2447831; 448961, 2447718; 448964, 2447690; 448881, 2447609; 448665, 2447400; 448662, 2447404; 448498, 2447589; 448384, 2447738; 448322, 2447877; 448286, 2448006; 448147, 2448186; 447988, 2448356; 447981, 2448434; 448470,

2448968; 448049, 2449503; 448160, 2449510; 448320, 2449476; 448515, 2449449; 448732, 2449449; 448783, 2449616; 448980, 2449613; 449250, 2449685; 448853, 2449375; return to starting point.

(B) **Note:** Map 146 follows:



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

(A) Unit consists of the following 418 boundary points: Start at 433577, 2447086; 433840, 2445888; 433837, 2445891; 433826, 2445896; 433791, 2445897; 433775, 2445901; 433758, 2445896; 433730, 2445871; 433708, 2445866; 433689, 2445873; 433675, 2445873; 433653, 2445857; 433650, 2445838; 433656, 2445820; 433690, 2445778; 433718, 2445762; 433735, 2445756; 433750, 2445748; 433756, 2445723; 433755, 2445706; 433759, 2445665; 433764, 2445656; 433781, 2445647; 433824, 2445642; 433851, 2445636; 433868, 2445628; 433879, 2445615; 433881, 2445595; 433867,

2445582; 433854, 2445582; 433827, 2445587; 433805, 2445594; 433787, 2445596; 433772, 2445590; 433763, 2445575; 433770, 2445538; 433773, 2445524; 433772, 2445519; 433762, 2445509; 433749, 2445500; 433732, 2445496; 433717, 2445497; 433708, 2445498; 433696, 2445499; 433686, 2445494; 433668, 2445480; 433655, 2445475; 433647, 2445474; 433635, 2445470; 433628, 2445467; 433621, 2445463; 433616, 2445456; 433609, 2445448; 433604, 2445445; 433598, 2445437; 433595, 2445433; 433595, 2445428; 433599, 2445420; 433611, 2445391; 433614, 2445376; 433620, 2445365; 433629, 2445356; 433637, 2445346; 433639, 2445336; 433641,

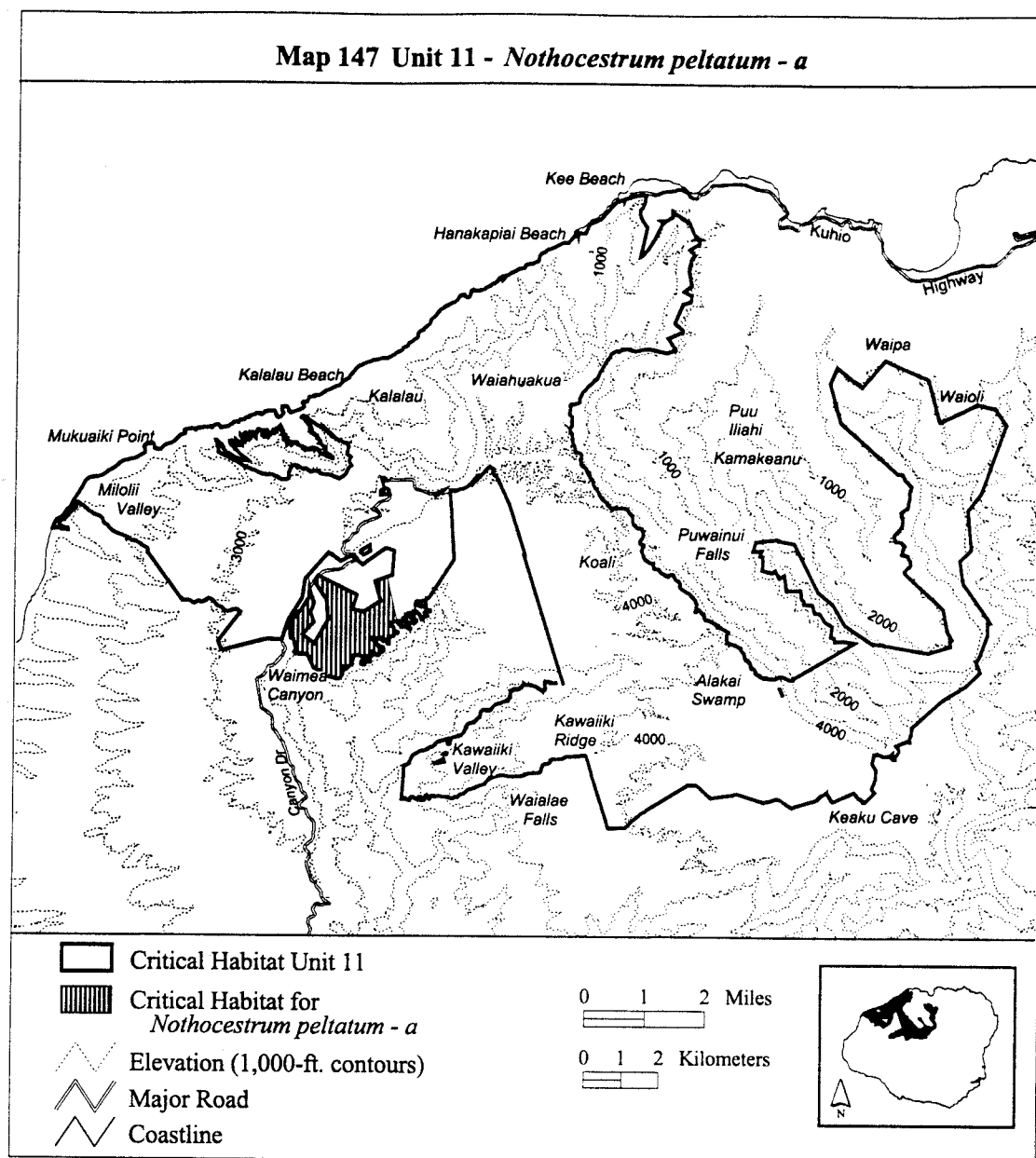
2445327; 433641, 2445319; 433637, 2445311; 433625, 2445307; 433619, 2445305; 433611, 2445307; 433604, 2445309; 433600, 2445313; 433591, 2445329; 433586, 2445341; 433582, 2445346; 433577, 2445353; 433573, 2445358; 433568, 2445366; 433567, 2445374; 433565, 2445381; 433564, 2445388; 433563, 2445395; 433562, 2445398; 433561, 2445399; 433556, 2445403; 433548, 2445403; 433527, 2445398; 433494, 2445388; 433477, 2445386; 433469, 2445388; 433463, 2445394; 433459, 2445402; 433456, 2445410; 433455, 2445416; 433452, 2445424; 433452, 2445436; 433451, 2445445; 433450, 2445450; 433449, 2445457; 433448, 2445461; 433446,

2445465; 433442, 2445467; 433438,
2445470; 433431, 2445468; 433426,
2445464; 433420, 2445459; 433413,
2445452; 433405, 2445444; 433396,
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2445421; 433332, 2445422; 433317,
2445424; 433307, 2445428; 433288,
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2445444; 433247, 2445450; 433242,
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2445464; 433201, 2445464; 433193,
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2445460; 433179, 2445455; 433179,
2445445; 433180, 2445437; 433192,
2445424; 433199, 2445416; 433225,
2445390; 433249, 2445376; 433262,
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2445351; 433279, 2445342; 433287,
2445336; 433298, 2445333; 433312,
2445324; 433316, 2445313; 433323,
2445297; 433334, 2445273; 433342,
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2445197; 433506, 2445166; 433514,
2445158; 433515, 2445153; 433512,
2445142; 433510, 2445136; 433508,
2445133; 433505, 2445128; 433500,
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2445142; 433469, 2445149; 433467,
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2445137; 433446, 2445124; 433444,
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2445105; 433182, 2445104; 433177,
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2445076; 433159, 2445071; 433154,
2445066; 433147, 2445060; 433142,
2445051; 433139, 2445045; 433140,
2445035; 433142, 2445021; 433156,
2444993; 433163, 2444982; 433166,
2444972; 433166, 2444968; 433160,
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2444960; 433105, 2444969; 433093,
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2444659; 432513, 2444645; 432507,
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2445871; 431312, 2445542; 431632,
2445303; 432001, 2445941; 431961,
2446460; 431624, 2446959; 431732,
2447115; 432759, 2446609; 432659,
2446240; 432948, 2446150; 433397,
2446440; 433257, 2446958; return to
starting point.

(B) Note: Map 147 follows:



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

(A) Unit consists of the following 125 boundary points: Start at 433416, 2449553; 433413, 2449527; 433251, 2449306; 433081, 2449255; 432650, 2449255; 432630, 2449144; 432587, 2449098; 433711, 2448846; 432893, 2448778; 432382, 2448880; 432382, 2448693; 432638, 2448625; 432638, 2448387; 432433, 2448387; 432416, 2447995; 432432, 2447806; 432433, 2447791; 432672, 2447739; 432961, 2447978; 433336, 2448182; 433424, 2447780; 432918, 2447407; 432609, 2447647; 432320, 2447497; 432136, 2447629; 432001, 2447726; 431369, 2447027; 431298, 2446522; 430955,

2445963; 430827, 2445619; 430759, 2445406; 430405, 2445422; 429257, 2445126; 429144, 2445121; 429062, 2445354; 429654, 2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428912, 2446468; 428912, 2446468; 428911, 2446468; 428904, 2446474; 428793, 2446542; 428773, 2446550; 428747, 2446566; 427960, 2447503; 427660, 2447675; 427505, 2448103; 429733, 2449052; 429708, 2449170; 429968, 2449152; 430437, 2449352; 430418, 2449395; 430369, 2449433; 430355, 2449451; 430349, 2449466; 430335, 2449474; 430318, 2449477; 430307, 2449482; 430312, 2449517; 430313, 2449532; 430320,

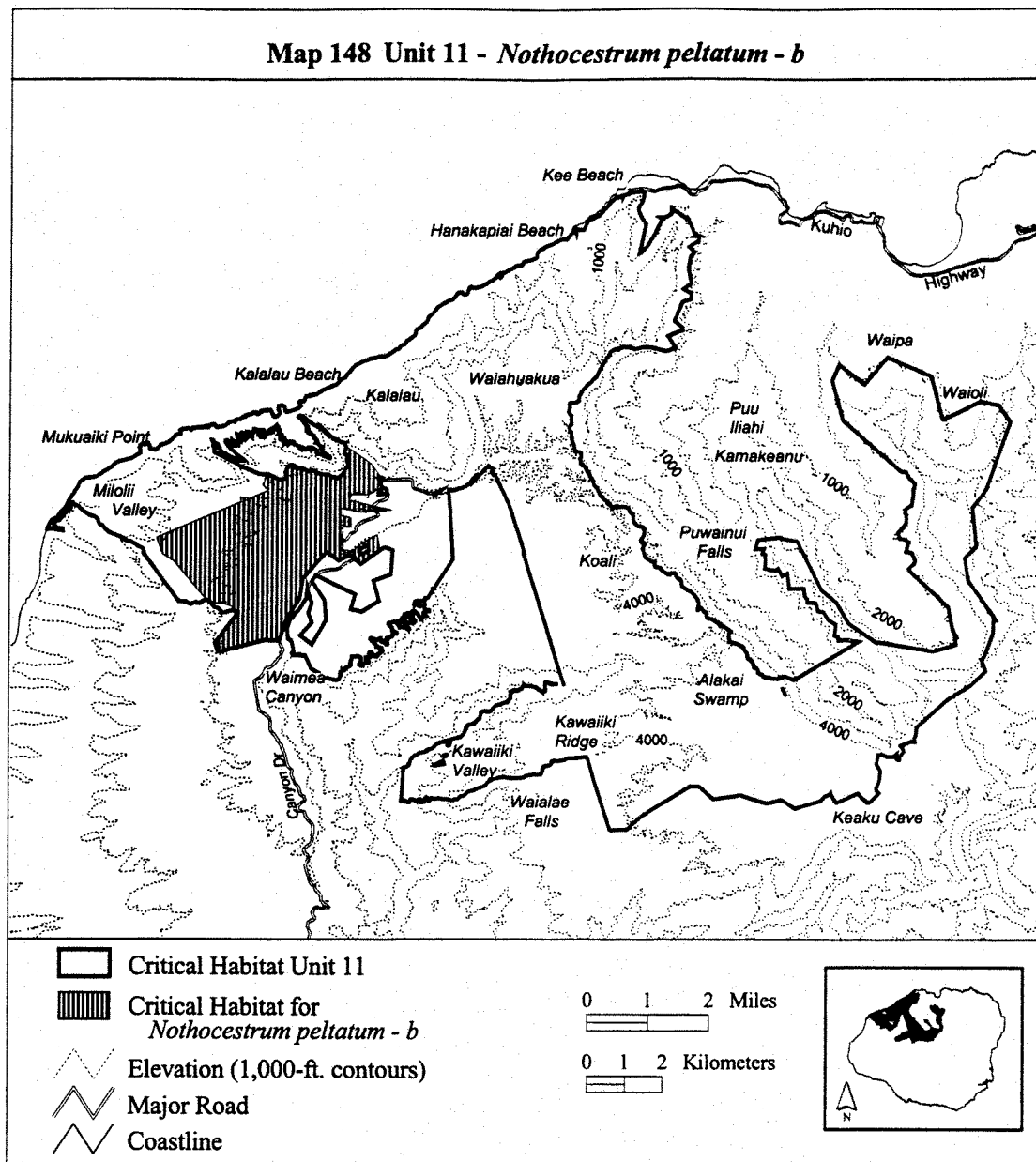
2449553; 430331, 2449565; 430346, 2449596; 430354, 2449622; 430355, 2449641; 430348, 2449666; 430376, 2449750; 430384, 2449766; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113,

2449740; 432217, 2449712; 432259,
2449679; 432344, 2449744; 432419,
2449806; 432471, 2449904; 432504,
2449961; 432579, 2450036; 432551,
2450083; 432523, 2450130; 432523,
2450182; 432565, 2450262; 432523,
2450304; 432475, 2450313; 432452,

2450337; 432461, 2450375; 432480,
2450426; 432490, 2450478; 432501,
2450529; 432504, 2450525; 432504,
2450527; 433152, 2450085; 433399,
2449754; 433399, 2449709; 433419,
2449599; return to starting point.

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

(C) Note: Map 148 follows:



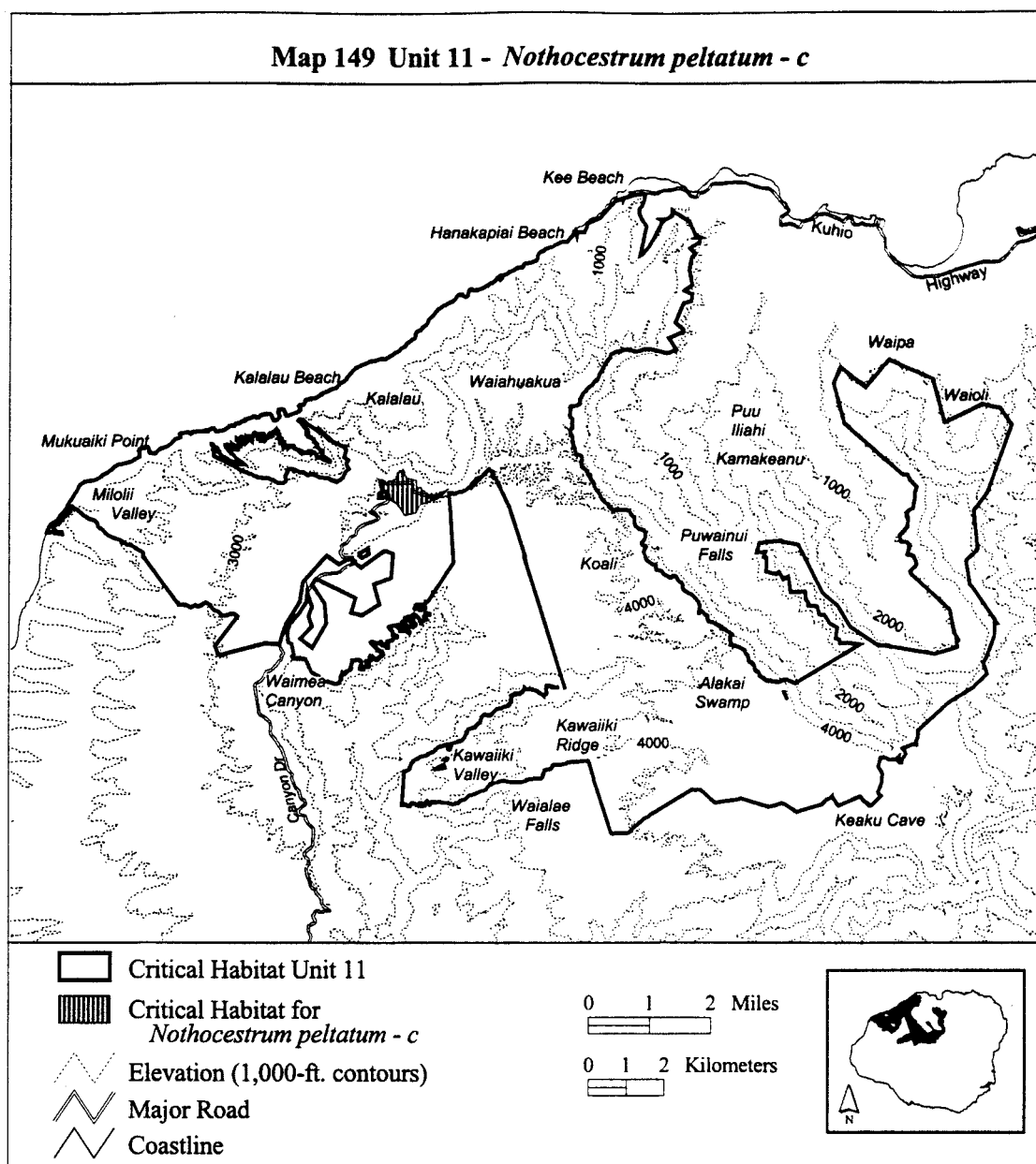
(cxlix) Kauai 11—*Nothocestrum peltatum*—c (80 ha; 198 ac)

(A) Unit consists of the following 36 boundary points: Start at 433467, 2449537; 433459, 2449601; 433480, 2449629; 433550, 2449670; 433792, 2449721; 433887, 2449924; 434015, 2449995; 434094, 2449780; 434354,

2449721; 434409, 2449470; 434457, 2449541; 434688, 2449346; 434987, 2449346; 434991, 2449346; 434991, 2449344; 434988, 2449343; 434881, 2449297; 434833, 2449281; 434834, 2449277; 434839, 2449258; 434842, 2449253; 434844, 2449248; 434839, 2449242; 434833, 2449239; 434684,

2449151; 434469, 2449071; 434362, 2448856; 434336, 2448850; 434055, 2448781; 433923, 2449012; 433812, 2449135; 433688, 2449191; 433660, 2449263; 433664, 2449351; 433588, 2449442; 433509, 2449482; return to starting point.

(B) Note: Map 149 follows:



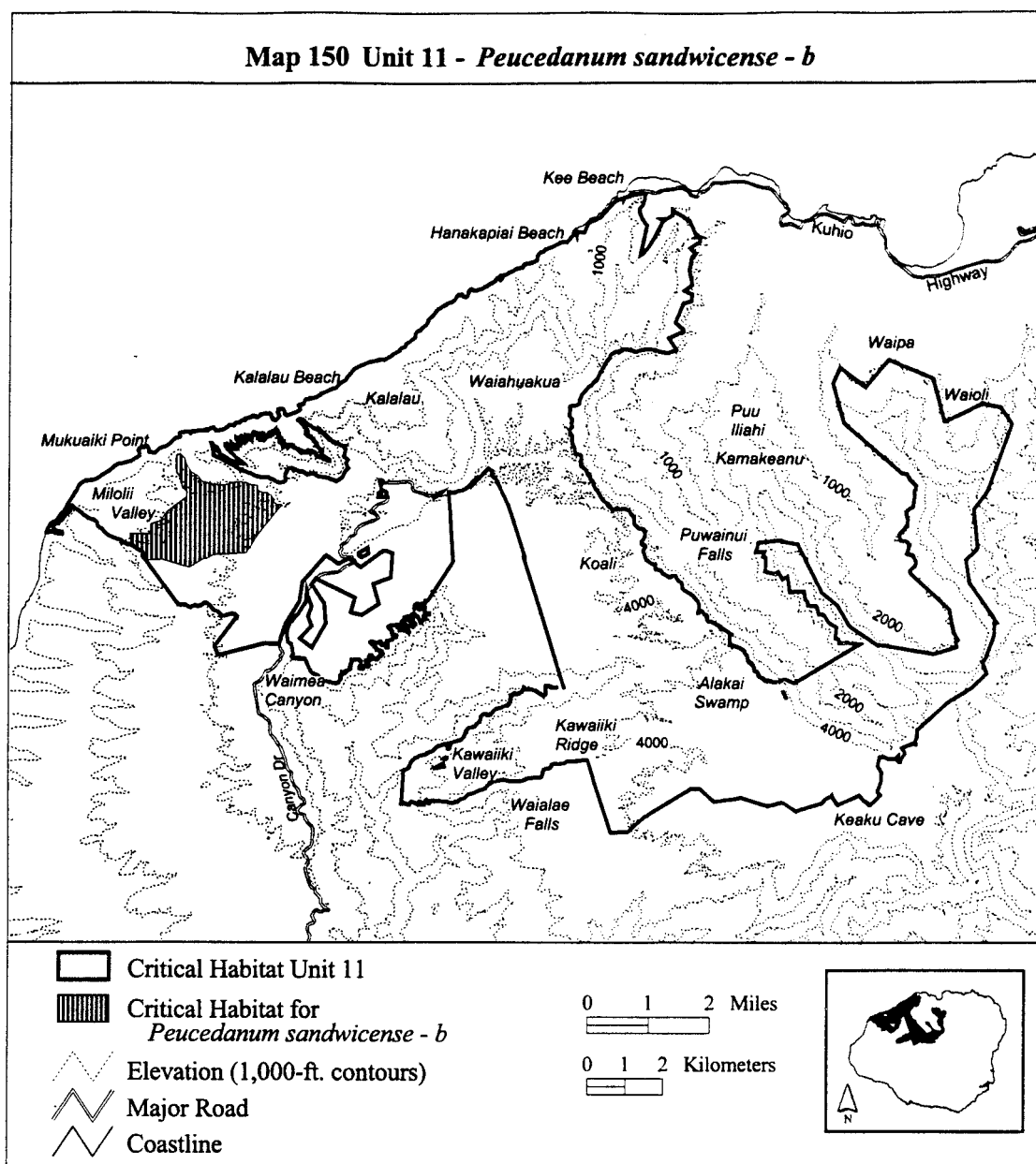
(cl) Kauai 11—*Peucedanum sandwicense*—b (579 ha; 1,430 ac)

(A) Unit consists of the following 91 boundary points: Start at 426832, 2447995; 426843, 2448011; 426810, 2448288; 427346, 2448293; 427357, 2448542; 427623, 2448630; 427799, 2448868; 428291, 2449244; 428313, 2449309; 428313, 2449411; 428205, 2449507; 428142, 2449672; 428131, 2449814; 428029, 2449922; 428017, 2449990; 428017, 2450120; 428017, 2450279; 428034, 2450399; 428142, 2450404; 428245, 2450302; 428302, 2450155; 428364, 2450024; 428409, 2449944; 428523, 2449882; 428637, 2449819; 428705, 2449689; 428847,

2449649; 429000, 2449604; 429194, 2449587; 429341, 2449592; 429501, 2449649; 429677, 2449672; 429876, 2449649; 430006, 2449598; 430009, 2449587; 430011, 2449592; 430066, 2449586; 430177, 2449564; 430182, 2449481; 430221, 2449420; 430359, 2449371; 430420, 2449392; 430437, 2449371; 430430, 2449364; 430451, 2449363; 430463, 2449355; 430474, 2449342; 430485, 2449333; 430527, 2449321; 430531, 2449315; 430531, 2449310; 430534, 2449307; 430545, 2449277; 430559, 2449254; 430604, 2449229; 430616, 2449214; 430623, 2449194; 430623, 2449173; 430616, 2449156; 430619, 2449138; 430629,

2449119; 430643, 2449106; 430666, 2449092; 430680, 2449072; 430824, 2449050; 430232, 2448299; 429895, 2447790; 429381, 2447752; 429032, 2447740; 428839, 2447641; 428767, 2447635; 428380, 2447414; 427650, 2447613; 427235, 2447592; 427185, 2447661; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 426997, 2447892; 426981, 2447902; 426958, 2447923; 426944, 2447941; 426907, 2447965; 426847, 2447992; return to starting point.

(B) Note: Map 150 follows:



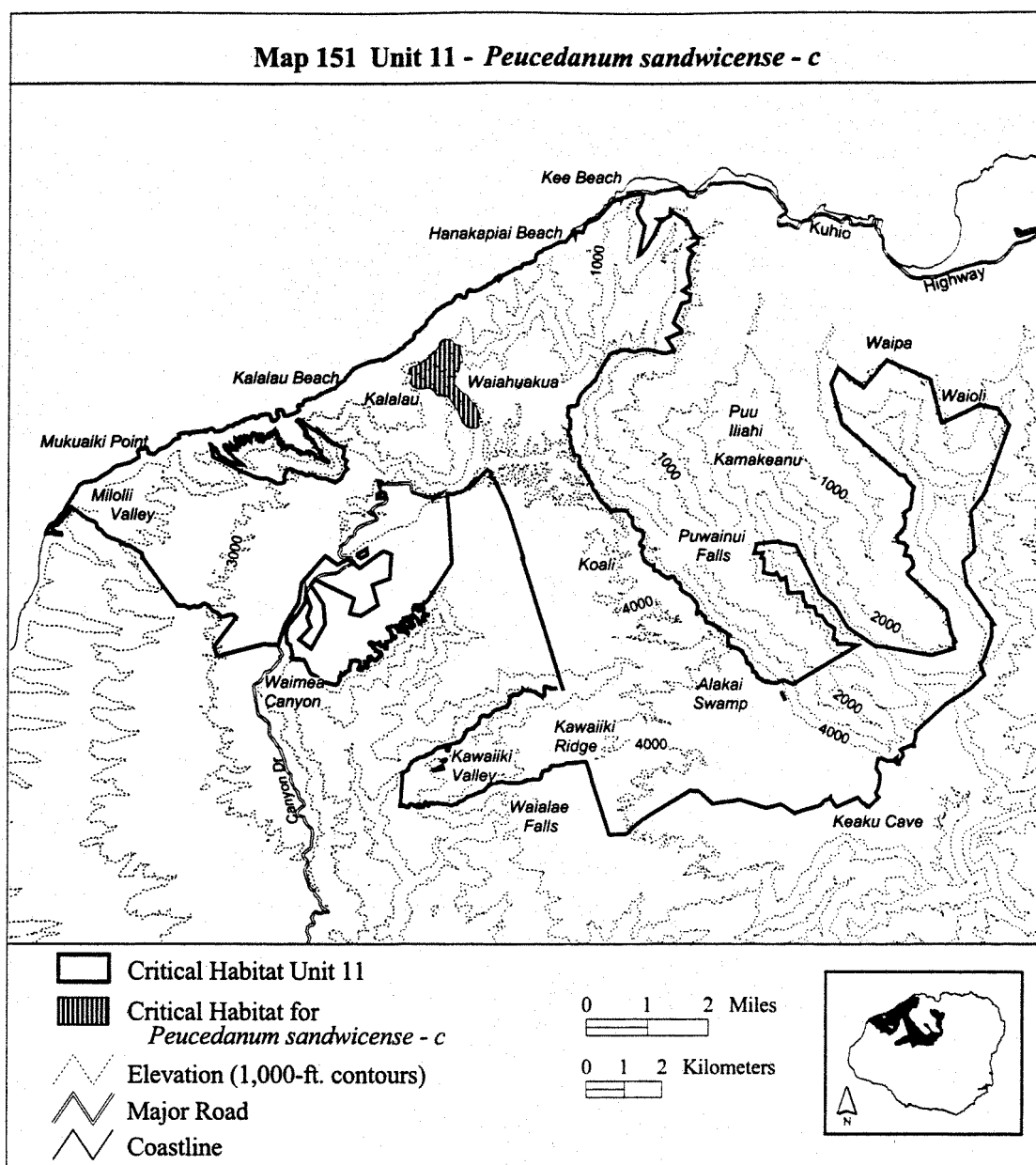
(cli) Kauai 11—*Peucedanum sandwicense*—c (181 ha; 447 ac)

(A) Unit consists of the following 48 boundary points: Start at 435634, 2452896; 435550, 2452817; 435535, 2452664; 435497, 2452553; 435413, 2452410; 435407, 2452304; 435487, 2452193; 435630, 2452061; 435773, 2451976; 435831, 2451875; 435969, 2451706; 436054, 2451547; 436080,

2451431; 436043, 2451304; 436064, 2451177; 435995, 2451108; 435757, 2451140; 435619, 2451272; 435503, 2451574; 435376, 2451759; 435270, 2451902; 435206, 2451981; 434989, 2451976; 434904, 2452029; 434851, 2452114; 434745, 2452198; 434544, 2452161; 434438, 2452167; 434295, 2452225; 434226, 2452320; 434258, 2452437; 434306, 2452516; 434216,

2452564; 434189, 2452680; 434269, 2452749; 434385, 2452775; 434512, 2452849; 434629, 2452913; 434714, 2452971; 434804, 2453108; 434909, 2453188; 434989, 2453272; 435010, 2453389; 435090, 2453452; 435301, 2453468; 435423, 2453341; 435552, 2453315; 435559, 2453209; return to starting point.

(B) **Note:** Map 151 follows:



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

(A) Unit consists of the following 265 boundary points: Start at 438184,

2444684; 438270, 2444792; 438407, 2444861; 438555, 2444861; 438624, 2444693; 438899, 2444575; 438978, 2444733; 439185, 2444831; 439490, 2444929; 439598, 2444880; 439598, 2445136; 439795, 2445214; 440110, 2445136; 440316, 2444919; 440503, 2445047; 440661, 2445106; 440788, 2445096; 440759, 2444831; 440720, 2444949; 440474, 2444850; 440493, 2444762; 440188, 2444693; 440188, 2444791; 439933, 2444880; 439962, 2444723; 439933, 2444605; 439775, 2444418; 439490, 2444349; 439362, 2444202; 439195, 2444064; 439037,

2444054; 439027, 2443818; 438949, 2443946; 438634, 2444025; 438516, 2443897; 438358, 2443858; 438348, 2443749; 438034, 2443681; 437984, 2443808; 437384, 2443720; 437571, 2443494; 437473, 2443268; 437227, 2443140; 437069, 2443228; 436774, 2443228; 435545, 2442770; 435532, 2442855; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725,

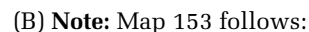
2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146,

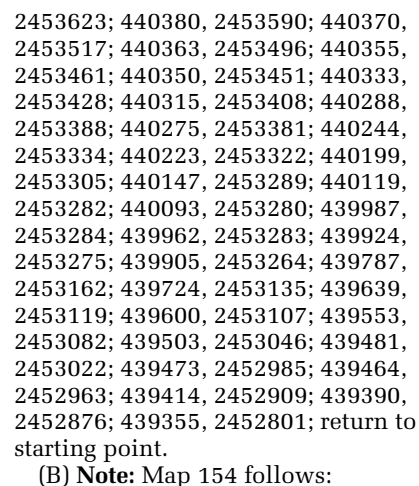
2443534; 436160, 2443543; 436175,
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2443707; 436576, 2443711; 436597,
2443714; 436611, 2443716; 436630,
2443718; 436644, 2443720; 436655,
2443724; 436666, 2443731; 436678,
2443742; 436697, 2443756; 436708,
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2443772; 436758, 2443775; 436771,
2443776; 436788, 2443776; 436799,
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2443785; 436823, 2443786; 436829,
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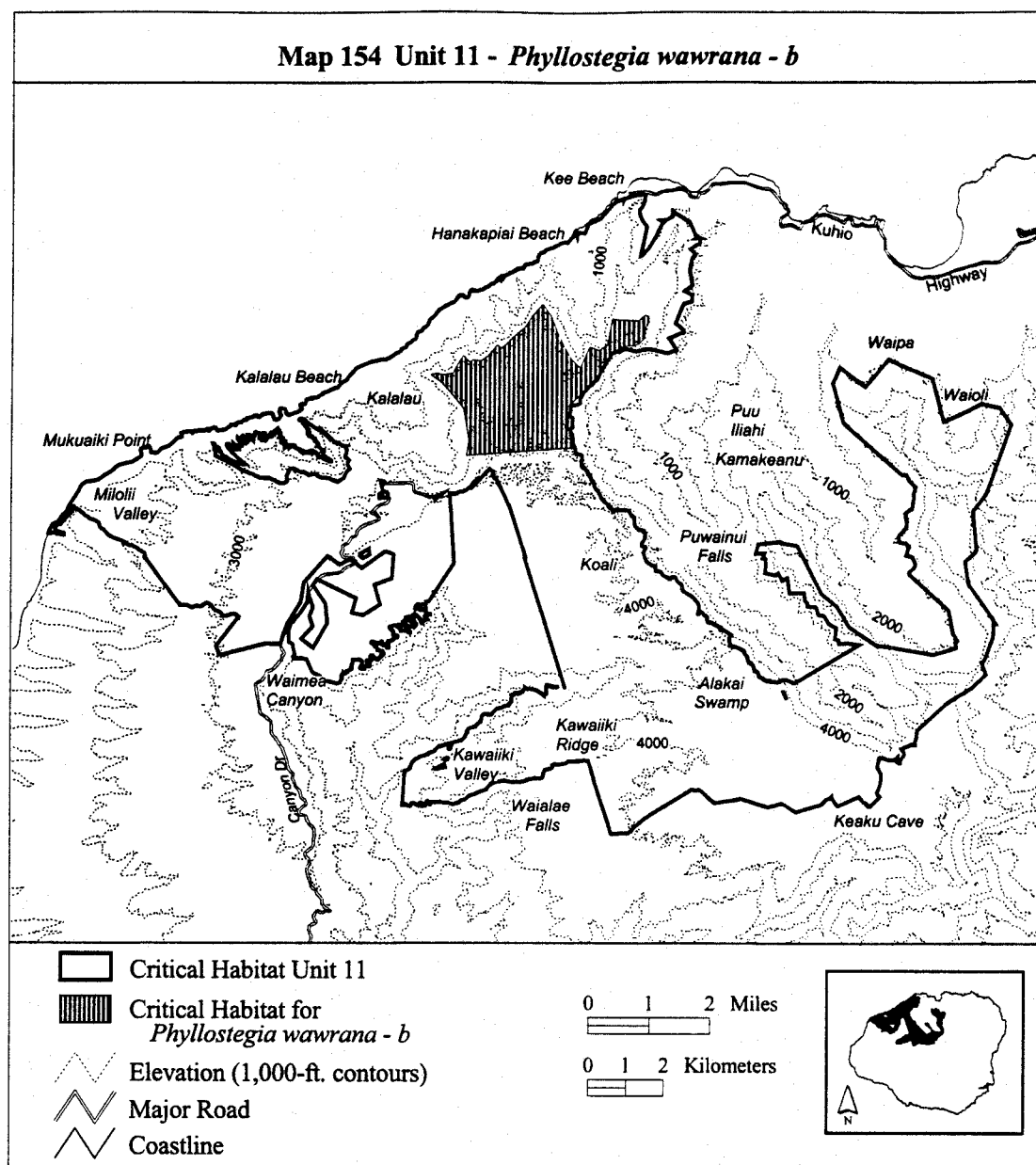
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2444102; 436994, 2444107; 437009,
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2444239; 437263, 2444246; 437278,
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2444226; 437445, 2444223; 437462,

2444219; 437482, 2444211; 437497,
2444205; 437541, 2444190; 437563,
2444183; 437578, 2444179; 437593,
2444170; 437610, 2444160; 437624,
2444146; 437636, 2444132; 437651,
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2444265; 437828, 2444292; 437836,
2444314; 437843, 2444322; 437854,
2444327; 437871, 2444328; 437887,
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2444302; 437960, 2444289; 437984,
2444274; 438007, 2444260; 438028,
2444258; 438048, 2444258; 438072,
2444260; 438087, 2444266; 438109,
2444271; 438133, 2444273; 438164,
2444270; 438196, 2444263; 438335,
2444214; return to starting point.

(B) **Note:** Map 152 follows:







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

(A) Unit consists of the following 254 boundary points: Start at 436283,

2443540; 436283, 2443542; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708,

2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009,

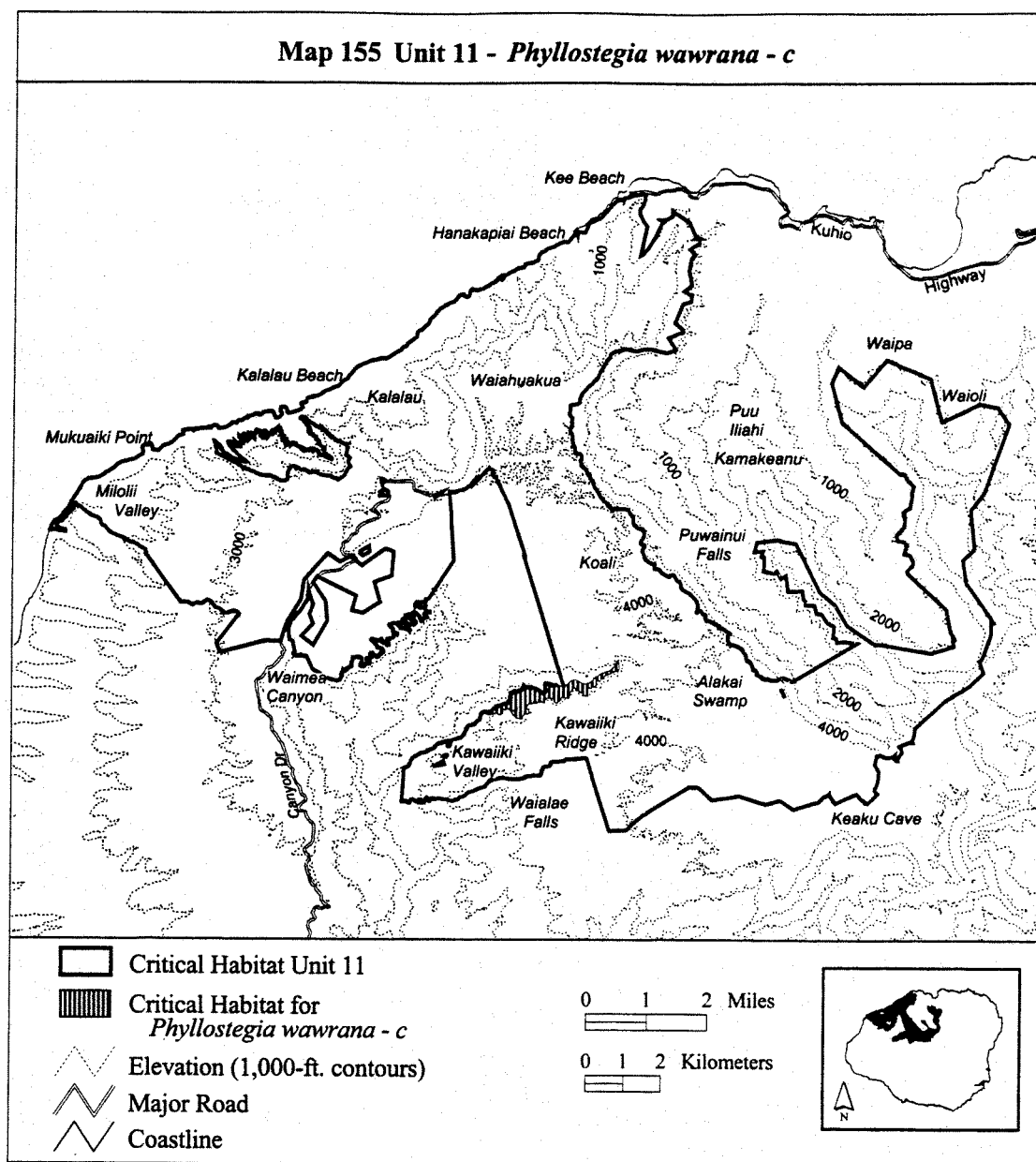
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2444170; 437610, 2444160; 437624,
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2444102; 437703, 2444093; 437722,
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2444080; 437821, 2444088; 437831,
2444100; 437833, 2444111; 437835,
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2444206; 437818, 2444236; 437824,
2444265; 437828, 2444292; 437836,
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2444274; 438007, 2444260; 438028,
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2444271; 438133, 2444273; 438164,
2444270; 438196, 2444263; 438335,
2444214; 438331, 2444225; 438331,
2444225; 438361, 2444238; 438459,
2444323; 438527, 2444400; 438642,
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2444306; 439085, 2444387; 439102,
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2444566; 439379, 2444595; 439562,
2444668; 439660, 2444766; 439694,
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2444532; 439400, 2444506; 439396,
2444438; 439336, 2444455; 439285,
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2444357; 439208, 2444306; 439217,
2444276; 439187, 2444263; 439132,
2444221; 439093, 2444246; 439072,
2444238; 439051, 2444204; 439055,
2444187; 439025, 2444191; 438995,
2444204; 438949, 2444195; 438949,
2444144; 438966, 2444093; 438974,
2443991; 438906, 2443970; 438846,
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2443923; 438272, 2443949; 438229,

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2443774; 437412, 2443770; 437343,
2443719; 437343, 2443659; 437382,
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2443510; 437305, 2443523; 437254,
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2443613; 436709, 2443621; 436692,
2443553; 436692, 2443515; 436637,
2443468; 436594, 2443485; 436547,
2443515; 436496, 2443515; 436445,
2443485; 436390, 2443485; 436309,
2443477; 436279, 2443506; return to
starting point.

(B) **Note:** Map 155 follows:



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

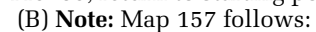
(A) Unit consists of the following 46 boundary points: Start at 433484, 2449698; 433602, 2449656; 433646, 2449236; 433339, 2448655; 432657, 2448174; 432163, 2448681; 432122, 2448722; 431444, 2449890; 431449, 2449886; 431497, 2449867; 431510, 2449870; 431519, 2449867; 431617, 2449892; 431723, 2449853; 431765, 2449810; 431860, 2449801; 432043,

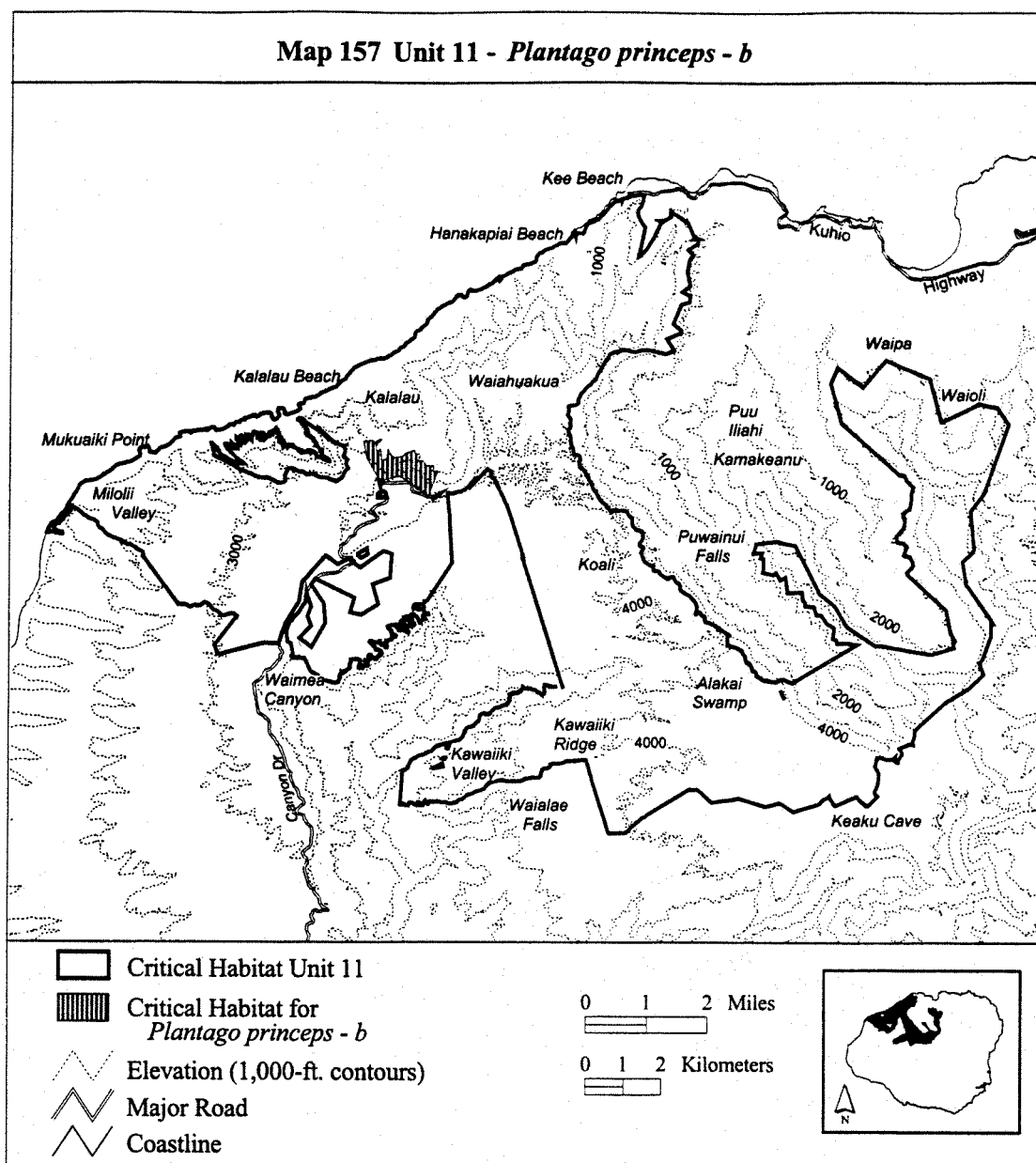
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2449556; 433440, 2449604; 433457, 2449622; 433480, 2449629; return to starting point.

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

(C) **Note:** Map 156 follows:





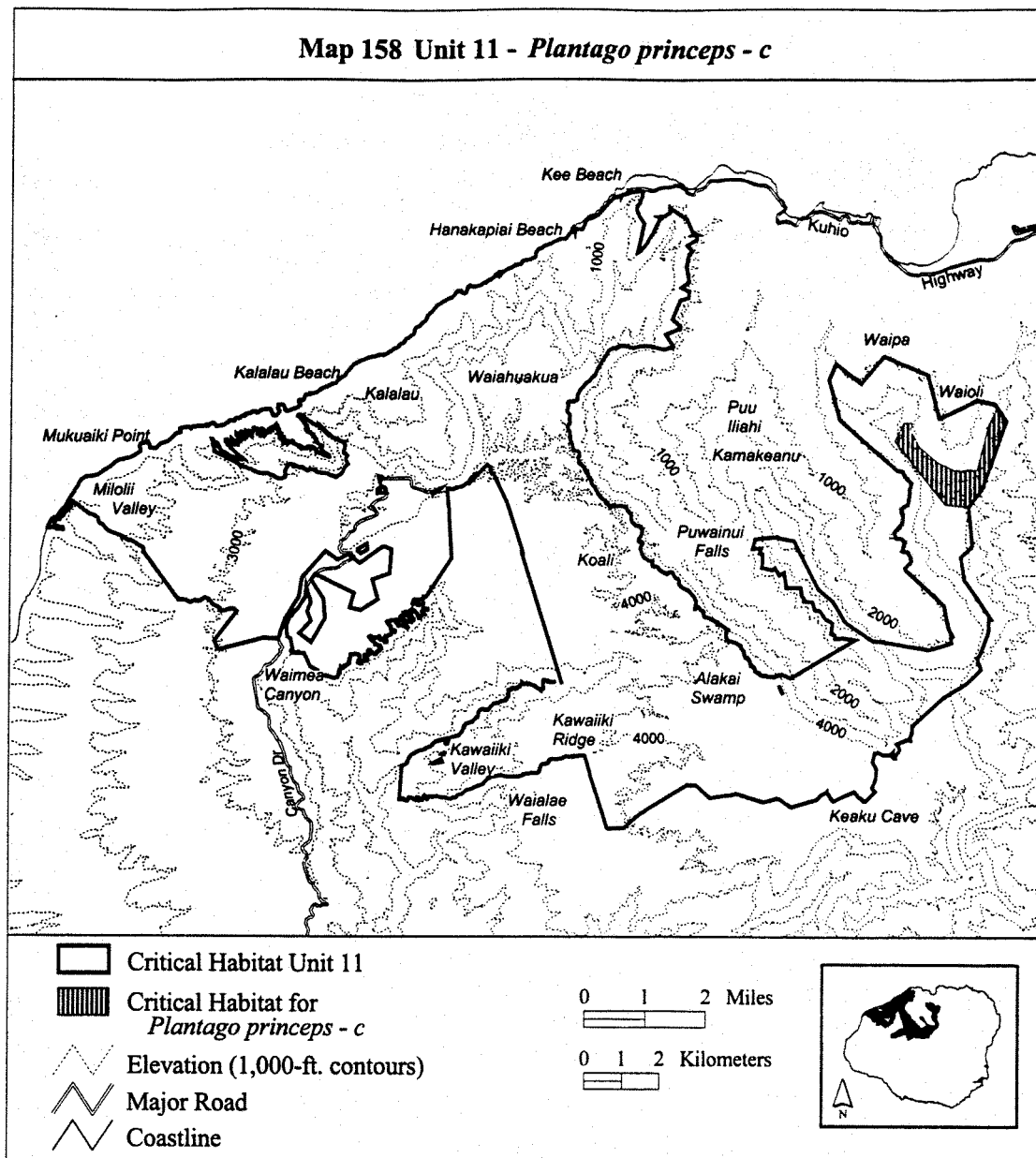
(clviii) Kauai 11—*Plantago princeps*—c
(244 ha; 603 ac)

(A) Unit consists of the following 17
boundary points: Start at 448456,

2448986; 447125, 2450677; 447365,
2451166; 447582, 2451166; 447538,
2450979; 447777, 2450536; 448254,
2450127; 448731, 2449889; 449310,
2449923; 449617, 2451148; 449833,

2451517; 450063, 2451208; 449872,
2450704; 449708, 2450232; 449423,
2449382; 449245, 2449149; 449068,
2448933; return to starting point.

(B) **Note:** Map 158 follows:



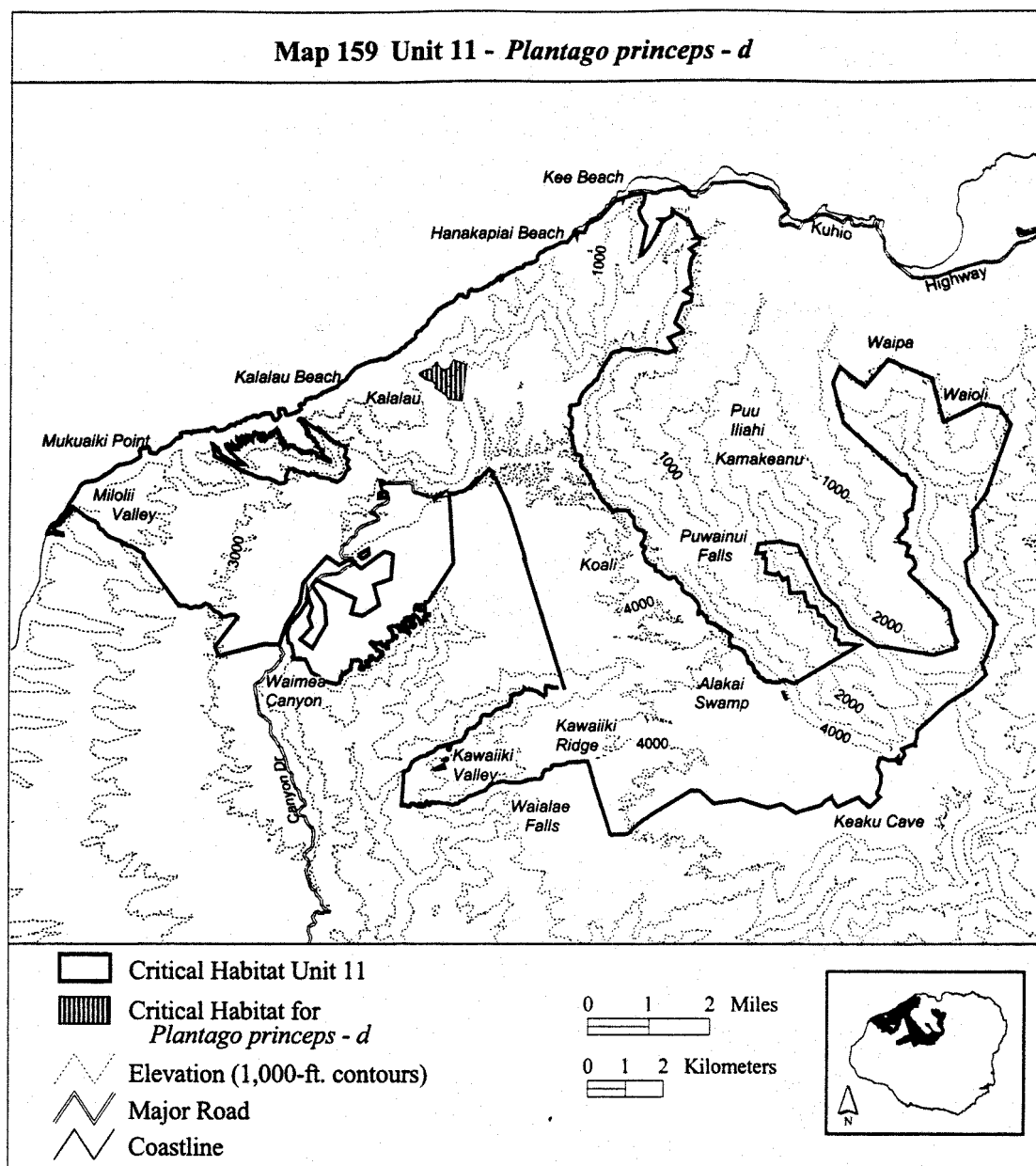
(clix) Kauai 11—*Plantago princeps*—d
(77 ha; 189 ac)

(A) Unit consists of the following 17
boundary points: Start at 434421,

2452541; 434634, 2452659; 434776,
2452663; 434894, 2452862; 434993,
2452692; 435074, 2452644; 435221,
2452678; 435334, 2452914; 435626,
2452805; 435684, 2452743; 435571,

2451808; 435202, 2451855; 435126,
2452002; 434852, 2452163; 434885,
2452271; 434757, 2452352; 434587,
2452394; return to starting point.

(B) **Note:** Map 159 follows:



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

(A) Unit consists of the following 419 boundary points: Start at 443067, 2445215; 443066, 2445209; 443066, 2445190; 443083, 2445171; 443103, 2445152; 443122, 2445132; 443135, 2445115; 443140, 2445105; 443144, 2445096; 443150, 2445078; 443152, 2445059; 443153, 2445040; 443153, 2445020; 443156, 2445003; 443158, 2444995; 443163, 2444984; 443175, 2444965; 443177, 2444962; 443193, 2444946; 443196, 2444944; 443215, 2444938; 443234, 2444932; 443240, 2444927; 443252, 2444914; 443260, 2444907; 443271, 2444898; 443281, 2444890; 443290, 2444876; 443294, 2444870; 443301, 2444851; 443307,

2444833; 443309, 2444829; 443313, 2444815; 443320, 2444796; 443327, 2444778; 443333, 2444758; 443341, 2444740; 443346, 2444728; 443352, 2444721; 443366, 2444706; 443373, 2444702; 443385, 2444699; 443403, 2444695; 443423, 2444686; 443435, 2444664; 443440, 2444655; 443443, 2444647; 443444, 2444627; 443447, 2444608; 443452, 2444591; 443459, 2444579; 443464, 2444570; 443478, 2444555; 443483, 2444551; 443497, 2444548; 443516, 2444546; 443534, 2444543; 443553, 2444537; 443557, 2444532; 443571, 2444521; 443579, 2444514; 443598, 2444493; 443610, 2444483; 443617, 2444477; 443628, 2444469; 443647, 2444460; 443666, 2444456; 443677, 2444459; 443685,

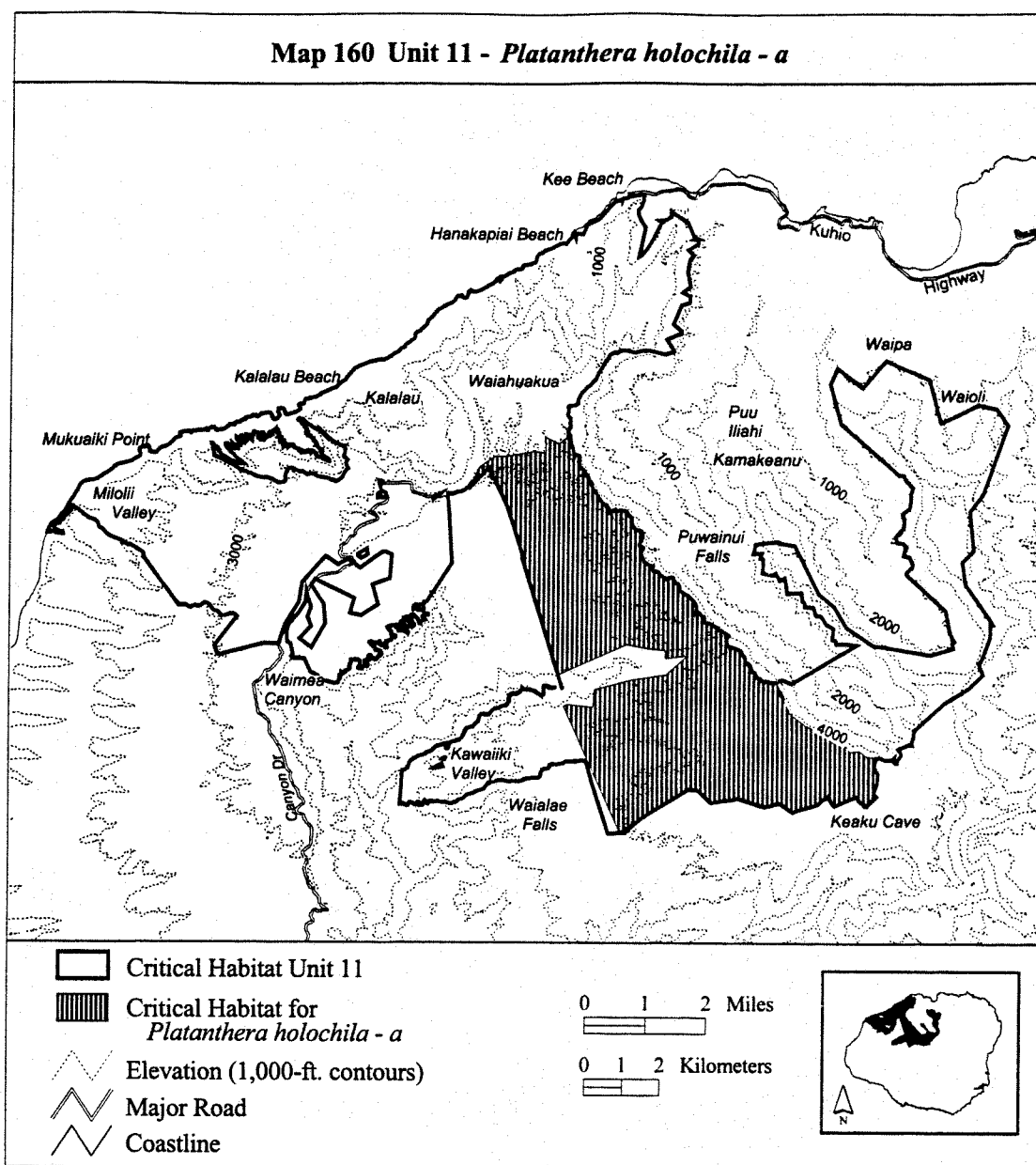
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2445359; 442804, 2445357; 442821,
2445353; 442842, 2445347; 442858,
2445342; 442862, 2445341; 442877,
2445336; 442898, 2445330; 442915,
2445323; 442934, 2445314; 442952,
2445303; 442956, 2445301; 442972,
2445292; 442981, 2445284; 442990,
2445276; 443006, 2445268; 443009,
2445266; 443029, 2445263; 443047,
2445260; 443065, 2445247; 443068,
2445227; return to starting point.

(B) **Note:** Map 160 follows:



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

(A) Unit consists of the following 174 boundary points: Start at 425642, 2448753; 426032, 2448753; 426313, 2448497; 426288, 2448753; 426735, 2448715; 427004, 2448702; 426723, 2448868; 426723, 2448996; 427068, 2449085; 426697, 2449175; 426288, 2449252; 426070, 2449379; 426428, 2449430; 426428, 2449545; 426697, 2449609; 427068, 2449801; 427196, 2449942; 427273, 2450069; 427708, 2449967; 427887, 2449993; 428040, 2450235; 428168, 2449878; 428232, 2449788; 428488, 2449673; 428488, 2449571; 428718, 2449443; 428910, 2449533; 429089, 2449443; 429115, 2449532; 429549, 2449584; 429805,

2449609; 429677, 2449941; 429283, 2450247; 429576, 2450092; 429717, 2449996; 429751, 2449978; 429791, 2449963; 429830, 2449956; 429860, 2449947; 429944, 2449910; 429968, 2449904; 430016, 2449884; 430068, 2449856; 430172, 2449815; 430207, 2449804; 430261, 2449795; 430317, 2449781; 430340, 2449778; 430365, 2449787; 430392, 2449798; 430408, 2449802; 430410, 2449802; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238,

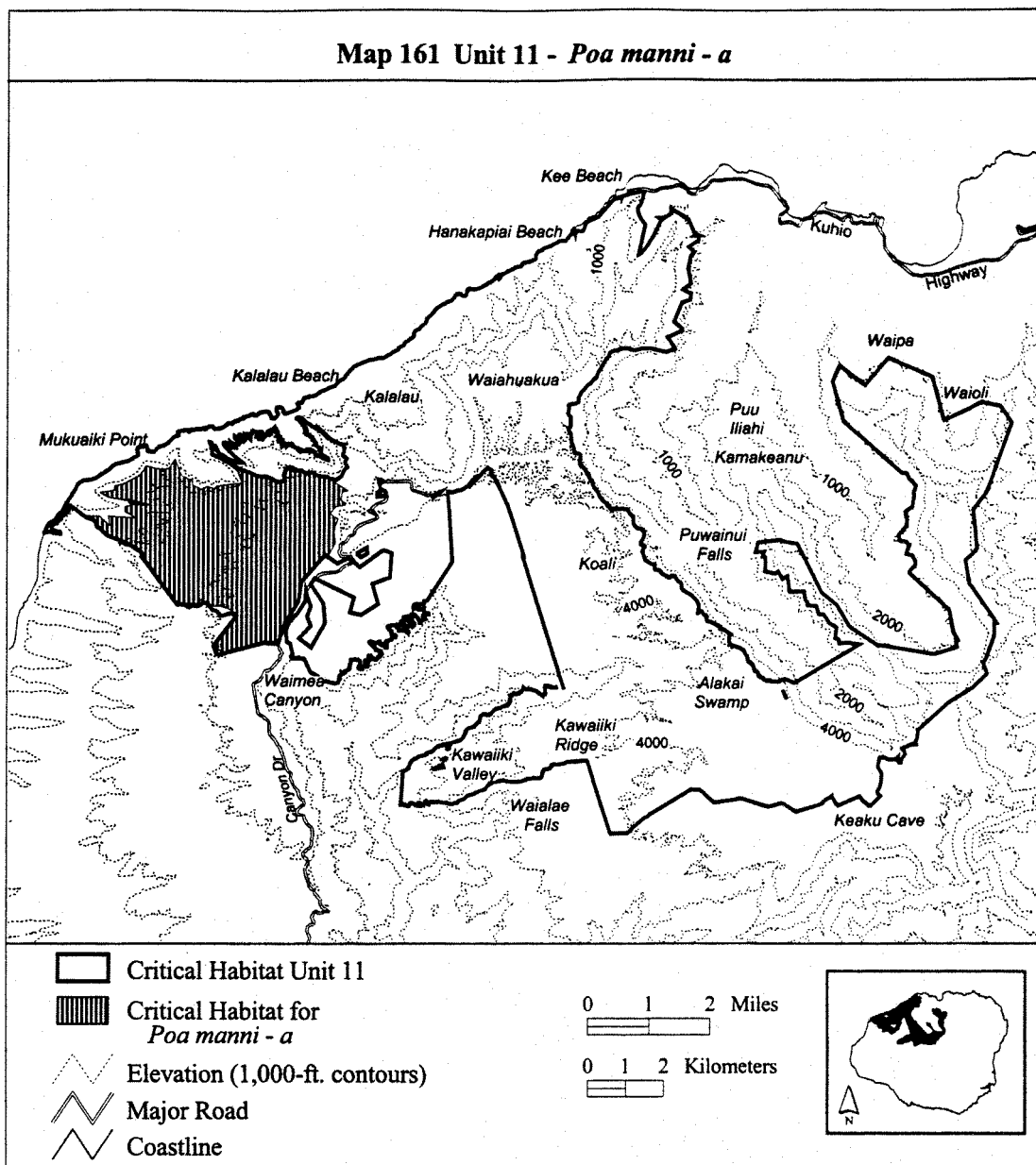
2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 431993, 2449791; 432594, 2449404; 432440, 2449378; 432415, 2449161; 432550, 2449064; 432514, 2449029; 432286, 2448988; 432120, 2448816; 432217, 2448734; 432331, 2448670; 432248, 2448433; 432235, 2448305; 432261, 2448075; 432248, 2447985; 432082, 2447678; 432073, 2447674; 432001, 2447726; 431869, 2447580; 431749, 2447525; 431686, 2447378; 431369, 2447027; 431298, 2446522; 430955, 2445963; 430837, 2445645; 430679, 2445410; 430405, 2445422; 429367, 2445154; 429077,

2445312; 429062, 2445354; 429654,
2446125; 429591, 2446167; 429485,
2446305; 429263, 2446389; 429094,
2446389; 428972, 2446421; 428904,
2446474; 428793, 2446542; 428740,
2446564; 428655, 2446474; 428602,
2446447; 428476, 2446463; 428396,
2446447; 428285, 2446458; 428116,
2446474; 428047, 2446484; 427185,
2447661; 427161, 2447669; 427157,
2447676; 427157, 2447711; 427175,
2447754; 427176, 2447775; 427171,

2447800; 427160, 2447815; 427124,
2447837; 427084, 2447847; 427039,
2447867; 426997, 2447892; 426981,
2447902; 426958, 2447923; 426944,
2447941; 426907, 2447965; 426847,
2447992; 426819, 2447998; 426798,
2448010; 426758, 2448005; 426737,
2448009; 426722, 2448015; 426613,
2448093; 426561, 2448116; 426517,
2448133; 426478, 2448151; 426432,
2448166; 426398, 2448180; 426338,
2448196; 426281, 2448222; 426223,

2448260; 426138, 2448319; 426097,
2448378; 426063, 2448412; 426051,
2448421; 426007, 2448440; 425989,
2448455; 425969, 2448492; 425954,
2448543; 425949, 2448584; 425923,
2448613; 425884, 2448631; 425855,
2448652; 425837, 2448658; 425792,
2448676; 425765, 2448685; 425735,
2448700; 425708, 2448709; 425675,
2448727; 425654, 2448744; return to
starting point.

(B) Note: Map 161 follows:



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

(A) Unit consists of the following 234 boundary points: Start at 438751, 2445160; 438842, 2444944; 439024,

2445148; 439285, 2445160; 439353, 2445398; 439637, 2445466; 439933, 2445511; 440148, 2445421; 440273, 2445375; 440512, 2445375; 441091, 2445284; 441046, 2445068; 441387, 2445216; 441625, 2445204; 441750,

2445102; 441807, 2445307; 441909, 2445363; 442045, 2445454; 442204, 2445397; 441966, 2445250; 441943, 2445068; 441841, 2444784; 441784, 2444750; 441648, 2444921; 441409, 2444841; 441659, 2444489; 441148,

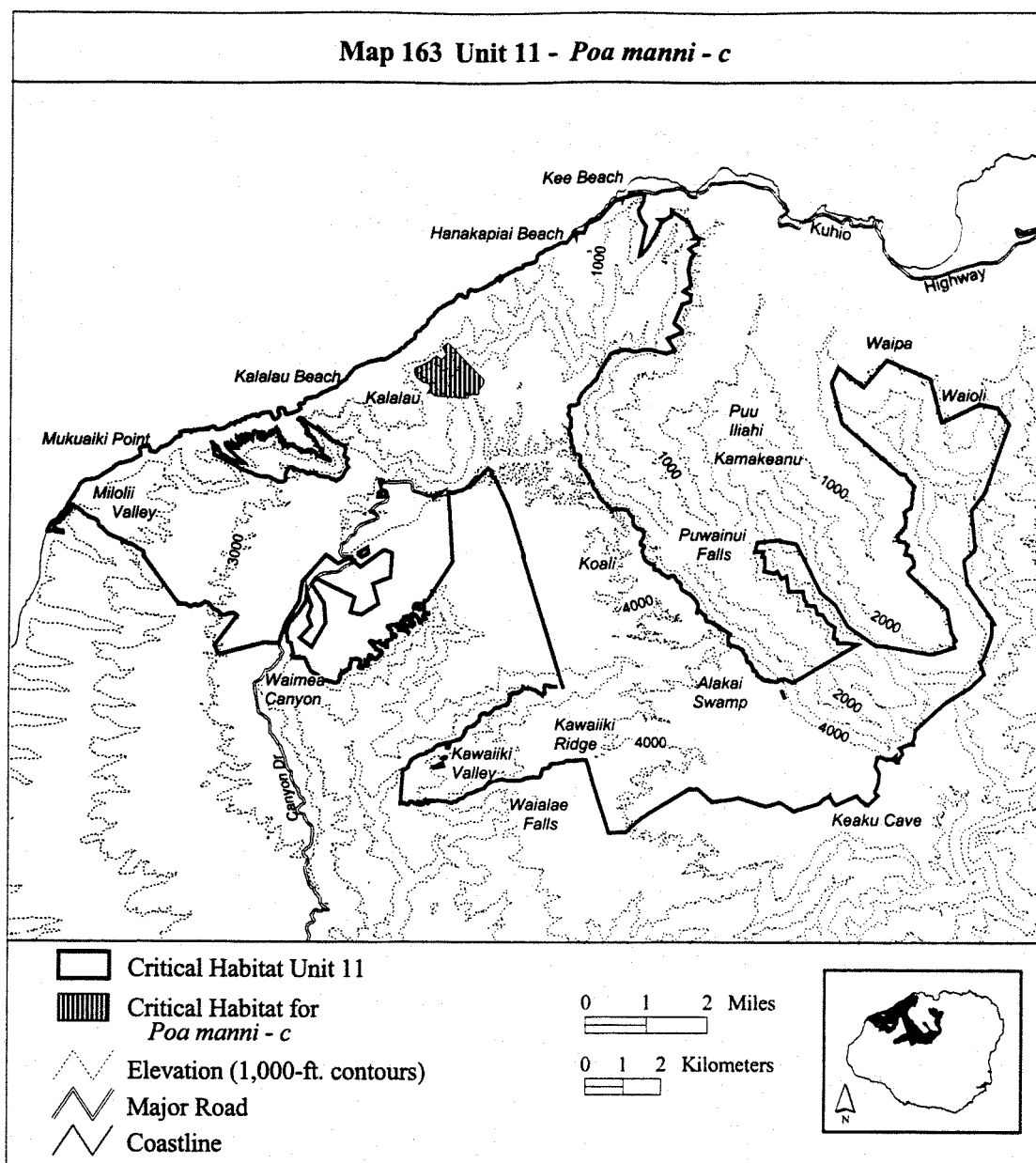
2444523; 440784, 2444523; 440796,
2444330; 440682, 2444240; 440444,
2444251; 440421, 2444478; 440216,
2444455; 440069, 2444455; 440092,
2444296; 439989, 2444240; 439603,
2444206; 439478, 2444047; 439808,
2443945; 439910, 2443763; 440239,
2443785; 440239, 2443695; 440035,
2443627; 439773, 2443513; 439467,
2443615; 439217, 2443422; 439012,
2443388; 438638, 2443581; 438638,
2443638; 438376, 2443536; 438399,
2443445; 435707, 2442537; 435707,
2442855; 435926, 2443221; 435933,
2443223; 435942, 2443232; 435949,
2443246; 435958, 2443255; 435969,
2443263; 435979, 2443271; 435993,
2443281; 436010, 2443297; 436032,
2443316; 436048, 2443332; 436064,
2443343; 436080, 2443358; 436089,
2443375; 436095, 2443390; 436100,
2443403; 436107, 2443421; 436113,
2443456; 436118, 2443477; 436123,
2443502; 436134, 2443520; 436146,
2443534; 436160, 2443543; 436175,
2443554; 436190, 2443560; 436213,
2443563; 436227, 2443563; 436240,
2443562; 436254, 2443557; 436265,
2443552; 436274, 2443547; 436287,
2443540; 436300, 2443537; 436315,
2443532; 436328, 2443529; 436337,
2443528; 436348, 2443531; 436357,
2443536; 436369, 2443546; 436380,
2443558; 436392, 2443572; 436403,
2443585; 436421, 2443611; 436438,
2443631; 436460, 2443655; 436478,

2443676; 436497, 2443688; 436518,
2443696; 436534, 2443700; 436558,
2443707; 436576, 2443711; 436597,
2443714; 436611, 2443716; 436630,
2443718; 436644, 2443720; 436655,
2443724; 436666, 2443731; 436678,
2443742; 436697, 2443756; 436708,
2443763; 436726, 2443769; 436745,
2443772; 436758, 2443775; 436771,
2443776; 436788, 2443776; 436799,
2443778; 436808, 2443781; 436818,
2443785; 436823, 2443786; 436829,
2443790; 436837, 2443797; 436841,
2443801; 436845, 2443807; 436852,
2443819; 436861, 2443831; 436870,
2443847; 436882, 2443863; 436890,
2443877; 436900, 2443900; 436911,
2443923; 436914, 2443936; 436914,
2443948; 436913, 2443962; 436910,
2443981; 436908, 2443995; 436908,
2444013; 436911, 2444027; 436918,
2444040; 436926, 2444047; 436933,
2444055; 436942, 2444065; 436951,
2444073; 436961, 2444084; 436969,
2444094; 436975, 2444098; 436983,
2444102; 436994, 2444107; 437009,
2444108; 437026, 2444105; 437049,
2444100; 437067, 2444092; 437076,
2444089; 437106, 2444090; 437119,
2444096; 437128, 2444104; 437133,
2444112; 437137, 2444122; 437144,
2444130; 437156, 2444135; 437169,
2444141; 437183, 2444150; 437191,
2444154; 437202, 2444165; 437212,
2444177; 437228, 2444198; 437239,
2444213; 437245, 2444227; 437254,

2444239; 437263, 2444246; 437278,
2444240; 437294, 2444234; 437310,
2444225; 437332, 2444217; 437351,
2444217; 437370, 2444223; 437391,
2444223; 437412, 2444226; 437428,
2444226; 437445, 2444223; 437462,
2444219; 437482, 2444211; 437497,
2444205; 437541, 2444190; 437563,
2444183; 437578, 2444179; 437593,
2444170; 437610, 2444160; 437624,
2444146; 437636, 2444132; 437651,
2444119; 437671, 2444112; 437691,
2444102; 437703, 2444093; 437722,
2444082; 437732, 2444069; 437749,
2444061; 437758, 2444058; 437768,
2444060; 437780, 2444066; 437810,
2444080; 437821, 2444088; 437831,
2444100; 437833, 2444111; 437835,
2444126; 437833, 2444139; 437827,
2444163; 437822, 2444185; 437820,
2444206; 437818, 2444236; 437824,
2444265; 437828, 2444292; 437836,
2444314; 437843, 2444322; 437854,
2444327; 437871, 2444328; 437887,
2444323; 437909, 2444314; 437933,
2444302; 437960, 2444289; 437984,
2444274; 438007, 2444260; 438028,
2444258; 438048, 2444258; 438072,
2444260; 438087, 2444266; 438109,
2444271; 438133, 2444273; 438164,
2444270; 438196, 2444263; 438335,
2444214; 438062, 2445062; return to
starting point.

(B) **Note:** Map 162 follows:





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

(A) Unit consists of the following 77 boundary points: Start at 433153, 2449843; 432813, 2450152; 432485, 2450450; 432490, 2450478; 432501, 2450529; 432494, 2450543; 432477, 2450580; 432468, 2450593; 432464, 2450611; 432465, 2450623; 432450, 2450624; 432408, 2450635; 432380, 2450644; 432335, 2450666; 432281, 2450696; 432235, 2450718; 432200, 2450735; 432172, 2450746; 432145, 2450759; 431625, 2451231; 431758,

2451328; 431849, 2451245; 431911, 2451384; 431960, 2451272; 432072, 2451300; 432121, 2451098; 432191, 2451293; 432246, 2451224; 432267, 2451286; 432386, 2451112; 432365, 2451307; 432477, 2451286; 432456, 2451398; 432532, 2451384; 432553, 2451481; 432539, 2451572; 432630, 2451691; 432742, 2451495; 432825, 2451642; 432909, 2451579; 432902, 2451481; 433035, 2451523; 433000, 2451405; 433063, 2451335; 432902, 2451300; 432867, 2451237; 433000, 2451098; 433084, 2450965; 433181, 2450896; 433244, 2450833; 433481,

2450937; 433516, 2450868; 433516, 2450756; 433411, 2450624; 433509, 2450638; 433509, 2450491; 433642, 2450798; 433718, 2450603; 433893, 2450638; 434102, 2450721; 434172, 2450728; 434256, 2450679; 434339, 2450672; 435693, 2449591; 435532, 2449494; 435330, 2449466; 435107, 2449452; 434681, 2449431; 434430, 2449661; 434207, 2449836; 434046, 2450073; 433795, 2449947; 433774, 2449752; 433565, 2449738; 433404, 2449759; 433321, 2449885; 433195, 2449955; return to starting point.

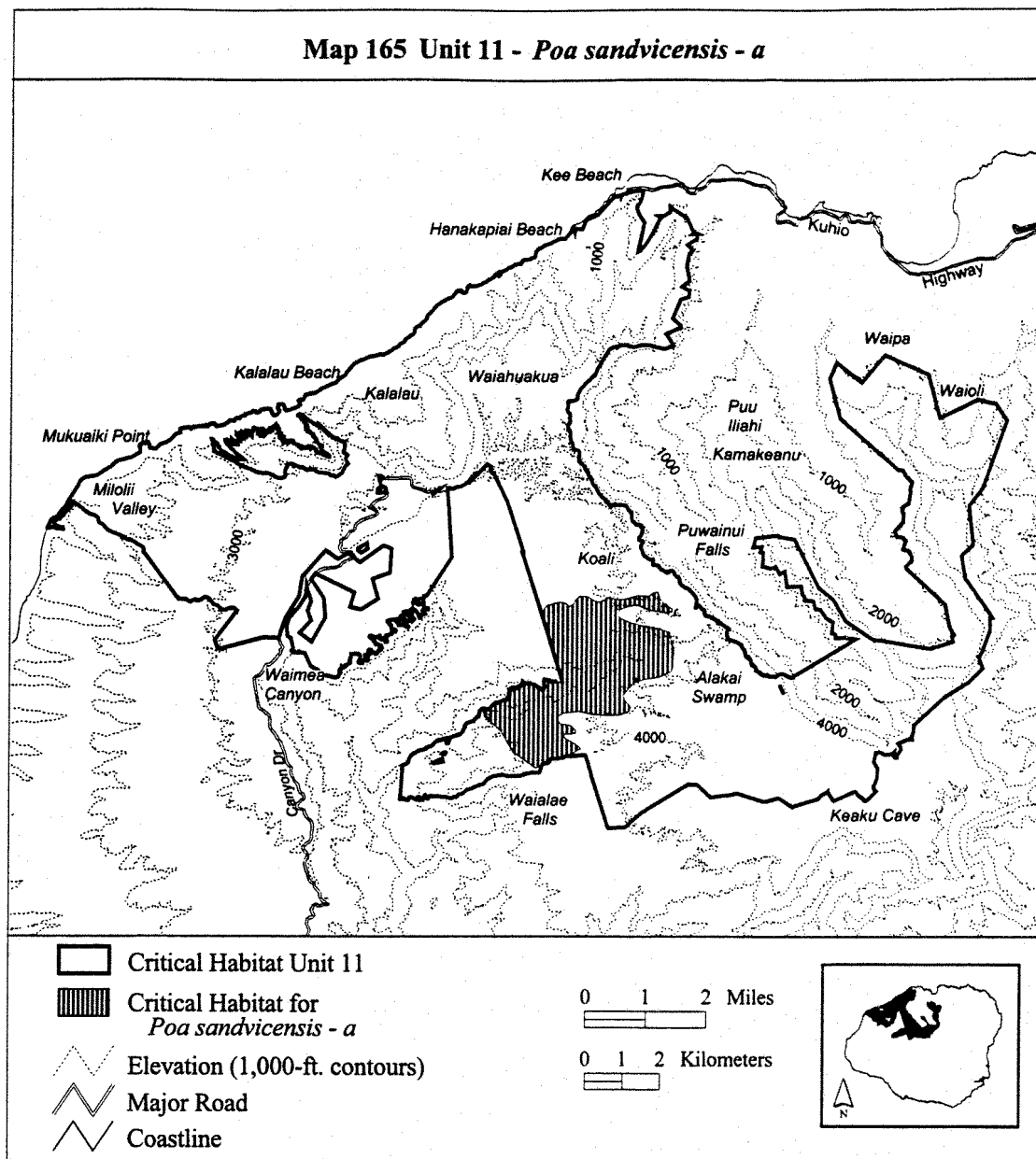
(B) **Note:** Map 164 follows:

2443688; 436518, 2443696; 436534,
2443700; 436558, 2443707; 436576,
2443711; 436597, 2443714; 436611,
2443716; 436630, 2443718; 436644,
2443720; 436655, 2443724; 436666,
2443731; 436678, 2443742; 436697,
2443756; 436708, 2443763; 436726,
2443769; 436745, 2443772; 436758,
2443775; 436771, 2443776; 436788,
2443776; 436799, 2443778; 436808,
2443781; 436818, 2443785; 436823,
2443786; 436829, 2443790; 436837,
2443797; 436841, 2443801; 436845,
2443807; 436852, 2443819; 436861,
2443831; 436870, 2443847; 436882,
2443863; 436890, 2443877; 436900,
2443900; 436911, 2443923; 436914,
2443936; 436914, 2443948; 436913,
2443962; 436910, 2443981; 436908,
2443995; 436908, 2444013; 436911,
2444027; 436918, 2444040; 436926,
2444047; 436933, 2444055; 436942,
2444065; 436951, 2444073; 436961,

2444084; 436969, 2444094; 436975,
2444098; 436983, 2444102; 436994,
2444107; 437009, 2444108; 437026,
2444105; 437049, 2444100; 437067,
2444092; 437076, 2444089; 437106,
2444090; 437119, 2444096; 437128,
2444104; 437133, 2444112; 437137,
2444122; 437144, 2444130; 437156,
2444135; 437169, 2444141; 437183,
2444150; 437191, 2444154; 437202,
2444165; 437212, 2444177; 437228,
2444198; 437239, 2444213; 437245,
2444227; 437254, 2444239; 437263,
2444246; 437278, 2444240; 437294,
2444234; 437310, 2444225; 437332,
2444217; 437351, 2444217; 437370,
2444223; 437391, 2444223; 437412,
2444226; 437428, 2444226; 437445,
2444223; 437462, 2444219; 437482,
2444211; 437497, 2444205; 437541,
2444190; 437563, 2444183; 437578,
2444179; 437593, 2444170; 437610,
2444160; 437624, 2444146; 437636,

2444132; 437651, 2444119; 437671,
2444112; 437691, 2444102; 437703,
2444093; 437722, 2444082; 437732,
2444069; 437749, 2444061; 437758,
2444058; 437768, 2444060; 437780,
2444066; 437810, 2444080; 437821,
2444088; 437831, 2444100; 437833,
2444111; 437835, 2444126; 437833,
2444139; 437827, 2444163; 437822,
2444185; 437820, 2444206; 437818,
2444236; 437824, 2444265; 437828,
2444292; 437836, 2444314; 437843,
2444322; 437854, 2444327; 437871,
2444328; 437887, 2444323; 437909,
2444314; 437933, 2444302; 437960,
2444289; 437984, 2444274; 438007,
2444260; 438028, 2444258; 438048,
2444258; 438072, 2444260; 438087,
2444266; 438109, 2444271; 438133,
2444273; 438164, 2444270; 438196,
2444263; 438335, 2444214; return to
starting point.

(B) **Note:** Map 165 follows:



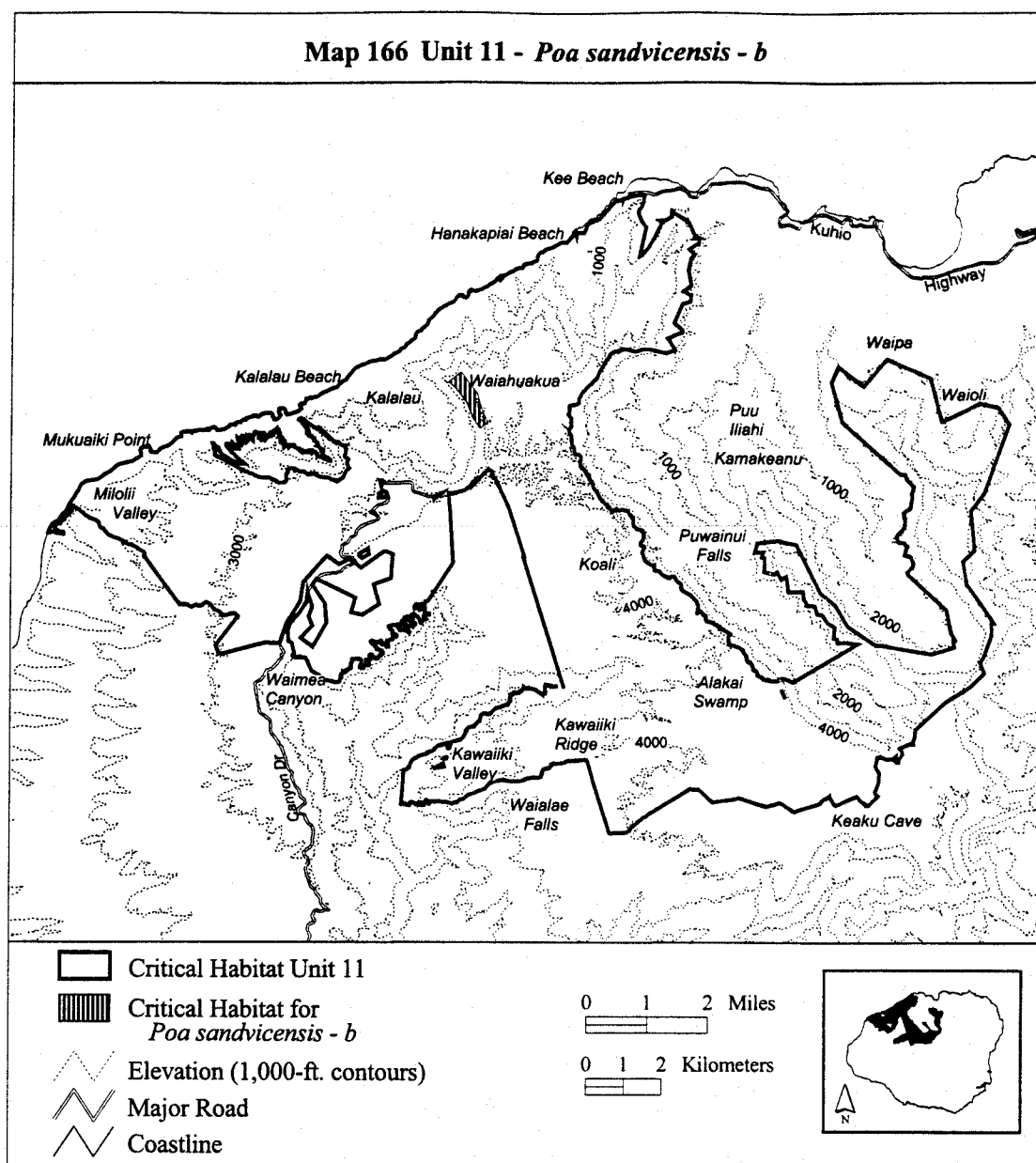
(clxvi) Kauai 11—*Poa sandvicensis*—b
(52 ha; 129 ac)

(A) Unit consists of the following 10
boundary points: Start at 436055,

2451082; 435856, 2451368; 435690,
2451778; 435398, 2452143; 435211,
2452317; 435557, 2452588; 435790,
2452218; 435961, 2452034; 436121,

2451531; 436275, 2451227; return to
starting point.

(B) **Note:** Map 166 follows:



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

(A) Unit consists of the following 227 boundary points: Start at 435318, 2449361; 435292, 2449379; 435269, 2449384; 435247, 2449385; 435234, 2449384; 435236, 2449347; 435272, 2448835; 434926, 2448514; 433562, 2447841; 433527, 2447856; 433396, 2447759; 433345, 2447734; 433014, 2447717; 433109, 2447775; 433094, 2447922; 432827, 2447751; 432878, 2447710; 432213, 2447675; 432081, 2447668; 432001, 2447726; 431942, 2447661; 431912, 2447659; 431752, 2448070; 431709, 2447946; 431586, 2447682; 431454, 2447418; 431304, 2447145; 431119, 2446952; 430635, 2447101; 430494, 2447093; 430327,

2446996; 430019, 2446697; 429904, 2446433; 429975, 2446274; 430168, 2446168; 430432, 2446063; 430573, 2445940; 430564, 2445728; 430432, 2445675; 430115, 2445737; 429790, 2445931; 429684, 2446063; 429618, 2446078; 429654, 2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476, 2446463; 428396, 2446447; 428285, 2446458; 428116, 2446474; 428047, 2446484; 427185, 2447661; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427130, 2447833; 427219,

2448070; 427360, 2448281; 427360, 2448404; 427360, 2448527; 427457, 2448571; 427800, 2448633; 427967, 2448650; 427932, 2448712; 428038, 2448765; 428135, 2448800; 428126, 2448862; 428038, 2448932; 428038, 2448985; 428205, 2449073; 428363, 2449038; 428399, 2449011; 428504, 2448958; 428592, 2448967; 428601, 2448932; 428645, 2448932; 428733, 2449046; 428821, 2449073; 428989, 2449055; 429112, 2449117; 429182, 2449169; 429323, 2449161; 429350, 2449178; 429314, 2449284; 429350, 2449310; 429675, 2449345; 429790, 2449398; 429878, 2449425; 430080, 2449345; 430212, 2449328; 430354, 2449452; 430355, 2449451; 430369, 2449433; 430418, 2449395; 430437,

2449371; 430430, 2449364; 430451, 2449363; 430463, 2449355; 430474, 2449342; 430485, 2449333; 430527, 2449321; 430533, 2449310; 430545, 2449277; 430559, 2449254; 430604, 2449229; 430616, 2449214; 430623, 2449194; 430623, 2449173; 430616, 2449156; 430619, 2449138; 430629, 2449119; 430643, 2449106; 430677, 2449084; 430699, 2449074; 430717, 2449071; 430748, 2449070; 430773, 2449073; 430799, 2449081; 430825, 2449080; 430875, 2449032; 430881, 2449027; 430905, 2449022; 430921, 2449029; 430944, 2449045; 430958, 2449061; 430967, 2449077; 430984, 2449094; 431006, 2449097; 431020, 2449089; 431028, 2449064; 431024, 2449005; 431035, 2448975; 431050, 2448960; 431066, 2448956; 431086, 2448957; 431093, 2448962; 431116, 2448991; 431124, 2448994; 431134, 2448988; 431138, 2448981; 431147, 2448955; 431158, 2448950; 431170, 2448954; 431195, 2448966; 431208, 2448969; 431223, 2448964; 431228, 2448960; 431275, 2448914; 431290, 2448911; 431310, 2448912; 431339, 2448927; 431358, 2448923; 431376,

2448914; 431407, 2448903; 431463, 2448902; 431473, 2448899; 431479, 2448891; 431501, 2448872; 431538, 2448867; 431545, 2448867; 431567, 2448859; 431580, 2448844; 431596, 2448824; 431611, 2448789; 431609, 2448764; 431601, 2448750; 431600, 2448733; 431627, 2448682; 431636, 2448653; 431677, 2448576; 431702, 2448563; 431763, 2448526; 431788, 2448486; 431824, 2448430; 431830, 2448417; 431840, 2448395; 431847, 2448368; 432630, 2449144; 432749, 2449800; 433222, 2450264; 433345, 2450115; 433481, 2450031; 433526, 2449921; 433637, 2449927; 433624, 2450096; 434143, 2450303; 434279, 2450225; 434207, 2450160; 434331, 2450037; 434460, 2449992; 434590, 2449927; 434558, 2449797; 434635, 2449823; 434713, 2449765; 434707, 2449674; 434772, 2449609; 434849, 2449694; 435011, 2449713; 435148, 2449616; 435414, 2449661; 435666, 2449525; 435669, 2449472; 435664, 2449469; 435598, 2449429; 435576, 2449421; 435549, 2449426; 435517, 2449423; 435501, 2449420; 435469, 2449405; 435418, 2449387; 435390,

2449374; 435390, 2449374; 435368, 2449361; 435334, 2449356; 435319, 2449360; return to starting point.

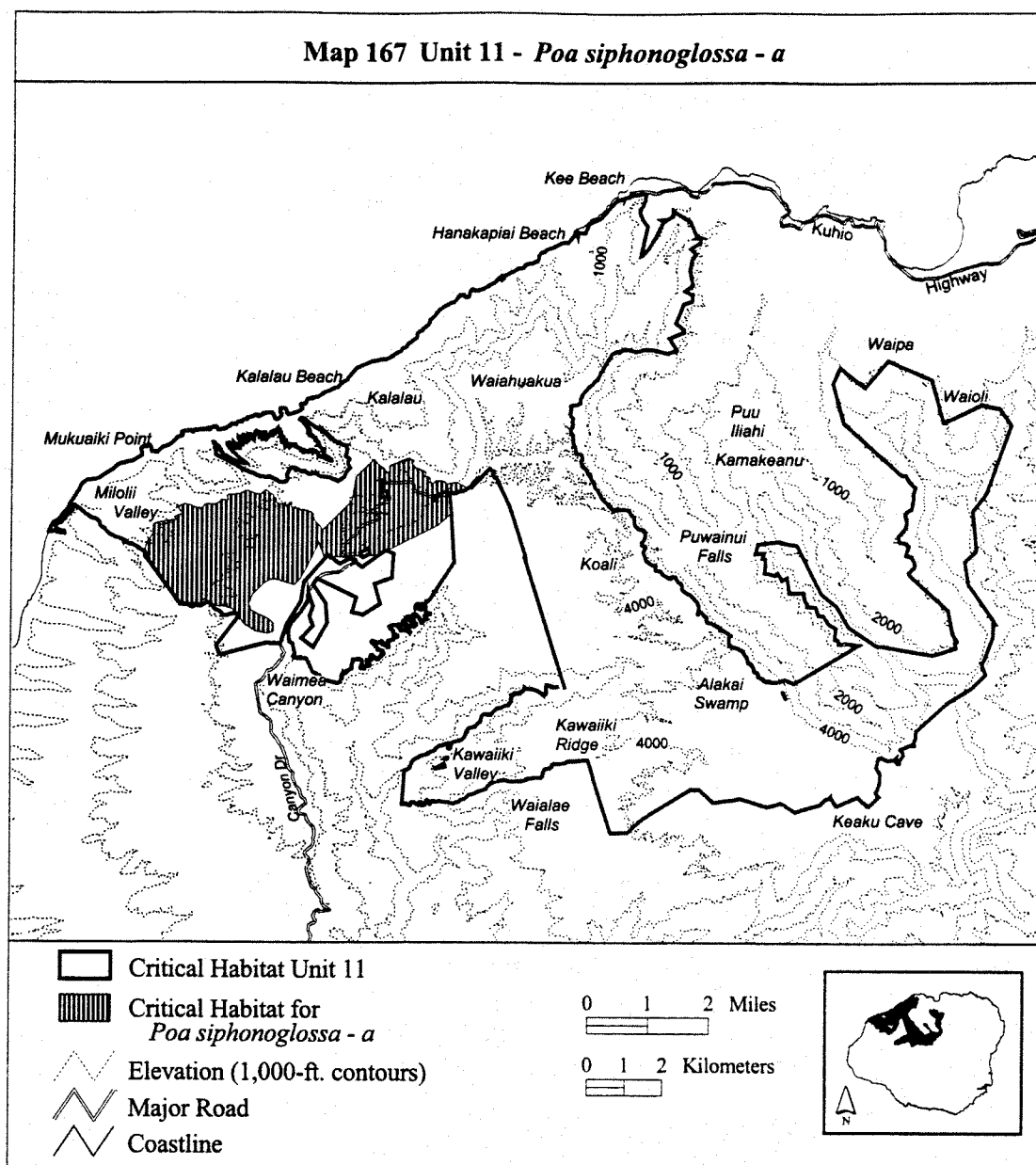
(B) Excluding 3 areas:

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

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

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

(C) **Note:** Map 167 follows:



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

(A) Unit consists of the following 372
boundary points: Start at 439906,

2445836; 441198, 2445593; 441314,
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2444115; 441081, 2443396; 441256,
2442501; 441334, 2441762; 440770,
2441101; 440528, 2440844; 440464,
2440832; 440113, 2440527; 440014,
2440441; 440002, 2440430; 439931,
2440426; 439832, 2440430; 439556,
2440414; 439491, 2440617; 439088,
2441871; 438934, 2442351; 438866,
2442347; 438838, 2442340; 438821,
2442339; 438757, 2442331; 438721,
2442329; 438704, 2442326; 438694,
2442327; 438679, 2442324; 438656,

2442321; 438626, 2442315; 438609,
2442314; 438561, 2442316; 438536,
2442314; 438535, 2442314; 438523,
2442310; 438517, 2442310; 438496,
2442310; 438460, 2442320; 438453,
2442321; 438436, 2442321; 438433,
2442319; 438418, 2442311; 438392,
2442294; 438376, 2442278; 438373,
2442277; 438355, 2442265; 438305,
2442256; 438254, 2442248; 438238,
2442248; 438219, 2442244; 438157,
2442234; 438130, 2442234; 438114,
2442232; 438098, 2442237; 438095,
2442238; 438065, 2442246; 438049,
2442246; 438030, 2442243; 438012,
2442229; 438000, 2442216; 437998,
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2442188; 437984, 2442167; 437973,
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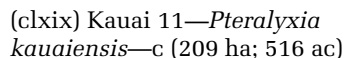
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2442074; 437777, 2442052; 437766,
2442017; 437758, 2441998; 437754,
2441991; 437751, 2441981; 437745,
2441950; 437740, 2441938; 437736,
2441928; 437717, 2441899; 437711,
2441887; 437705, 2441878; 437689,
2441877; 437674, 2441875; 437647,
2441866; 437635, 2441866; 437617,
2441866; 437602, 2441867; 437566,
2441876; 437532, 2441880; 437522,
2441879; 437495, 2441869; 437460,
2441862; 437432, 2441860; 437391,
2441858; 437366, 2441852; 437346,
2441845; 437332, 2441842; 437317,
2441835; 437287, 2441816; 437274,

2441809; 437240, 2441796; 437224,
2441791; 437181, 2441781; 437150,
2441777; 437111, 2441777; 437096,
2441779; 437062, 2441776; 437008,
2441775; 436960, 2441776; 436912,
2441780; 436895, 2441784; 436825,
2441795; 436815, 2441798; 436852,
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2442862; 436782, 2442872; 436607,
2443105; 436238, 2443377; 436257,
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2443948; 436913, 2443962; 436910,
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2444047; 436933, 2444055; 436942,
2444065; 436943, 2444066; 436951,
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2444094; 436975, 2444098; 436983,
2444102; 436994, 2444107; 437009,
2444108; 437026, 2444105; 437049,
2444100; 437067, 2444092; 437076,
2444089; 437106, 2444090; 437119,
2444096; 437128, 2444104; 437133,
2444112; 437137, 2444122; 437144,
2444130; 437156, 2444135; 437169,
2444141; 437183, 2444150; 437191,
2444154; 437202, 2444165; 437212,
2444177; 437228, 2444198; 437239,
2444213; 437239, 2444213; 437245,
2444227; 437254, 2444239; 437263,
2444246; 437278, 2444240; 437294,
2444234; 437310, 2444225; 437332,
2444217; 437351, 2444217; 437370,
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2444226; 437428, 2444226; 437445,
2444223; 437462, 2444219; 437482,
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2444190; 437563, 2444183; 437578,
2444179; 437592, 2444171; 437593,
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2444328; 437887, 2444323; 437909,

2444314; 437933, 2444302; 437960,
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2444214; 438318, 2444268; 438317,
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2447282; 439258, 2447293; 439325,
2447367; 439345, 2447472; 439510,
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2447524; 439777, 2447545; 439837,
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2447296; 439791, 2447275; 439776,
2447216; 439557, 2447183; 439528,
2447125; 439795, 2447081; 439817,
2447082; 439817, 2447077; 439856,
2447071; 439910, 2447092; 439910,
2447123; 440014, 2447134; 440072,
2447154; 440108, 2447168; 440110,
2447167; 440144, 2447179; 440141,
2447143; 440146, 2447140; 440234,
2447108; 440263, 2447052; 440170,
2447045; 440174, 2446941; 440148,
2446878; 440115, 2446879; 440108,
2446857; 439975, 2446650; 439979,
2446414; 440303, 2446507; 440653,
2446507; 440848, 2446623; 441003,
2446351; 441217, 2446195; 441178,
2446059; 439894, 2446138; 439903,
2446071; 439927, 2445971; return to
starting point.

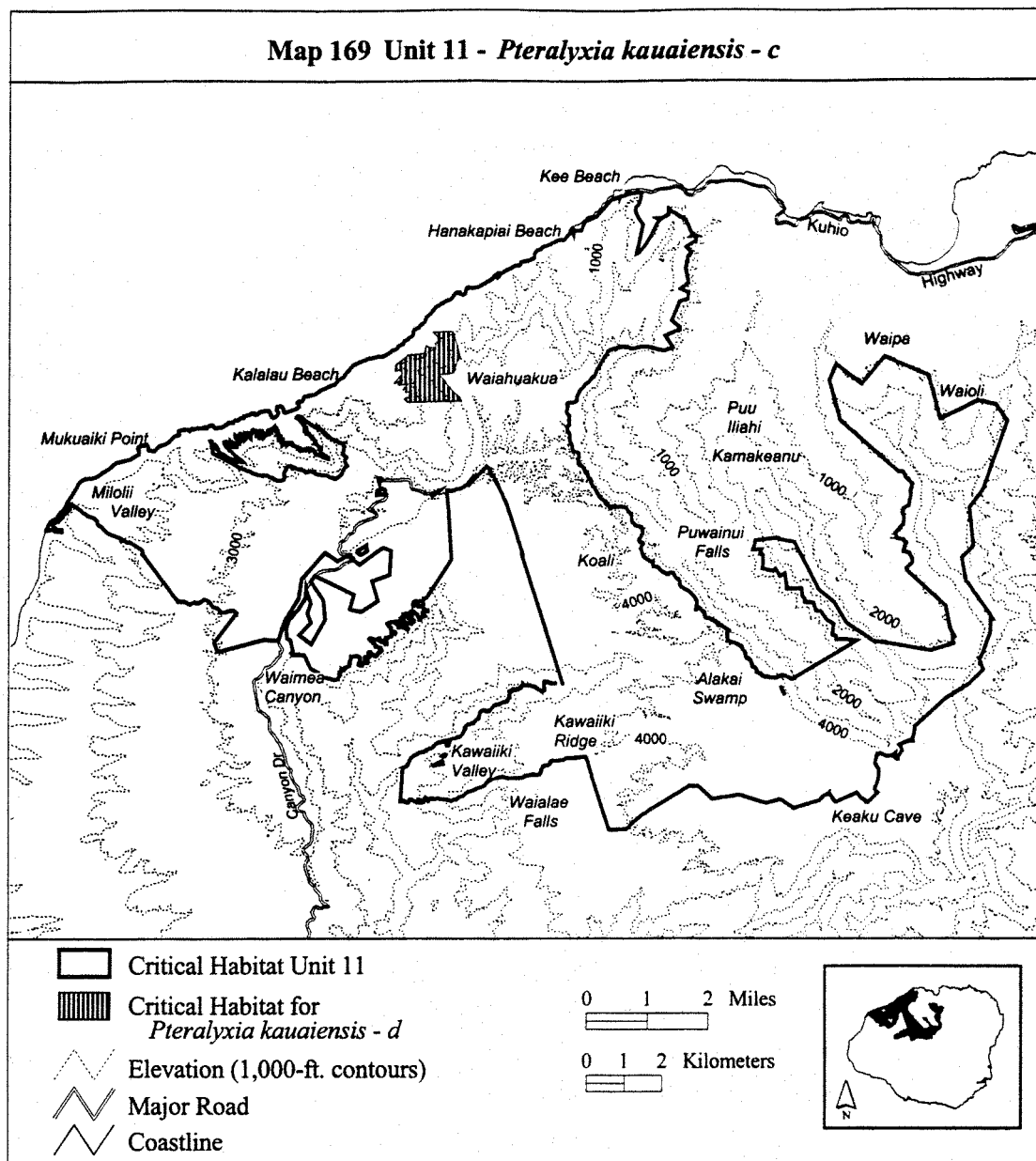
(B) **Note:** Map 168 follows:



2452126; 435419, 2451974; 435551,
2451852; 435592, 2451741; 434183,
2451701; 434102, 2451792; 434264,
2451873; 434213, 2451893; 434254,
2451984; 434112, 2451984; 434163,
2452065; 434051, 2452045; 434173,
2452187; 433940, 2452157; 433940,
2452248; 433828, 2452207; 433940,
2452339; 434041, 2452481; 433960,
2452582; 433838, 2452531; 433858,

2452693; 434051, 2452845; 434193,
2452966; 434517, 2452997; 434629,
2453017; 434669, 2453219; 434781,
2453169; 434933, 2453169; 434912,
2453280; 434983, 2453320; 434994,
2453452; 434872, 2453584; 435186,
2453594; 435379, 2453594; return to
starting point.

(B) **Note:** Map 169 follows:



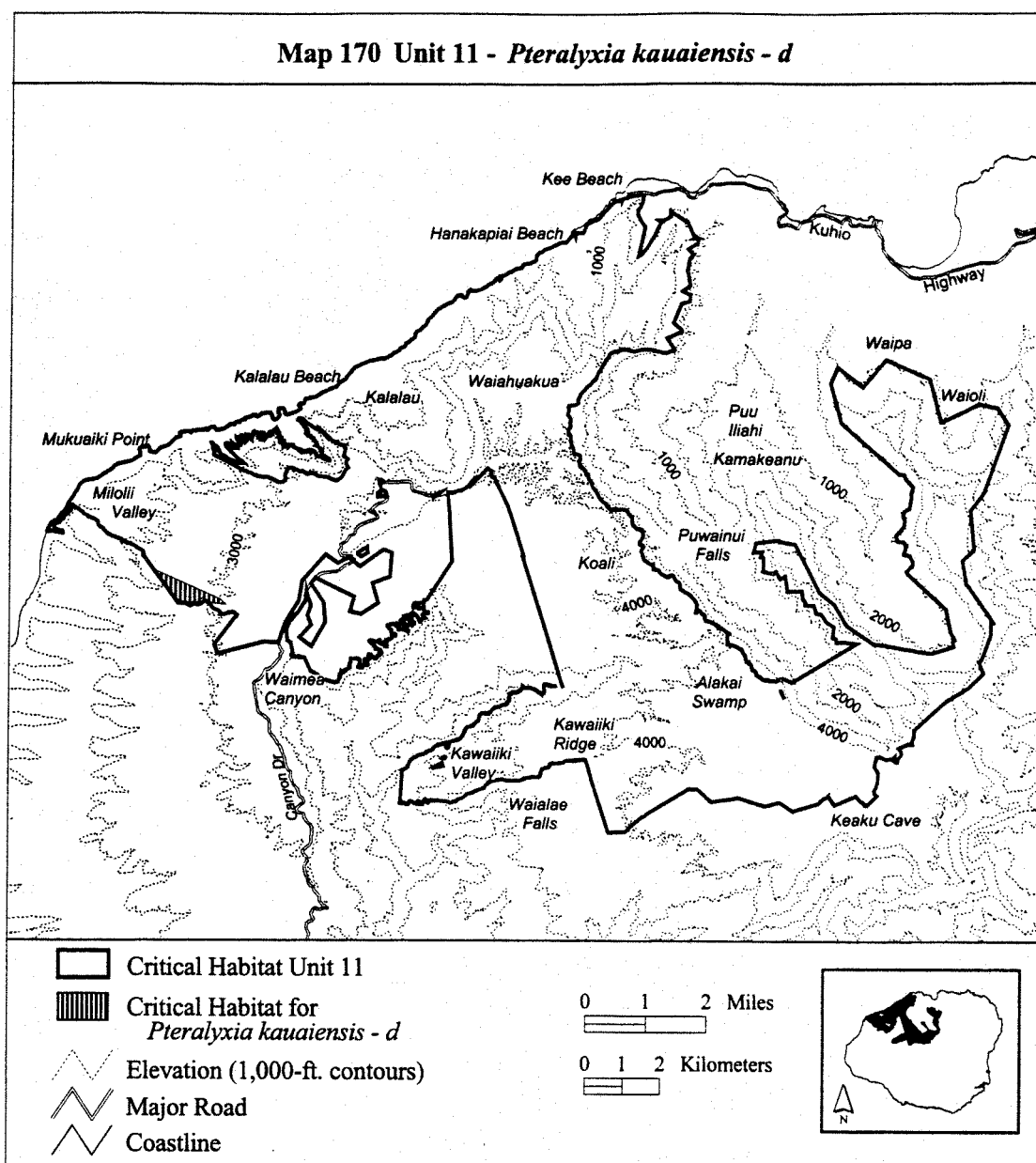
(clxx) Kauai 11—*Pteralyxia kauaiensis*—d (57 ha; 141 ac)

(A) Unit consists of the following 15 boundary points: Start at 427428,

2447329; 429224, 2446536; 429347, 2446394; 428978, 2446451; 428955, 2446435; 428904, 2446474; 428793, 2446542; 428740, 2446564; 428655, 2446474; 428602, 2446447; 428476,

2446463; 428396, 2446447; 428285, 2446458; 428116, 2446474; 428047, 2446484; return to starting point.

(B) **Note:** Map 170 follows:



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

(A) Unit consists of the following 42 boundary points: Start at 434264, 2451326; 435936, 2450971; 435875, 2450799; 435916, 2450657; 435835, 2450586; 435906, 2450505; 435855, 2450364; 435855, 2450293; 435733, 2450252; 435723, 2450121; 435693,

2450040; 435642, 2449908; 435642, 2449766; 435531, 2449706; 435389, 2449645; 435156, 2449635; 435105, 2449625; 435024, 2449716; 434913, 2449685; 434771, 2449635; 434659, 2449716; 434507, 2449817; 434355, 2449969; 434213, 2450182; 434274, 2450222; 434142, 2450324; 434031, 2450172; 433737, 2450162; 433676,

2450091; 433615, 2449969; 433554, 2449909; 433483, 2449970; 433362, 2450071; 433190, 2450273; 433088, 2450334; 432967, 2450466; 433473, 2451326; 433615, 2451337; 433717, 2451418; 433869, 2451428; 434061, 2451428; 434163, 2451346; return to starting point.

(B) Note: Map 171 follows:

Map 171 Unit 11 - *Pteralyxia kauaiensis* - e

The map displays the island of Kauai with Unit 11 highlighted by a thick black border. Within this unit, a specific area is marked with diagonal hatching, representing critical habitat for *Pteralyxia kauaiensis* - e. The map includes various geographical labels: beaches (Kee, Hanakapiai, Kalalau), valleys (Milolii, Waimea, Kawaiiki), canyons (Waimea, Waialeale), ridges (Kawaiiki), and other features like Waialeale Falls, Kamekameanu, and Keaku Cave. Elevation contours are shown at 1,000-foot intervals, and major roads are indicated by double lines. The coastline is marked with a wavy line. A legend at the bottom left defines the symbols for Critical Habitat Unit 11, Critical Habitat for *Pteralyxia kauaiensis* - e, Elevation (1,000-ft. contours), Major Road, and Coastline. A scale bar at the bottom center shows distances in miles (0 to 2) and kilometers (0 to 2). An inset map at the bottom right shows the location of Kauai within the Hawaiian Islands, with a north arrow.

Legend:

- Critical Habitat Unit 11
- Critical Habitat for *Pteralyxia kauaiensis* - e
- Elevation (1,000-ft. contours)
- Major Road
- Coastline

Scale:

- 0 1 2 Miles
- 0 1 2 Kilometers

Inset Map:

North Arrow

(A) Unit consists of the following 463 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715,

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2443086; 435729, 2443093; 435735,
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2443127; 435749, 2443138; 435753,
2443149; 435757, 2443155; 435766,
2443169; 435778, 2443179; 435790,
2443186; 435804, 2443188; 435821,
2443194; 435842, 2443199; 435861,
2443202; 435874, 2443204; 435889,
2443208; 435904, 2443211; 435933,
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2443403; 436107, 2443421; 436113,
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2443502; 436134, 2443520; 436146,
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2444618; 438780, 2444627; 438885, 2444574; 438946, 2444478; 438990, 2444644; 439218, 2444741; 439455, 2444846; 439639, 2444846; 439700, 2445074; 440094, 2445038; 440454, 2444793; 440243, 2444784; 440183, 2444848; 440016, 2444942; 439849, 2444916; 439919, 2444749; 439753, 2444513; 439490, 2444373; 439314, 2444215; 439139, 2444101; 439060, 2444127; 438999, 2443970; 438806, 2444022; 438648, 2444101; 438595, 2444128; 438499, 2443952; 438315, 2443882; 438315, 2443821; 438070, 2443733; 438017, 2443874; 437815, 2443821; 437579, 2443786; 437386, 2443742; 437482, 2443567; 437263, 2443506; 437254, 2443400; 437342, 2443339; 437193, 2443278; 437070, 2443278; 436939, 2443295; 436667, 2443252; 436667, 2443155; 436632, 2443068; 436702, 2442980; 436474, 2442822; 436614, 2442840; 436816, 2442857; 436798, 2442752; 436939, 2442682; 437061, 2442734; 437140, 2442620; 436947, 2442480; 437053, 2442305; 437132, 2442174; 437281, 2442174; 437289, 2442068; 437070, 2442033; 437061, 2441893; 436772, 2441937; 436755, 2442033; 436667, 2441955; 436606, 2441998; 436457, 2441981; 436413, 2441902; 436246, 2441893; 436097, 2441972; 435878, 2441884; 435939, 2441735; 435817, 2441639; 435703, 2441622; 435703, 2441455; 435343, 2441455; 435291, 2441324; 435124, 2441245; 435166, 2441229; 435127, 2441232; 435053, 2441251; 435010, 2441263; 434950, 2441241; 434901, 2441226; 434881, 2441230; 434867, 2441252; 434859, 2441262; 434851, 2441266; 434843, 2441266; 434811, 2441263; 434806, 2441260; 434794, 2441245; 434787, 2441223; 434779, 2441196; 434754, 2441166; 434742, 2441170; 434733, 2441191; 434717, 2441232; 434699, 2441277; 434696, 2441283; 434689, 2441286; 434676, 2441286; 434669, 2441281; 434661, 2441273; 434653, 2441254; 434641, 2441213; 434631, 2441186; 434629, 2441175; 434626, 2441167; 434615, 2441161; 434592, 2441168; 434580, 2441170; 434570, 2441168; 434563, 2441163; 434556, 2441145; 434551, 2441140; 434542, 2441137; 434538, 2441144; 434535, 2441154; 434536, 2441173; 434530, 2441201; 434523, 2441222; 434520, 2441227; 434516, 2441230; 434508, 2441229; 434501, 2441223; 434489, 2441216; 434475, 2441203; 434448, 2441190; 434424, 2441176; 434397, 2441178; 434359, 2441197; 434333,

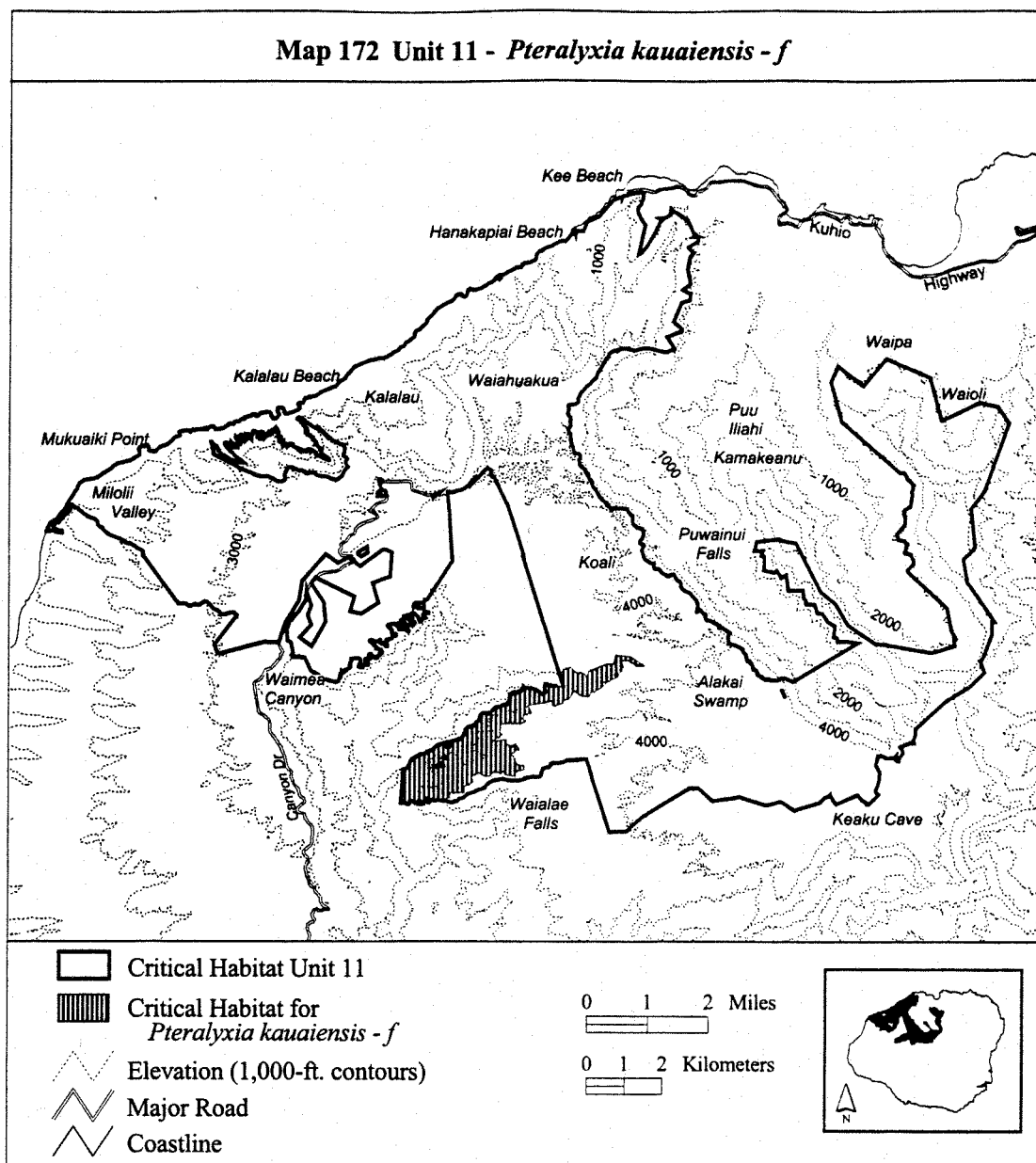
2441217; 434325, 2441222; 434308, 2441229; 434293, 2441229; 434280, 2441225; 434259, 2441212; 434253, 2441203; 434240, 2441177; 434228, 2441152; 434223, 2441147; 434216, 2441143; 434190, 2441144; 434174, 2441147; 434155, 2441156; 434145, 2441157; 434130, 2441163; 434110, 2441175; 434097, 2441181; 434079, 2441193; 434069, 2441192; 434062, 2441188; 434026, 2441177; 434018, 2441178; 434073, 2442051; 434078, 2442055; 434086, 2442062; 434103, 2442070; 434112, 2442076; 434126, 2442080; 434139, 2442083; 434144, 2442086; 434153, 2442092; 434175, 2442105; 434192, 2442116; 434203, 2442127; 434215, 2442141; 434220, 2442151; 434229, 2442173; 434247, 2442208; 434253, 2442234; 434261, 2442257; 434269, 2442282; 434282, 2442299; 434295, 2442316; 434308, 2442329; 434330, 2442350; 434344, 2442361; 434355, 2442368; 434370, 2442378; 434395, 2442387; 434416, 2442397; 434439, 2442410; 434458, 2442423; 434486, 2442437; 434504, 2442450; 434522, 2442454; 434537, 2442457; 434563, 2442460; 434590, 2442462; 434610, 2442464; 434628, 2442472; 434643, 2442483; 434664, 2442490; 434680, 2442493; 434700, 2442502; 434713, 2442515; 434725, 2442524; 434735, 2442532; 434755, 2442542; 434775, 2442551; 434800, 2442556; 434822, 2442562; 434842, 2442574; 434862, 2442596; 434883, 2442613; 434896, 2442626; 434916, 2442647; 434934, 2442668; 434949, 2442681; 434972, 2442699; 434986, 2442705; 434997, 2442708; 435006, 2442713; 435012, 2442717; 435026, 2442719; 435039, 2442722; 435061, 2442727; 435081, 2442733; 435100, 2442739; 435119, 2442747; 435135, 2442754; 435150, 2442764; 435164, 2442771; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

(B) Excluding 2 areas:

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

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

(C) **Note:** Map 172 follows:



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

(A) Unit consists of the following 136 boundary points: Start at 426830,

2448935; 426830, 2448946; 426865, 2448996; 426916, 2449001; 426976, 2448996; 427021, 2449001; 427096, 2449031; 427131, 2449051; 427237, 2449021; 427372, 2449006; 427513, 2449041; 427578, 2449031; 427638, 2449051; 427679, 2449061; 427814, 2449036; 427884, 2449056; 427894, 2449132; 427844, 2449202; 427799, 2449282; 427623, 2449312; 427463, 2449317; 427307, 2449292; 427227, 2449302; 427131, 2449342; 427041, 2449398; 427081, 2449468; 427257, 2449498; 427407, 2449548; 427583, 2449668; 427679, 2449709; 427759,

2449663; 427834, 2449663; 427935, 2449678; 428040, 2449588; 428145, 2449377; 428271, 2449272; 428396, 2449237; 428452, 2449197; 428422, 2449177; 428301, 2449147; 428321, 2449086; 428376, 2449051; 428376, 2449016; 428452, 2448961; 428462, 2448896; 428442, 2448800; 428321, 2448775; 428266, 2448795; 428241, 2448785; 428216, 2448730; 428271, 2448660; 428306, 2448600; 428306, 2448582; 429490, 2448299; 429651, 2448166; 429727, 2448242; 429983, 2448223; 430125, 2448308; 430134, 2448147; 429859, 2448138; 429765, 2447986; 430030, 2447910; 429594, 2447854; 429547, 2447759; 429272, 2447797; 429224, 2447749; 429243, 2447664; 429338, 2447711; 429471,

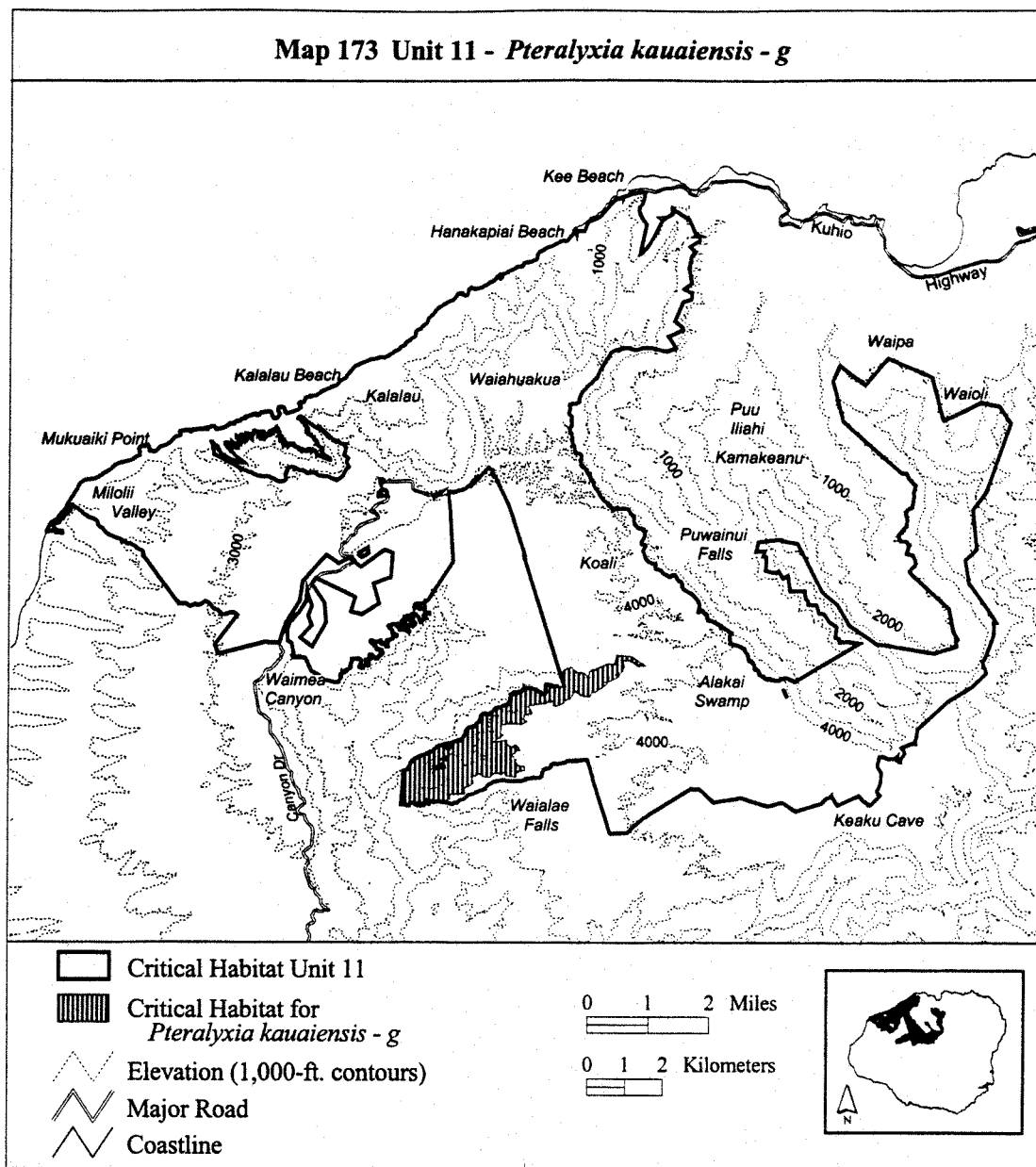
2447598; 429565, 2447598; 429622, 2447560; 429565, 2447503; 429565, 2447427; 429651, 2447380; 429537, 2447323; 429480, 2447323; 429347, 2447446; 429347, 2447304; 427881, 2447774; 427879, 2447772; 427930, 2447722; 427914, 2447661; 427814, 2447666; 427598, 2447732; 427553, 2447727; 427523, 2447732; 427458, 2447772; 427387, 2447757; 427282, 2447842; 427247, 2447872; 427111, 2447887; 427056, 2447862; 427016, 2447912; 426931, 2447952; 426835, 2448008; 426750, 2448043; 426599, 2448113; 426589, 2448188; 426127, 2448336; 426097, 2448378; 426063, 2448412; 426051, 2448421; 426007, 2448440; 425989, 2448455; 425969, 2448492; 425954, 2448543; 425949,

2448584; 425923, 2448613; 425884,
2448631; 425855, 2448652; 425837,
2448658; 425792, 2448676; 425765,
2448685; 425735, 2448700; 425708,
2448709; 425675, 2448727; 425654,
2448744; 425621, 2448768; 425591,

2448786; 425552, 2448813; 425528,
2448834; 425487, 2448867; 425460,
2448891; 425421, 2448924; 425388,
2448948; 425334, 2448975; 425329,
2448978; 425337, 2449010; 425479,
2449057; 425479, 2449181; 425602,

2449067; 425764, 2448953; 425830,
2448991; 425934, 2449001; 426001,
2448953; 426399, 2449038; return to
starting point.

(B) Note: Map 173 follows:



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

(A) Unit consists of the following 107
boundary points: Start at 437937,
2443749; 437924, 2443901; 437955,
2444013; 437973, 2444102; 437928,
2444227; 437902, 2444298; 437907,
2444314; 437909, 2444314; 437933,
2444302; 437960, 2444289; 437984,
2444274; 438007, 2444260; 438028,
2444258; 438048, 2444258; 438072,

2444260; 438087, 2444266; 438109,
2444271; 438133, 2444273; 438164,
2444270; 438196, 2444263; 438335,
2444214; 438310, 2444290; 438384,
2444240; 438455, 2444396; 438625,
2444450; 438696, 2444419; 438799,
2444334; 438946, 2444334; 439013,
2444356; 439080, 2444450; 439129,
2444494; 439250, 2444539; 439326,
2444579; 439402, 2444619; 439540,
2444686; 439678, 2444726; 439710,
2444829; 439705, 2444936; 439759,

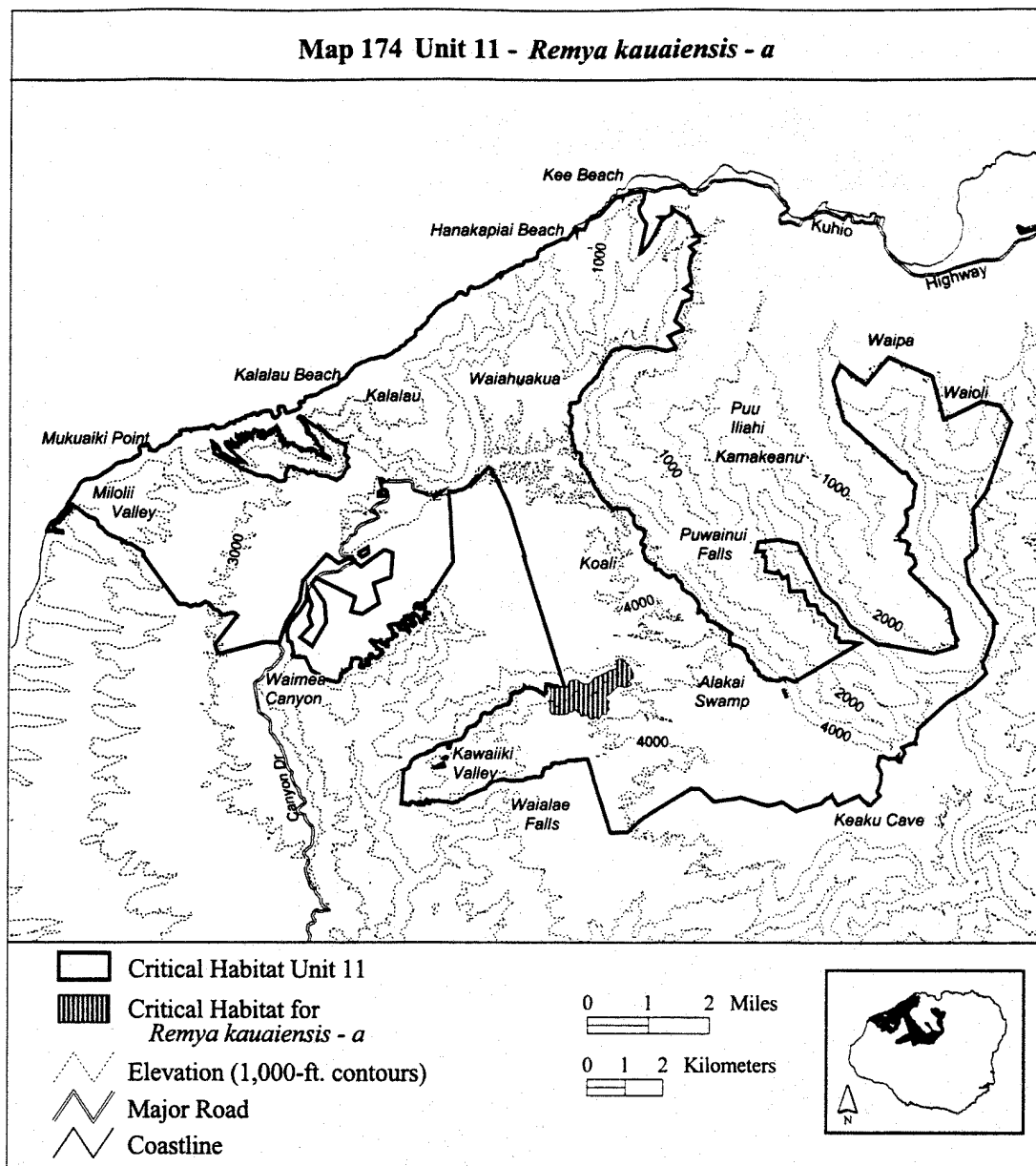
2444985; 439857, 2445003; 439897,
2444931; 439919, 2444896; 440004,
2444860; 440058, 2444753; 440107,
2444668; 440138, 2444623; 440143,
2444574; 440143, 2444539; 440143,
2444476; 440071, 2444445; 440018,
2444405; 440018, 2444374; 440067,
2444351; 440080, 2444302; 440058,
2444275; 439928, 2444231; 439830,
2444271; 439750, 2444267; 439678,
2444222; 439607, 2444137; 439495,
2444057; 439428, 2444008; 439415,

2443959; 439464, 2443887; 439500,
2443878; 439518, 2443861; 439486,
2443843; 439486, 2443812; 439477,
2443771; 439464, 2443770; 439500,
2443655; 439473, 2443620; 439446,
2443588; 439446, 2443539; 439428,
2443513; 439312, 2443513; 439294,
2443508; 439268, 2443450; 439241,

2443401; 439210, 2443392; 439187,
2443441; 439125, 2443441; 439067,
2443397; 439035, 2443392; 438955,
2443455; 438946, 2443486; 438919,
2443508; 438852, 2443499; 438803,
2443468; 438754, 2443481; 438750,
2443504; 438745, 2443544; 438719,
2443575; 438669, 2443575; 438669,

2443624; 438620, 2443647; 438585,
2443638; 438544, 2443602; 438473,
2443598; 438442, 2443593; 438415,
2443535; 438308, 2443513; 438085,
2443522; 438009, 2443526; 437955,
2443571; 437933, 2443665; 437940,
2443749; return to starting point.

(B) Note: Map 174 follows:



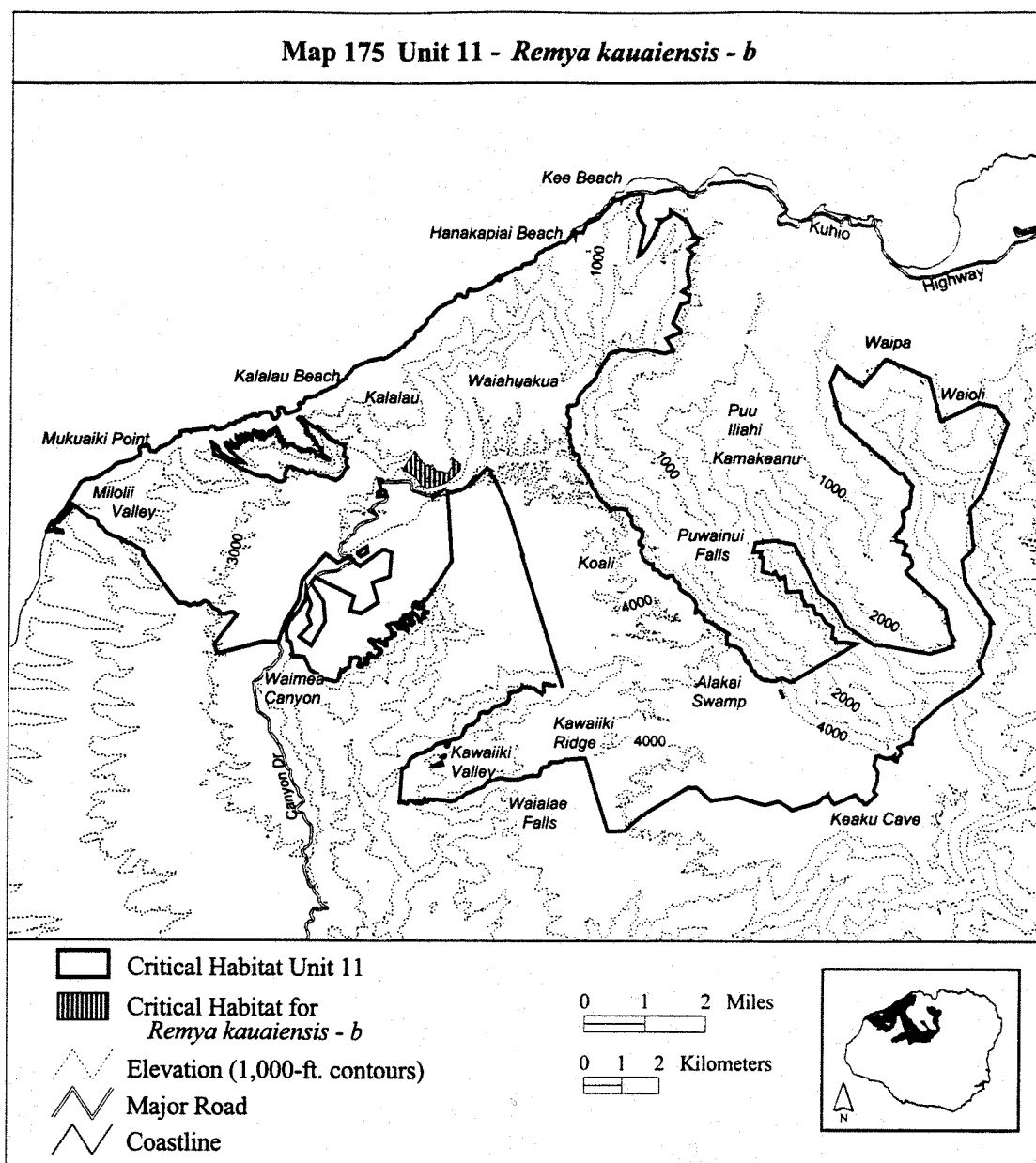
(clxxv) Kauai 11—*Remya kauaiensis*—b
(66 ha; 163 ac)

(A) Unit consists of the following 19
boundary points: Start at 434356,
2450470; 434503, 2450255; 434622,

2450093; 434841, 2450072; 434941,
2449932; 435078, 2449914; 435232,
2449871; 435368, 2450079; 435350,
2450294; 435580, 2450125; 435569,
2449953; 435472, 2449863; 435368,

2449752; 435167, 2449623; 434776,
2449484; 434694, 2449462; 434539,
2449541; 434381, 2449771; 434044,
2449989; return to starting point.

(B) Note: Map 175 follows:



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

(A) Unit consists of the following 119 boundary points: Start at 431977,

2448160; 432081, 2447933; 431820, 2447620; 431629, 2447412; 431298, 2447081; 431124, 2446995; 430828, 2447064; 430817, 2447078; 429798, 2446041; 429595, 2446048; 429654, 2446125; 429591, 2446167; 429485, 2446305; 429263, 2446389; 429094, 2446389; 428972, 2446421; 428904, 2446474; 428793, 2446542; 428774, 2446550; 428762, 2446580; 428765, 2446584; 429064, 2446531; 429021, 2446658; 429244, 2446797; 428914, 2446797; 428765, 2446882; 428648, 2446839; 428595, 2446892; 428659, 2447052; 428627, 2447073; 428648,

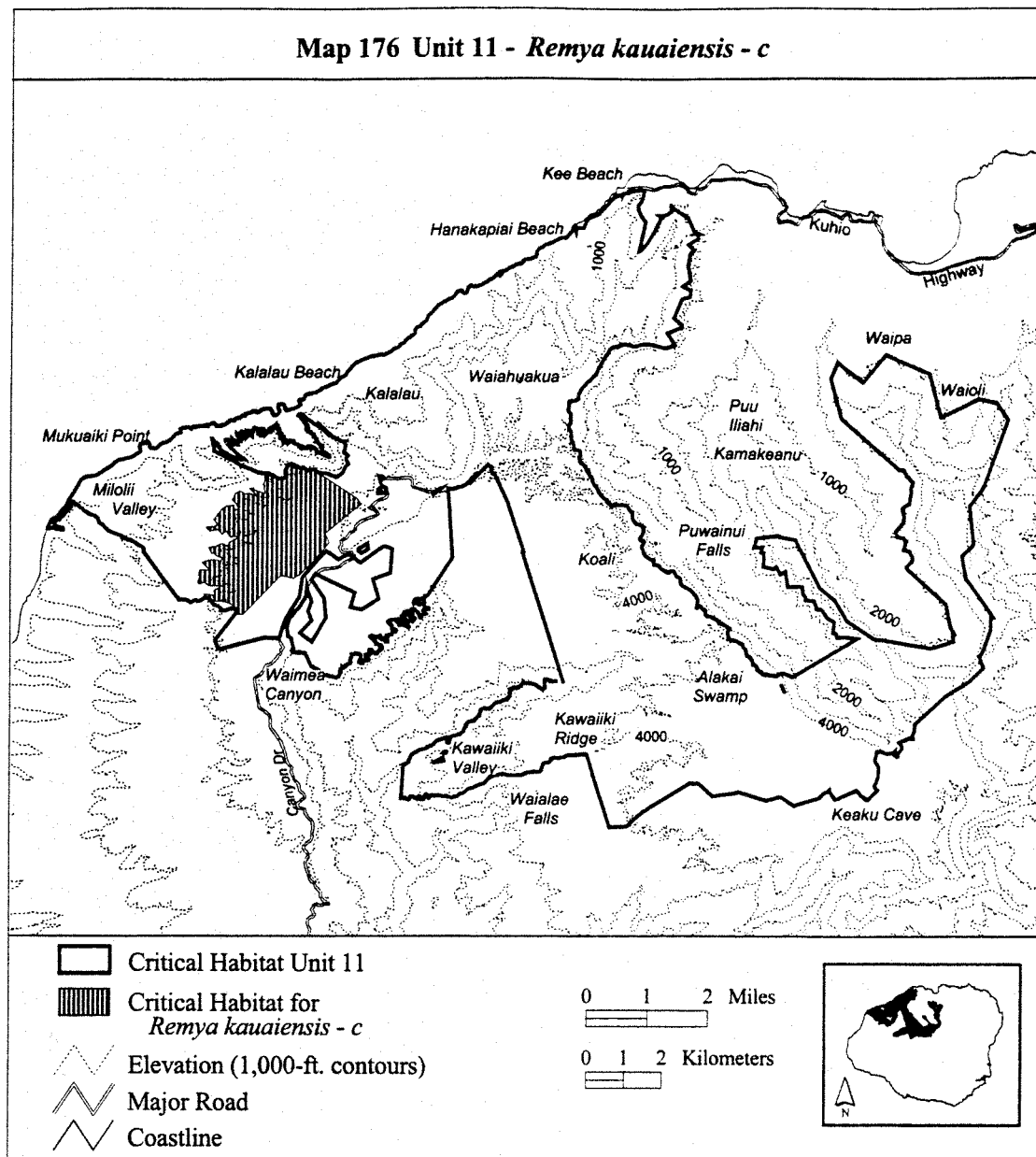
2447201; 428936, 2447211; 428808, 2447318; 428723, 2447414; 428904, 2447477; 429117, 2447477; 429202, 2447435; 429244, 2447541; 429085, 2447595; 429021, 2447658; 428968, 2447658; 428883, 2447797; 429085, 2447829; 429191, 2447914; 429266, 2447914; 429393, 2447839; 429425, 2447946; 429649, 2448063; 429628, 2448105; 429457, 2448095; 429340, 2448244; 429234, 2448158; 429138, 2448286; 428915, 2448244; 428829, 2448339; 429064, 2448361; 429149, 2448424; 429074, 2448478; 429032, 2448552; 429244, 2448829; 429362, 2448914; 429543, 2448924; 429564, 2448807; 429681, 2448818; 429649, 2448882; 429617, 2448967; 429511, 2449084; 429596, 2449254; 429734,

2449318; 429819, 2449233; 429958, 2449244; 430160, 2449169; 429968, 2449371; 430064, 2449382; 430075, 2449339; 430181, 2449307; 430362, 2449254; 430330, 2449414; 430330, 2449415; 430366, 2449436; 430355, 2449451; 430349, 2449466; 430335, 2449474; 430320, 2449476; 430320, 2449477; 430394, 2449658; 430350, 2449658; 430348, 2449666; 430376, 2449750; 430384, 2449766; 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238,

2449970; 431285, 2449942; 431360,
2449956; 431449, 2449886; 431497,
2449867; 431605, 2449895; 431632,

2449893; 432647, 2449237; 432672,
2449222; 432832, 2449094; 432927,

2448966; 432512, 2448626; 431953,
2448167; return to starting point.
(B) Note: Map 176 follows:



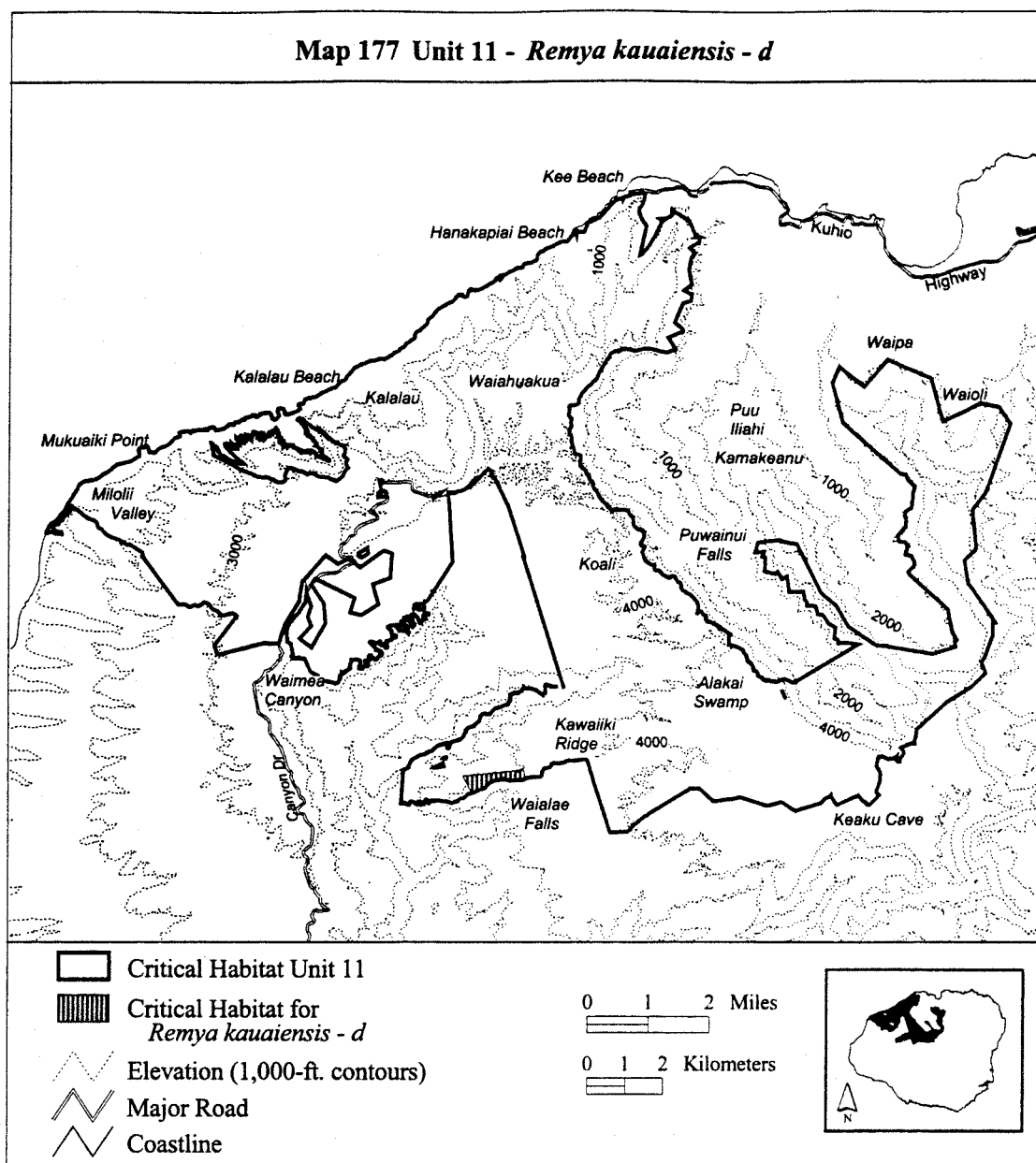
(clxxvii) Kauai 11—*Remya kauaiensis*—
d (47 ha; 115 ac)

(A) Unit consists of the following 51
boundary points: Start at 435663,
2441899; 437117, 2442058; 437240,
2442106; 437316, 2441834; 437287,
2441816; 437274, 2441809; 437240,
2441796; 437224, 2441791; 437181,
2441781; 437150, 2441777; 437111,
2441777; 437096, 2441779; 437062,

2441776; 437008, 2441775; 436960,
2441776; 436912, 2441780; 436895,
2441784; 436825, 2441795; 436799,
2441801; 436777, 2441809; 436730,
2441820; 436695, 2441811; 436666,
2441808; 436638, 2441803; 436618,
2441796; 436593, 2441792; 436583,
2441789; 436541, 2441785; 436492,
2441773; 436453, 2441759; 436419,
2441739; 436408, 2441737; 436374,
2441718; 436357, 2441708; 436342,

2441700; 436319, 2441681; 436285,
2441639; 436272, 2441618; 436247,
2441590; 436228, 2441575; 436203,
2441564; 436181, 2441558; 436167,
2441552; 436155, 2441546; 436121,
2441536; 436070, 2441515; 436039,
2441504; 436027, 2441501; 435983,
2441481; 435950, 2441467; 435894,
2441450; return to starting point.

(B) Note: Map 177 follows:



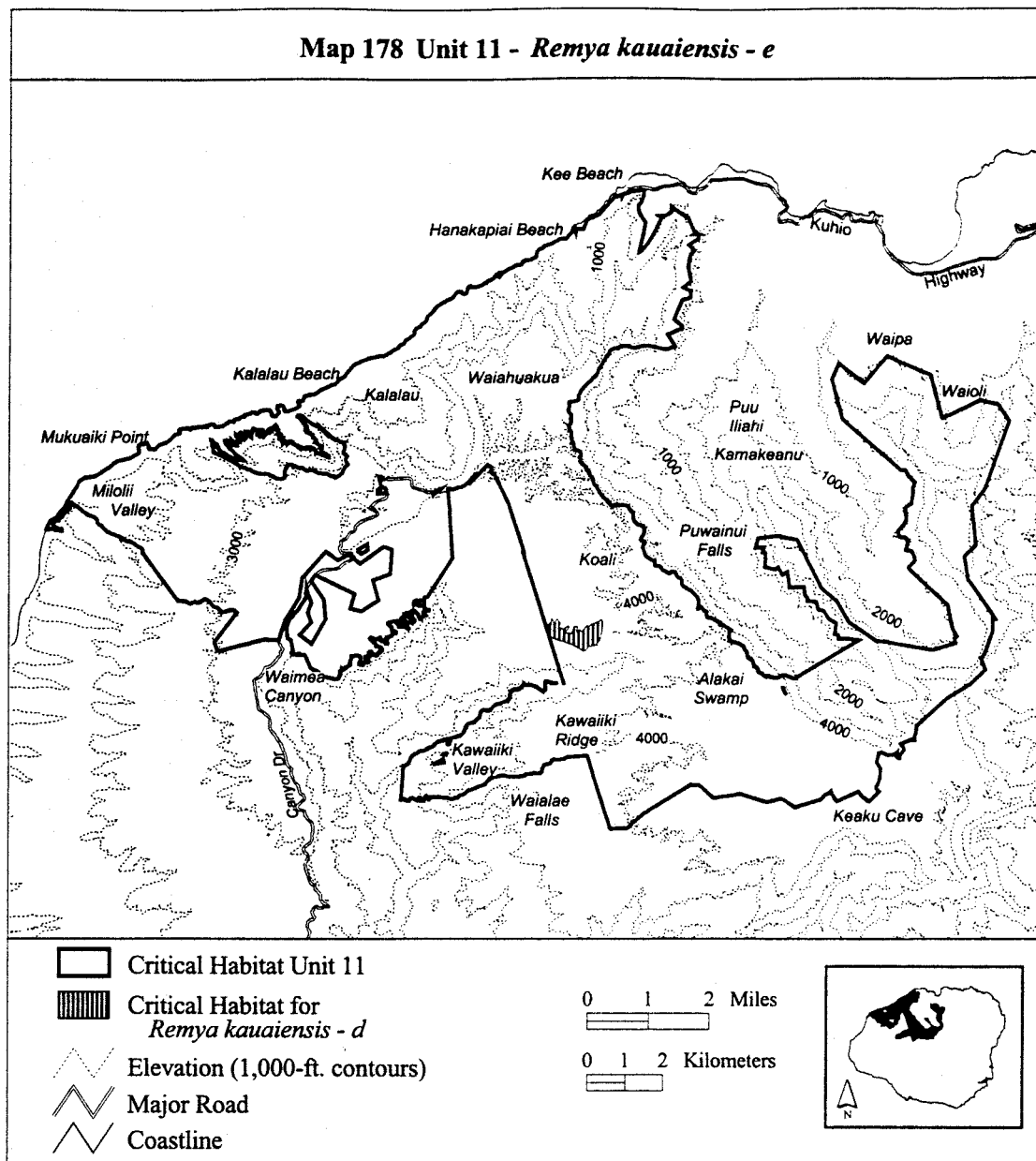
(clxxviii) Kauai 11—*Remya kauaiensis*—e (66 ha, 163 ac)

(A) Unit consists of the following 48 boundary points: Start at 437855, 2445706; 437877, 2445731; 437906, 2445821; 437983, 2445872; 437996, 2445968; 438025, 2445891; 438060, 2445843; 438124, 2445965; 438197, 2445865; 438213, 2445843; 438178, 2445750; 438293, 2445689; 438341,

2445734; 438438, 2445779; 438450, 2445747; 438393, 2445660; 438341, 2445593; 438505, 2445580; 438572, 2445708; 438575, 2445763; 438658, 2445766; 438646, 2445664; 438646, 2445616; 438713, 2445667; 438777, 2445628; 438918, 2445792; 438953, 2445744; 439030, 2445811; 439251, 2445897; 439289, 2445958; 439318, 2445919; 439328, 2445836; 439318,

2445679; 439286, 2445555; 439257, 2445401; 439187, 2445295; 439136, 2445260; 438969, 2445228; 438905, 2445151; 438851, 2445110; 438831, 2445107; 438700, 2445203; 438559, 2445267; 438470, 2445308; 438361, 2445331; 438303, 2445382; 438236, 2445382; 437929, 2445478; return to starting point.

(B) Note: Map 178 follows:



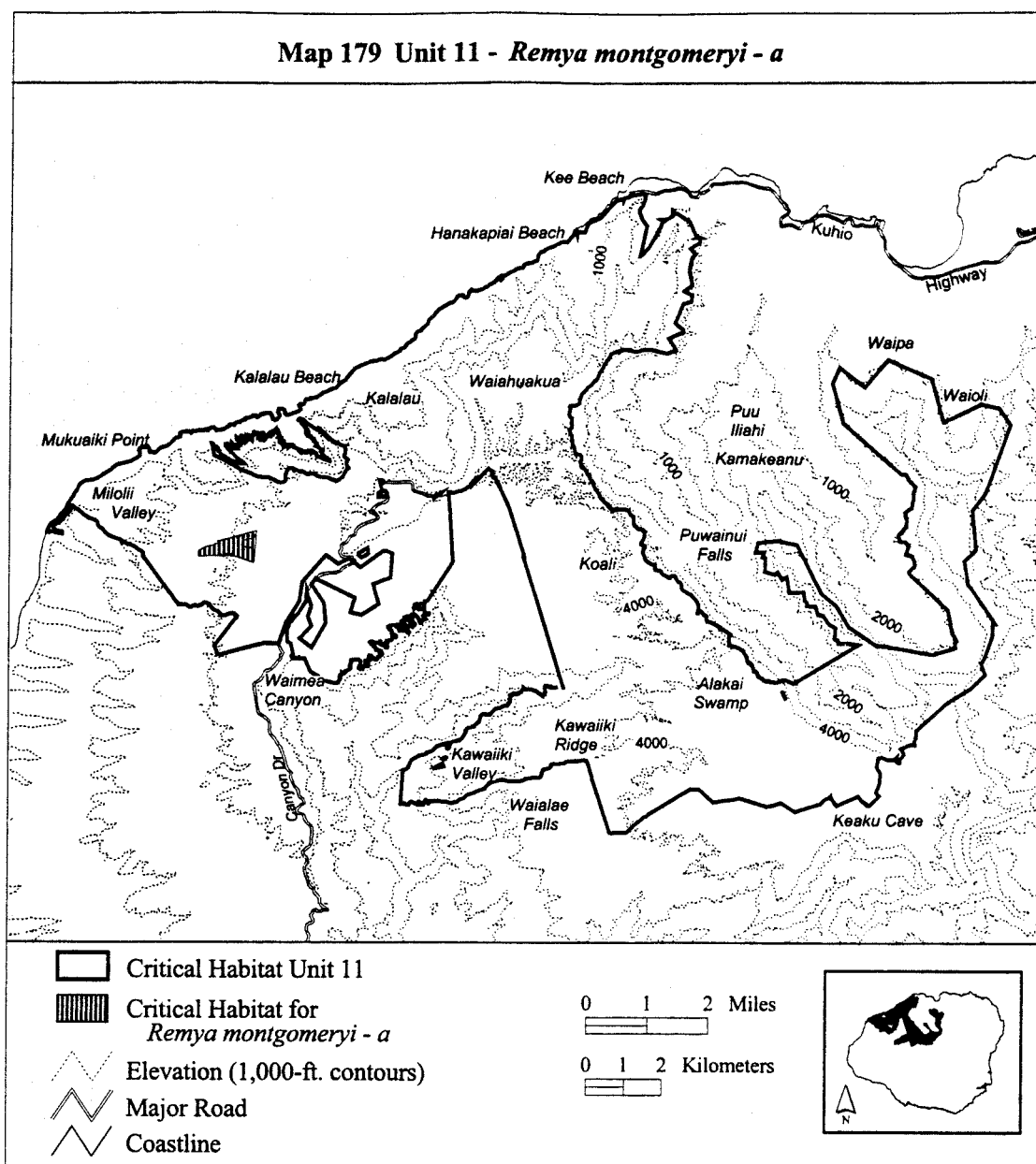
(clxxix) Kauai 11—*Remya montgomeryi*—a (69 ha; 171 ac)

(A) Unit consists of the following 12 boundary points: Start at 428611,

2447702; 428616, 2447840; 428804, 2447934; 428942, 2447978; 429058, 2448006; 429174, 2448056; 429113, 2448100; 429373, 2448149; 430157,

2448370; 430091, 2447531; 429544, 2447708; 428821, 2447708; return to starting point.

(B) **Note:** Map 179 follows:



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

(A) Unit consists of the following 245 boundary points: Start at 442448, 2445805; 442665, 2445511; 442672, 2445510; 442668, 2445494; 442667, 2445490; 442671, 2445471; 442675, 2445453; 442682, 2445433; 442689, 2445419; 442694, 2445414; 442709, 2445399; 442727, 2445386; 442743, 2445378; 442747, 2445377; 442765, 2445370; 442785, 2445364; 442798, 2445359; 442804, 2445357; 442821, 2445353; 442842, 2445347; 442858, 2445342; 442862, 2445341; 442877, 2445336; 442898, 2445330; 442915, 2445323; 442934, 2445314; 442952, 2445303; 442956, 2445301; 442972, 2445292; 442981, 2445284; 442990,

2445276; 443009, 2445266; 443029, 2445263; 443047, 2445260; 443065, 2445247; 443068, 2445227; 443066, 2445209; 443066, 2445190; 443083, 2445171; 443103, 2445152; 443122, 2445132; 443135, 2445115; 443140, 2445105; 443144, 2445096; 443150, 2445078; 443152, 2445059; 443153, 2445040; 443153, 2445020; 443156, 2445003; 443158, 2444995; 443163, 2444984; 443175, 2444965; 443177, 2444962; 443193, 2444946; 443196, 2444944; 443215, 2444938; 443234, 2444932; 443240, 2444927; 443252, 2444914; 443260, 2444907; 443271, 2444898; 443281, 2444890; 443290, 2444876; 443294, 2444870; 443301, 2444851; 443307, 2444833; 443309, 2444829; 443313, 2444815; 443320,

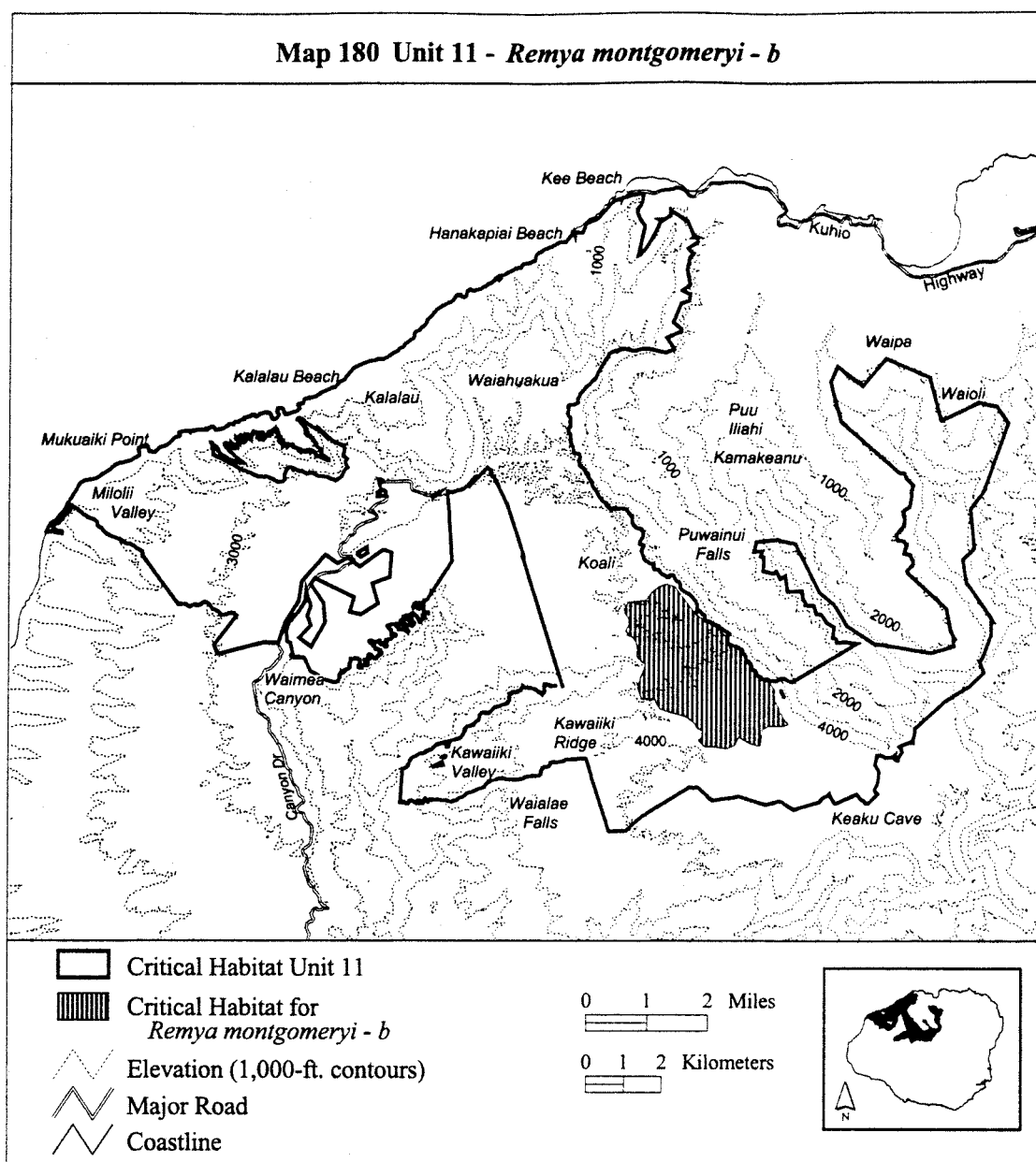
2444796; 443327, 2444778; 443333, 2444758; 443341, 2444740; 443346, 2444728; 443352, 2444721; 443366, 2444706; 443373, 2444702; 443385, 2444699; 443403, 2444695; 443423, 2444686; 443435, 2444664; 443440, 2444655; 443443, 2444647; 443444, 2444627; 443447, 2444608; 443452, 2444591; 443459, 2444579; 443464, 2444570; 443478, 2444555; 443483, 2444551; 443497, 2444548; 443516, 2444546; 443534, 2444543; 443553, 2444537; 443557, 2444532; 443571, 2444521; 443579, 2444514; 443598, 2444493; 443610, 2444483; 443617, 2444477; 443628, 2444469; 443647, 2444460; 443666, 2444456; 443677, 2444459; 443685, 2444463; 443703, 2444469; 443722, 2444464; 443732,

2444458; 443740, 2444454; 443760,
2444446; 443769, 2444440; 443778,
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2444364; 443829, 2444347; 443835,
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2444204; 443915, 2444196; 443929,
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2444113; 443925, 2444103; 443924,
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2444045; 443928, 2444028; 443931,
2444009; 443935, 2443990; 443936,
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2443934; 443935, 2443915; 443939,
2443896; 443945, 2443877; 443955,
2443857; 443963, 2443839; 443965,
2443836; 443972, 2443821; 443984,
2443805; 443987, 2443801; 444000,

2443783; 444003, 2443777; 444005,
2443764; 444012, 2443746; 444022,
2443733; 444025, 2443727; 444035,
2443709; 444041, 2443694; 444041,
2443690; 444048, 2443672; 444055,
2443652; 444056, 2443633; 444051,
2443614; 444051, 2443596; 444058,
2443577; 444080, 2443566; 444096,
2443558; 444114, 2443539; 444125,
2443521; 444133, 2443503; 444134,
2443498; 444139, 2443484; 444146,
2443464; 444153, 2443447; 444164,
2443427; 444171, 2443417; 444180,
2443407; 444191, 2443390; 444202,
2443371; 444210, 2443360; 444215,
2443352; 444228, 2443337; 444232,
2443334; 444246, 2443322; 444259,
2443315; 444267, 2443312; 444285,
2443303; 444288, 2443300; 444287,
2443267; 444175, 2443218; 443802,
2443211; 443603, 2443118; 443591,
2442857; 443541, 2442683; 443305,
2442739; 442975, 2442920; 442895,
2442714; 442665, 2442609; 442310,

2442665; 442080, 2442671; 441918,
2442827; 441999, 2442901; 442024,
2443094; 441887, 2443131; 441788,
2443305; 441583, 2443454; 441135,
2443585; 440886, 2443666; 440799,
2443803; 440762, 2443921; 440538,
2443927; 440402, 2443914; 440314,
2444219; 440370, 2444480; 440445,
2444666; 440501, 2444859; 440420,
2444909; 440259, 2445052; 440296,
2445238; 440265, 2445387; 440190,
2445530; 440035, 2445648; 439973,
2445735; 440047, 2445872; 440047,
2446052; 439948, 2446195; 440022,
2446469; 440513, 2446543; 440625,
2446717; 440843, 2446885; 441042,
2446972; 441274, 2446893; 441832,
2446159; 442113, 2445986; 442326,
2445854; 442415, 2445847; 442422,
2445840; 442430, 2445830; 442430,
2445827; 442435, 2445813; 442444,
2445807; return to starting point.

(B) **Note:** Map 180 follows:



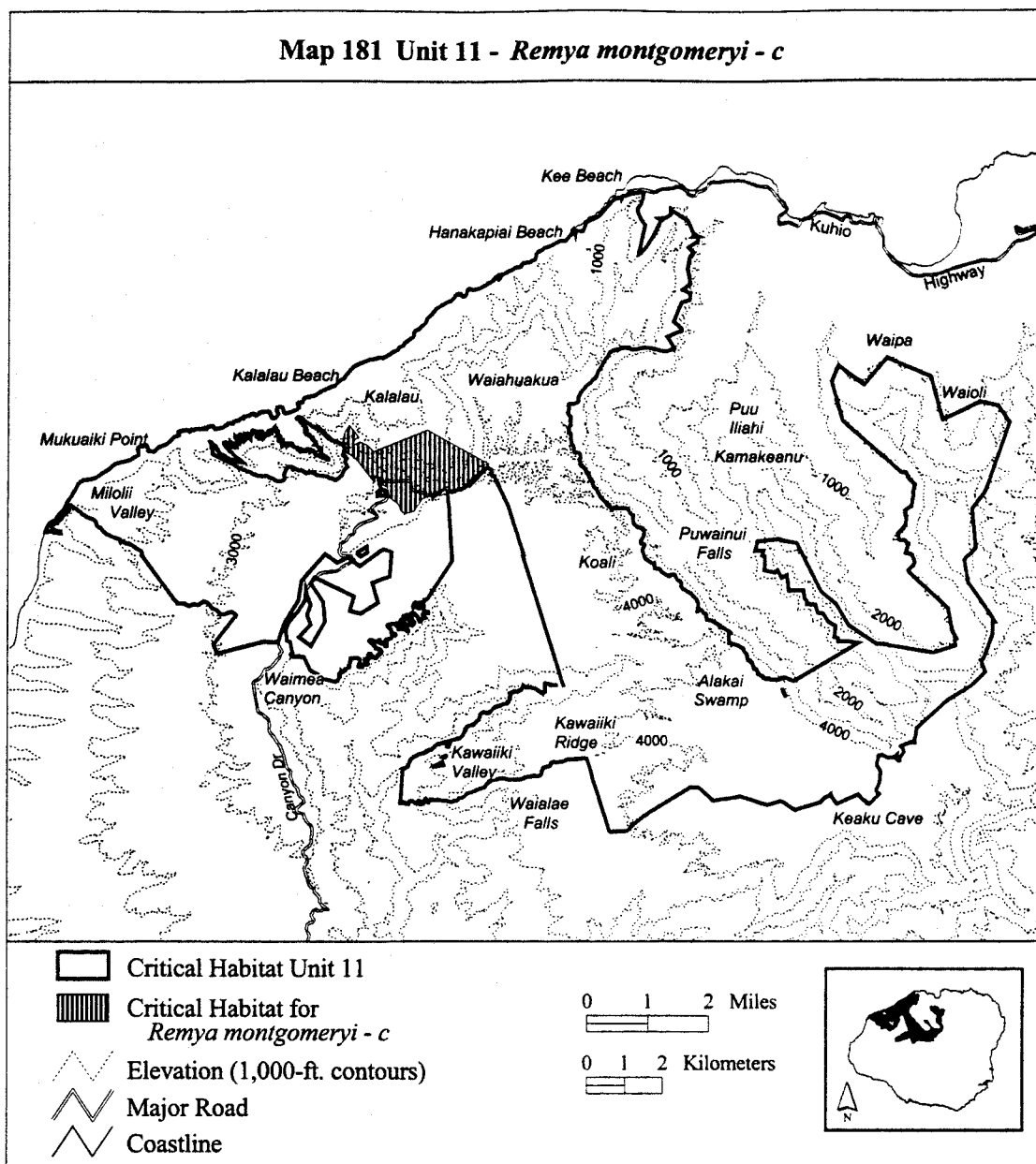
(clxxxi) Kauai 11—*Remya montgomeryi*—c (435 ha; 1,076 ac)

(A) Unit consists of the following 73 boundary points: Start at 434088, 2448772; 434057, 2448814; 433978, 2448898; 433944, 2448994; 433902, 2449074; 433692, 2449220; 433659, 2449275; 433659, 2449342; 433625, 2449489; 433500, 2449564; 433462, 2449619; 433461, 2449623; 433480, 2449629; 433484, 2449703; 433460, 2449707; 433444, 2449707; 433441, 2449723; 433318, 2449783; 433292, 2449640; 432855, 2450187; 432823,

2450206; 432826, 2450224; 432797, 2450260; 432768, 2450266; 432752, 2450270; 432745, 2450272; 432733, 2450275; 432709, 2450317; 432692, 2450330; 432650, 2450343; 432591, 2450373; 432573, 2450385; 432550, 2450412; 432528, 2450468; 432515, 2450503; 432494, 2450543; 432477, 2450580; 432468, 2450593; 432464, 2450611; 432465, 2450623; 432450, 2450624; 432445, 2450625; 432435, 2450666; 432502, 2450935; 432628, 2451128; 432889, 2450808; 432771, 2450766; 432737, 2450598; 432897,

2450691; 433099, 2450615; 433217, 2450489; 433248, 2450427; 434703, 2451005; 436330, 2450099; 436237, 2450032; 436212, 2450009; 436203, 2450009; 436111, 2449924; 436109, 2449918; 435562, 2449429; 435168, 2449400; 435010, 2449343; 435011, 2449352; 434884, 2449298; 434872, 2449294; 434833, 2449281; 434833, 2449280; 434814, 2449273; 434573, 2449187; 434342, 2448860; 434340, 2448859; 434109, 2448774; 434091, 2448768; return to starting point.

(B) **Note:** Map 181 follows:



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

(A) Unit consists of the following 121 boundary points: Start at 432745, 2452425; 434404, 2451114; 434287, 2451030; 434135, 2451007; 434062, 2451170; 433978, 2451164; 433917, 2450991; 433698, 2450985; 433608, 2450963; 433524, 2451170; 433328, 2451041; 433188, 2451120; 433322, 2451237; 433132, 2451249; 433143, 2451316; 433210, 2451411; 433126, 2451411; 433098, 2451450; 433132, 2451512; 433109, 2451568; 433126, 2451663; 432980, 2451618; 432969, 2451714; 432919, 2451708; 432812, 2451742; 432773, 2451669; 432689, 2451842; 432621, 2451820; 432571, 2451803; 432537, 2451730; 432504,

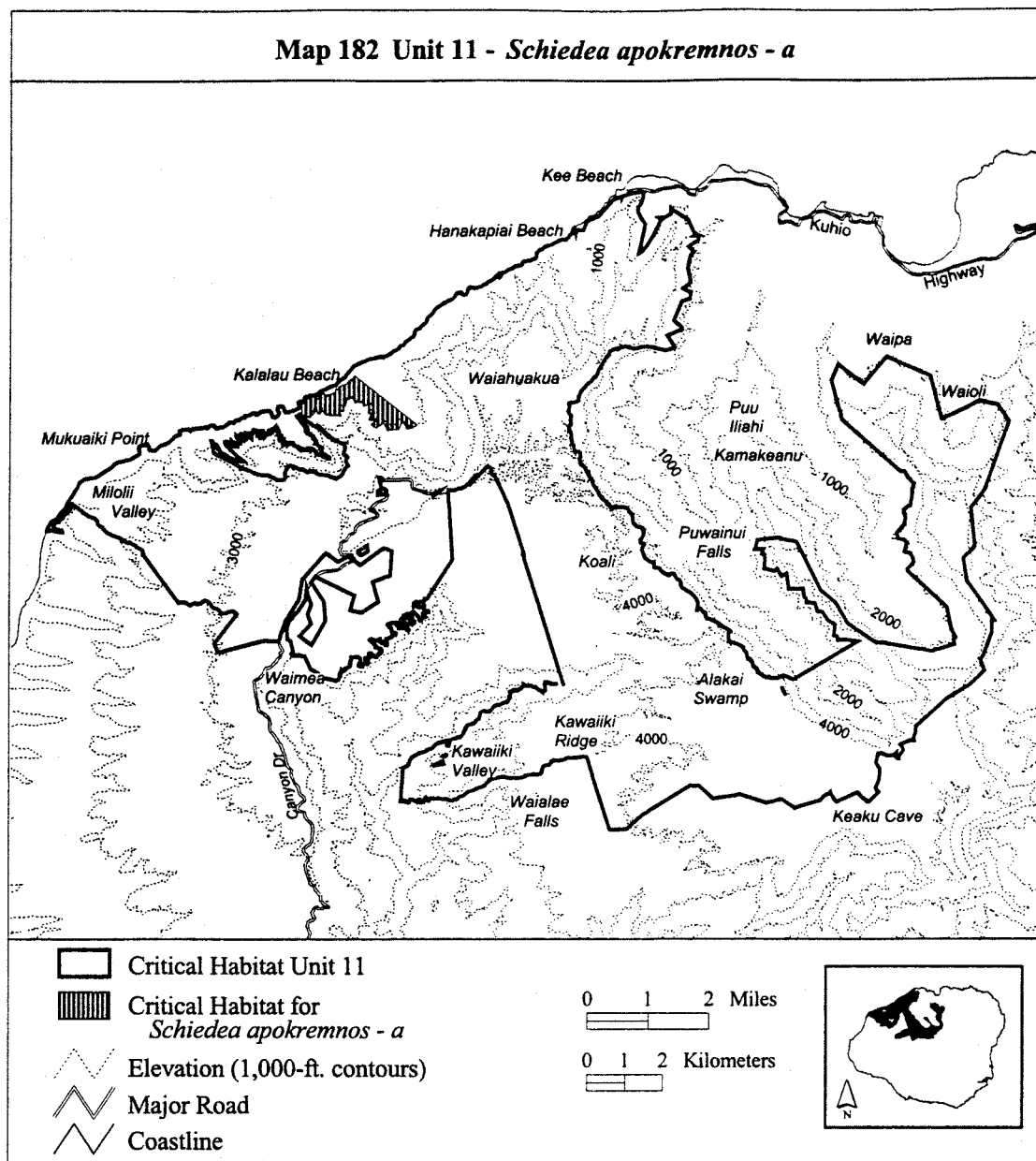
2451635; 432453, 2451590; 432453, 2451467; 432347, 2451490; 432347, 2451450; 432392, 2451355; 432319, 2451350; 432201, 2451372; 432139, 2451366; 432016, 2451383; 431932, 2451439; 431893, 2451507; 431831, 2451411; 431775, 2451411; 431736, 2451507; 431657, 2451423; 431618, 2451367; 431579, 2451299; 431511, 2451311; 431416, 2451367; 431378, 2451323; 431373, 2451329; 431370, 2451323; 431360, 2451314; 431351, 2451321; 431337, 2451323; 431318, 2451324; 431304, 2451317; 431293, 2451316; 431287, 2451322; 431281, 2451336; 431277, 2451355; 431264, 2451350; 431245, 2451336; 431233, 2451323; 431242, 2451310; 431267, 2451297; 431294, 2451278; 431312,

2451246; 431348, 2451203; 431384, 2451176; 431402, 2451170; 431407, 2451149; 431415, 2451137; 431428, 2451129; 431432, 2451109; 431442, 2451094; 431457, 2451086; 431456, 2451081; 431450, 2451067; 431455, 2451053; 431467, 2451047; 431486, 2451047; 431488, 2451038; 431482, 2451029; 431481, 2451010; 431487, 2450998; 431504, 2450987; 431499, 2450978; 431486, 2450974; 431476, 2450971; 431456, 2450971; 431455, 2450971; 431158, 2451367; 431349, 2451456; 431321, 2451557; 431287, 2451714; 431371, 2451669; 431438, 2451820; 431461, 2451787; 431567, 2451848; 431685, 2451893; 431769, 2451798; 431808, 2451826; 431775, 2451882; 431853, 2451910; 431937,

2451966; 432016, 2451865; 432027,
2451915; 432083, 2451927; 432150,
2451938; 432223, 2451988; 432251,

2452067; 432319, 2452039; 432319,
2452111; 432448, 2452184; 432532,
2452201; 432593, 2452291; 432672,

2452313; 432706, 2452246; 432700,
2452369; return to starting point.
(B) Note: Map 182 follows:



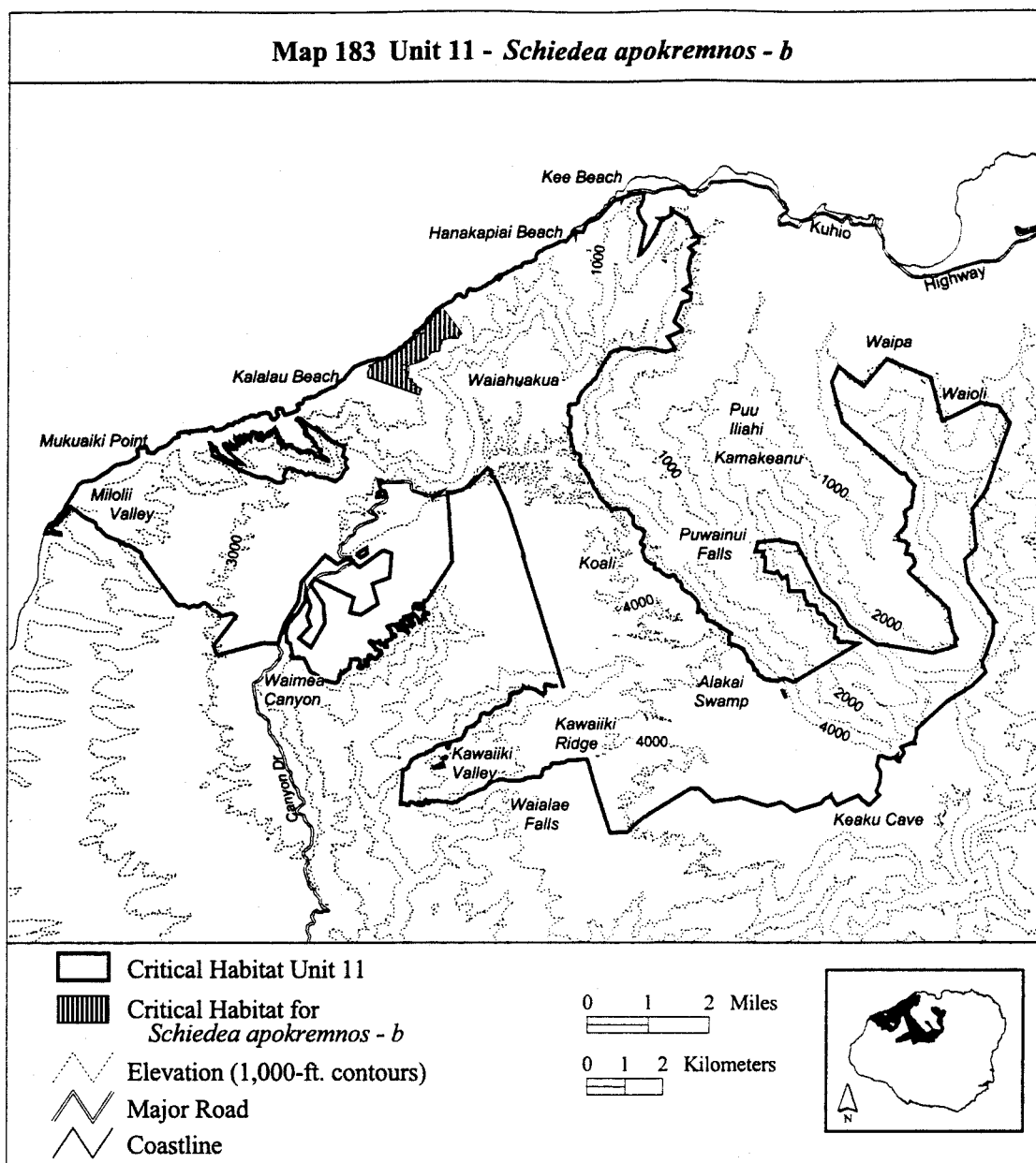
(clxxxiii) Kauai 11—*Schiedea apokremnos*—b (187 ha; 463 ac)

(A) Unit consists of the following 49 boundary points: Start at 435094, 2454278; 435593, 2453600; 435509, 2453505; 435509, 2453460; 435374, 2453455; 435279, 2453455; 435184, 2453449; 435077, 2453393; 435083, 2453309; 435038, 2453287; 435015, 2453130; 434982, 2453113; 434892,

2453113; 434774, 2453068; 434713, 2452945; 434601, 2452884; 434483, 2452816; 434180, 2452744; 434203, 2452592; 434169, 2452385; 434309, 2452374; 434309, 2452307; 434388, 2452245; 434371, 2452195; 434533, 2452116; 434488, 2451948; 433115, 2452430; 433092, 2452565; 433171, 2452677; 433132, 2452722; 433311, 2452806; 433704, 2452951; 433743,

2452957; 433788, 2453029; 433995, 2453164; 434085, 2453242; 434186, 2453332; 434354, 2453438; 434421, 2453516; 434427, 2453617; 434561, 2453584; 434567, 2453712; 434657, 2453819; 434780, 2453964; 434802, 2453948; 434802, 2454032; 434903, 2454149; 434971, 2454132; 434993, 2454233; return to starting point.

(B) Note: Map 183 follows:



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

(A) Unit consists of the following 184 boundary points: coastline; 425961, 2449457; 425945, 2449431; 426025, 2449417; 426119, 2449388; 426206, 2449330; 426264, 2449199; 426496, 2449105; 426662, 2449004; 426800, 2448866; 427032, 2448743; 427068, 2448642; 426966, 2448569; 426829, 2448606; 426503, 2448743; 426445, 2448765; 426401, 2448707; 426336, 2448693; 426336, 2448642; 426322, 2448577; 426264, 2448540; 426170, 2448591; 426025, 2448729; 425974, 2448707; 425858, 2448700; 425786, 2448707; 425692, 2448779; 425525, 2448852; 425484, 2448870; 425466, 2448885; 425424, 2448946; 425344,

2449011; 425235, 2449076; 425217, 2449149; 425395, 2449439; 425453, 2449540; 425525, 2449547; 425721, 2449569; 425736, 2449562; 425833, 2449576; 426041, 2449624; 426274, 2449816; 426427, 2449928; 426555, 2450065; 426804, 2450065; 427045, 2450185; 427133, 2450313; 427085, 2450490; 427141, 2450530; 427165, 2450466; 427197, 2450546; 427245, 2450554; 427302, 2450425; 427534, 2450353; 427639, 2450393; 427671, 2450369; 427711, 2450441; 428008, 2450618; 428136, 2450682; 428184, 2450794; 428152, 2450947; 428257, 2450955; 428329, 2450987; 428353, 2450850; 428385, 2450730; 428385, 2450586; 428329, 2450514; 428377, 2450433; 428425, 2450506; 428425,

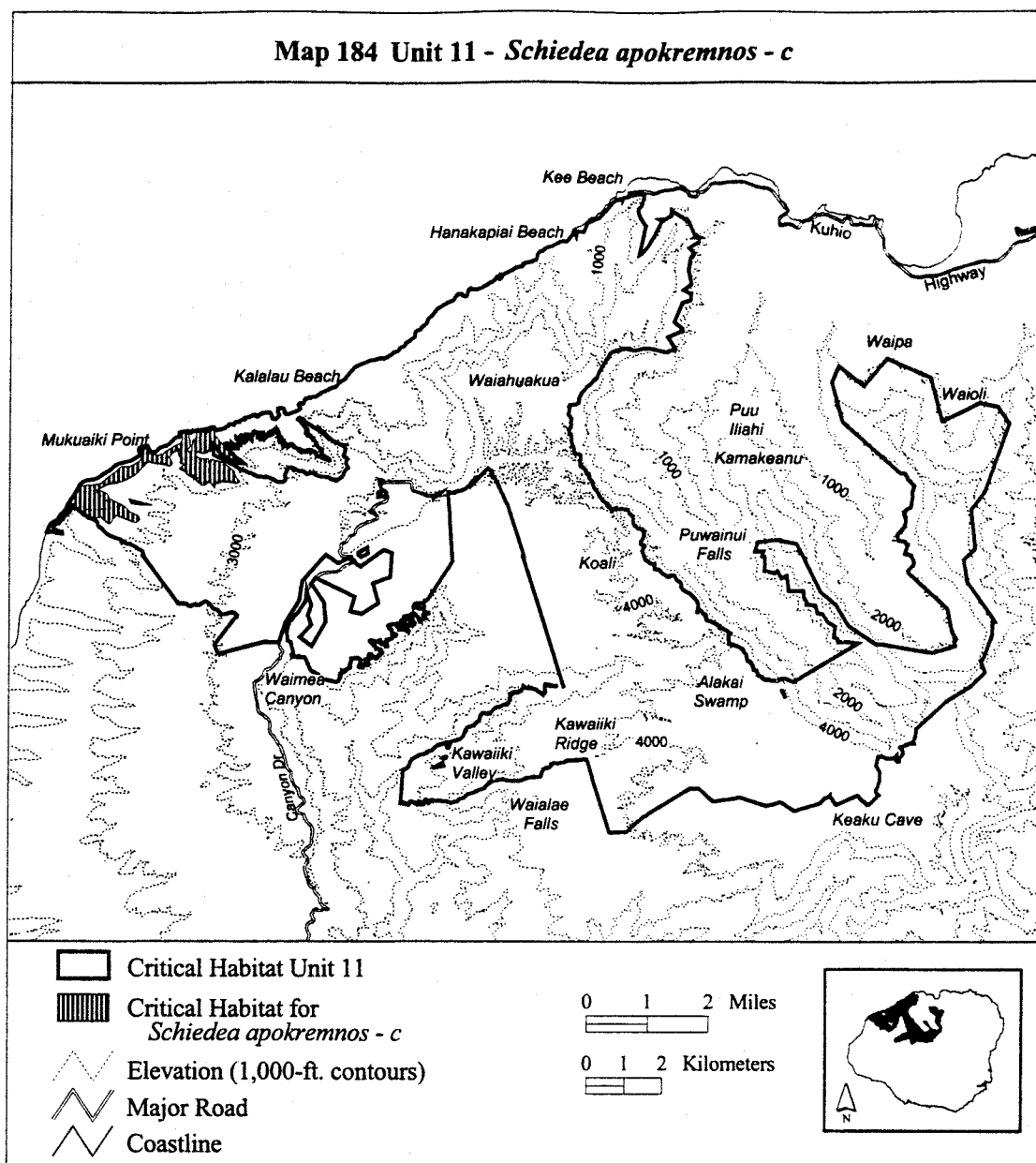
2450618; 428481, 2450770; 428538, 2450778; 428538, 2450858; 428570, 2450979; 428650, 2451011; 428714, 2450987; 428794, 2450987; 428834, 2450923; 428899, 2451059; 428955, 2451067; 429035, 2450987; 429051, 2450882; 429099, 2450834; 429139, 2450810; 429629, 2450177; 429625, 2450178; 429610, 2450183; 429571, 2450198; 429538, 2450212; 429503, 2450229; 429460, 2450248; 429433, 2450259; 429404, 2450268; 429391, 2450277; 429371, 2450289; 429356, 2450303; 429342, 2450315; 429321, 2450332; 429294, 2450343; 429269, 2450357; 429244, 2450363; 429232, 2450370; 429208, 2450389; 429205, 2450394; 429200, 2450405; 429193, 2450416; 429174, 2450426; 429162,

2450435; 429162, 2450436; 429161,
2450444; 429158, 2450455; 429152,
2450468; 429143, 2450481; 429132,
2450492; 429114, 2450527; 429113,
2450540; 429110, 2450557; 429103,
2450577; 429091, 2450594; 429077,
2450605; 429069, 2450606; 429067,
2450610; 429011, 2450630; 429009,
2450638; 429000, 2450655; 428990,
2450676; 428979, 2450690; 428972,
2450701; 428962, 2450707; 428952,
2450706; 428952, 2450704; 428964,
2450654; 428975, 2450624; 428947,
2450498; 428899, 2450449; 428770,

2450409; 428554, 2450449; 428546,
2450353; 428698, 2450273; 428875,
2450273; 428867, 2450169; 428955,
2450265; 429083, 2450233; 429268,
2450161; 429436, 2450048; 429541,
2449952; 429589, 2449800; 429717,
2449663; 429637, 2449615; 429461,
2449647; 429292, 2449648; 429260,
2449680; 429196, 2449631; 429075,
2449607; 429035, 2449487; 428907,
2449664; 428810, 2449583; 428714,
2449559; 428626, 2449632; 428546,
2449728; 428473, 2449760; 428289,
2449872; 428249, 2449944; 428104,

2449992; 428233, 2450113; 428120,
2450145; 428136, 2450265; 428104,
2450329; 428088, 2450361; 428088,
2450498; 427936, 2450425; 427855,
2450305; 427936, 2450145; 427879,
2450081; 427639, 2450113; 427462,
2450137; 427285, 2450177; 427165,
2450057; 427053, 2449952; 426940,
2449832; 426643, 2449672; 426435,
2449624; 426242, 2449584; 426170,
2449559; 425969, 2449455; coastline.

(B) Note: Map 184 follows:



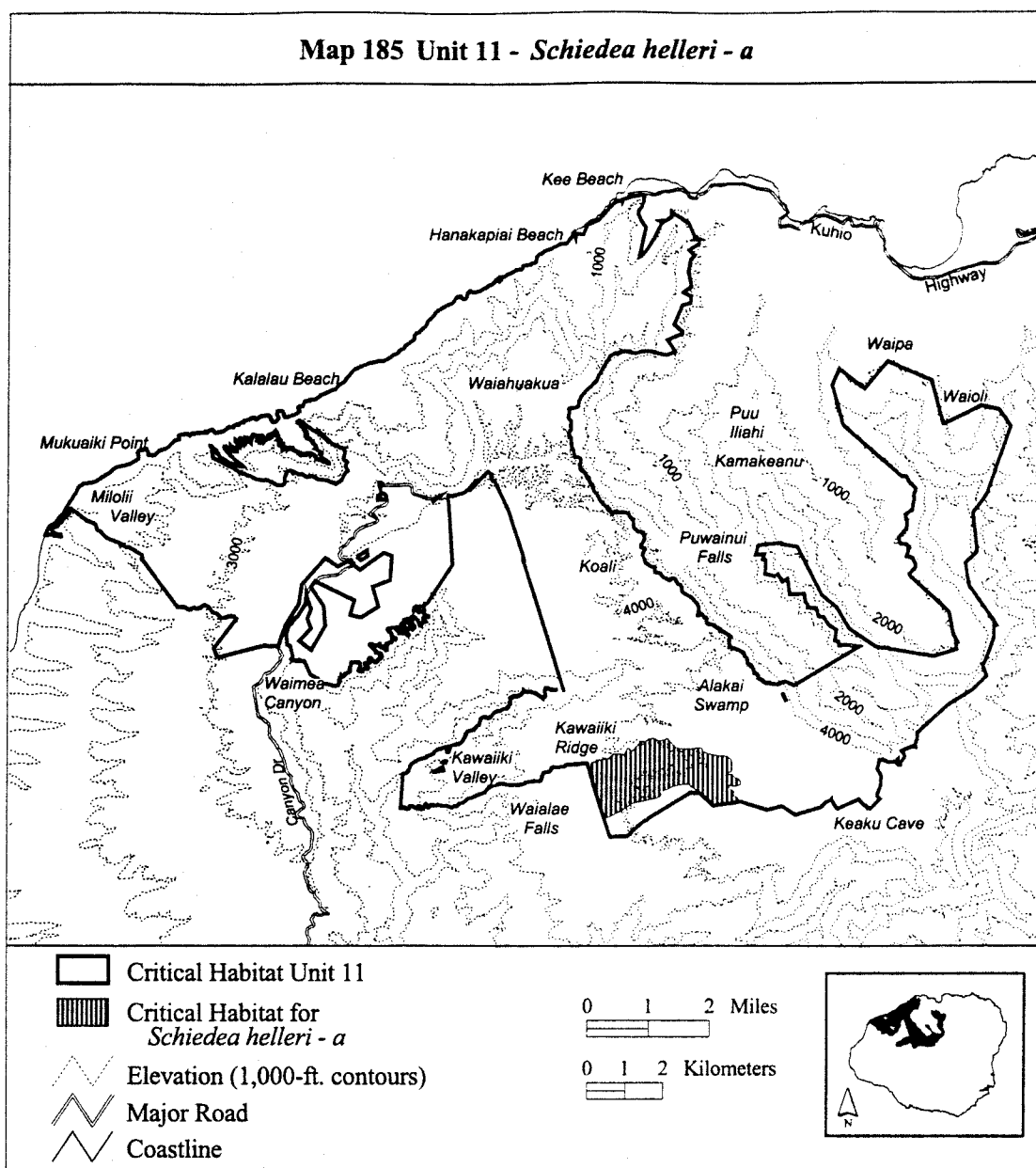
(clxxxv) Kauai 11—*Schiedea helleri*—a
(485 ha; 1,198 ac)

(A) Unit consists of the following 100 boundary points: Start at 439125, 2441965; 439082, 2442134; 439060, 2442238; 439038, 2442310; 439065, 2442364; 439202, 2442397; 439262, 2442430; 439514, 2442474; 439586, 2442550; 439651, 2442589; 439788, 2442589; 439876, 2442567; 439925, 2442561; 439969, 2442649; 440018, 2442737; 440035, 2442747; 440073, 2442698; 440073, 2442665; 440150, 2442682; 440248, 2442791; 440363, 2442906; 440407, 2442917; 440468, 2442895; 440577, 2442983; 440654, 2443005; 440774, 2442966; 440769, 2442939; 440862, 2442939; 440988,

2442955; 441059, 2442994; 441141, 2442906; 441207, 2442829; 441306, 2442758; 441415, 2442720; 441651, 2442720; 441810, 2442742; 441908, 2442758; 441968, 2442736; 441996, 2442659; 442111, 2442621; 442341, 2442555; 442434, 2442539; 442598, 2442544; 442659, 2442522; 442659, 2442513; 442735, 2442462; 442779, 2442358; 442757, 2442249; 442757, 2442216; 442763, 2442183; 442752, 2442134; 442697, 2442117; 442675, 2442073; 442708, 2442051; 442768, 2442068; 442796, 2442040; 442850, 2441964; 442933, 2441947; 442987, 2441865; 442987, 2441794; 442954, 2441761; 442883, 2441745; 442779, 2441750; 442719, 2441772; 442681, 2441756; 442681, 2441717; 442730,

2441663; 442812, 2441624; 442823, 2441586; 442812, 2441526; 442856, 2441482; 442916, 2441455; 442954, 2441378; 442982, 2441350; 442631, 2441285; 442287, 2441225; 441900, 2441576; 441842, 2441576; 441832, 2441635; 441804, 2441674; 441733, 2441718; 441667, 2441761; 441651, 2441800; 441519, 2441794; 441251, 2441745; 440977, 2441625; 440917, 2441537; 440884, 2441477; 440725, 2441411; 440511, 2441367; 440265, 2441329; 440194, 2441307; 440018, 2441214; 439892, 2441132; 439761, 2441044; 439553, 2440946; 439492, 2440924; 439405, 2440902; 439076, 2441910; 439120, 2441932; return to starting point.

(B) Note: Map 185 follows:



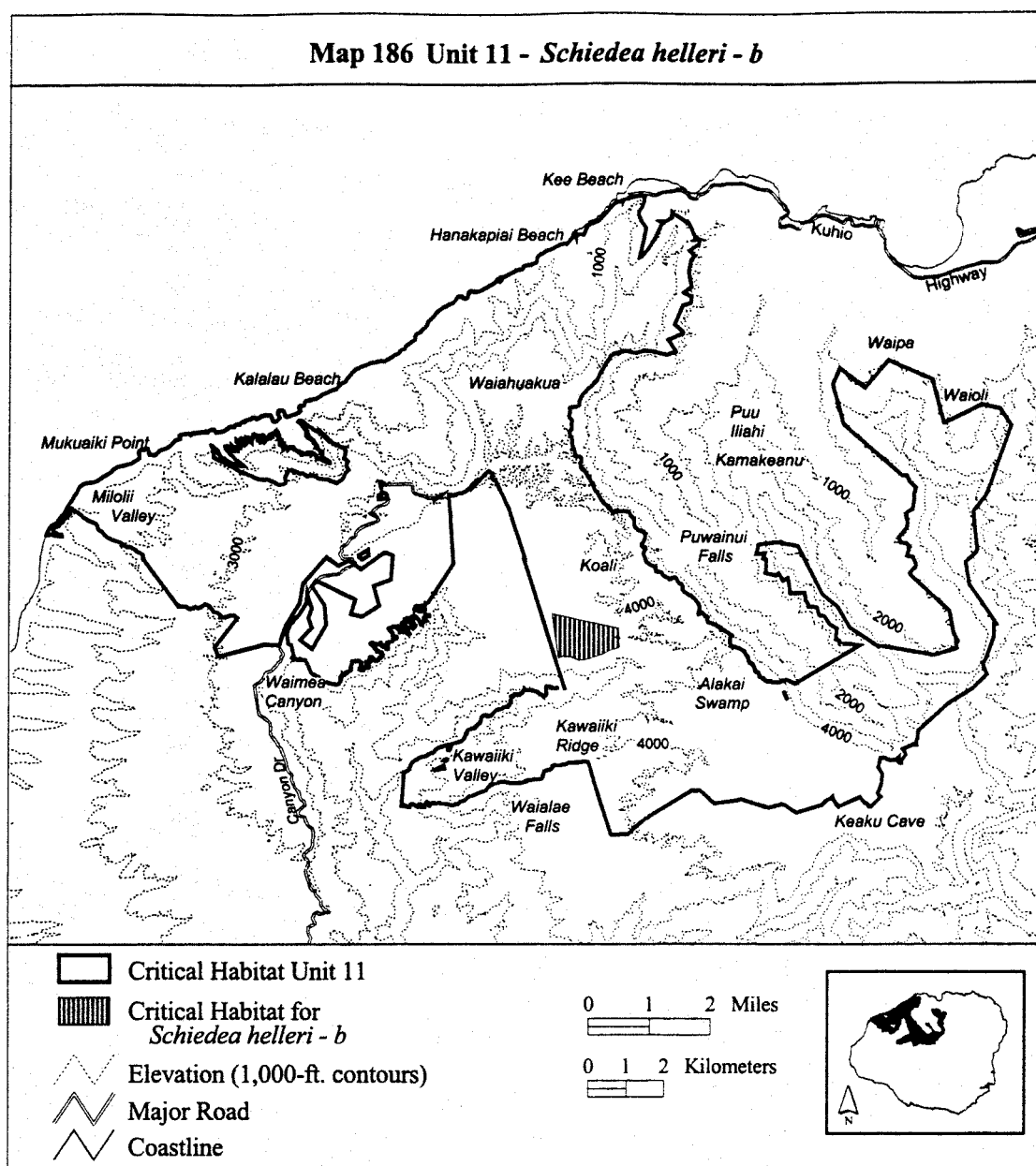
(clxxxvi) Kauai 11—*Schiedea helleri*—b
(154 ha; 381 ac)

(A) Unit consists of the following 13
boundary points: Start at 437970,

2446232; 439724, 2445859; 439747,
2445326; 439471, 2445259; 439401,
2445208; 439351, 2445174; 438983,
2445051; 438803, 2445014; 438673,

2445016; 438448, 2445099; 438225,
2445106; 438147, 2445051; 438140,
2445049; return to starting point.

(B) Note: Map 186 follows:



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

(A) Unit consists of the following 97
boundary points: Start at 437937,

2443749; 437924, 2443901; 437955,
2444013; 437973, 2444102; 437928,
2444227; 437902, 2444298; 437911,
2444303; 438000, 2444267; 438085,
2444267; 438156, 2444280; 438326,
2444213; 438348, 2444222; 438384,
2444240; 438455, 2444396; 438625,
2444450; 438696, 2444419; 438799,
2444334; 438946, 2444334; 439013,

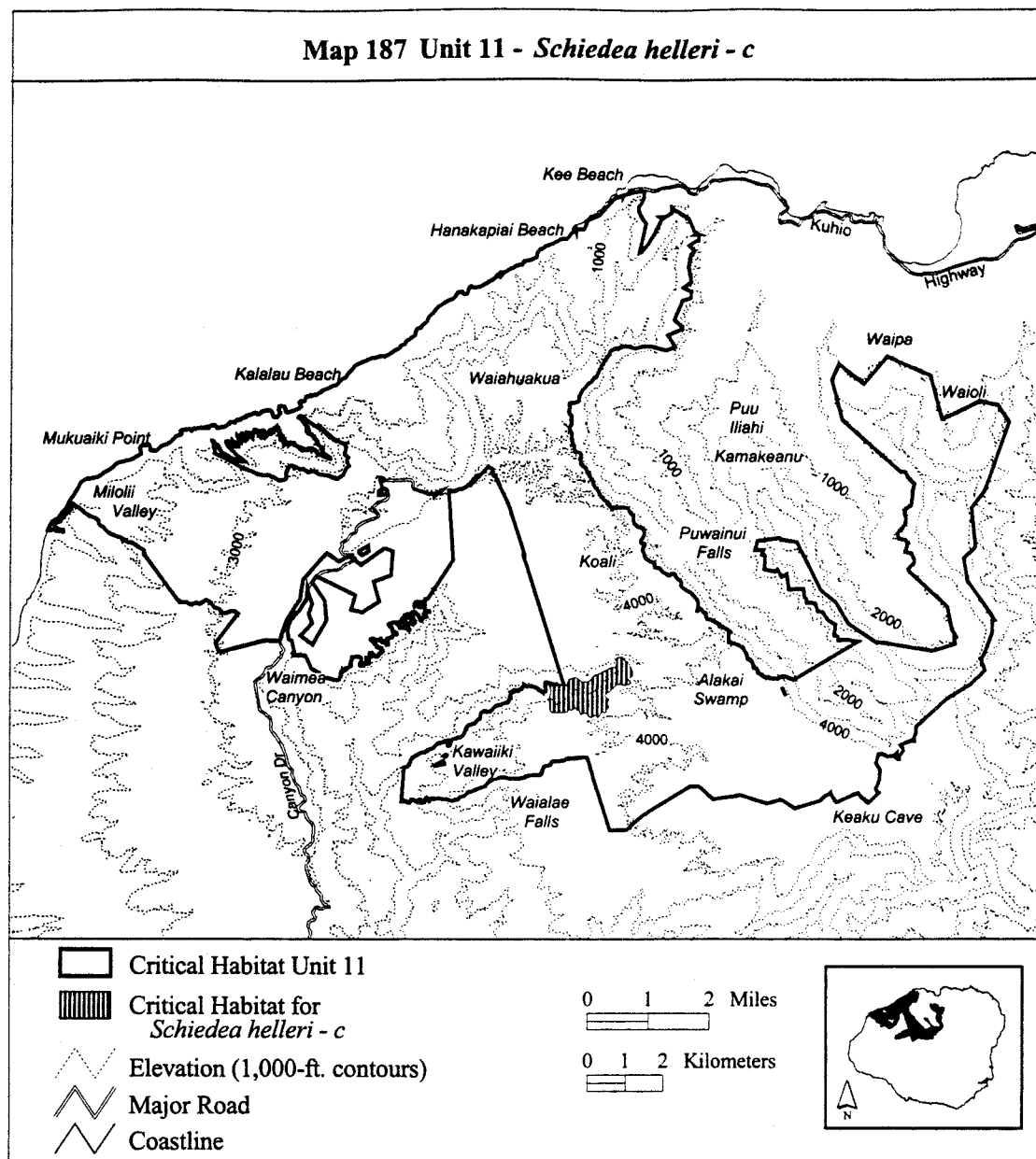
2444356; 439080, 2444450; 439129,
2444494; 439250, 2444539; 439326,
2444579; 439402, 2444619; 439540,
2444686; 439678, 2444726; 439710,
2444829; 439705, 2444936; 439759,
2444985; 439857, 2445003; 439897,
2444931; 439919, 2444896; 440004,
2444860; 440058, 2444753; 440107,
2444668; 440138, 2444623; 440143,
2444574; 440143, 2444539; 440143,
2444476; 440071, 2444445; 440018,
2444405; 440018, 2444374; 440067,
2444351; 440080, 2444302; 440058,

2444275; 439928, 2444231; 439830,
2444271; 439750, 2444267; 439678,
2444222; 439607, 2444137; 439495,
2444057; 439428, 2444008; 439415,
2443959; 439464, 2443887; 439500,
2443878; 439518, 2443861; 439486,
2443843; 439486, 2443812; 439477,
2443771; 439464, 2443770; 439500,
2443655; 439473, 2443620; 439446,
2443588; 439446, 2443539; 439428,
2443513; 439312, 2443513; 439294,
2443508; 439268, 2443450; 439241,
2443401; 439210, 2443392; 439187,

2443441; 439125, 2443441; 439067,
2443397; 439035, 2443392; 438955,
2443455; 438946, 2443486; 438919,
2443508; 438852, 2443499; 438803,
2443468; 438754, 2443481; 438750,

2443504; 438745, 2443544; 438719,
2443575; 438669, 2443575; 438669,
2443624; 438620, 2443647; 438585,
2443638; 438544, 2443602; 438473,
2443598; 438442, 2443593; 438415,

2443535; 438308, 2443513; 438085,
2443522; 438009, 2443526; 437955,
2443571; 437933, 2443665; 437940,
2443749; return to starting point.
(B) Note: Map 187 follows:

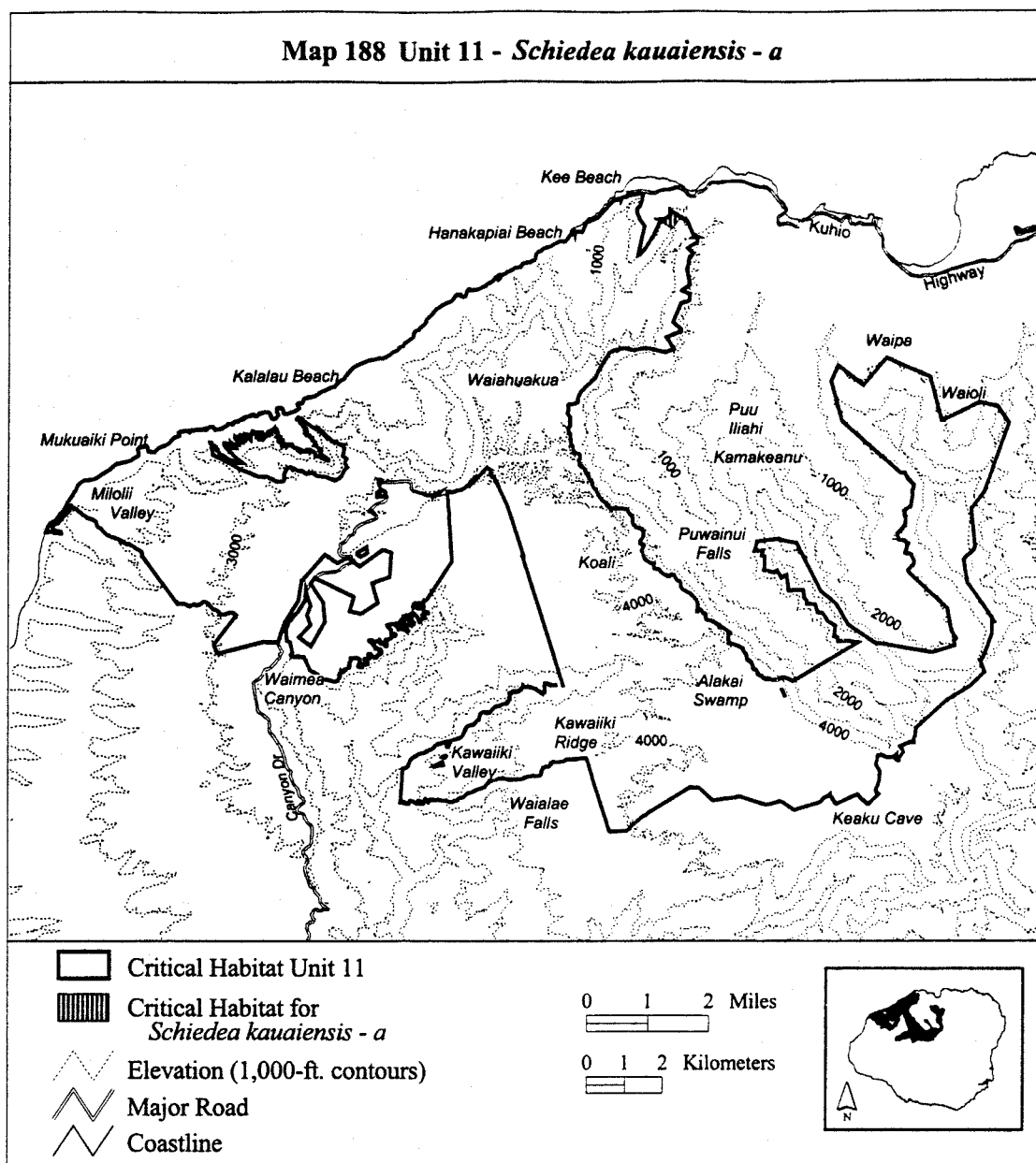


(clxxxviii) Kauai 11—*Schiedea kauaiensis*—a (12 ha; 29 ac)

(A) Unit consists of the following 7 boundary points: Start at 441158,

2456345; 440802, 2456603; 441024,
2456625; 441109, 2456674; 441096,
2456831; 441096, 2456842; 441384,
2456663; return to starting point.

(B) Note: Map 188 follows:



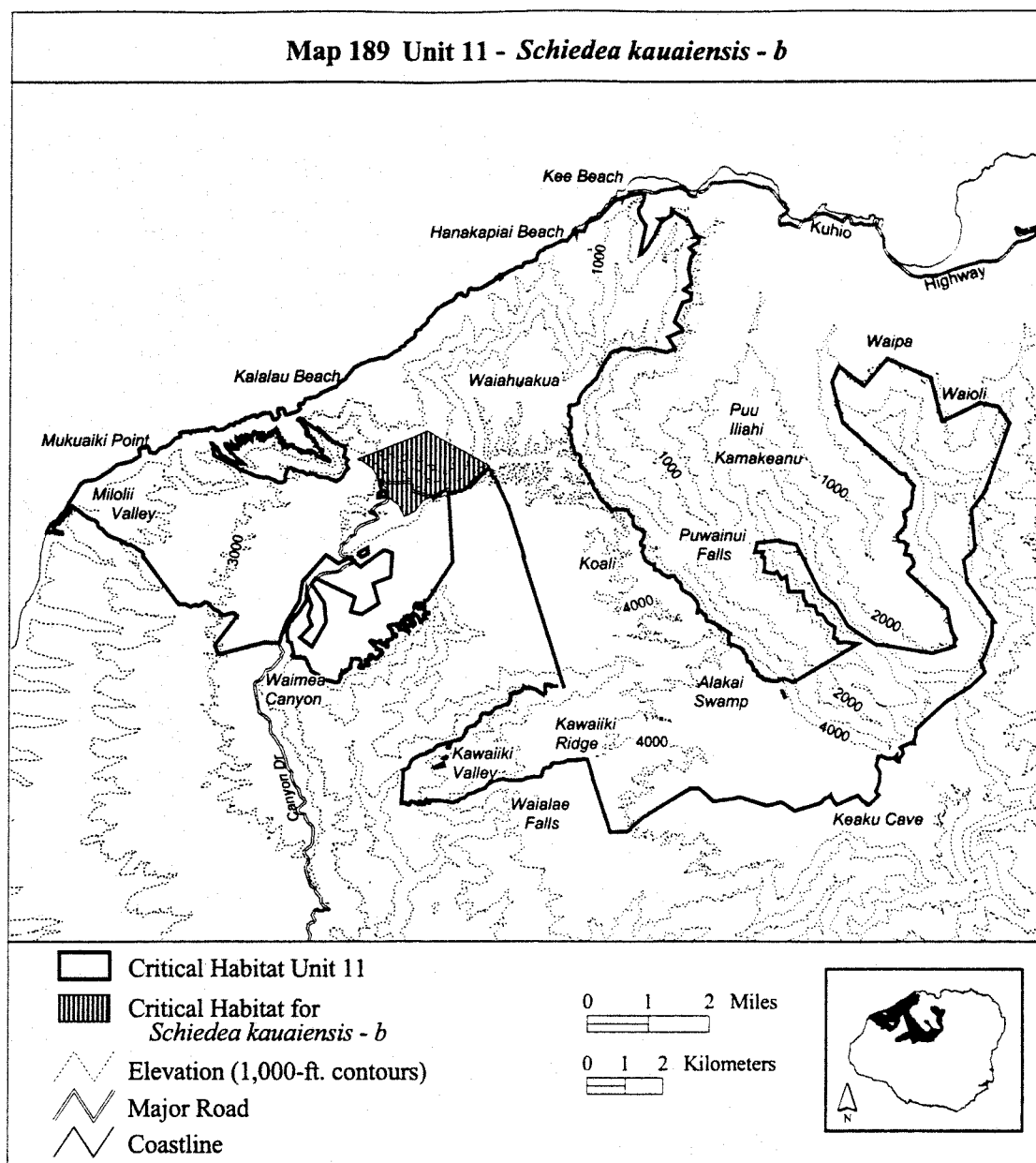
(clxxxix) Kauai 11—*Schiedea kauaiensis*—b (394 ha; 974 ac)

(A) Unit consists of the following 47 boundary points: Start at 434833, 2449278; 434824, 2449275; 434569, 2449182; 434357, 2448899; 434343, 2448881; 434145, 2448778; 434076, 2448743; 434061, 2448769; 433970, 2448925; 433903, 2449067; 433746,

2449177; 433650, 2449258; 433659, 2449418; 433575, 2449511; 433473, 2449595; 433461, 2449623; 433480, 2449629; 433484, 2449703; 433460, 2449707; 433443, 2449707; 433442, 2449724; 433348, 2449773; 433304, 2449883; 433184, 2450065; 433006, 2450176; 432940, 2450230; 432816, 2450278; 433712, 2450629; 434347, 2450868; 434676, 2451014; 434924,

2450872; 435714, 2450443; 436323, 2450091; 436203, 2450009; 436203, 2450009; 436201, 2450007; 436194, 2450002; 435573, 2449422; 435549, 2449426; 435517, 2449423; 435501, 2449420; 435498, 2449418; 435177, 2449404; 435010, 2449343; 435011, 2449352; 434881, 2449297; 434833, 2449281; return to starting point.

(B) **Note:** Map 189 follows:



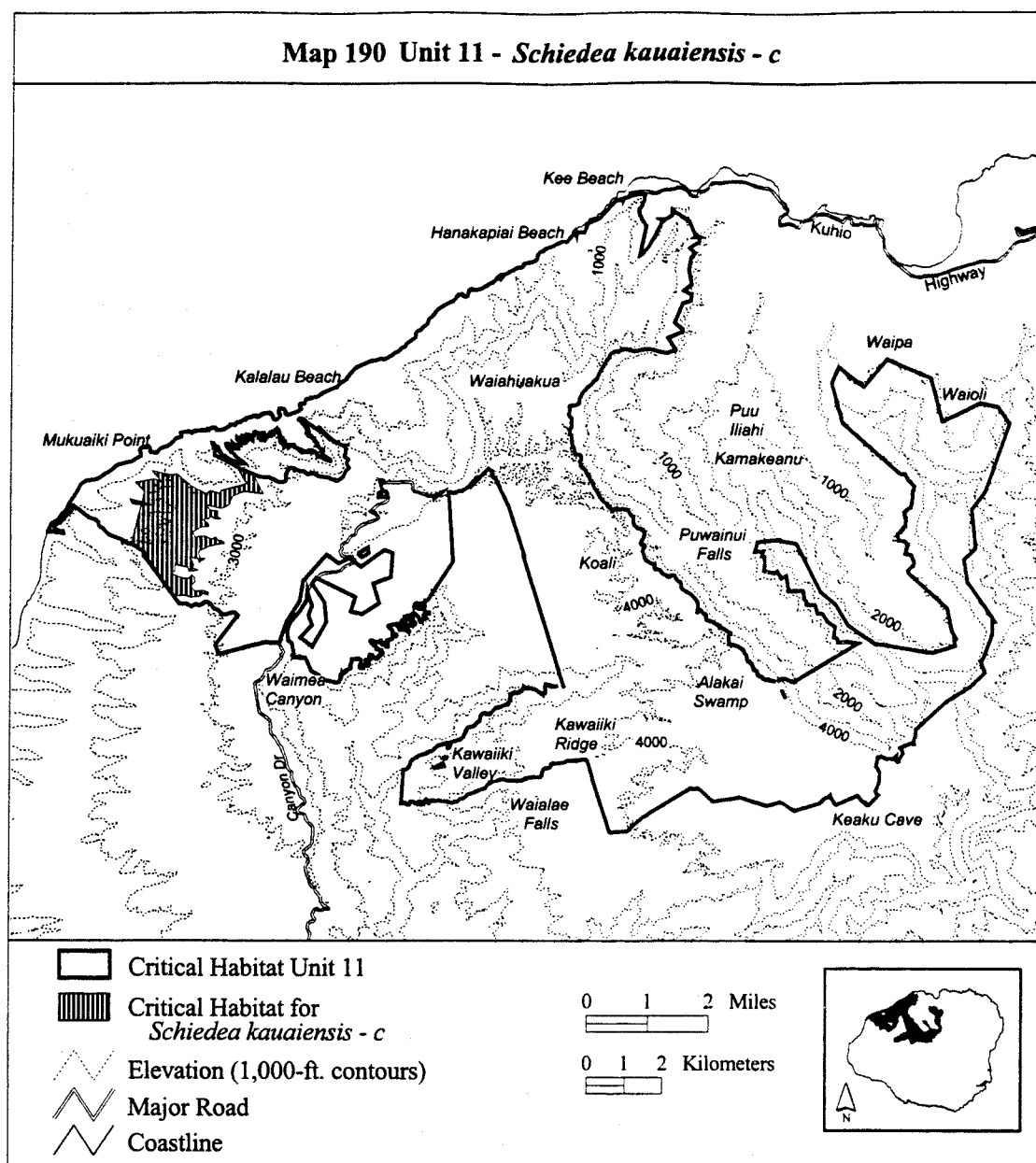
(cxc) Kauai 11—*Schiedea kauaiensis*—c
(510 ha; 1,260 ac)

(A) Unit consists of the following 110 boundary points: Start at 426811, 2448002; 427169, 2449411; 426941, 2449644; 427428, 2449744; 427602, 2449670; 427375, 2449950; 427862, 2449850; 428025, 2449872; 428417, 2449538; 428792, 2449348; 428919, 2449417; 429157, 2449343; 429189, 2449432; 429866, 2449617; 429586, 2450082; 429598, 2450077; 429717, 2449996; 429751, 2449978; 429791, 2449963; 429830, 2449956; 429860, 2449947; 429944, 2449910; 429968, 2449904; 430016, 2449884; 430027, 2449878; 430300, 2449348; 429803, 2449411; 429501, 2449279; 429411, 2449047; 429231, 2448941; 428781,

2449052; 428877, 2448948; 428940, 2448908; 429100, 2448884; 429100, 2448820; 429084, 2448749; 429180, 2448669; 429044, 2448677; 428925, 2448749; 428861, 2448677; 428805, 2448685; 428717, 2448637; 428837, 2448565; 428877, 2448470; 428725, 2448462; 428653, 2448462; 428454, 2448318; 428502, 2448174; 428597, 2448198; 428789, 2448214; 428932, 2448119; 429060, 2448182; 429124, 2448087; 429204, 2448095; 429292, 2448023; 429156, 2448007; 428901, 2447951; 428725, 2447863; 428613, 2447816; 428597, 2447736; 428661, 2447616; 428773, 2447616; 428621, 2447520; 428581, 2447624; 428374, 2447648; 428478, 2447465; 428446, 2447369; 428589, 2447313; 428350,

2447281; 428310, 2447393; 427967, 2447465; 427975, 2447369; 427967, 2447289; 427895, 2447289; 427951, 2447186; 428198, 2447098; 428358, 2447098; 428438, 2447193; 428510, 2447122; 428494, 2447098; 428510, 2446994; 428398, 2446906; 428502, 2446755; 428733, 2446787; 428877, 2446723; 428861, 2446667; 428741, 2446707; 428653, 2446635; 428382, 2446595; 428246, 2446651; 427959, 2446635; 427952, 2446615; 427185, 2447661; 427161, 2447669; 427157, 2447676; 427157, 2447711; 427175, 2447754; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 426997, 2447892; 426981, 2447902; 426958, 2447923; 426944,

2447941; 426907, 2447965; 426847,

2447992; 426819, 2447998; return to
starting point.(B) **Note:** Map 190 follows:

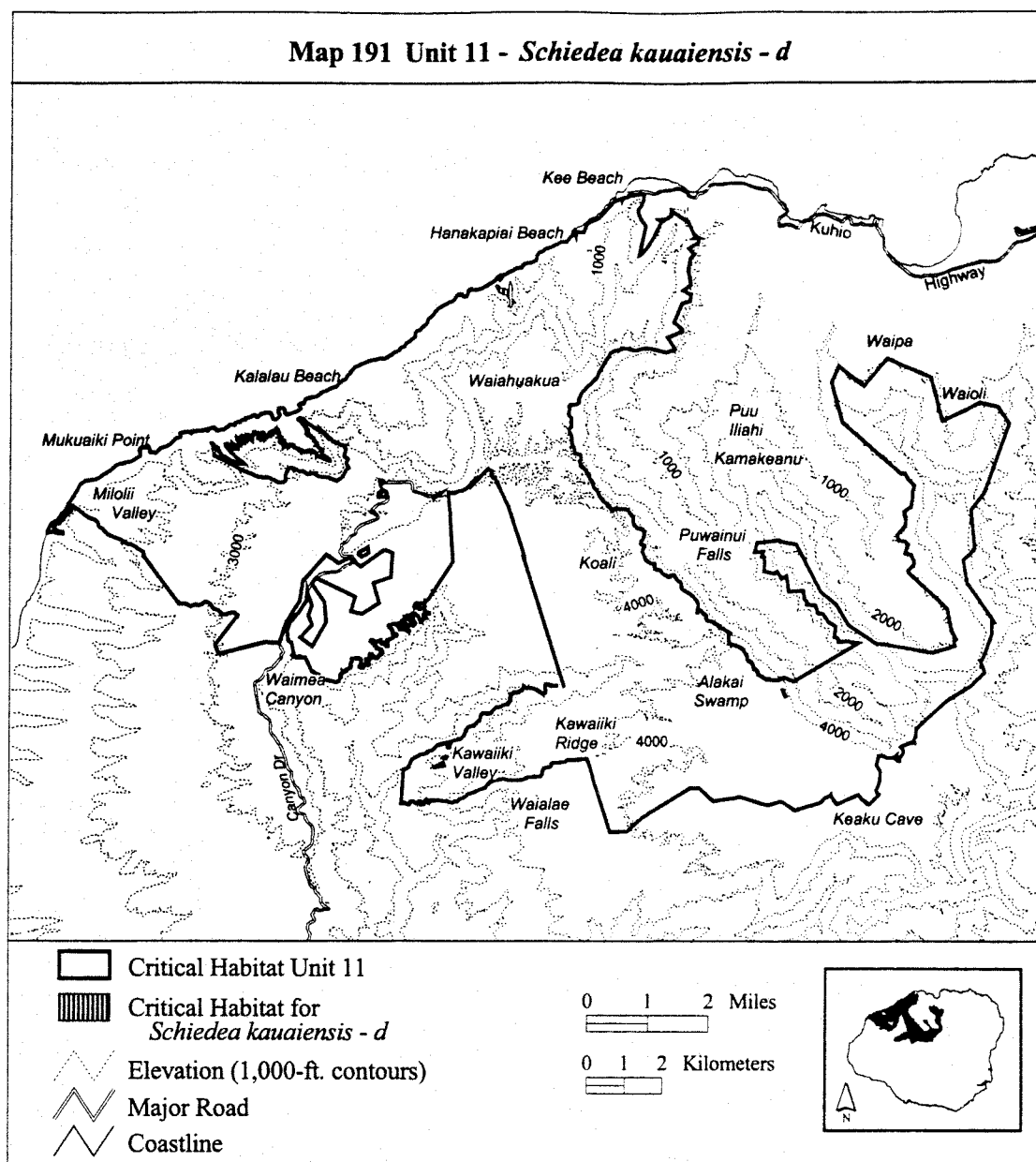
(cxc) Kauai 11—*Schiedea kauaiensis*—
d (11 ha; 28 ac)

(A) Unit consists of the following 39
boundary points: Start at 436481,
2454892; 436554, 2454840; 436578,
2454805; 436650, 2454788; 436692,
2454795; 436761, 2454736; 436782,
2454761; 436806, 2454757; 436823,

2454836; 436816, 2454895; 436834,
2454968; 436858, 2454971; 436858,
2454912; 436906, 2454847; 436899,
2454633; 436896, 2454554; 436889,
2454509; 436927, 2454474; 437006,
2454412; 437006, 2454395; 436920,
2454384; 436896, 2454298; 436875,
2454271; 436854, 2454271; 436840,
2454322; 436834, 2454426; 436834,

2454485; 436809, 2454523; 436764,
2454567; 436733, 2454616; 436685,
2454619; 436654, 2454619; 436619,
2454650; 436581, 2454681; 436530,
2454688; 436505, 2454737; 436485,
2454781; 436457, 2454833; 436457,
2454861; return to starting point.

(B) **Note:** Map 191 follows:



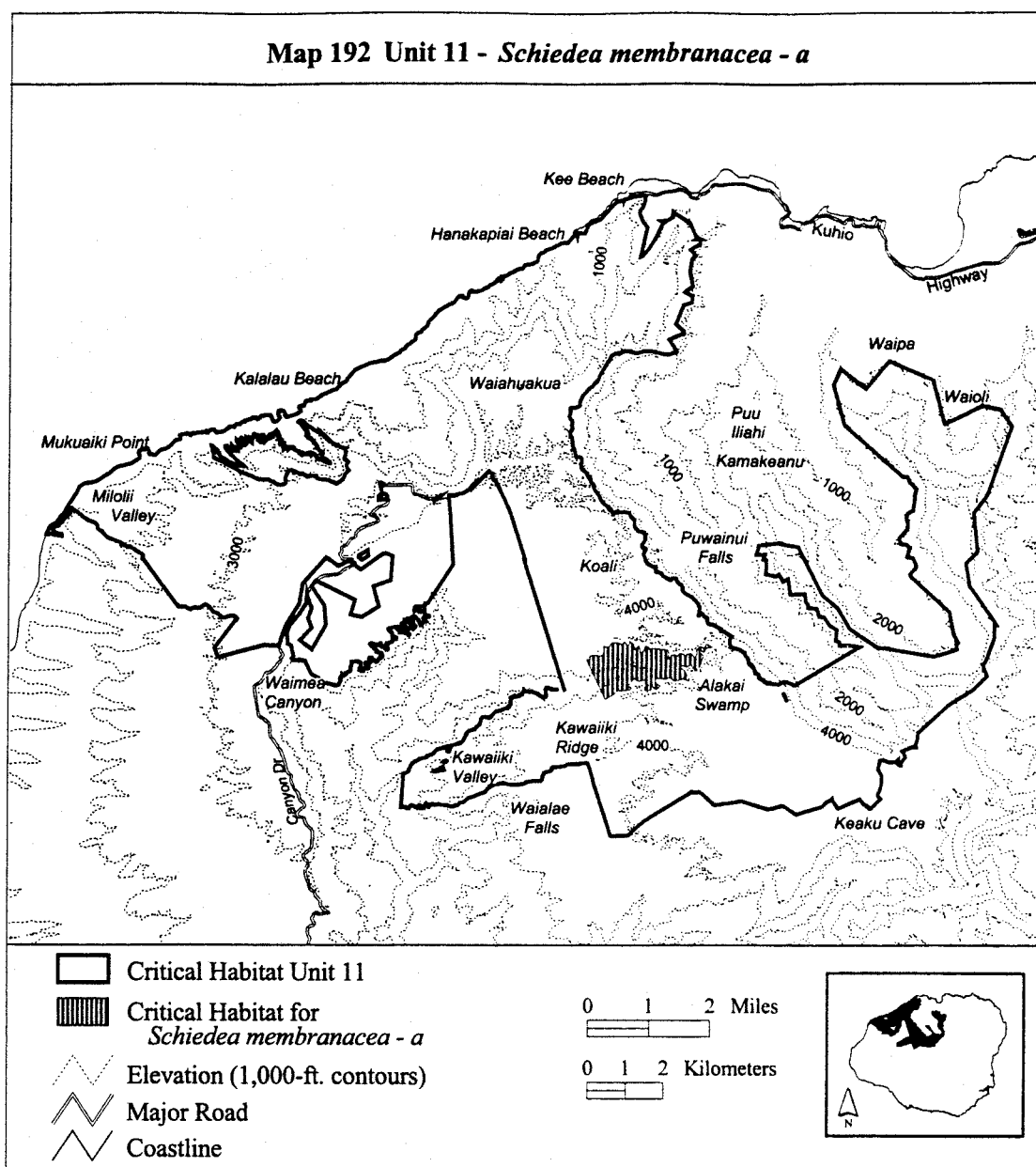
(cxcii) Kauai 11—*Schiedea membranacea*—a (251 ha; 620 ac)

(A) Unit consists of the following 85 boundary points: Start at 439181, 2445148; 439301, 2445148; 439351, 2445232; 439351, 2445395; 439471, 2445366; 439563, 2445479; 439711, 2445479; 439817, 2445437; 439895, 2445501; 439951, 2445409; 440008, 2445430; 440022, 2445515; 440128, 2445458; 440149, 2445310; 440269, 2445402; 440312, 2445218; 440404, 2445267; 440439, 2445409; 440517, 2445373; 440545, 2445317; 440623, 2445352; 441025, 2445302; 441054, 2445211; 441018, 2445055; 441145,

2445161; 441216, 2445175; 441280, 2445140; 441372, 2445225; 441527, 2445133; 441527, 2445196; 441647, 2445210; 441746, 2445083; 441796, 2445203; 441788, 2445309; 441894, 2445387; 441979, 2445345; 442057, 2445465; 442198, 2445373; 442057, 2445359; 441993, 2445246; 441894, 2445295; 441866, 2445253; 441951, 2445182; 441951, 2445104; 441880, 2444878; 441803, 2444780; 441739, 2444787; 441640, 2444914; 441548, 2444857; 441400, 2444893; 441357, 2444857; 441485, 2444751; 441612, 2444547; 441591, 2444490; 441442, 2444554; 441343, 2444504; 441188,

2444490; 441117, 2444582; 440969, 2444533; 440714, 2444554; 440714, 2444434; 440835, 2444363; 440736, 2444264; 440594, 2444377; 440594, 2444250; 440432, 2444243; 440432, 2444321; 440531, 2444392; 440446, 2444406; 440446, 2444519; 440283, 2444483; 440142, 2444554; 440057, 2444420; 439980, 2444378; 440078, 2444300; 440022, 2444243; 439874, 2444229; 439704, 2444236; 439640, 2444145; 439492, 2444074; 439400, 2444003; 438884, 2445049; 438983, 2445042; 438983, 2445141; 439139, 2445169; return to starting point.

(B) Note: Map 192 follows:



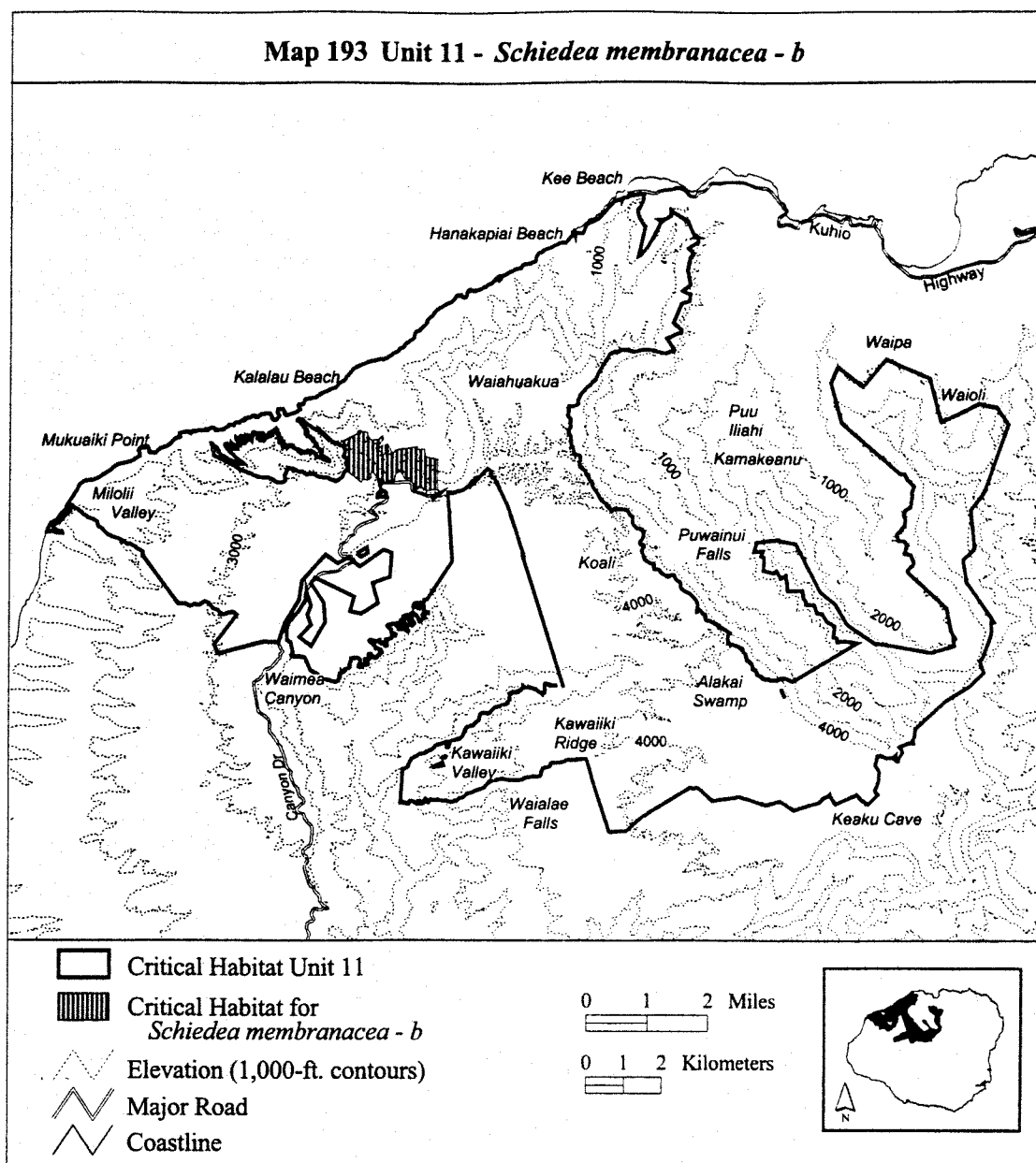
(cxciii) Kauai 11—*Schiedea membranacea*—b (234 ha; 579 ac)

(A) Unit consists of the following 73 boundary points: Start at 432751, 2449809; 432525, 2449982; 432579, 2450036; 432551, 2450083; 432523, 2450130; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432452, 2450337; 432461, 2450375; 432480, 2450426; 432490, 2450478; 432501, 2450529; 432494, 2450543; 432477, 2450580; 432468, 2450593; 432464, 2450611; 432465, 2450623; 432450, 2450624; 432408,

2450635; 432380, 2450644; 432335, 2450666; 432306, 2450682; 432952, 2451018; 433092, 2450986; 433100, 2450920; 433191, 2450796; 433323, 2450788; 433380, 2450813; 433471, 2450895; 433528, 2450805; 433397, 2450640; 433372, 2450550; 433495, 2450640; 433479, 2450443; 433495, 2450369; 433569, 2450435; 433561, 2450632; 433635, 2450681; 433685, 2450566; 433750, 2450410; 433849, 2450517; 434162, 2450566; 434401, 2450615; 434425, 2450525; 434606, 2450525; 434639, 2450327; 434952,

2450270; 434952, 2449497; 434968, 2449447; 434812, 2449447; 434688, 2449421; 434573, 2449489; 434461, 2449513; 434354, 2449390; 434322, 2449449; 434310, 2449628; 434251, 2449664; 434076, 2449767; 433964, 2449950; 433873, 2449910; 433808, 2449826; 433817, 2449668; 433535, 2449656; 433372, 2449777; 433285, 2449871; 433199, 2449958; 433166, 2449867; 433183, 2449769; 433094, 2449708; 432985, 2449744; 432952, 2449654; return to starting point.

(B) **Note:** Map 193 follows:



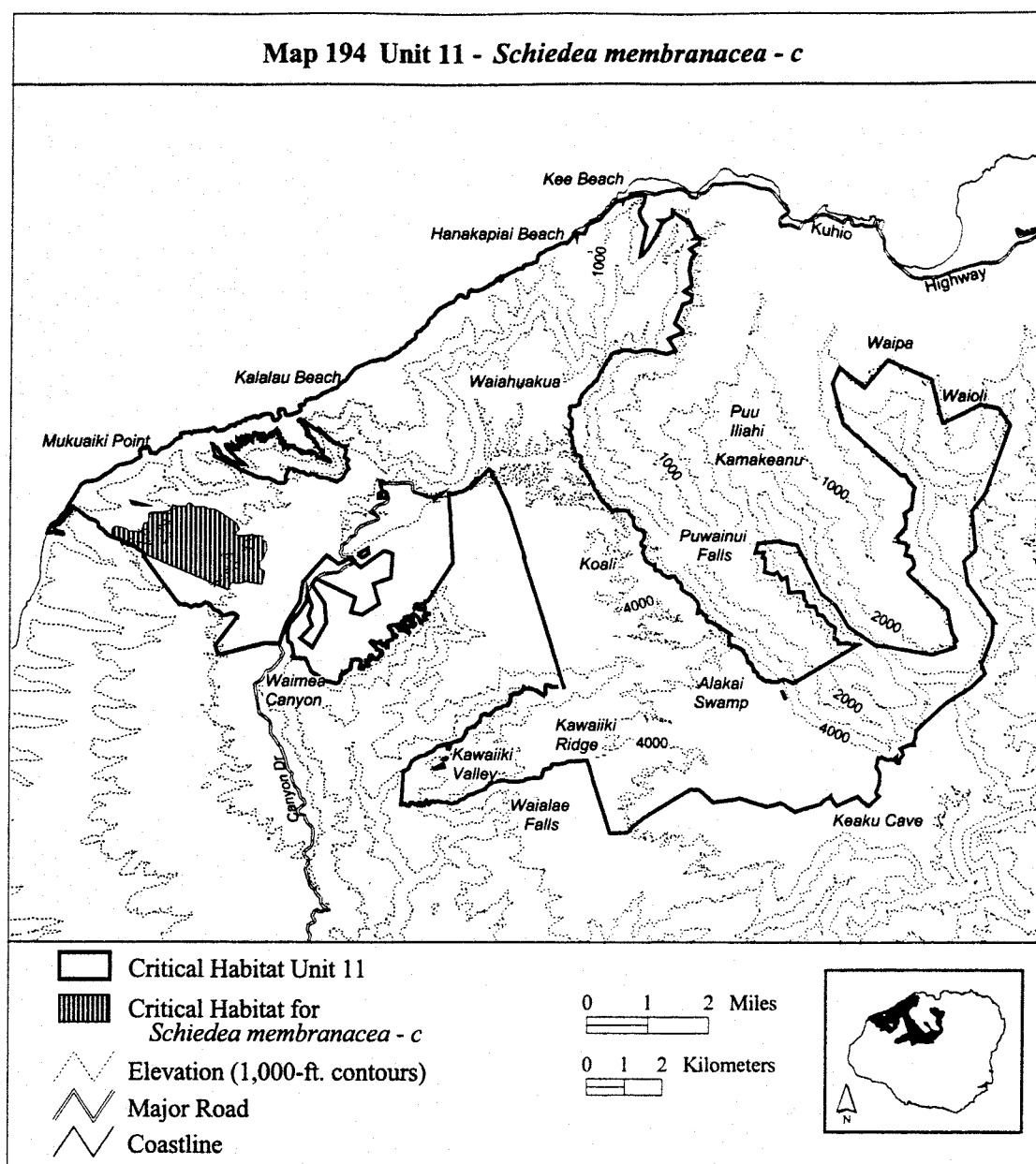
(cxciv) Kauai 11—*Schiedea membranacea*—c (527 ha; 1,303 ac)

(A) Unit consists of the following 95 boundary points: Start at 429500, 2447004; 429408, 2446809; 427175, 2447761; 427176, 2447775; 427171, 2447800; 427160, 2447815; 427124, 2447837; 427084, 2447847; 427039, 2447867; 427014, 2447882; 427019, 2447905; 426996, 2447928; 426906, 2448039; 426874, 2448050; 426752, 2448039; 426667, 2448060; 426648, 2448068; 426613, 2448093; 426561, 2448116; 426560, 2448116; 426491, 2448177; 426375, 2448225; 426316, 2448252; 426316, 2448342; 426321, 2448427; 426380, 2448475; 426438,

2448496; 426550, 2448475; 426699, 2448421; 426784, 2448374; 427049, 2448347; 427102, 2448379; 427166, 2448575; 427170, 2448577; 427171, 2448582; 427181, 2448581; 427241, 2448602; 427288, 2448618; 427294, 2448767; 427288, 2448830; 427368, 2448873; 427655, 2448889; 427830, 2448915; 427873, 2448968; 427899, 2449027; 427979, 2449048; 428059, 2449037; 428106, 2449027; 428282, 2449032; 428335, 2449117; 428377, 2449133; 428415, 2449101; 428478, 2449037; 428537, 2449006; 428670, 2449006; 428755, 2449021; 428824, 2448995; 428845, 2448968; 428999, 2448968; 429063, 2448942; 429350, 2448766; 429514, 2448660; 429642,

2448549; 429690, 2448432; 429658, 2448384; 429589, 2448336; 429605, 2448283; 429769, 2448246; 429844, 2448257; 430024, 2448283; 430088, 2448283; 430120, 2448235; 430152, 2448235; 430184, 2448257; 430322, 2448225; 430295, 2448166; 430290, 2448140; 430391, 2448092; 430412, 2447906; 430412, 2447848; 430348, 2447747; 430322, 2447657; 430258, 2447588; 430232, 2447529; 430237, 2447396; 430354, 2447317; 430348, 2447221; 430295, 2446966; 430242, 2446961; 430093, 2446998; 429977, 2447014; 429881, 2447041; 429764, 2446993; 429647, 2446982; 429514, 2447003; return to starting point.

(B) Note: Map 194 follows:



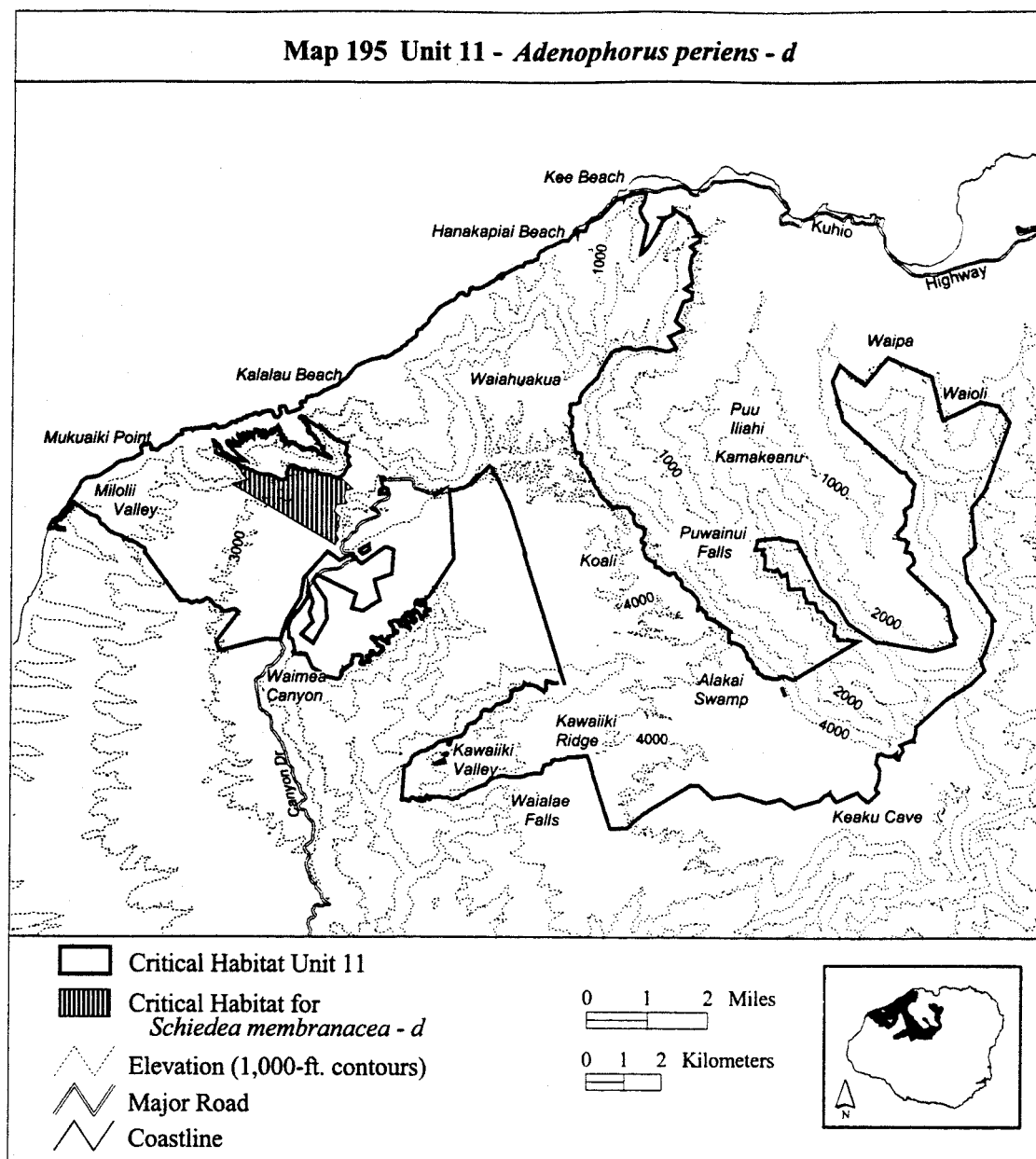
(cxcv) Kauai 11—*Schiedea membranacea*—d (327 ha; 809 ac)

(A) Unit consists of the following 78 boundary points: Start at 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657,

2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432217, 2449712; 432259, 2449679; 432313, 2449721; 432664, 2449391; 432475, 2449358; 432426, 2449177; 432475, 2449062; 432514, 2449029; 432472, 2448986; 432450, 2448988; 432236, 2448980; 432162, 2448799; 432230, 2448747; 432226, 2448740; 432334, 2448663; 432269, 2448470; 432310, 2448387; 432261, 2448338; 432261, 2448264; 432220, 2448239; 432228, 2448165; 432286, 2448050; 432228, 2447976; 432212,

2447910; 429447, 2449531; 429866, 2449654; 429710, 2449811; 429644, 2449942; 429480, 2450139; 429489, 2450138; 429576, 2450092; 429717, 2449996; 429751, 2449978; 429791, 2449963; 429830, 2449956; 429860, 2449947; 429944, 2449910; 429968, 2449904; 430016, 2449884; 430068, 2449856; 430172, 2449815; 430207, 2449804; 430261, 2449795; 430317, 2449781; 430340, 2449778; 430365, 2449787; 430392, 2449798; 430408, 2449802; 430410, 2449802; return to starting point.

(B) **Note:** Map 195 follows:



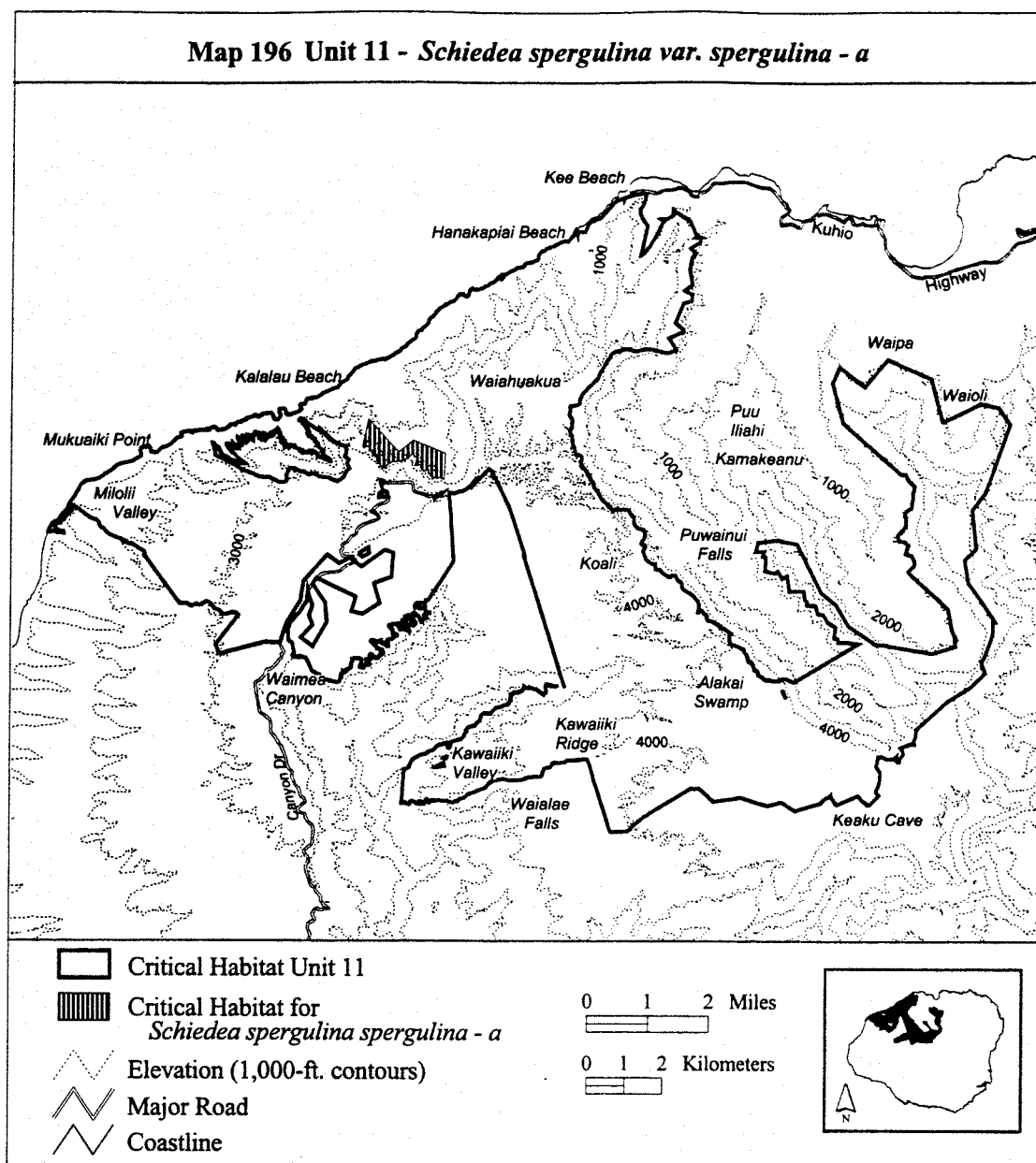
(cxcvi) Kauai 11—*Schiedea spergulina* var. *spergulina*—a (131 ha; 323 ac)

(A) Unit consists of the following 48 boundary points: Start at 432924, 2450644; 433080, 2451343; 433887, 2450474; 434285, 2450789; 435124, 2450447; 435088, 2449734; 434974, 2449796; 434896, 2449749; 434891, 2449796; 434850, 2449796; 434777, 2449718; 434777, 2449827; 434731,

2449827; 434725, 2449889; 434663, 2449889; 434684, 2449998; 434534, 2449951; 434534, 2450013; 434524, 2450039; 434482, 2450018; 434472, 2450096; 434441, 2450132; 434368, 2450101; 434317, 2450106; 434379, 2450323; 434291, 2450354; 434296, 2450396; 434260, 2450432; 434027, 2450241; 433706, 2450194; 433556, 2450112; 433571, 2450029; 433494,

2450050; 433411, 2450070; 433302, 2450251; 433338, 2450303; 433276, 2450298; 433266, 2450344; 433312, 2450365; 433307, 2450391; 433178, 2450355; 433240, 2450463; 433162, 2450448; 433183, 2450500; 433080, 2450489; 433111, 2450593; 433028, 2450629; 432955, 2450557; return to starting point.

(B) Note: Map 196 follows:



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

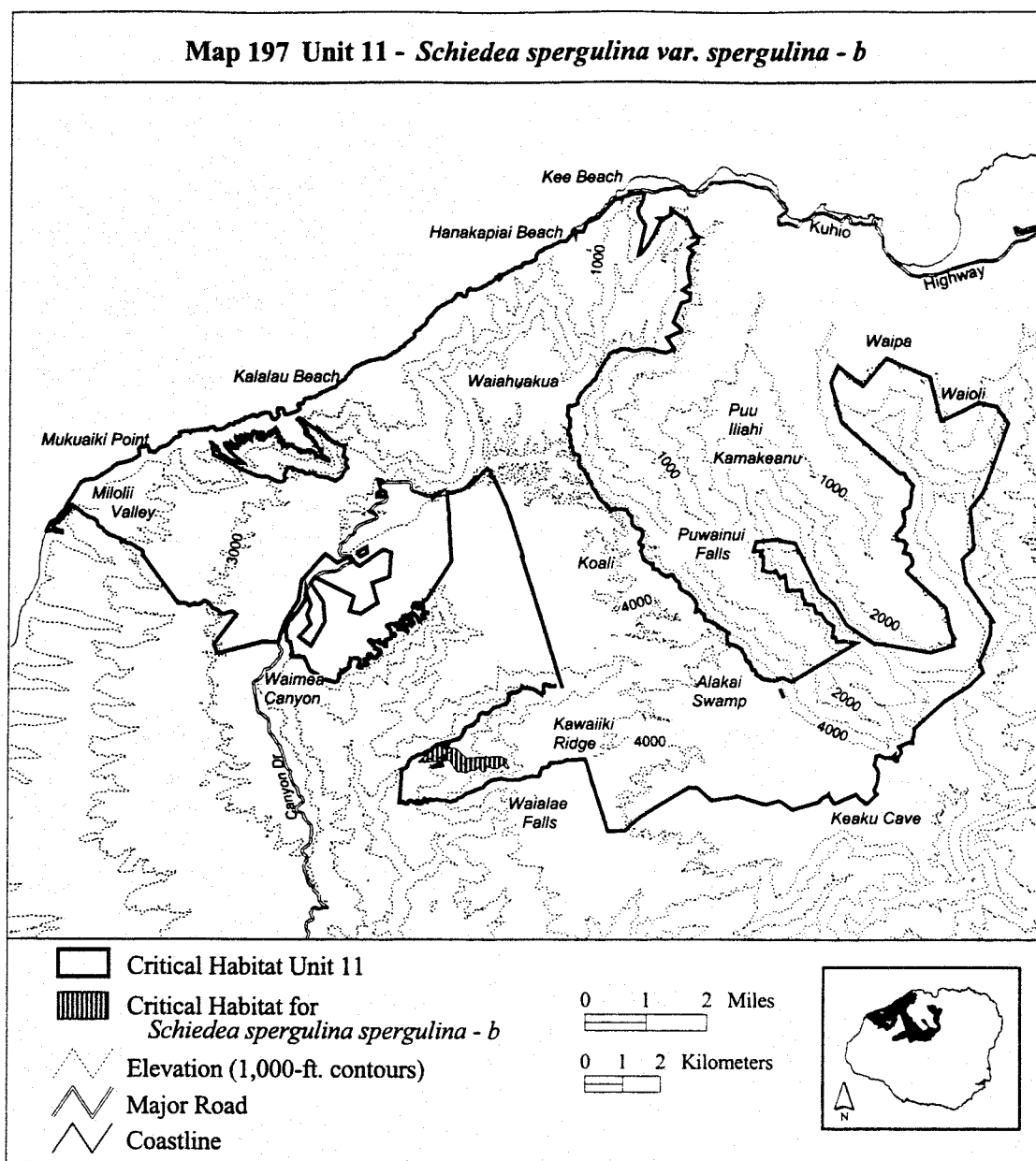
(A) Unit consists of the following 27 boundary points: Start at 435290, 2442650; 435520, 2442618; 435796, 2442364; 436701, 2442400; 436882, 2442335; 436853, 2442241; 436940, 2442103; 436868, 2442082; 436752,

2442198; 436636, 2442089; 436506, 2442082; 436332, 2442154; 436303, 2441988; 436223, 2441988; 436179, 2442031; 436122, 2442125; 436064, 2442053; 435911, 2442024; 435781, 2441966; 435658, 2441995; 435542, 2441995; 435346, 2442306; 434520, 2442249; 435006, 2442690; 435235,

2442658; 435237, 2442643; 435284, 2442631; return to starting point.

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

(C) **Note:** Map 197 follows:



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

(A) Unit consists of the following 568 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715,

2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821, 2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123,

2443502; 436134, 2443520; 436146, 2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678,

2443742; 436697, 2443756; 436708,
2443763; 436726, 2443769; 436745,
2443772; 436758, 2443775; 436771,
2443776; 436788, 2443776; 436799,
2443778; 436808, 2443781; 436818,
2443785; 436823, 2443786; 436829,
2443790; 436837, 2443797; 436841,
2443801; 436845, 2443807; 436852,
2443819; 436861, 2443831; 436870,
2443847; 436882, 2443863; 436890,
2443877; 436900, 2443900; 436911,
2443923; 436914, 2443936; 436914,
2443948; 436913, 2443962; 436910,
2443981; 436908, 2443995; 436908,
2444013; 436911, 2444027; 436918,
2444040; 436926, 2444047; 436933,
2444055; 436942, 2444065; 436951,
2444073; 436961, 2444084; 436969,
2444094; 436975, 2444098; 436983,
2444102; 436994, 2444107; 437009,
2444108; 437026, 2444105; 437049,
2444100; 437067, 2444092; 437076,
2444089; 437106, 2444090; 437119,
2444096; 437128, 2444104; 437133,
2444112; 437137, 2444122; 437144,
2444130; 437156, 2444135; 437169,
2444141; 437183, 2444150; 437191,
2444154; 437202, 2444165; 437212,
2444177; 437228, 2444198; 437239,
2444213; 437245, 2444227; 437254,
2444239; 437263, 2444246; 437278,
2444240; 437294, 2444234; 437310,
2444225; 437332, 2444217; 437351,
2444217; 437370, 2444223; 437391,
2444223; 437412, 2444226; 437428,
2444226; 437445, 2444223; 437462,
2444219; 437482, 2444211; 437497,
2444205; 437541, 2444190; 437563,
2444183; 437578, 2444179; 437593,
2444170; 437610, 2444160; 437624,
2444146; 437636, 2444132; 437651,
2444119; 437671, 2444112; 437691,
2444102; 437703, 2444093; 437722,
2444082; 437732, 2444069; 437749,
2444061; 437758, 2444058; 437768,
2444060; 437780, 2444066; 437810,
2444080; 437821, 2444088; 437831,
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2444126; 437833, 2444139; 437827,
2444163; 437822, 2444185; 437820,
2444206; 437818, 2444236; 437824,
2444265; 437828, 2444292; 437836,
2444314; 437843, 2444322; 437854,
2444327; 437871, 2444328; 437887,
2444323; 437909, 2444314; 437933,
2444302; 437960, 2444289; 437984,
2444274; 438007, 2444260; 438028,
2444258; 438048, 2444258; 438072,
2444260; 438087, 2444266; 438109,
2444271; 438133, 2444273; 438164,
2444270; 438196, 2444263; 438335,
2444214; 438315, 2444274; 438323,
2444270; 438355, 2444421; 438442,
2444561; 438420, 2444670; 438420,
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2444972; 438907, 2445004; 438907,
2445080; 438993, 2445145; 439156,
2445145; 439296, 2445177; 439339,
2445253; 439545, 2445491; 439783,
2445458; 440107, 2445318; 440150,
2445285; 440334, 2445307; 440410,
2445263; 440431, 2445231; 440594,
2445253; 440691, 2445339; 440756,
2445371; 440907, 2445317; 441048,
2445252; 441113, 2445242; 441221,
2445274; 441361, 2445306; 441513,
2445339; 441707, 2445328; 441848,
2445198; 442075, 2445112; 442053,
2445025; 441988, 2444906; 441891,
2444852; 441740, 2444744; 441664,
2444701; 441697, 2444582; 441740,
2444463; 441675, 2444420; 441513,
2444420; 441069, 2444453; 440626,
2444442; 440626, 2444356; 440723,
2444291; 440896, 2444193; 440886,
2444183; 440723, 2444204; 440410,
2444280; 440237, 2444258; 440161,
2444248; 440075, 2444183; 440075,
2444064; 440183, 2443988; 440280,
2443988; 440323, 2443902; 440356,
2443826; 440453, 2443772; 440486,
2443696; 440464, 2443653; 440291,
2443567; 440096, 2443577; 439934,
2443459; 439718, 2443415; 439523,
2443340; 439274, 2443340; 438961,
2443405; 438745, 2443480; 438582,
2443524; 438377, 2443491; 438269,
2443372; 438334, 2443189; 438485,
2443070; 438615, 2443081; 438669,
2443048; 438669, 2442929; 438701,
2442810; 438755, 2442745; 439069,
2442810; 439177, 2442702; 439177,
2442605; 439058, 2442486; 438961,
2442378; 438909, 2442349; 438866,
2442347; 438838, 2442340; 438821,
2442339; 438757, 2442331; 438721,
2442329; 438704, 2442326; 438694,
2442327; 438679, 2442324; 438668,
2442322; 438637, 2442324; 438577,
2442315; 438561, 2442316; 438535,
2442314; 438523, 2442310; 438517,
2442310; 438496, 2442310; 438460,
2442320; 438453, 2442321; 438436,
2442321; 438433, 2442319; 438418,
2442311; 438392, 2442294; 438376,
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2441190; 434424, 2441176; 434397,
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2442596; 434883, 2442613; 434896,
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2442668; 434949, 2442681; 434972,
2442699; 434986, 2442705; 434997,
2442708; 435006, 2442713; 435012,
2442717; 435026, 2442719; 435039,
2442722; 435061, 2442727; 435081,
2442733; 435100, 2442739; 435119,
2442747; 435135, 2442754; 435150,
2442764; 435164, 2442771; 435184,
2442774; 435201, 2442777; 435219,
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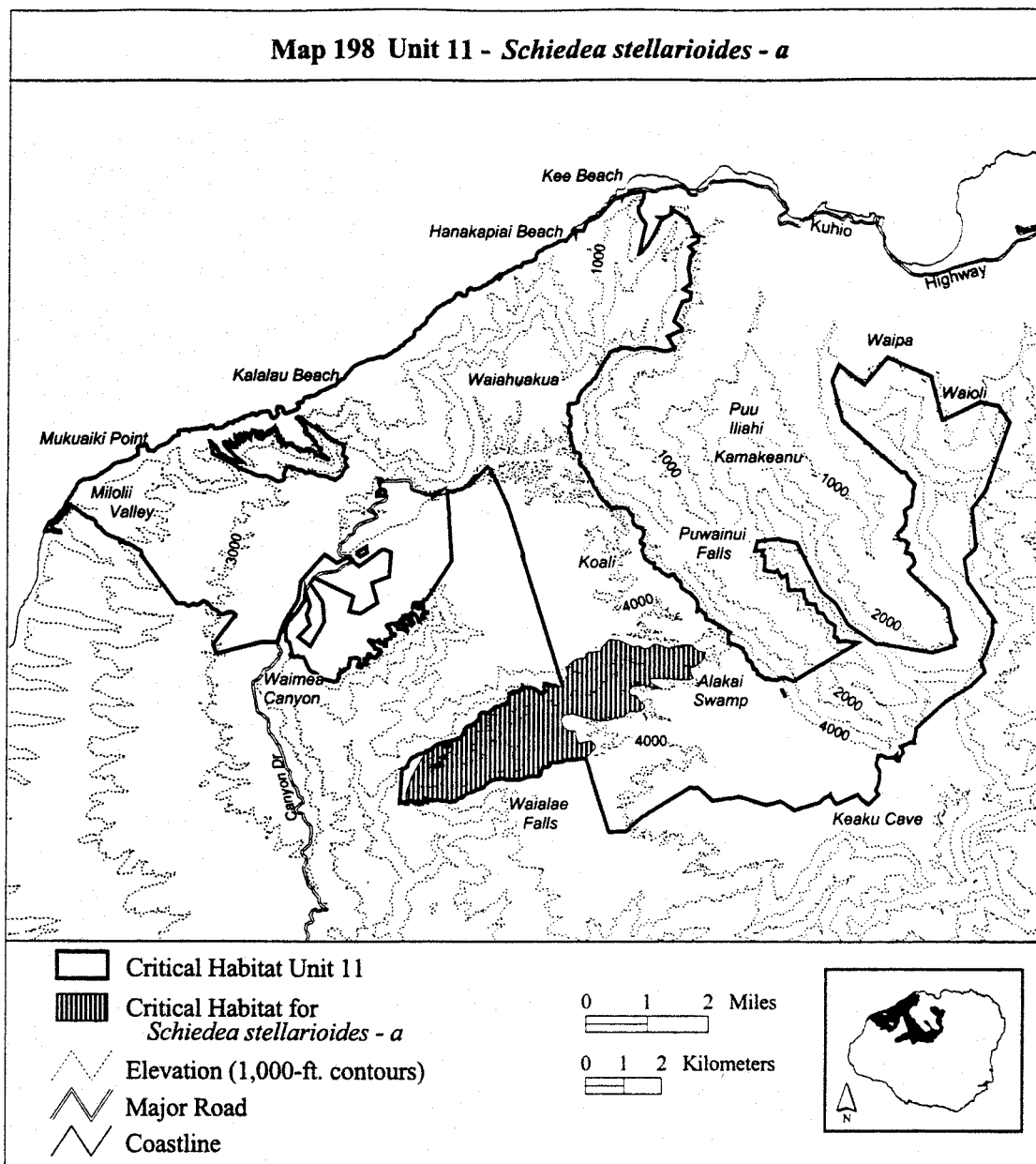
2442643; 435284, 2442631; return to
starting point.

(B) Excluding 2 areas:

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

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

(C) Note: Map 198 follows:



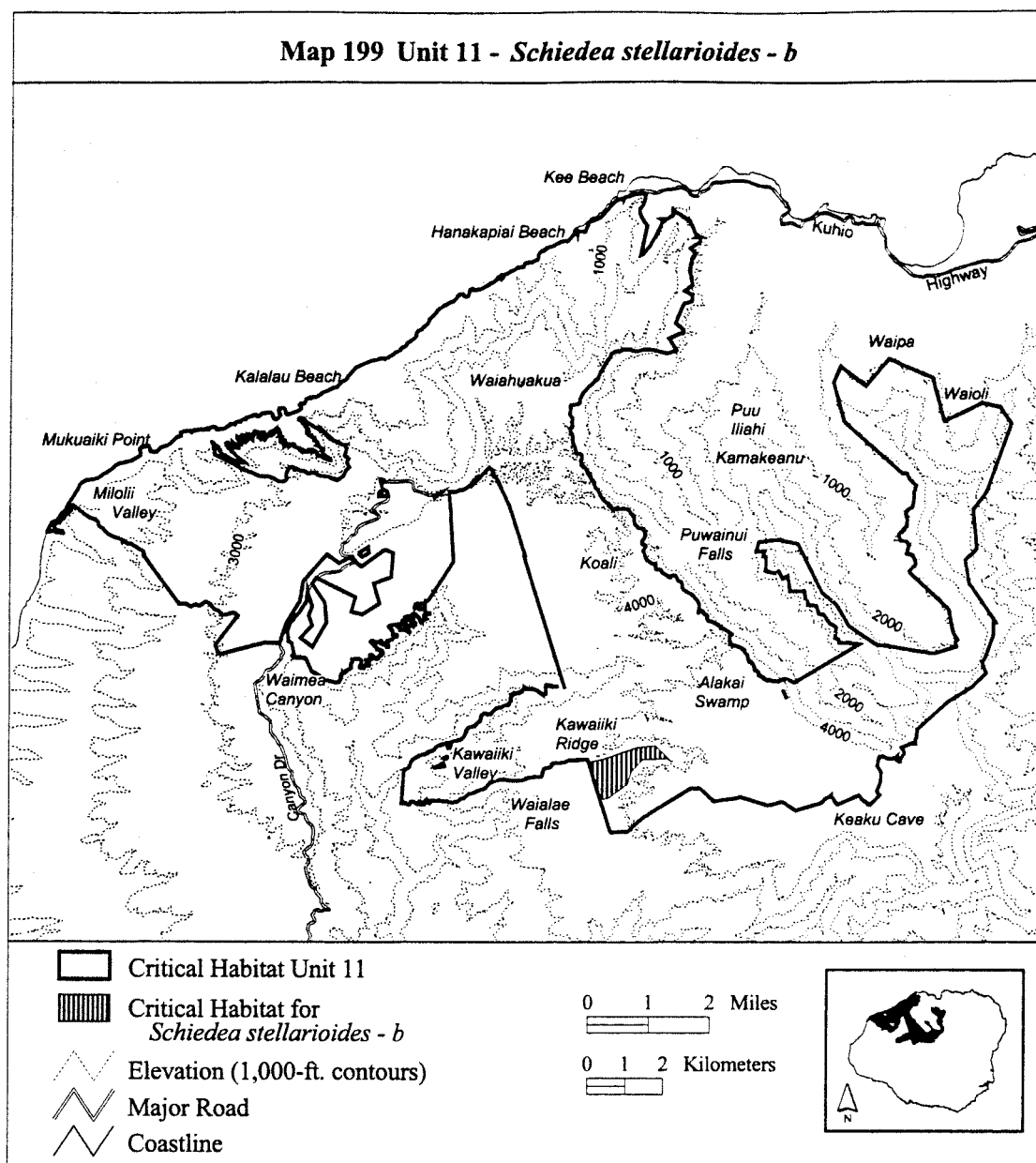
(cxcix) Kauai 11—*Schiedea stellarioides*—b (129 ha; 320 ac)

(A) Unit consists of the following 10
boundary points: Start at 438960,

2442270; 439367, 2442351; 440212,
2442656; 440725, 2442711; 441086,
2442365; 440393, 2442323; 440088,
2442032; 439991, 2441672; 439455,

2441287; 439273, 2441296; return to
starting point.

(B) Note: Map 199 follows:



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

(A) Unit consists of the following 544 boundary points: Start at 430406, 2449796; 430471, 2449787; 430527, 2449754; 430583, 2449736; 430635, 2449693; 430696, 2449656; 430720, 2449646; 430819, 2449646; 430899, 2449674; 430918, 2449717; 430904, 2449834; 430927, 2449905; 430955, 2449985; 430993, 2450032; 431068, 2450041; 431153, 2450008; 431238, 2449970; 431285, 2449942; 431360, 2449956; 431449, 2449886; 431497, 2449867; 431605, 2449895; 431657, 2449890; 431699, 2449876; 431765, 2449810; 431864, 2449801; 431981, 2449792; 432047, 2449787; 432113, 2449740; 432217, 2449712; 432259,

2449679; 432344, 2449744; 432419, 2449806; 432471, 2449904; 432504, 2449961; 432579, 2450036; 432551, 2450083; 432523, 2450130; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432452, 2450337; 432461, 2450375; 432480, 2450426; 432490, 2450478; 432501, 2450529; 432504, 2450523; 432515, 2450503; 432524, 2450478; 433149, 2450124; 433338, 2449790; 434410, 2449639; 434833, 2449278; 434834, 2449277; 434839, 2449258; 434848, 2449239; 434872, 2449246; 435266, 2448909; 435282, 2448685; 435360, 2447538; 434700, 2446542; 434681, 2446520; 434675, 2446517; 434664, 2446523; 434636, 2446529; 434623, 2446526; 434620, 2446512; 434628,

2446479; 434625, 2446467; 434618, 2446459; 434582, 2446443; 434558, 2446439; 434533, 2446441; 434514, 2446449; 434500, 2446448; 434471, 2446422; 434457, 2446416; 434447, 2446420; 434434, 2446428; 434423, 2446441; 434416, 2446441; 434403, 2446435; 434400, 2446429; 434386, 2446417; 434371, 2446414; 434363, 2446417; 434355, 2446417; 434351, 2446414; 434333, 2446375; 434335, 2446361; 434340, 2446352; 434353, 2446346; 434368, 2446352; 434403, 2446359; 434411, 2446354; 434417, 2446344; 434421, 2446327; 434434, 2446306; 434469, 2446291; 434479, 2446288; 434499, 2446297; 434514, 2446317; 434528, 2446325; 434559, 2446322; 434568, 2446320; 434585,

2446324; 434595, 2446329; 434614,
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2446262; 434614, 2446240; 434625,
2446221; 434647, 2446210; 434667,
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2446128; 434582, 2446114; 434603,
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2449787; 430392, 2449798; 430408, 2449802; 430410, 2449802; return to starting point.

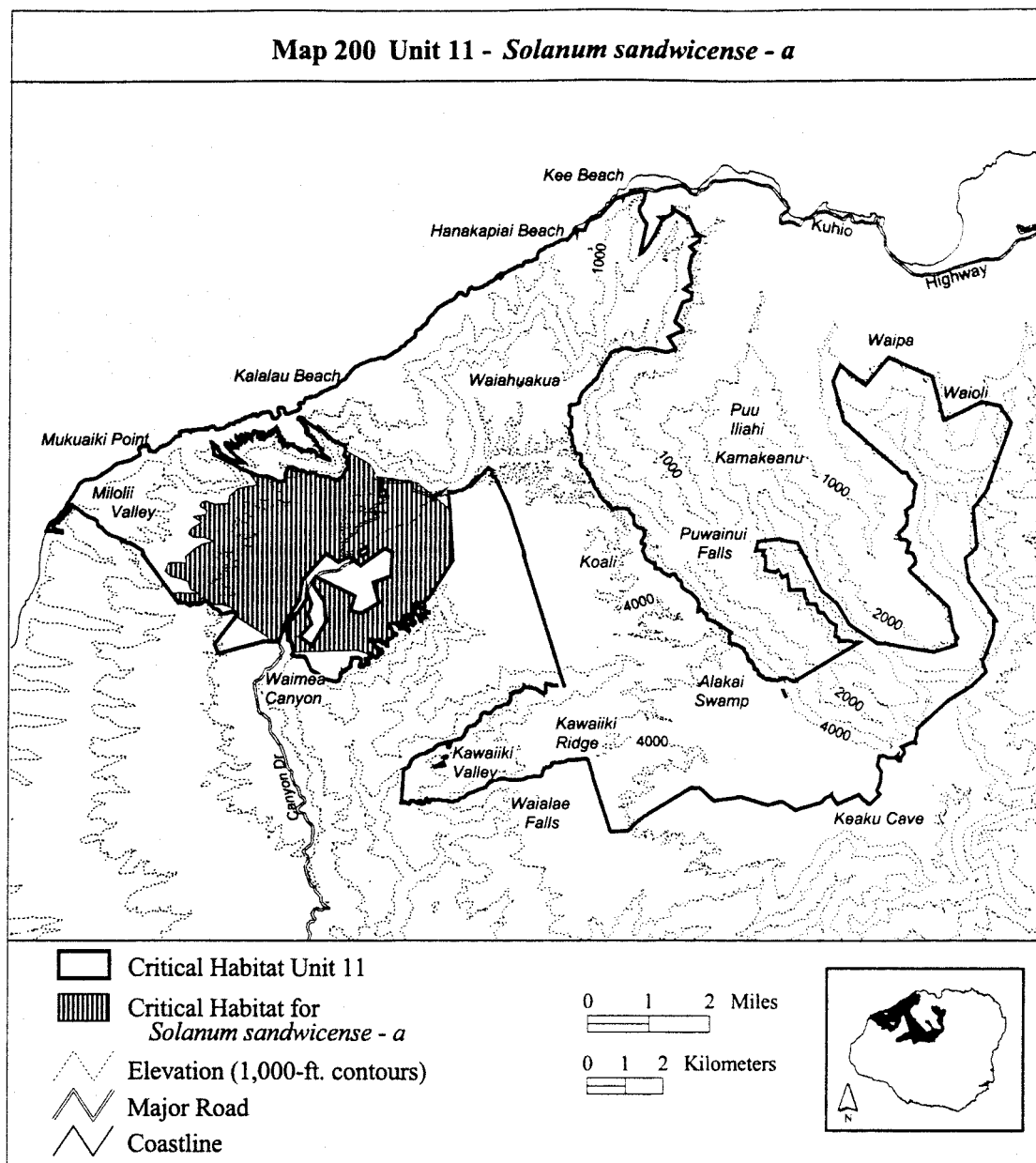
(B) Excluding 3 areas:

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

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

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

(C) Note: Map 200 follows:



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

(A) Unit consists of the following 173 boundary points: Start at 437312,

2441832; 437426, 2442297; 437228, 2442475; 437193, 2442545; 437746, 2443542; 436864, 2443836; 436870, 2443847; 436882, 2443863; 436890,

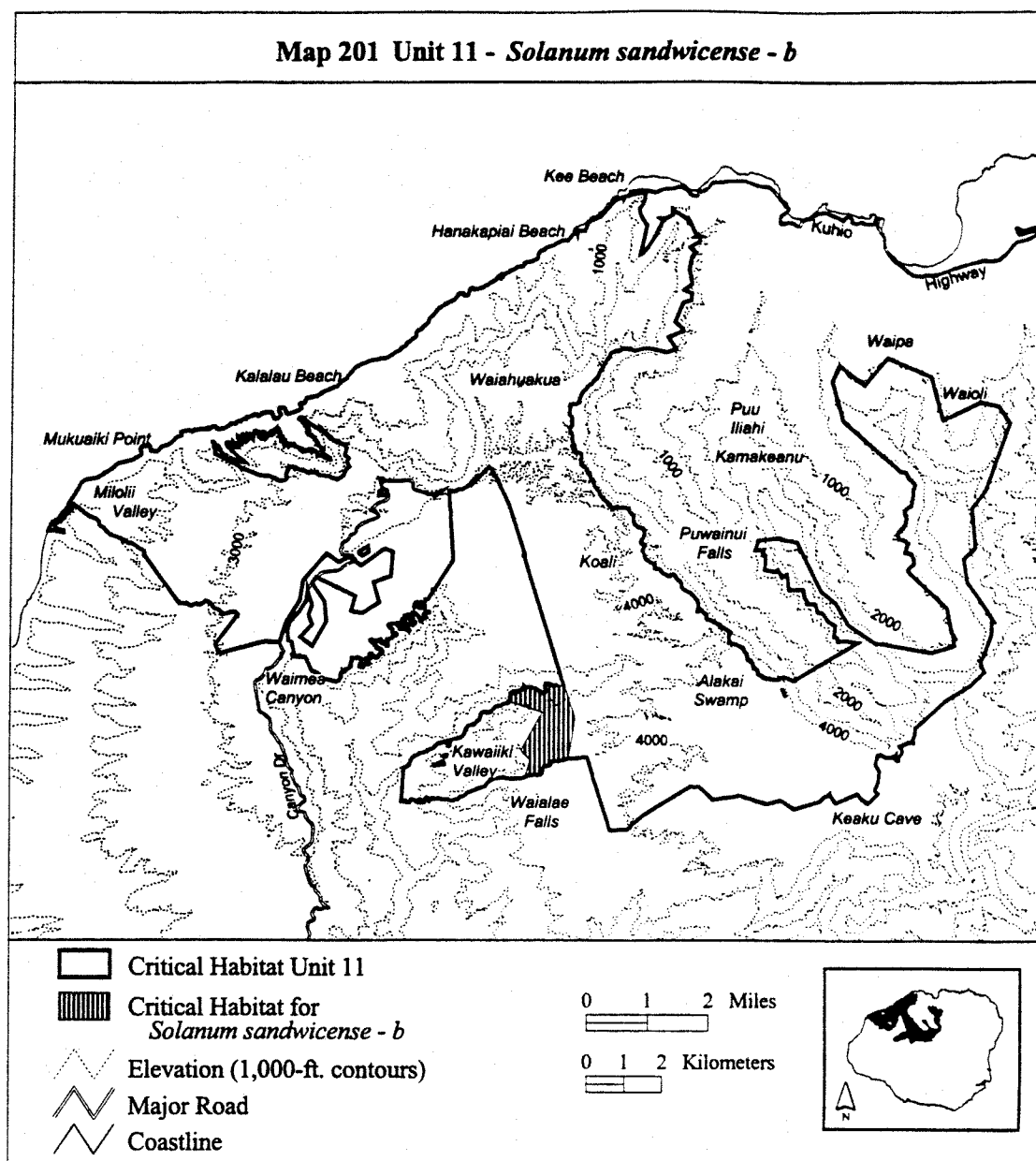
2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908,

2444013; 436911, 2444027; 436918,
2444040; 436926, 2444047; 436933,
2444055; 436942, 2444065; 436951,
2444073; 436961, 2444084; 436969,
2444094; 436975, 2444098; 436983,
2444102; 436994, 2444107; 437009,
2444108; 437026, 2444105; 437049,
2444100; 437067, 2444092; 437076,
2444089; 437106, 2444090; 437119,
2444096; 437128, 2444104; 437133,
2444112; 437137, 2444122; 437144,
2444130; 437156, 2444135; 437169,
2444141; 437183, 2444150; 437191,
2444154; 437202, 2444165; 437212,
2444177; 437228, 2444198; 437239,
2444213; 437245, 2444227; 437254,
2444239; 437263, 2444246; 437278,
2444240; 437294, 2444234; 437310,
2444225; 437332, 2444217; 437351,
2444217; 437370, 2444223; 437391,
2444223; 437412, 2444226; 437428,
2444226; 437445, 2444223; 437462,
2444219; 437482, 2444211; 437497,
2444205; 437541, 2444190; 437563,
2444183; 437578, 2444179; 437593,
2444170; 437610, 2444160; 437624,
2444146; 437636, 2444132; 437651,

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2442278; 438355, 2442265; 438305,
2442256; 438254, 2442248; 438238,
2442248; 438219, 2442244; 438157,

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2442246; 438049, 2442246; 438030,
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2442052; 437766, 2442017; 437758,
2441998; 437754, 2441991; 437751,
2441981; 437745, 2441950; 437740,
2441938; 437736, 2441928; 437717,
2441899; 437711, 2441887; 437705,
2441878; 437689, 2441877; 437674,
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2441866; 437617, 2441866; 437602,
2441867; 437566, 2441876; 437532,
2441880; 437522, 2441879; 437495,
2441869; 437460, 2441862; 437391,
2441858; 437366, 2441852; 437346,
2441845; 437332, 2441842; 437317,
2441835; return to starting point.

(B) **Note:** Map 201 follows:



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

(A) Unit consists of the following 121 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619, 2442899; 435627, 2442904; 435642, 2442920; 435649, 2442926; 435987, 2442743; 435923, 2442638; 435980, 2442622; 435964, 2442531; 436062, 2442540; 436086, 2442482; 436308, 2442425; 436218, 2442327; 436136,

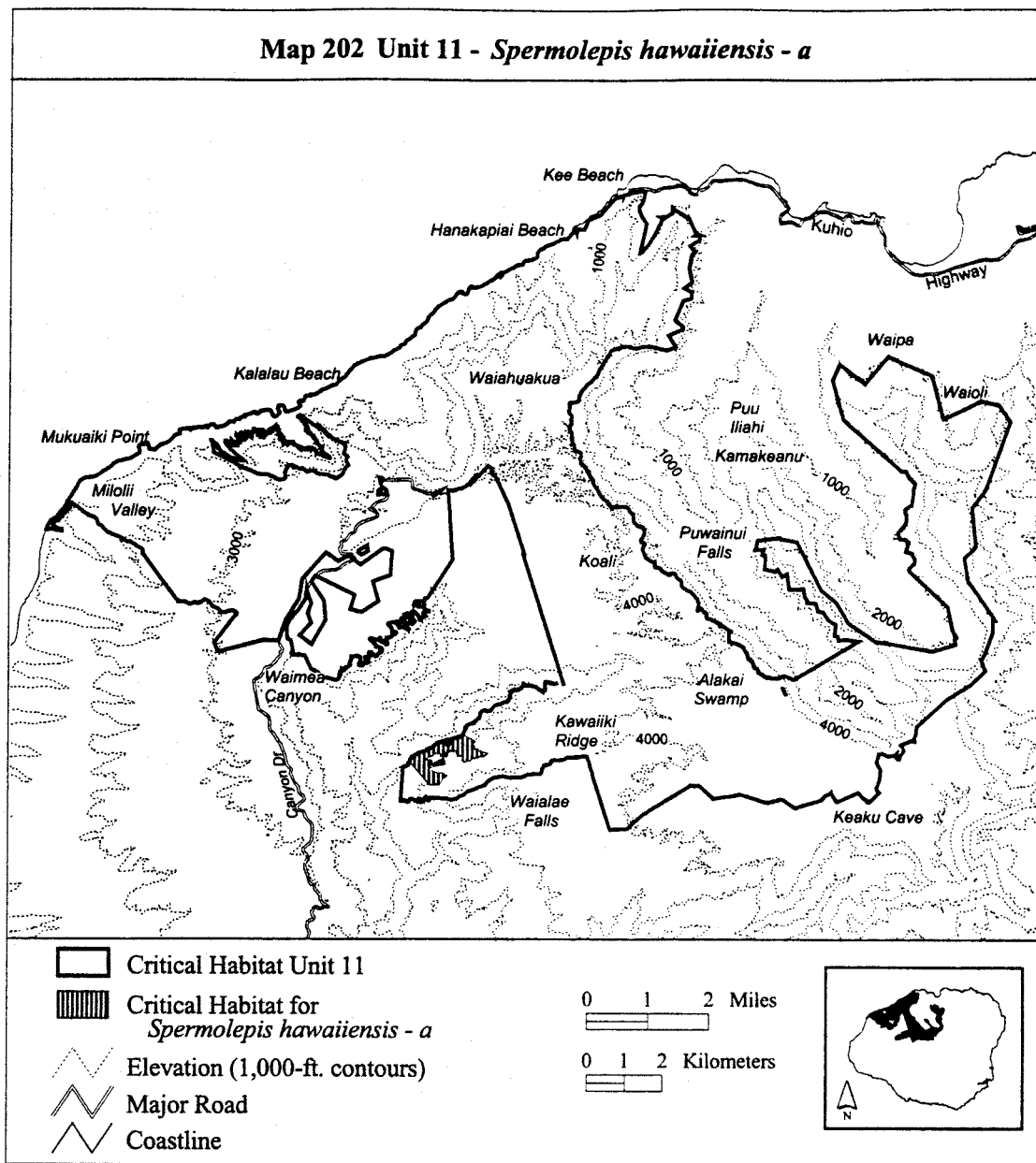
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2442378; 434395, 2442387; 434416, 2442397; 434439, 2442410; 434458, 2442423; 434486, 2442437; 434504, 2442450; 434522, 2442454; 434537, 2442457; 434563, 2442460; 434590, 2442462; 434610, 2442464; 434628, 2442472; 434643, 2442483; 434664, 2442490; 434680, 2442493; 434700, 2442502; 434713, 2442515; 434725, 2442524; 434735, 2442532; 434755, 2442542; 434775, 2442551; 434800, 2442556; 434822, 2442562; 434842, 2442574; 434862, 2442596; 434883, 2442613; 434896, 2442626; 434916, 2442647; 434934, 2442668; 434949, 2442681; 434972, 2442699; 434986, 2442705; 434997, 2442708; 435006, 2442713; 435012, 2442717; 435026, 2442719; 435039, 2442722; 435061,

2442727; 435081, 2442733; 435100,
2442739; 435119, 2442747; 435135,
2442754; 435150, 2442764; 435164,

2442771; 435184, 2442774; 435201,
2442777; 435219, 2442778; 435237,
2442782; 435251, 2442783; 435228,

2442762; 435237, 2442643; 435284,
2442631; return to starting point.
(B) Note: Map 202 follows:



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

(A) Unit consists of the following 144 boundary points: Start at 434899, 2449305; 434804, 2449290; 434736, 2449221; 434553, 2449155; 434346, 2448873; 434346, 2448873; 434133, 2448777; 434083, 2448755; 434075, 2448771; 434056, 2448804; 434012, 2448851; 433982, 2448889; 433967, 2448914; 433940, 2448999; 433923, 2449035; 433901, 2449073; 433878, 2449095; 433816, 2449138; 433722, 2449193; 433702, 2449209; 433670,

2449240; 433661, 2449253; 433655, 2449281; 433657, 2449308; 433655, 2449364; 433644, 2449421; 433637, 2449443; 433599, 2449496; 433583, 2449511; 433542, 2449535; 433502, 2449553; 433474, 2449581; 433459, 2449611; 433455, 2449620; 433457, 2449622; 433480, 2449629; 433484, 2449703; 433460, 2449707; 433445, 2449707; 433447, 2449716; 433452, 2449730; 433426, 2449734; 433382, 2449748; 433360, 2449764; 433333, 2449796; 433315, 2449831; 433305, 2449855; 433306, 2449889; 433274,

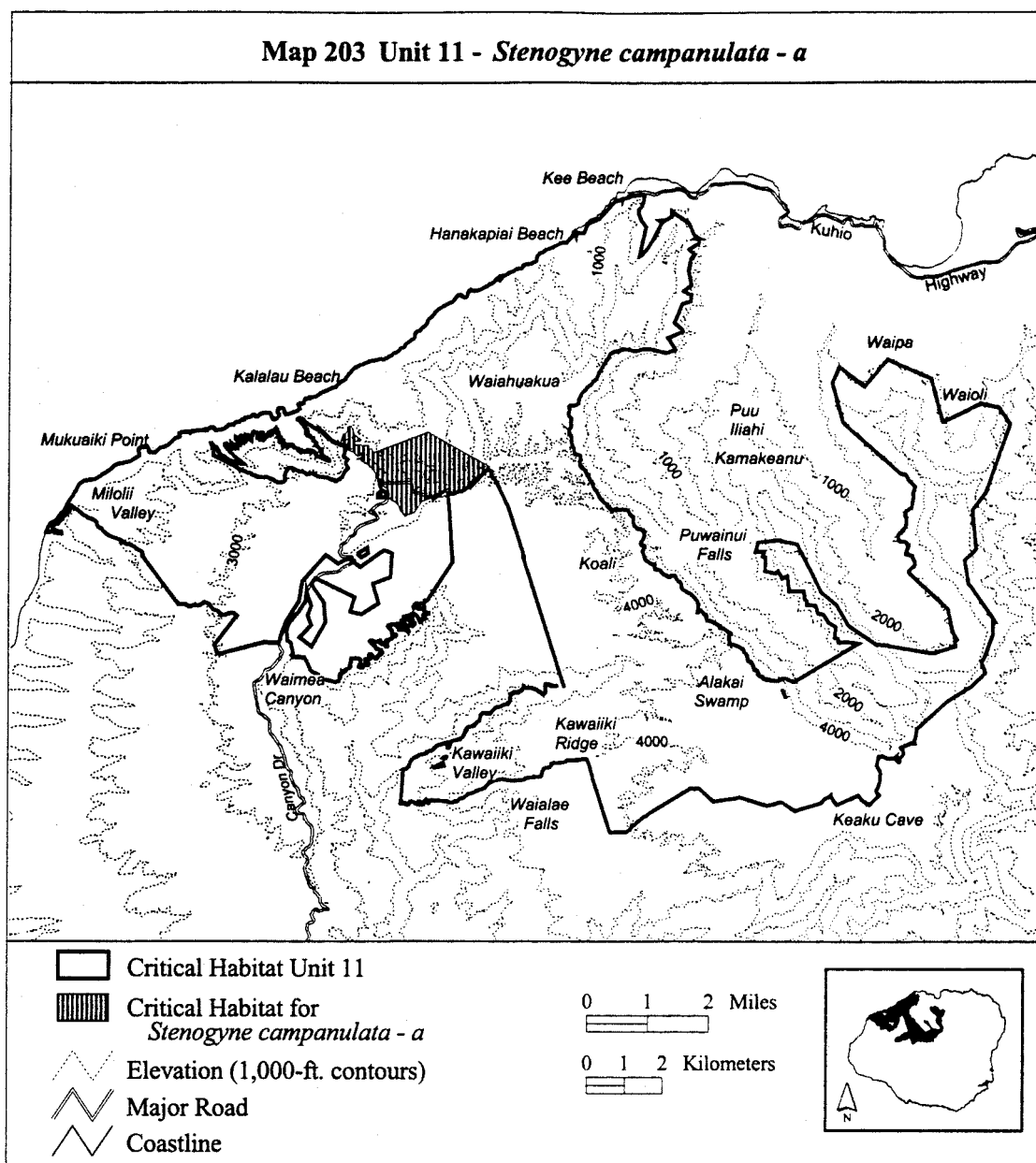
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2450674; 432388, 2450682; 432448,
2450923; 432499, 2450934; 432562,
2451021; 432566, 2451116; 432649,
2451139; 432688, 2451076; 432704,
2451001; 432732, 2450923; 432850,
2450832; 432925, 2450788; 432893,
2450753; 432811, 2450745; 432740,
2450749; 432767, 2450651; 432822,
2450635; 432909, 2450674; 432953,
2450599; 432980, 2450635; 433130,
2450635; 433130, 2450532; 433201,
2450548; 433225, 2450473; 433286,

2450459; 434695, 2451004; 436326,
2450090; 436322, 2450080; 436296,
2450046; 436244, 2450016; 436213,
2450009; 436203, 2450009; 436111,
2449924; 436104, 2449902; 436086,
2449869; 436075, 2449855; 436058,
2449842; 436017, 2449817; 436001,
2449805; 435988, 2449789; 435981,
2449774; 435967, 2449754; 435899,
2449684; 435876, 2449668; 435842,
2449638; 435825, 2449617; 435797,
2449573; 435765, 2449537; 435716,

2449506; 435664, 2449469; 435598,
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2449420; 435469, 2449405; 435418,
2449387; 435390, 2449374; 435368,
2449361; 435334, 2449356; 435319,
2449360; 435292, 2449379; 435269,
2449384; 435247, 2449385; 435234,
2449384; 435201, 2449386; 435171,
2449398; 435011, 2449352; return to
starting point.

(B) Note: Map 203 follows:



(cciv) Kauai 11—*Wilkesia hobyi*—a
(775 ha; 1,914 ac)

(A) Unit consists of the following 767
boundary points: Start at 429512,
2450126; 429503, 2450126; 429579,

2449948; 429883, 2449645; 429022,
2449316; 428566, 2449468; 428186,
2449923; 427856, 2449949; 427679,
2449974; 427375, 2450025; 427248,
2449898; 426868, 2449645; 426235,

2449468; 426235, 2449240; 426463,
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2449037; 426716, 2448911; 426893,
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2448809; 426311, 2448809; 426235,

2448581; 426057, 2448759; 425880,
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2448834; 425487, 2448867; 425460,
2448891; 425421, 2448924; 425388,
2448948; 425362, 2448961; 425329,
2449019; 425500, 2449189; 425804,
2448987; 426108, 2448987; 426387,
2449063; 426083, 2449215; 425778,
2449493; 426589, 2449797; 427020,
2449949; 427020, 2450126; 427121,
2450227; 427223, 2450328; 427806,
2450227; 427704, 2450354; 427831,
2450506; 428262, 2450708; 428287,
2450176; 428464, 2449974; 428844,
2449771; 429199, 2449771; 429605,
2449746; 429427, 2449923; 429174,
2450151; 428819, 2450100; 428515,
2450278; 428439, 2450480; 428692,
2450657; 428971, 2450784; 429529,
2450252; 429224, 2450733; 429275,
2450809; 429655, 2451037; 430137,
2451088; 430694, 2451163; 430947,
2450860; 431277, 2450632; 431758,
2450480; 431480, 2450885; 431125,
2451366; 431581, 2451594; 431936,
2451594; 432265, 2451492; 432569,
2452049; 433203, 2451846; 433456,
2451416; 434191, 2451390; 434165,
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2454174; 435787, 2454073; 435964,
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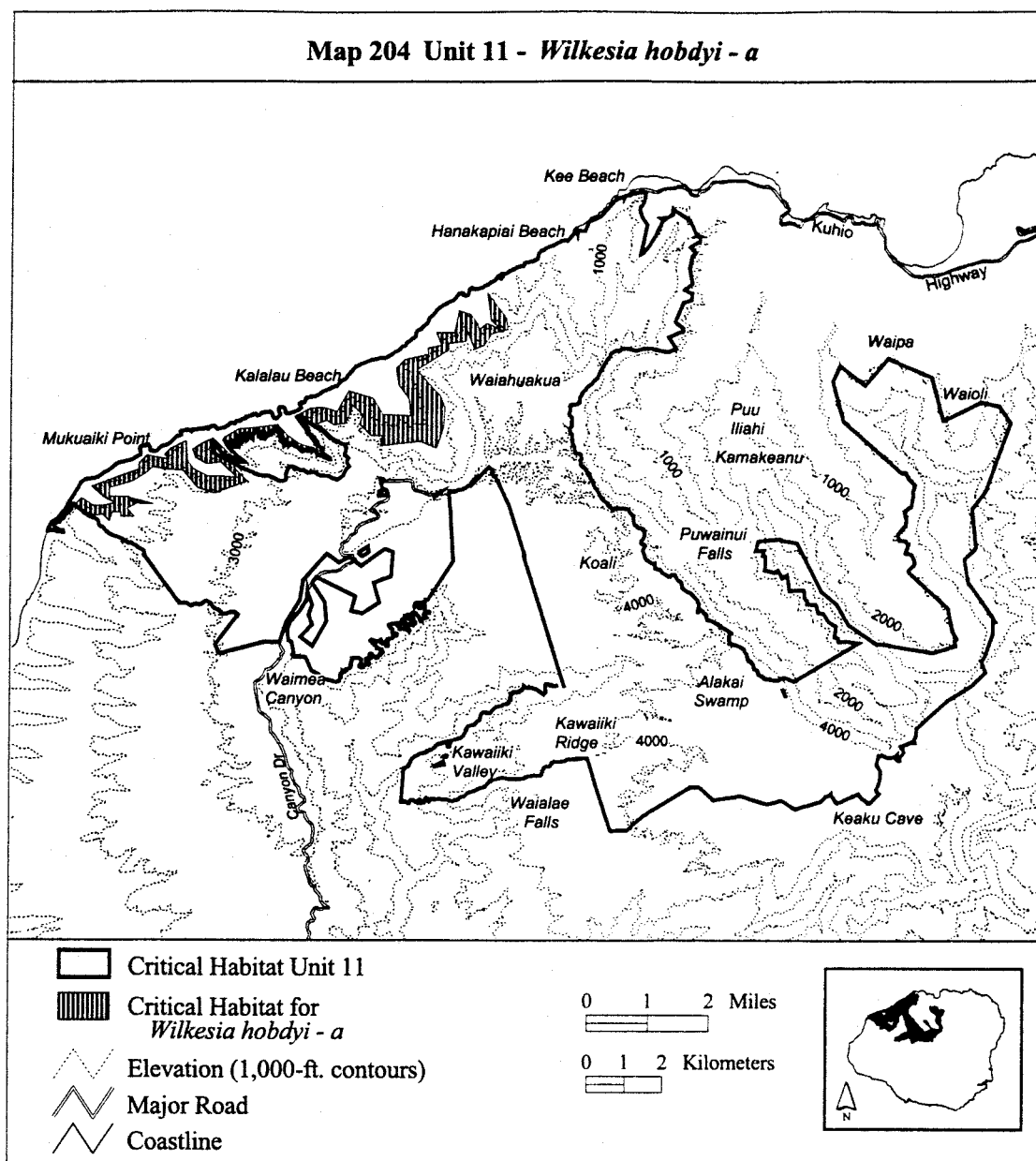
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2450750; 429875, 2450744; 429873,
2450736; 429866, 2450746; 429861,
2450753; 429854, 2450754; 429848,
2450756; 429843, 2450769; 429841,
2450785; 429827, 2450802; 429816,
2450819; 429797, 2450845; 429773,
2450868; 429738, 2450896; 429724,
2450899; 429720, 2450887; 429726,
2450875; 429733, 2450856; 429739,
2450832; 429742, 2450813; 429746,
2450791; 429752, 2450769; 429754,
2450756; 429748, 2450755; 429737,
2450753; 429731, 2450750; 429731,
2450739; 429734, 2450732; 429745,
2450721; 429750, 2450701; 429741,
2450701; 429728, 2450698; 429722,
2450692; 429718, 2450681; 429709,
2450676; 429702, 2450682; 429696,
2450693; 429691, 2450714; 429680,
2450743; 429664, 2450781; 429652,
2450802; 429639, 2450818; 429619,
2450828; 429603, 2450830; 429601,
2450825; 429604, 2450812; 429619,
2450793; 429637, 2450771; 429654,
2450750; 429664, 2450735; 429667,
2450717; 429663, 2450706; 429661,
2450673; 429666, 2450641; 429663,
2450621; 429654, 2450603; 429645,
2450601; 429634, 2450610; 429619,
2450622; 429602, 2450633; 429558,
2450656; 429505, 2450692; 429490,
2450702; 429483, 2450698; 429478,
2450692; 429480, 2450680; 429489,
2450657; 429496, 2450634; 429503,
2450613; 429524, 2450599; 429556,
2450569; 429569, 2450555; 429569,
2450546; 429560, 2450541; 429535,
2450540; 429510, 2450541; 429489,
2450546; 429478, 2450553; 429468,
2450566; 429461, 2450574; 429450,
2450580; 429440, 2450580; 429434,
2450588; 429432, 2450595; 429422,

2450604; 429410, 2450609; 429389,
2450622; 429387, 2450629; 429384,
2450638; 429377, 2450656; 429371,
2450661; 429365, 2450670; 429363,
2450681; 429359, 2450689; 429352,
2450687; 429345, 2450685; 429330,
2450677; 429319, 2450668; 429311,
2450657; 429310, 2450642; 429317,
2450633; 429334, 2450615; 429346,
2450600; 429359, 2450581; 429365,
2450564; 429372, 2450543; 429389,
2450532; 429400, 2450531; 429410,
2450517; 429420, 2450504; 429431,
2450485; 429450, 2450463; 429462,
2450449; 429482, 2450434; 429500,
2450421; 429523, 2450406; 429541,
2450384; 429554, 2450363; 429577,
2450344; 429599, 2450324; 429622,
2450305; 429645, 2450292; 429669,
2450271; 429686, 2450258; 429712,
2450243; 429745, 2450217; 429770,
2450202; 429788, 2450184; 429802,
2450172; 429815, 2450154; 429808,
2450151; 429791, 2450150; 429770,
2450151; 429738, 2450152; 429713,
2450155; 429686, 2450161; 429656,
2450168; 429622, 2450179; 429571,
2450198; 429538, 2450212; 429503,
2450229; 429460, 2450248; 429433,
2450259; 429404, 2450268; 429391,
2450277; 429371, 2450289; 429356,
2450303; 429342, 2450315; 429321,
2450332; 429294, 2450343; 429269,
2450357; 429244, 2450363; 429212,
2450380; 429205, 2450394; 429200,
2450405; 429193, 2450416; 429174,
2450426; 429162, 2450435; 429161,
2450444; 429158, 2450455; 429152,
2450468; 429143, 2450481; 429128,
2450496; 429115, 2450512; 429114,
2450524; 429113, 2450540; 429110,
2450557; 429103, 2450577; 429091,
2450594; 429077, 2450605; 429060,
2450608; 429041, 2450610; 429026,
2450609; 429013, 2450623; 429009,
2450638; 429000, 2450655; 428990,
2450676; 428979, 2450690; 428972,
2450701; 428962, 2450707; 428952,
2450706; 428952, 2450704; 428964,
2450654; 428990, 2450584; 429000,
2450551; 429015, 2450477; 429016,
2450451; 429013, 2450421; 429012,
2450380; 429036, 2450360; 429089,
2450331; 429147, 2450304; 429258,
2450260; return to starting point.

(B) **Note:** Map 204 follows:



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

(A) Unit consists of the following 122 boundary points: Start at 432382, 2447776; 432423, 2447705; 432682, 2447686; 432655, 2447631; 432639, 2447624; 432609, 2447647; 432320, 2447497; 432136, 2447629; 432001, 2447726; 431389, 2447049; 431307, 2447021; 431213, 2446424; 431051, 2446119; 430955, 2445963; 430925, 2445882; 430674, 2445410; 430555, 2445415; 430312, 2445743; 429891, 2446070; 429781, 2447125; 429904, 2447201; 429895, 2447305; 430027, 2447324; 429696, 2447438; 429866, 2447552; 429639, 2447675; 429667, 2447779; 429989, 2447789; 430170, 2447694; 430113, 2447893; 429989,

2448054; 430189, 2448101; 430302, 2447988; 430473, 2448035; 430283, 2448130; 430293, 2448329; 430245, 2448528; 430283, 2448642; 430407, 2448632; 430464, 2448490; 430473, 2448755; 430615, 2448689; 430520, 2448859; 430445, 2449030; 430691, 2448878; 430976, 2448916; 431222, 2448869; 431488, 2448883; 431563, 2448888; 431326, 2448954; 431156, 2449077; 431298, 2449163; 430928, 2449182; 430824, 2449248; 430947, 2449381; 431127, 2449447; 430938, 2449579; 430795, 2449542; 431023, 2449655; 431080, 2449665; 431469, 2449560; 431696, 2449560; 431563, 2449674; 431391, 2449886; 431473, 2449876; 431497, 2449867; 431513, 2449871; 431548, 2449867; 431590,

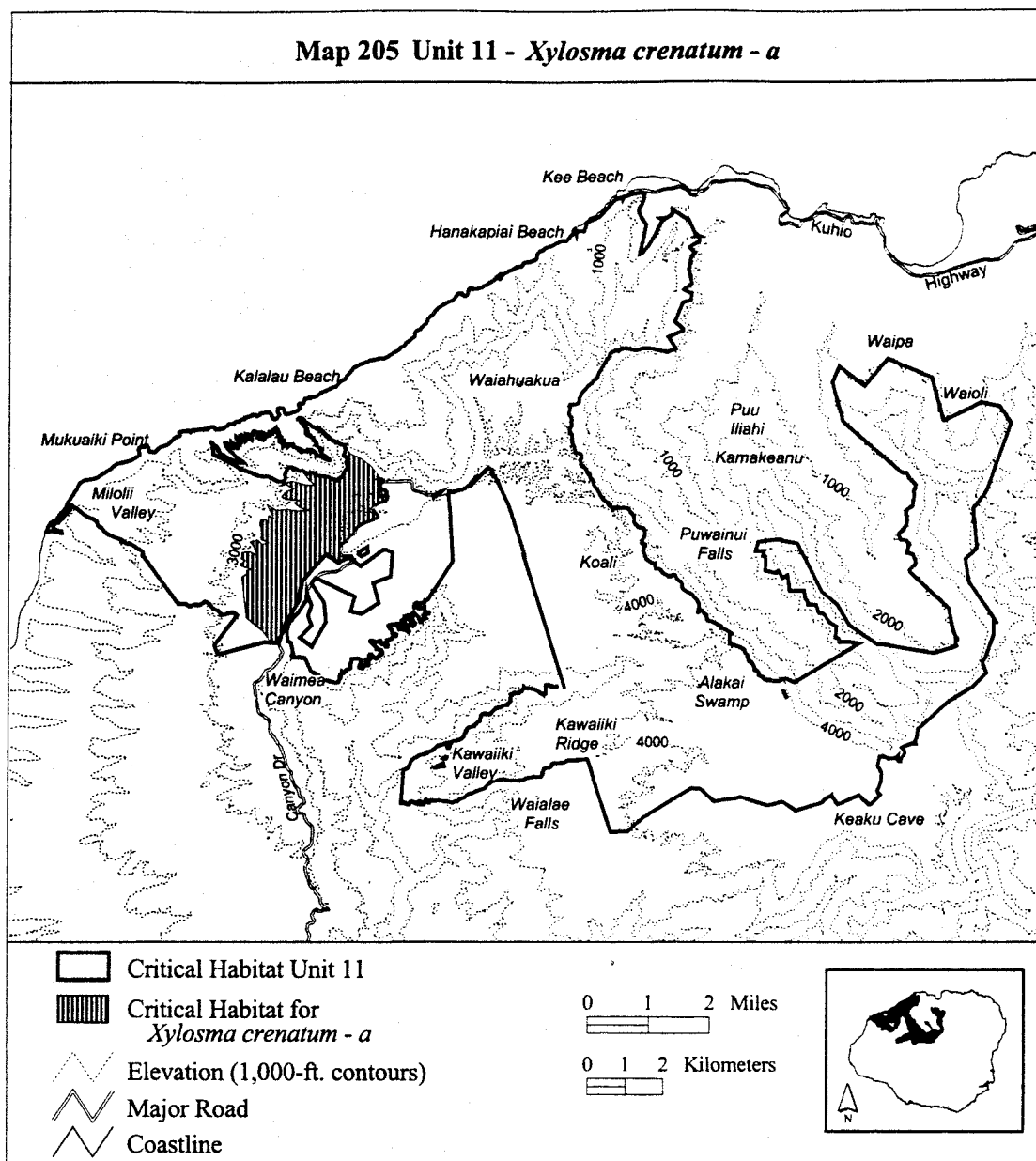
2449891; 431605, 2449895; 431657, 2449890; 431678, 2449883; 431707, 2449868; 431765, 2449810; 431835, 2449804; 432251, 2449685; 432259, 2449679; 432263, 2449682; 432287, 2449675; 432405, 2449773; 432584, 2450032; 432523, 2450178; 432523, 2450182; 432565, 2450262; 432523, 2450304; 432475, 2450313; 432459, 2450330; 432457, 2450334; 432476, 2450414; 432480, 2450426; 432486, 2450458; 432504, 2450523; 432510, 2450542; 432633, 2450391; 432930, 2450259; 433160, 2450085; 433400, 2449772; 433437, 2449726; 433436, 2449707; 433399, 2449709; 433419, 2449599; 433426, 2449556; 433430, 2449518; 433525, 2449415; 433448, 2449426; 433367, 2449352; 433368,

2449292; 433369, 2449255; 433567,
2449260; 433588, 2449244; 433599,
2449252; 433608, 2449246; 433610,
2449137; 433383, 2449073; 433181,

2448930; 433395, 2448719; 433088,
2448562; 432861, 2448469; 432612,
2448172; 432493, 2448031; 432404,

2447993; 432356, 2447820; return to
starting point.

(B) Note: Map 205 follows:



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

(A) Unit consists of the following 402 boundary points: Start at 435336, 2442801; 435344, 2442802; 435367, 2442807; 435391, 2442814; 435415, 2442819; 435435, 2442826; 435454, 2442831; 435476, 2442838; 435496, 2442844; 435516, 2442850; 435530, 2442853; 435534, 2442855; 435543, 2442858; 435556, 2442862; 435571, 2442867; 435585, 2442876; 435598, 2442885; 435608, 2442891; 435619,

2442899; 435627, 2442904; 435642, 2442920; 435658, 2442932; 435668, 2442948; 435673, 2442959; 435681, 2442977; 435688, 2442995; 435693, 2443006; 435698, 2443024; 435704, 2443036; 435708, 2443047; 435715, 2443064; 435722, 2443078; 435725, 2443086; 435729, 2443093; 435735, 2443103; 435738, 2443112; 435743, 2443127; 435749, 2443138; 435753, 2443149; 435757, 2443155; 435766, 2443169; 435778, 2443179; 435790, 2443186; 435804, 2443188; 435821,

2443194; 435842, 2443199; 435861, 2443202; 435874, 2443204; 435889, 2443208; 435904, 2443211; 435933, 2443223; 435942, 2443232; 435949, 2443246; 435958, 2443255; 435969, 2443263; 435979, 2443271; 435993, 2443281; 436010, 2443297; 436032, 2443316; 436048, 2443332; 436064, 2443343; 436080, 2443358; 436089, 2443375; 436095, 2443390; 436100, 2443403; 436107, 2443421; 436113, 2443456; 436118, 2443477; 436123, 2443502; 436134, 2443520; 436146,

2443534; 436160, 2443543; 436175, 2443554; 436190, 2443560; 436213, 2443563; 436227, 2443563; 436240, 2443562; 436254, 2443557; 436265, 2443552; 436274, 2443547; 436287, 2443540; 436300, 2443537; 436315, 2443532; 436328, 2443529; 436337, 2443528; 436348, 2443531; 436357, 2443536; 436369, 2443546; 436380, 2443558; 436392, 2443572; 436403, 2443585; 436421, 2443611; 436438, 2443631; 436460, 2443655; 436478, 2443676; 436497, 2443688; 436518, 2443696; 436534, 2443700; 436558, 2443707; 436576, 2443711; 436597, 2443714; 436611, 2443716; 436630, 2443718; 436644, 2443720; 436655, 2443724; 436666, 2443731; 436678, 2443742; 436697, 2443756; 436708, 2443763; 436726, 2443769; 436745, 2443772; 436758, 2443775; 436771, 2443776; 436788, 2443776; 436799, 2443778; 436808, 2443781; 436818, 2443785; 436823, 2443786; 436829, 2443790; 436837, 2443797; 436841, 2443801; 436845, 2443807; 436852, 2443819; 436861, 2443831; 436870, 2443847; 436882, 2443863; 436890, 2443877; 436900, 2443900; 436911, 2443923; 436914, 2443936; 436914, 2443948; 436913, 2443962; 436910, 2443981; 436908, 2443995; 436908, 2444013; 436911, 2444027; 436918, 2444040; 436926, 2444047; 436933, 2444055; 436942, 2444065; 436951, 2444073; 436961, 2444084; 436969, 2444094; 436975, 2444098; 436983, 2444102; 436994, 2444107; 437009, 2444108; 437026, 2444105; 437049, 2444100; 437067, 2444092; 437076, 2444089; 437106, 2444090; 437119, 2444096; 437128, 2444104; 437133, 2444112; 437137, 2444122; 437144, 2444130; 437156, 2444135; 437169, 2444141; 437183, 2444150; 437191, 2444154; 437202, 2444165; 437212, 2444177; 437228, 2444198; 437239, 2444213; 437245, 2444227; 437254, 2444239; 437263, 2444246; 437278, 2444240; 437294, 2444234; 437310, 2444225; 437332, 2444217; 437351, 2444217; 437370, 2444223; 437391, 2444223; 437412, 2444226; 437428, 2444226; 437445, 2444223; 437462, 2444219; 437482, 2444211; 437497, 2444205; 437541, 2444190; 437563, 2444183; 437578, 2444179; 437593, 2444170; 437610, 2444160; 437624, 2444146; 437636, 2444132; 437651, 2444119; 437671, 2444112; 437691,

2444102; 437703, 2444093; 437722, 2444082; 437732, 2444069; 437749, 2444061; 437758, 2444058; 437768, 2444060; 437780, 2444066; 437810, 2444080; 437821, 2444088; 437831, 2444100; 437833, 2444111; 437835, 2444126; 437833, 2444139; 437827, 2444163; 437822, 2444185; 437820, 2444206; 437818, 2444236; 437824, 2444265; 437828, 2444292; 437836, 2444314; 437843, 2444322; 437854, 2444327; 437871, 2444328; 437887, 2444323; 437909, 2444314; 437933, 2444302; 437960, 2444289; 437984, 2444274; 438007, 2444260; 438028, 2444258; 438048, 2444258; 438072, 2444260; 438087, 2444266; 438109, 2444271; 438133, 2444273; 438164, 2444270; 438196, 2444263; 438254, 2444242; 438334, 2444171; 438431, 2444207; 438595, 2444371; 438699, 2444353; 438820, 2444201; 438893, 2444079; 438881, 2443982; 438802, 2443915; 438583, 2443715; 438431, 2443605; 438273, 2443538; 438151, 2443532; 438005, 2443636; 437956, 2443684; 437622, 2443660; 437451, 2443545; 437391, 2443459; 437245, 2443374; 436959, 2443186; 436843, 2443009; 436867, 2442809; 437019, 2442657; 437026, 2442577; 437019, 2442456; 437135, 2442310; 437281, 2442225; 437403, 2442176; 437476, 2442073; 437415, 2441987; 437202, 2441921; 436946, 2441921; 436734, 2441951; 436606, 2441945; 436490, 2441854; 436405, 2441817; 436289, 2441817; 436125, 2441866; 436052, 2441866; 435997, 2441817; 435924, 2441726; 435784, 2441677; 435699, 2441617; 435693, 2441531; 435699, 2441465; 435657, 2441428; 435547, 2441428; 435401, 2441495; 435310, 2441489; 435298, 2441329; 435258, 2441222; 435245, 2441229; 435201, 2441226; 435127, 2441232; 435053, 2441251; 435010, 2441263; 434950, 2441241; 434901, 2441226; 434881, 2441230; 434867, 2441252; 434859, 2441262; 434851, 2441266; 434843, 2441266; 434811, 2441263; 434806, 2441260; 434794, 2441245; 434787, 2441223; 434779, 2441196; 434754, 2441166; 434742, 2441170; 434733, 2441191; 434717, 2441232; 434699, 2441277; 434696, 2441283; 434689, 2441286; 434676, 2441286; 434669, 2441281; 434661, 2441273; 434653, 2441254; 434641, 2441213; 434631, 2441186; 434629, 2441175; 434626,

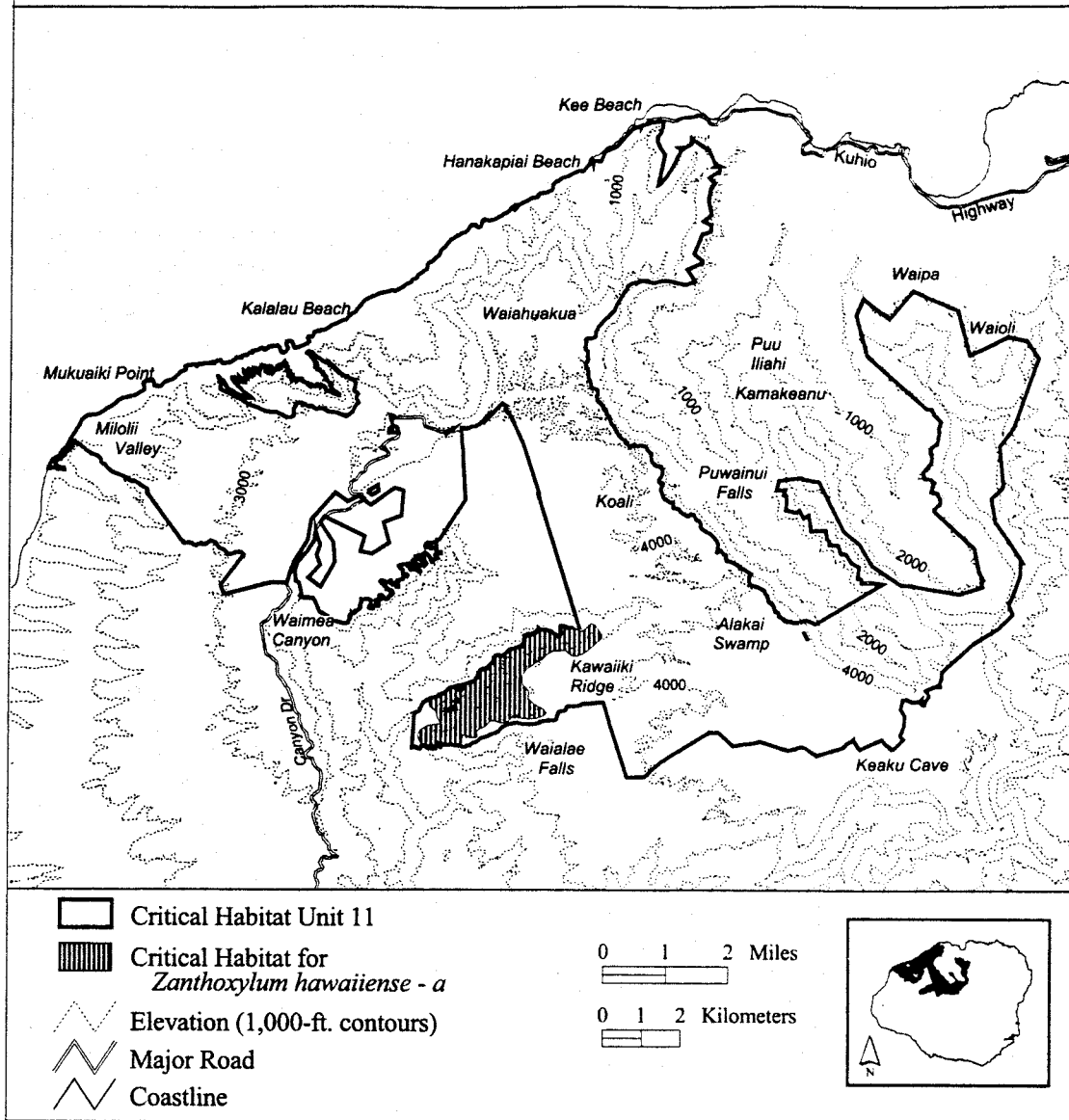
2441167; 434615, 2441161; 434592, 2441168; 434580, 2441170; 434570, 2441168; 434563, 2441163; 434556, 2441145; 434551, 2441140; 434542, 2441137; 434538, 2441144; 434535, 2441154; 434536, 2441173; 434530, 2441201; 434523, 2441222; 434520, 2441227; 434516, 2441230; 434508, 2441229; 434501, 2441223; 434489, 2441216; 434475, 2441203; 434448, 2441190; 434424, 2441176; 434397, 2441178; 434359, 2441197; 434333, 2441217; 434325, 2441222; 434308, 2441229; 434293, 2441229; 434290, 2441228; 434233, 2441313; 434184, 2441410; 434172, 2441489; 434227, 2441617; 434409, 2441732; 434726, 2441787; 434750, 2441817; 434720, 2441872; 434671, 2441933; 434641, 2442103; 434574, 2442152; 434495, 2442219; 434476, 2442219; 434459, 2442342; 434477, 2442433; 434486, 2442437; 434504, 2442450; 434522, 2442454; 434537, 2442457; 434563, 2442460; 434590, 2442462; 434610, 2442464; 434628, 2442472; 434643, 2442483; 434664, 2442490; 434680, 2442493; 434700, 2442502; 434713, 2442515; 434725, 2442524; 434735, 2442532; 434755, 2442542; 434775, 2442551; 434800, 2442556; 434822, 2442562; 434842, 2442574; 434862, 2442596; 434883, 2442613; 434896, 2442626; 434916, 2442647; 434934, 2442668; 434949, 2442681; 434972, 2442699; 434986, 2442705; 434997, 2442708; 435006, 2442713; 435012, 2442717; 435026, 2442719; 435039, 2442722; 435061, 2442727; 435081, 2442733; 435100, 2442739; 435119, 2442747; 435135, 2442754; 435150, 2442764; 435164, 2442771; 435184, 2442774; 435201, 2442777; 435219, 2442778; 435237, 2442782; 435251, 2442783; 435228, 2442762; 435237, 2442643; 435284, 2442631; return to starting point.

(B) Excluding 2 areas:

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

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

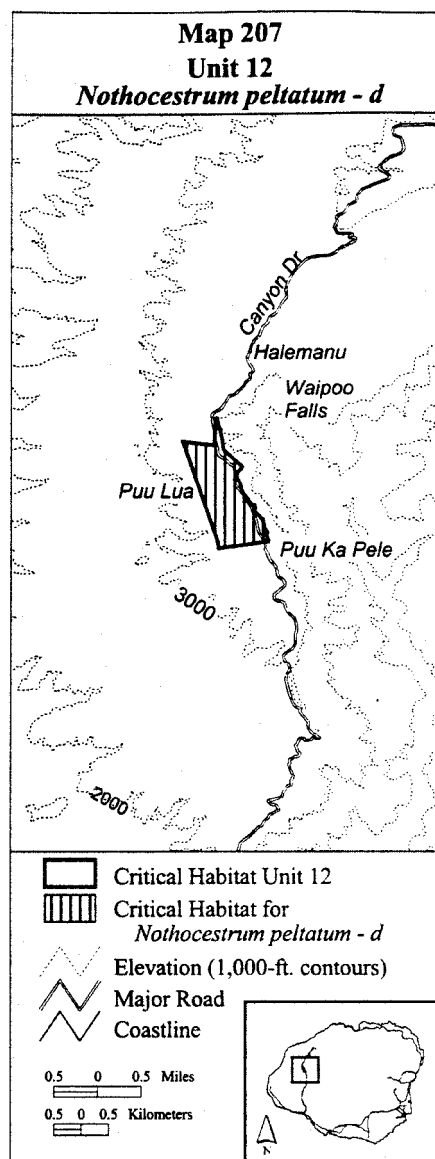
(C) Note: Map 206 follows:

Map 206 Unit 11 - *Zanthoxylum hawaiiense* - a

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

(A) Unit consists of the following 65 boundary points: Start at 431190, 2442015; 430254, 2441884; 430238, 2442005; 429593, 2443842; 430155, 2443777; 430205, 2444275; 430214, 2444280; 430308, 2443912; 430339, 2443693; 430676, 2443374; 430654, 2443340; 430640, 2443324; 430608, 2443294; 430597, 2443274; 430587, 2443203; 430586, 2443158; 430592, 2443144; 430612, 2443121; 430634, 2443085; 430661, 2443014; 430671, 2442975; 430675, 2442949; 430682, 2442928; 430690, 2442911; 430702, 2442896; 430742, 2442852; 430777, 2442811; 430786, 2442795; 430789, 2442762; 430795, 2442751; 430844, 2442701; 430857, 2442692; 430896, 2442674; 430907, 2442665; 430914, 2442656; 430921, 2442640; 430921, 2442620; 430918, 2442601; 430912, 2442582; 430914, 2442564; 430919, 2442555; 430931, 2442541; 430947, 2442529; 430975, 2442502; 431001, 2442469; 431018, 2442445; 431030, 2442435; 431051, 2442425; 431058, 2442415; 431061, 2442389; 431068, 2442359; 431085, 2442326; 431091, 2442304; 431090, 2442285; 431094, 2442268; 431108, 2442231; 431119, 2442215; 431132, 2442205; 431142, 2442193; 431142, 2442168; 431126, 2442140; 431123, 2442121; 431130, 2442104; 431167, 2442034; 431188, 2442016; return to starting point.

(B) Note: Map 207 follows:

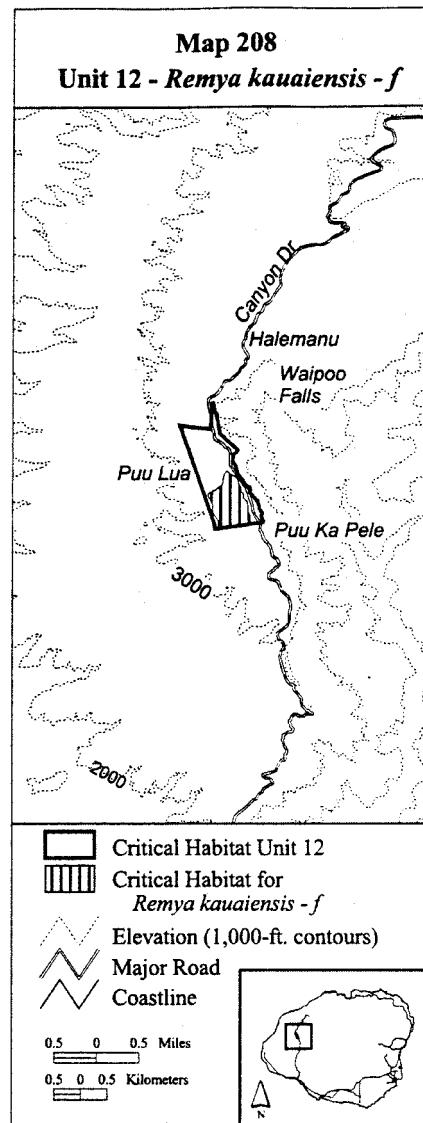


(ccviii) Kauai 12—*Remya kauaiensis*—f (52 ha; 128 ac)

(A) Unit consists of the following 42 boundary points: Start at 430320, 2441937; 430316, 2441992; 430320, 2442046; 430290, 2442087; 430221, 2442167; 430221, 2442192; 430203, 2442243; 430214, 2442345; 430181, 2442389; 430163, 2442448; 430130, 2442480; 430119, 2442542; 430148, 2442568; 430258, 2442619; 430334, 2442666; 430382, 2442714; 430407, 2442779; 430407, 2442841; 430422, 2442911; 430458, 2442951; 430465, 2442976; 430502, 2442954; 430542, 2442911; 430608, 2442896; 430659, 2442845; 430684, 2442801; 430684, 2442754; 430695, 2442721; 430728, 2442684; 430739, 2442593; 430779, 2442550; 430783, 2442477; 430812, 2442440; 430859, 2442400; 430877, 2442313; 430881, 2442218; 430907, 2442138; 430921, 2442006; 430888,

2441992; 430699, 2441963; 430582, 2441941; 430356, 2441922; return to starting point.

(B) Note: Map 208 follows:

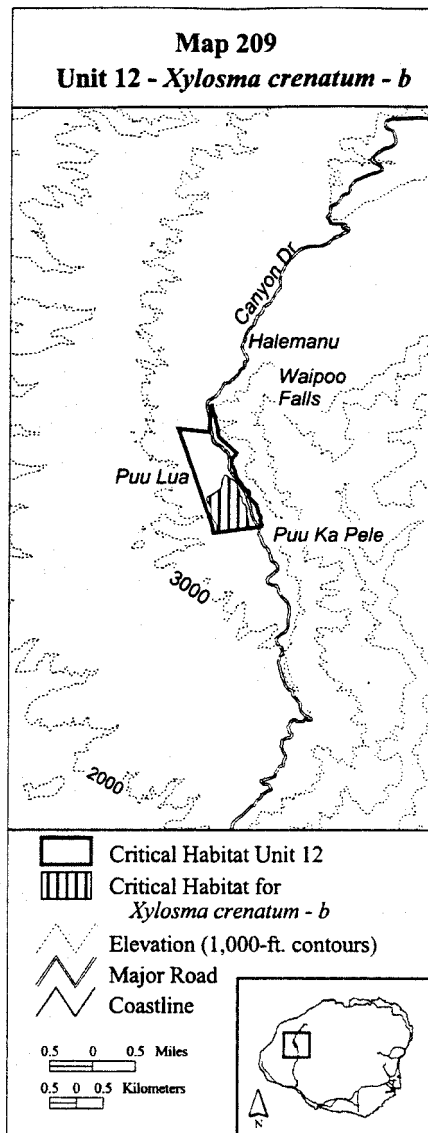


(ccix) Kauai 12—*Xylosma crenatum*—b (52 ha; 128 ac)

(A) Unit consists of the following 42 boundary points: Start at 430320, 2441937; 430316, 2441992; 430320, 2442046; 430290, 2442087; 430221, 2442167; 430221, 2442192; 430203, 2442243; 430214, 2442345; 430181, 2442389; 430163, 2442448; 430130, 2442480; 430119, 2442542; 430148, 2442568; 430258, 2442619; 430334, 2442666; 430382, 2442714; 430407, 2442779; 430407, 2442841; 430422, 2442911; 430458, 2442951; 430465, 2442976; 430502, 2442954; 430542, 2442911; 430608, 2442896; 430659, 2442845; 430684, 2442801; 430684, 2442754; 430695, 2442721; 430728, 2442684; 430739, 2442593; 430779,

2442550; 430783, 2442477; 430812, 2442440; 430859, 2442400; 430877, 2442313; 430881, 2442218; 430907, 2442138; 430921, 2442006; 430888, 2441992; 430699, 2441963; 430582, 2441941; 430356, 2441922; return to starting point.

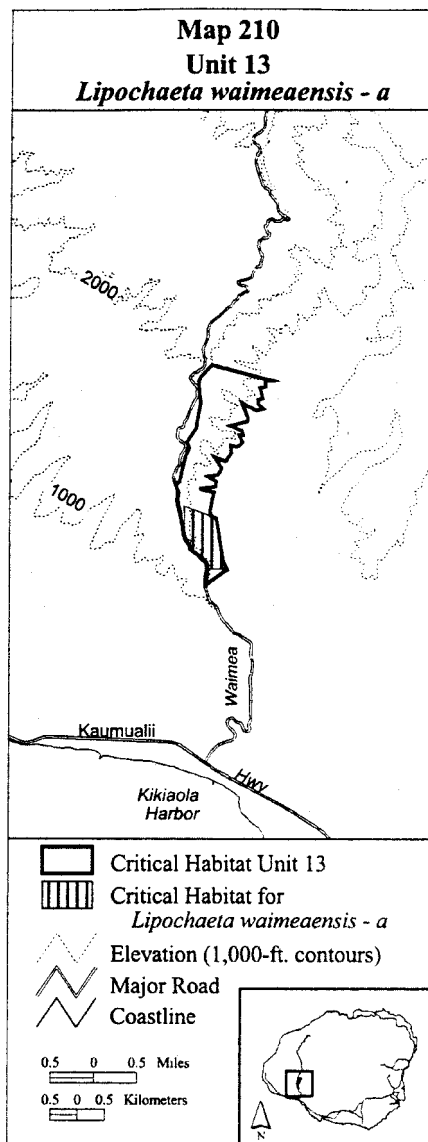
(B) Note: Map 209 follows:



(ccx) Kauai 13—*Lipochaeta waimeaeensis*—a (56 ha; 139 ac)

(A) Unit consists of the following 18 boundary points: Start at 430198, 2432906; 430189, 2433035; 430229, 2433022; 430792, 2432814; 430834, 2432547; 430921, 2432026; 430997, 2431853; 430996, 2431853; 430633, 2431864; 430621, 2431947; 430622, 2431957; 430619, 2431960; 430615, 2431990; 430308, 2432247; 430317, 2432397; 430247, 2432440; 430207, 2432544; 430198, 2432716; return to starting point.

(B) Note: Map 210 follows:

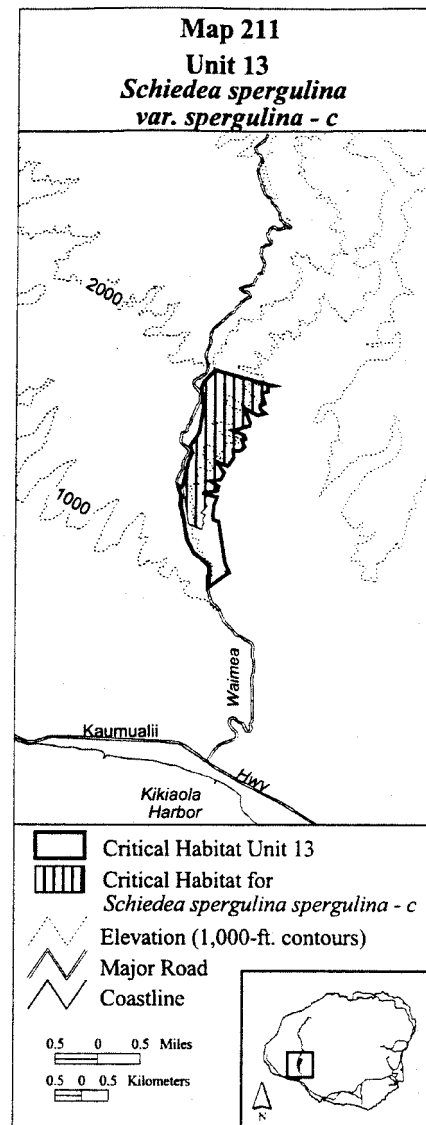


(ccxi) Kauai 13—*Schiedea spergulina* var. *spergulina*—c (221 ha; 545 ac)

(A) Unit consists of the following 59 boundary points: Start at 430475, 2432656; 430222, 2432760; 430103, 2433479; 430210, 2433949; 430290, 2434118; 430239, 2434242; 430239, 2434243; 430259, 2434273; 430414, 2434498; 430435, 2434630; 430495, 2434992; 430479, 2435099; 430454, 2435369; 430488, 2435448; 430698, 2435675; 430703, 2435680; 431807, 2435389; 431700, 2435381; 431700, 2435274; 431600, 2435251; 431654, 2435052; 431562, 2435029; 431562, 2434945; 431661, 2434861; 431661, 2434861; 431524, 2434832; 431520, 2434828; 431263, 2434968; 431370, 2434692; 431363, 2434623; 431049, 2434539; 431256, 2434455; 431294, 2434371; 431217, 2434363; 431267, 2434228; 431236, 2434191; 431179, 2434149; 431057, 2434164; 431072, 2434034; 430969, 2433883; 430955,

2433867; 430955, 2433866; 430750, 2433950; 430892, 2433741; 430865, 2433686; 430819, 2433613; 430635, 2433582; 430789, 2433483; 430785, 2433441; 430774, 2433398; 430505, 2433360; 430544, 2433268; 430513, 2433223; 430567, 2433100; 430459, 2432985; 430536, 2432939; 430482, 2432847; 430521, 2432771; 430490, 2432756; return to starting point.

(B) Note: Map 211 follows:

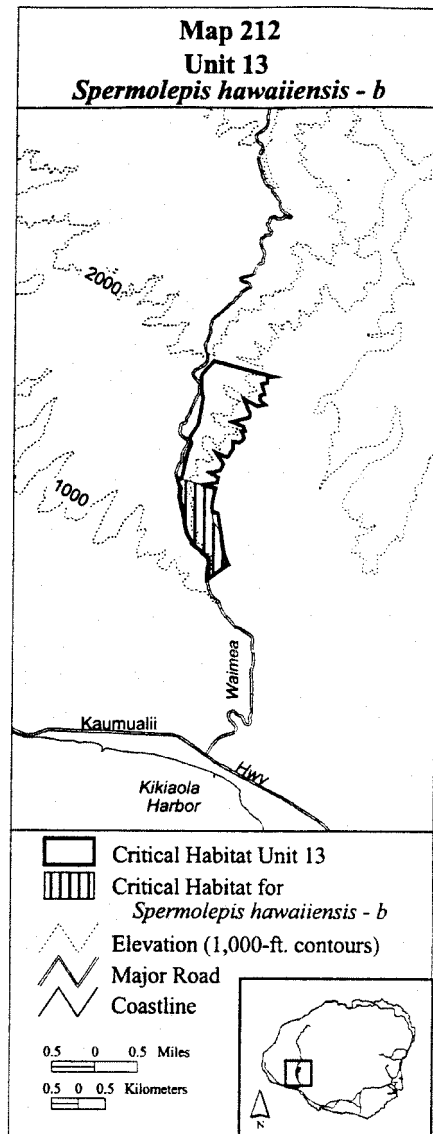


(ccxii) Kauai 13—*Spermolepis hawaiiensis*—b (87 ha; 215 ac)

(A) Unit consists of the following 29 boundary points: Start at 430602, 2431571; 430633, 2431875; 430620, 2431939; 430622, 2431957; 430615, 2431963; 430605, 2432015; 430417, 2432156; 430304, 2432274; 430205, 2432470; 430137, 2432799; 430123, 2432906; 430115, 2432961; 430081, 2433067; 430077, 2433154; 430099, 2433286; 430054, 2433369; 430032, 2433480; 430032, 2433480; 430747,

2433285; 430743, 2433270; 430745, 2433254; 430708, 2433142; 430680, 2432935; 430698, 2432672; 430820, 2432494; 430839, 2432344; 430858, 2432156; 430952, 2431931; 430980, 2431846; return to starting point.

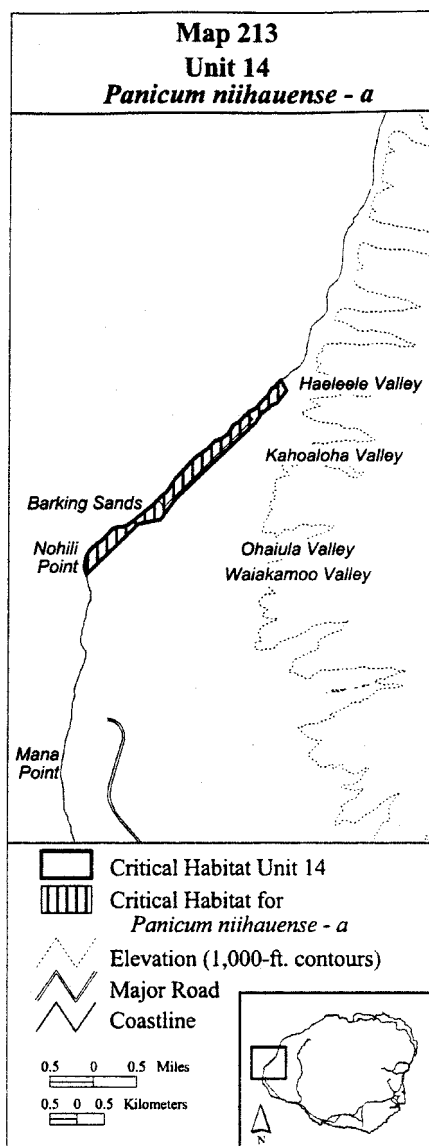
(B) Note: Map 212 follows:



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

(A) Unit consists of the following 17 boundary points: coastline; 420498, 2440857; 420095, 2440787; 419127, 2439857; 422725, 2443464; 422749, 2443432; 422830, 2443273; 422794, 2443226; 422660, 2443057; 422609, 2443018; 422557, 2443003; 422396, 2442865; 422383, 2442876; 422340, 2442802; 422337, 2442797; 422267, 2442675; 422055, 2442471; 420764, 2441227; coastline.

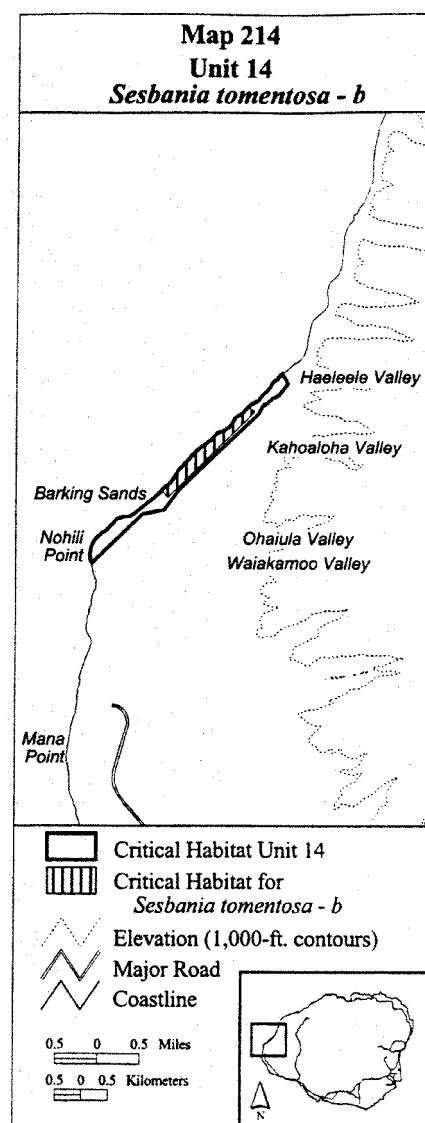
(B) Note: Map 213 follows:



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

(A) Unit consists of the following 7 boundary points: coastline; 422206, 2442741; 421987, 2442507; 420735, 2441277; 420643, 2441178; 420572, 2441093; 420438, 2441235; 422071, 2442818; coastline.

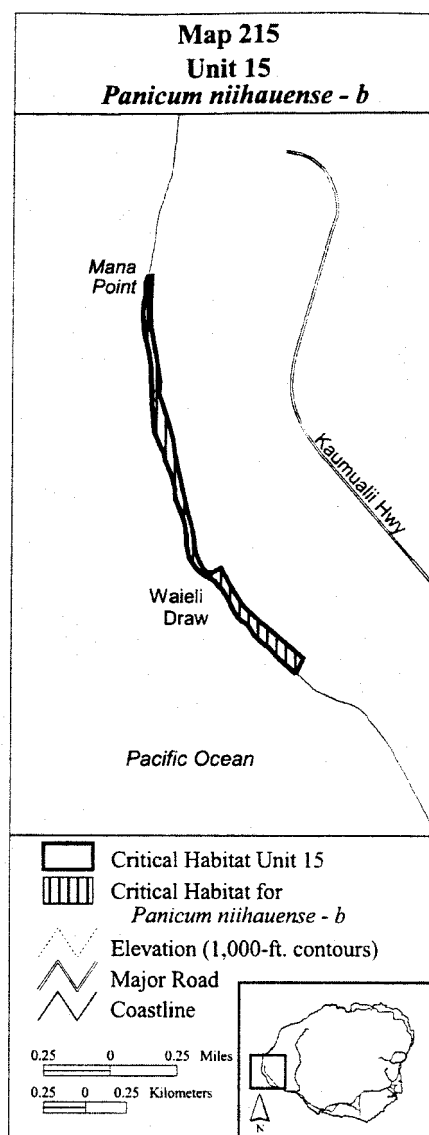
(B) Note: Map 214 follows:



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

(A) Unit consists of the following 24 boundary points: coastline; 418718, 2436405; 418711, 2436261; 418713, 2436100; 418746, 2435916; 418771, 2435768; 418763, 2435699; 418816, 2435550; 418853, 2435417; 418863, 2435329; 418904, 2435147; 418938, 2434999; 418971, 2434874; 418992, 2434737; 419022, 2434668; 419057, 2434621; 419092, 2434621; 419145, 2434647; 419209, 2434531; 419280, 2434420; 419395, 2434316; 419428, 2434292; 419645, 2434109; 419600, 2434015; 418693, 2436403 coastline.

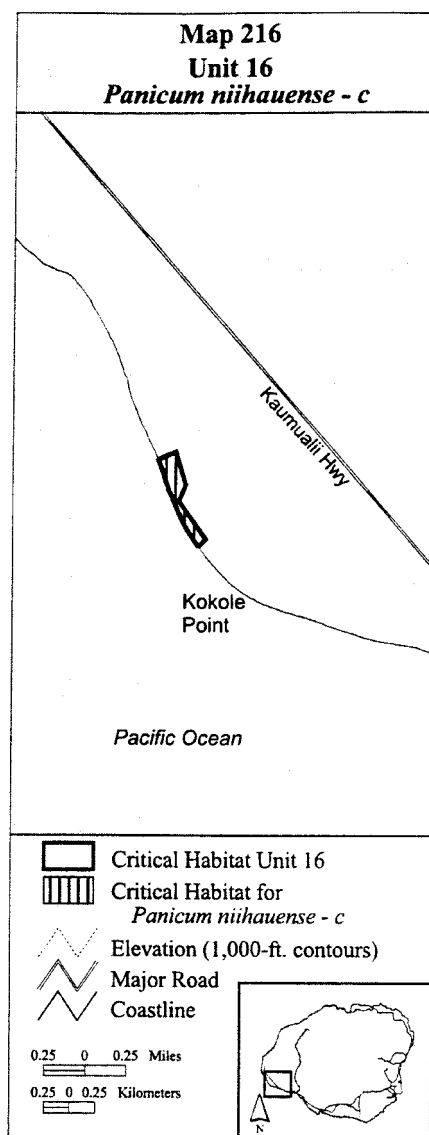
(B) Note: Map 215 follows:



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

(A) Unit consists of the following 8 boundary points: coastline; 421032, 2432070; 421129, 2431750; 421067, 2431592; 421328, 2431221; 421301,

2431191; 421254, 2431147; 420862, 2431988; 420900, 2432013; coastline.
(B) Note: Map 216 follows:

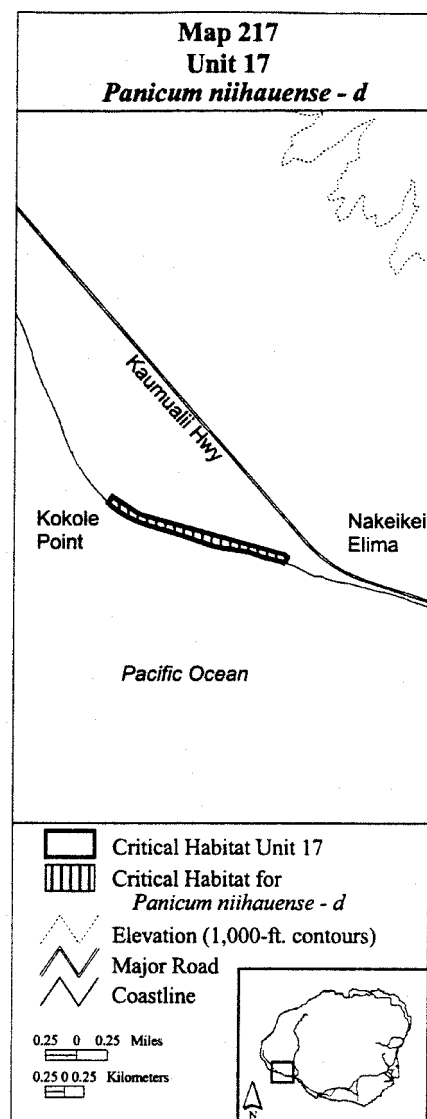


(ccxvii) Kauai 17—*Panicum niihauense*—d (28 ha; 68 ac)

(A) Unit consists of the following 5 boundary points: coastline; 423847,

2430037; 423765, 2429965; 422210, 2430021; 421524, 2430758; 421555, 2430809; coastline.

(B) Note: Map 217 follows:



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

Unit name	Species occupied	Species unoccupied
Kauai 1— <i>Ischaemum byrone</i> —a	<i>Ischaemum byrone</i>	<i>Ischaemum byrone</i>
Kauai 2— <i>Ischaemum byrone</i> —b .....	.....	
Kauai 3— <i>Ischaemum byrone</i> —c	<i>Ischaemum byrone</i> .	
Kauai 4— <i>Adenophorus periens</i> —a	<i>Adenophorus periens</i>	
Kauai 4— <i>Cyanea asarifolia</i> —a	<i>Cyanea asarifolis</i>	
Kauai 4— <i>Cyanea recta</i> —a	<i>Cyanea recta</i>	
Kauai 4— <i>Cyanea recta</i> —b	<i>Cyanea recta</i>	
Kauai 4— <i>Cyanea remyi</i> —a	<i>Cyanea remyi</i>	
Kauai 4— <i>Cyrtandra cyaneoides</i> —a	<i>Cyrtandra cyaneoides</i>	
Kauai 4— <i>Cyrtandra limahuliensis</i> —a	<i>Cyrtandra limahuliensis</i>	
Kauai 4— <i>Cyrtandra limahuliensis</i> —b	<i>Cyrtandra limahuliensis</i>	
Kauai 4— <i>Hibiscus clayi</i> —a		<i>Hibiscus clayi</i>
Kauai 4— <i>Hibiscus clayi</i> —b		<i>Hibiscus clayi</i>

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

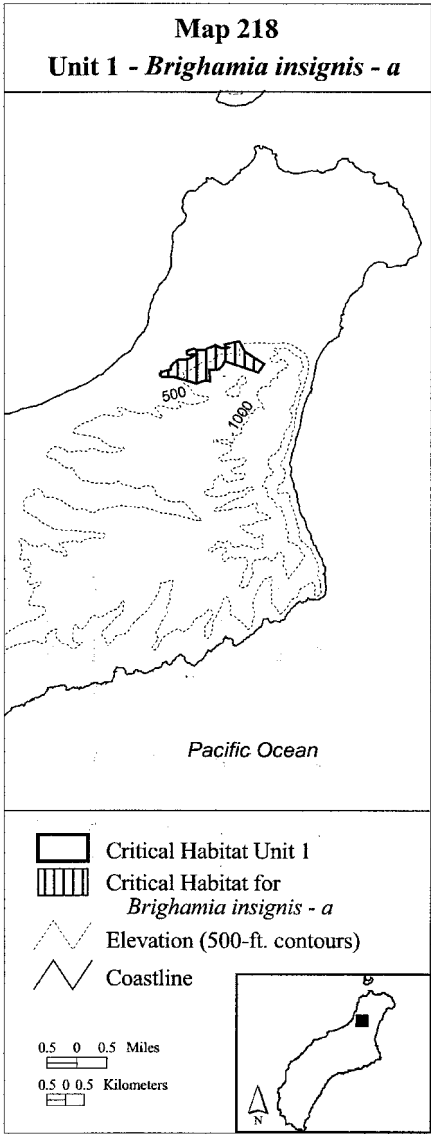
Unit name	Species occupied	Species unoccupied
Kauai 4— <i>Hibiscus clayi</i> —c .....	.....	<i>Hibiscus clayi</i>
Kauai 4— <i>Hibiscus clayi</i> —d .....	.....	<i>Hibiscus clayi</i>
Kauai 4— <i>Hibiscus clayi</i> —e .....	.....	<i>Hibiscus clayi</i>
Kauai 4— <i>Labordia lydgatei</i> —a	<i>Labordia lydgatei</i>	
Kauai 4— <i>Phyllostegia wawrana</i> —a	<i>Phyllostegia wawrana</i>	
Kauai 5— <i>Hibiscus clayi</i> —f	<i>Hibiscus clayi</i>	
Kauai 5— <i>Munroidendron racemosum</i> —a	<i>Munroidendron racemosum</i>	
Kauai 6— <i>Brighamia insignis</i> —a	<i>Brighamia insignis</i>	
Kauai 7— <i>Brighamia insignis</i> —b	<i>Brighamia insignis</i>	
Kauai 7— <i>Delissea rhytidosperra</i> —a	<i>Delissea rhytidosperra</i>	
Kauai 7— <i>Isodendron longifolium</i> —a	<i>Isodendron longifolium</i>	
Kauai 7— <i>Lipochaeta micrantha</i> —a	<i>Lipochaeta micrantha</i>	
Kauai 7— <i>Melicope haupuensis</i> —a .....	.....	<i>Melicope haupuensis</i>
Kauai 7— <i>Munroidendron racemosum</i> —b	<i>Munroidendron racemosum</i>	
Kauai 7— <i>Myrsine linearifolia</i> —a .....	.....	<i>Myrsine linearifolia</i>
Kauai 7— <i>Peucedanum sandwicense</i> —a	<i>Peucedanum sandwicense</i>	
Kauai 7— <i>Pteralyxia kauaiensis</i> —a	<i>Pteralyxia kauaiensis</i>	
Kauai 7— <i>Schiedea nuttallii</i> —a	<i>Schiedea nuttallii</i>	
Kauai 8— <i>Sesbania tomentosa</i> —a .....	.....	<i>Sesbania tomentosa</i>
Kauai 9— <i>Schiedea spergulina</i> var. <i>leiopoda</i> —a	<i>Schiedea spergulina</i> var. <i>leiopoda</i>	
Kauai 10— <i>Adenophorus periens</i> —b	<i>Adenophorus periens</i>	
Kauai 10— <i>Bonamia menziesii</i> —a	<i>Bonamia menziesii</i>	
Kauai 10— <i>Cyanea asarifolia</i> —b	<i>Cyanea asarifolia</i>	
Kauai 10— <i>Cyanea remyi</i> —b	<i>Cyanea remyi</i>	
Kauai 10— <i>Cyanea undulata</i> —a	<i>Cyanea undulata</i>	
Kauai 10— <i>Cyrtandra limahuliensis</i> —c	<i>Cyrtandra limahuliensis</i>	
Kauai 10— <i>Dubautia pauciflora</i> —a	<i>Dubautia pauciflora</i>	
Kauai 10— <i>Exocarpos luteolus</i> —a	<i>Exocarpos luteolus</i>	
Kauai 10— <i>Hesperomannia lydgatei</i> —a	<i>Hesperomannia lydgatei</i>	
Kauai 10— <i>Isodendron longifolium</i> —b	<i>Isodendron longifolium</i>	
Kauai 10— <i>Labordia lydgatei</i> —b	<i>Labordia lydgatei</i>	
Kauai 10— <i>Labordia tinifolia</i> var. <i>wahiawaensis</i> —a	<i>Labordia tinifolia</i> var. <i>wahiawaensis</i> .	
Kauai 10— <i>Lysimachia filifolia</i> —a	<i>Lysimachia filifolia</i>	
Kauai 10— <i>Myrsine linearifolia</i> —b	<i>Myrsine linearifolia</i>	
Kauai 10— <i>Phlegmariurus nutans</i> —a .....	.....	<i>Phlegmariurus nutans</i>
Kauai 10— <i>Plantago princeps</i> —a	<i>Plantago princeps</i>	
Kauai 10— <i>Pteralyxia kauaiensis</i> —b	<i>Pteralyxia kauaiensis</i>	
Kauai 10— <i>Viola helenae</i> —a	<i>Viola helenae</i>	
Kauai 10— <i>Viola kauaiensis</i> var. <i>wahiawaensis</i> —a	<i>Viola kauaiensis</i> var. <i>wahiawaensis</i> .	
Kauai 11— <i>Adenophorus periens</i> —c	<i>Adenophorus periens</i>	
Kauai 11— <i>Adenophorus periens</i> —d	<i>Adenophorus periens</i>	
Kauai 11— <i>Alectryon macrococcus</i> —a	<i>Alectryon macrococcus</i>	
Kauai 11— <i>Alectryon macrococcus</i> —b	<i>Alectryon macrococcus</i>	
Kauai 11— <i>Alsinidendron lychnoides</i> —a	<i>Alsinidendron lychnoides</i>	
Kauai 11— <i>Alsinidendron lychnoides</i> —b	11— <i>Alsinidendron lychnoides</i> —a	
Kauai 11— <i>Alsinidendron lychnoides</i> —c .....	.....	<i>Alsinidendron lychnoides</i>
Kauai 11— <i>Alsinidendron viscosum</i> —a	<i>Alsinidendron viscosum</i>	
Kauai 11— <i>Alsinidendron viscosum</i> —b	<i>Alsinidendron viscosum</i>	
Kauai 11— <i>Alsinidendron viscosum</i> —c	<i>Alsinidendron viscosum</i>	
Kauai 11— <i>Alsinidendron viscosum</i> —d	<i>Alsinidendron viscosum</i>	
Kauai 11— <i>Bonamia menziesii</i> —b	<i>Bonamia menziesii</i>	
Kauai 11— <i>Brighamia insignis</i> —c	<i>Brighamia insignis</i>	
Kauai 11— <i>Centaurium sebaeoides</i> —a	<i>Centaurium sebaeoides</i>	
Kauai 11— <i>Chamaesyce halemanui</i> —a .....	.....	<i>Chamaesyce halemanui</i>
Kauai 11— <i>Chamaesyce halemanui</i> —b	<i>Chamaesyce halemanui</i>	
Kauai 11— <i>Chamaesyce halemanui</i> —c	<i>Chamaesyce halemanui</i>	
Kauai 11— <i>Ctenitis squamigera</i> —a .....	.....	<i>Ctenitis squamigera</i>
Kauai 11— <i>Cyanea recta</i> —c	<i>Cyanea recta</i>	
Kauai 11— <i>Cyanea recta</i> —d .....	.....	<i>Cyanea recta</i>
Kauai 11— <i>Cyanea remyi</i> —c	<i>Cyanea remyi</i>	
Kauai 11— <i>Cyanea remyi</i> —d	<i>Cyanea remyi</i>	
Kauai 11— <i>Cyperus trachysanthos</i> —a	<i>Cyperus trachysanthos</i>	
Kauai 11— <i>Cyrtandra cyaneoides</i> —b	<i>Cyrtandra cyaneoides</i>	
Kauai 11— <i>Cyrtandra cyaneoides</i> —c	<i>Cyrtandra cyaneoides</i>	
Kauai 11— <i>Cyrtandra limahuliensis</i> —d	<i>Cyrtandra limahuliensis</i>	
Kauai 11— <i>Cyrtandra limahuliensis</i> —e	<i>Cyrtandra limahuliensis</i>	
Kauai 11— <i>Delissea rhytidosperra</i> —b	<i>Delissea rhytidosperra</i>	
Kauai 11— <i>Delissea rhytidosperra</i> —c .....	.....	<i>Delissea rhytidosperra</i>
Kauai 11— <i>Delissea rivularis</i> —a	<i>Delissea rivularis</i>	
Kauai 11— <i>Delissea undulata</i> —a .....	.....	<i>Delissea undulata</i>

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

Unit name	Species occupied	Species unoccupied
Kauai 11— <i>Delissea undulata</i> —b	<i>Delissea undulata</i>	
Kauai 11— <i>Diellia erecta</i> —a		<i>Diellia erecta</i>
Kauai 11— <i>Diellia pallida</i> —a	<i>Diellia pallida</i>	
Kauai 11— <i>Diellia pallida</i> —b	<i>Diellia pallida</i>	
Kauai 11— <i>Diplazium molokaiense</i> —a		<i>Diplazium molokaiense</i>
Kauai 11— <i>Dubautia latifolia</i> —1		<i>Dubautia latifolia</i>
Kauai 11— <i>Dubautia latifolia</i> —b	<i>Dubautia latifolia</i>	
Kauai 11— <i>Dubautia latifolia</i> —c	<i>Dubautia latifolia</i>	
Kauai 11— <i>Euphorbia haelealeana</i> —a	<i>Euphorbia haelealeana</i>	
Kauai 11— <i>Euphorbia haelealeana</i> —b	<i>Euphorbia haelealeana</i>	
Kauai 11— <i>Euphorbia haelealeana</i> —c	<i>Euphorbia haelealeana</i>	
Kauai 11— <i>Exocarpos luteolus</i> —b	<i>Exocarpos luteolus</i>	
Kauai 11— <i>Exocarpos luteolus</i> —c	<i>Exocarpos luteolus</i>	
Kauai 11— <i>Exocarpos luteolus</i> —d	<i>Exocarpos luteolus</i>	
Kauai 11— <i>Exocarpos luteolus</i> —e	<i>Exocarpos luteolus</i>	
Kauai 11— <i>Flueggea neowawraea</i> —a		<i>Flueggea neowawraea</i>
Kauai 11— <i>Flueggea neowawraea</i> —b	<i>Flueggea neowawraea</i>	
Kauai 11— <i>Flueggea neowawraea</i> —c	<i>Flueggea neowawraea</i>	
Kauai 11— <i>Flueggea neowawraea</i> —d	<i>Flueggea neowawraea</i>	
Kauai 11— <i>Flueggea neowawraea</i> —e	<i>Flueggea neowawraea</i>	
Kauai 11— <i>Flueggea neowawraea</i> —f	<i>Flueggea neowawraea</i>	
Kauai 11— <i>Gouania meyenii</i> —a		<i>Gouania meyenii</i>
Kauai 11— <i>Gouania meyenii</i> —b	<i>Gouania meyenii</i>	
Kauai 11— <i>Gouania meyenii</i> —c		<i>Gouania meyenii</i>
Kauai 11— <i>Hedyotis cookiana</i> —a	<i>Hedyotis cookiana</i>	
Kauai 11— <i>Hedyotis st. johnii</i> —a	<i>Hedyotis st. johnii</i>	
Kauai 11— <i>Hesperomannia lydgatei</i> —b	<i>Hesperomannia lydgatei</i>	
Kauai 11— <i>Hesperomannia lydgatei</i> —e	<i>Hesperomannia lydgatei</i>	
Kauai 11— <i>Hibiscadelphus woodii</i> —a	<i>Hibiscadelphus woodii</i>	
Kauai 11— <i>Hibiscadelphus woodii</i> —b	<i>Hibiscadelphus woodii</i>	
Kauai 11— <i>Hibiscus waimeae</i> ssp. <i>hannerae</i> —a	<i>Hibiscus waimeae</i> ssp. <i>hannerae</i>	
Kauai 11— <i>Ischaemum byrone</i> —d		<i>Ischaemum byrone</i>
Kauai 11— <i>Isodendron laurifolium</i> —a	<i>Isodendron laurifolium</i>	
Kauai 11— <i>Isodendron laurifolium</i> —b	<i>Isodendron laurifolium</i>	
Kauai 11— <i>Isodendron longifolium</i> —c	<i>Isodendron longifolium</i>	
Kauai 11— <i>Isodendron longifolium</i> —d	<i>Isodendron longifolium</i>	
Kauai 11— <i>Isodendron longifolium</i> —e	<i>Isodendron longifolium</i>	
Kauai 11— <i>Kokia kauaiensis</i> —a	<i>Kokia kauaiensis</i>	
Kauai 11— <i>Kokia kauaiensis</i> —b	<i>Kokia kauaiensis</i>	
Kauai 11— <i>Kokia kauaiensis</i> —c	<i>Kokia kauaiensis</i>	
Kauai 11— <i>Kokia kauaiensis</i> —d	<i>Kokia kauaiensis</i>	
Kauai 11— <i>Labordia lydgatei</i> —c	<i>Labordia lydgatei</i>	
Kauai 11— <i>Labordia lydgatei</i> —d	<i>Labordia lydgatei</i>	
Kauai 11— <i>Labordia lydgatei</i> —e	<i>Labordia lydgatei</i>	
Kauai 11— <i>Lipochaeta fauriei</i> —a		<i>Lipochaeta fauriei</i>
Kauai 11— <i>Lipochaeta fauriei</i> —b	<i>Lipochaeta fauriei</i>	
Kauai 11— <i>Lipochaeta micrantha</i> —b	<i>Lipochaeta micrantha</i>	
Kauai 11— <i>Lobelia niihauensis</i> —a		<i>Lobelia niihauensis</i>
Kauai 11— <i>Lobelia niihauensis</i> —b	<i>Lobelia niihauensis</i>	
Kauai 11— <i>Mariscus pennatiformis</i> —a		<i>Mariscus pennatiformis</i>
Kauai 11— <i>Melicope haupuensis</i> —b	<i>Melicope haupuensis</i>	
Kauai 11— <i>Melicope haupuensis</i> —c	<i>Melicope haupuensis</i>	
Kauai 11— <i>Melicope knudsenii</i> —a	<i>Melicope knudsenii</i>	
Kauai 11— <i>Melicope knudsenii</i> —b	<i>Melicope knudsenii</i>	
Kauai 11— <i>Melicope pallida</i> —a	<i>Melicope pallida</i>	
Kauai 11— <i>Melicope pallida</i> —b	<i>Melicope pallida</i>	
Kauai 11— <i>Munroidendron racemosum</i> —c	<i>Munroidendron racemosum</i>	
Kauai 11— <i>Munroidendron racemosum</i> —d	<i>Munroidendron racemosum</i>	
Kauai 11— <i>Myrsine linearifolia</i> —c	<i>Myrsine linearifolia</i>	
Kauai 11— <i>Myrsine linearifolia</i> —d	<i>Myrsine linearifolia</i>	
Kauai 11— <i>Myrsine linearifolia</i> —e	<i>Myrsine linearifolia</i>	
Kauai 11— <i>Myrsine linearifolia</i> —f	<i>Myrsine linearifolia</i>	
Kauai 11— <i>Nothocestrum peltatum</i> —a		<i>Nothocestrum peltatum</i>
Kauai 11— <i>Nothocestrum peltatum</i> —b	<i>Nothocestrum peltatum</i>	
Kauai 11— <i>Nothocestrum peltatum</i> —c	<i>Nothocestrum peltatum</i>	
Kauai 11— <i>Peucedanum sandwicense</i> —b	<i>Peucedanum sandwicense</i>	
Kauai 11— <i>Peucedanum sandwicense</i> —c	<i>Peucedanum sandwicense</i>	
Kauai 11— <i>Phyllostegia knudsenii</i> —a	<i>Phyllostegia knudsenii</i>	
Kauai 11— <i>Phyllostegia waimeae</i> —a	<i>Phyllostegia waimeae</i>	
Kauai 11— <i>Phyllostegia wawrana</i> —b	<i>Phyllostegia wawrana</i>	
Kauai 11— <i>Phyllostegia wawrana</i> —c	<i>Phyllostegia wawrana</i>	
Kauai 11— <i>Phyllostegia wawrana</i> —d	<i>Phyllostegia wawrana</i>	

2427553; 384706, 2427627; 384746, 2427670; 384750, 2427684; 384766, 2427695; 384924, 2427730; 384995, 2427744; 384993, 2427821; 385066, 2427920; 385143, 2427974; 385186, 2428008; 385291, 2428014; 385421, 2428023; 385500, 2428057; 385605, 2428131; 385614, 2428162; 385546, 2428162; 385509, 2428133; 385435, 2428142; 385410, 2428184; 385415, 2428238; 385478, 2428278; 385597, 2428312; 385679, 2428287; 385801, 2428267; 385903, 2428282; 385977, 2428333; 386111, 2428376; 386173, 2428412; 386264, 2428364; 386326, 2428328; 386482, 2428317; 386530, 2428342; 386440, 2428385; 386428, 2428419; 386471, 2428436; 386539, 2428453; 386582, 2428467; 386732, 2428498; 386811, 2428496; 386814, 2428500; 386959, 2428247; 387475, 2427909; 387322, 2427686; 386416, 2427981; 386362, 2427840; 386256, 2427750; 386010, 2427731; 386042, 2427438; 385897, 2427457; 385678, 2427367; 385116, 2427542. return to starting point.

(B) Note: Map 218 follows:



(II) TABLE OF PROTECTED SPECIES WITHIN EACH CRITICAL HABITAT UNIT FOR NIIHAU

Unit name	Species occupied	Species unoccupied
Niihau 1— <i>Brighamia insignis</i> —a	<i>Brighamia insignis</i>	

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

(1) *Flowering Plants.*

Family Apiaceae: *Peucedanum sandwicense* (makou)

Kauai 7—*Peucedanum sandwicense*—a, Kauai 11—*Peucedanum sandwicense*—b, and Kauai 11—*Peucedanum sandwicense*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Peucedanum sandwicense* on Kauai. Within these units, the currently known primary constituent elements of critical

habitat include, but are not limited to, the habitat components provided by:

- (i) Cliff habitats in mixed shrub coastal dry cliff communities or diverse mesic forest and containing one or more of the following associated native plant species: *Acacia koa*, *Artemisia australis*, *Bidens* spp., *Brighamia insignis*, *Carex meyenii*, *Chamaesyce celastroides*, *Diospyros* spp., *Dodonaea viscosa*, *Eragrostis variabilis*, *Hibiscus kokio*, *Lobelia niihauensis*, *Metrosideros polymorpha*, *Panicum lineale*, *Psychodra odorata*, *Psychotria* spp., or *Wilkesia* spp.; and
- (ii) Elevations between 119 and 1,232 m (391 and 4,041 ft).

Family Apiaceae: *Spermolepis hawaiiensis* (NCN)

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

- (i) *Metrosideros polymorpha* forests or *Dodonaea viscosa* lowland dry shrubland and containing one or more of the following associated plant

species: *Bidens sandwicensis*, *Doryopteris* spp., *Eragrostis variabilis*, *Erythrina sandwicensis*, *Lipochaeta* spp., *Schiedea spergulina*, or *Sida fallax*; and

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

Family Apocynaceae: *Pteralyxia kauaiensis* (kauai)

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

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

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

Family Araliaceae: *Munroidendron racemosum* (NCN)

Kauai 5—*Munroidendron racemosum*—a, Kauai 7—*Munroidendron racemosum*—b, Kauai 11—*Munroidendron racemosum*—c, and Kauai 11—*Munroidendron racemosum*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Munroidendron racemosum* on Kauai. Within these units the currently known

primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

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

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

Family Asteraceae: *Dubautia latifolia* (naenae)

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

(i) Gentle or steep slopes on well drained soil in semi-open or closed, diverse montane mesic forest dominated by *Acacia koa* and/or *Metrosideros polymorpha* and containing one or more of the following native plant species: *Alphitonia ponderosa*, *Antidesma platyphyllum*, *Bobea* spp., *Claoxylon sandwicense*, *Coprosma waimeae*, *Cyrtandra* spp., *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Ilex anomala*, *Melicope anisata*, *Nestegis sandwicensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria mariniana*, *Scaevola* spp., or *Xylosma* spp.; and

(ii) Elevations between 545 and 1,277 m (1,786 and 4,189 ft).

Family Asteraceae: *Dubautia pauciflorula* (naenae)

Kauai 10—*Dubautia pauciflorula*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Dubautia pauciflorula* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest within stream drainages containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Broussaia*

arguta, *Cheirodendron* spp., *Dubautia laxa*, *Embelia pacifica*, *Hesperomannia lydgatei*, *Labordia waialealae*, *Melicope* spp., *Nothoperanema rubiginosa*, *Pritchardia* spp., *Psychotria* spp., *Sadleria* spp., *Scaevola mollis*, *Syzygium sandwicensis*, or *Tetraplasandra* spp.; and

(ii) Elevations between 564 and 1,094 m (1,849 and 3,587 ft).

Family Asteraceae: *Hesperomannia lydgatei* (NCN)

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

(i) Stream banks and forested slopes in rich brown soil and silty clay in *Metrosideros polymorpha* or *Metrosideros polymorpha-Dicranopteris linearis* lowland wet forest and containing one or more of the following associated native plant species: *Adenophorus perieni*, *Antidesma platyphyllum*, *Broussaia arguta*, *Cheirodendron* spp., *Cyanea* spp., *Dubautia knudsenii*, *Dubautia laxa*, *Dubautia pauciflorula*, *Dubautia raillardoides*, *Elaphoglossum* spp., *Freycinetia arborea*, *Hedyotis terminalis*, *Labordia lydgatei*, *Machaerina angustifolia*, *Peperomia* spp., *Pritchardia* spp., *Psychotria hexandra*, or *Syzygium sandwicensis*; and

(ii) Elevations between 207 and 1,344 m (680 and 4,409 ft).

Family Asteraceae: *Lipochaeta fauriei* (nehe)

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

(i) Moderate shade to full sun on the sides of steep gulches in diverse lowland mesic forests and containing one or more of the following native species: *Acacia koa*, *Carex meyenii*, *Carex wahuensis*, *Dicranopteris linearis*, *Diospyros* spp., *Dodonaea viscosa*, *Euphorbia haelealeana*, *Hibiscus waimeae*, *Kokia kauaiensis*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pleomele aurea*, *Psychotria*

greenwelliae, *Psychotria mariniana*, or *Sapindus oahuensis*; and

(ii) Elevations between 438 and 948 m (1,438 and 3,108 ft).

Family Asteraceae: *Lipochaeta micrantha* (nehe)

Kauai 7—*Lipochaeta micrantha*—a, and Kauai 11—*Lipochaeta micrantha*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Lipochaeta micrantha* on Kauai. Within these units the currently known primary constituent elements of critical habitat for *Lipochaeta micrantha* are the habitat components provided by:

(i) Cliffs, ridges, stream banks, or slopes in mesic to wet mixed communities and containing one or more of the following associated native plant species: *Acacia koa*, *Antidesma* spp., *Artemisia australis*, *Bidens sandwicensis*, *Bobea* spp., *Chamaesyce celastroides* var. *hanapeensis*, *Diospyros* spp., *Dodonaea viscosa*, *Eragrostis grandis*, *Eragrostis variabilis*, *Hibiscus kokio*, *Lepidium bidentatum*, *Lobelia niihauensis*, *Melicope* spp., *Metrosideros polymorpha*, *Neraudia kauaiensis*, *Nototrichium* spp., *Pipturus* spp., *Plectranthus parviflorus*, *Pleomele aurea*, *Psydrax odorata*, *Rumex albescens*, *Sida fallax*, or *Xylosma hawaiiense*; and

(ii) Elevations between 127 and 1,090 m (418 and 3,574 ft).

Family Asteraceae: *Lipochaeta waimeaeensis* (nehe)

Kauai 13—*Lipochaeta waimeaeensis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Lipochaeta waimeaeensis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Precipitous, shrub-covered gulches in diverse lowland forest and containing one or more of the following associated native plant species: *Artemisia australis*, *Chamaesyce celastroides*, *Dodonaea viscosa*, *Lipochaeta connata*, *Santalum freycinetianum*, *Schiedea spargulina*, or *Panicum* spp.; and

(ii) Elevations between 44 and 409 m (145 and 1,340 ft).

Family Asteraceae: *Remya kauaiensis* (NCN)

Kauai 11—*Remya kauaiensis*—a, Kauai 11—*Remya kauaiensis*—b, Kauai 11—*Remya kauaiensis*—c, Kauai 11—*Remya kauaiensis*—d, Kauai 11—*Remya kauaiensis*—e, and Kauai 12—*Remya kauaiensis*—f, identified in the legal descriptions in paragraph (a)(1) of this

section, constitute critical habitat for *Remya kauaiensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep, north or northeast-facing slopes in *Acacia koa*-*Metrosideros polymorpha* lowland mesic forest and containing one or more of the following associated native plant species: *Chamaesyce* spp., *Claoxylon sandwicense*, *Dianella sandwicensis*, *Diospyros* spp., *Dodonaea viscosa*, *Hedyotis terminalis*, *Melicope* spp., *Nestegis sandwicensis*, *Pouteria sandwicensis*, *Psychotria* spp., *Schiedea* spp., or *Tetraplasandra* spp.; and

(ii) Elevations between 560 and 1,249 m (1,836 and 4,097 ft).

Family Asteraceae: *Remya montgomeryi* (NCN)

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

(i) Steep, north or northeast-facing slopes or cliffs in transitional wet or *Metrosideros polymorpha*-dominated mixed mesic forest and containing one or more of the following associated native plant species: *Artemisia australis*, *Bobea* spp., *Boehmeria grandis*, *Cheirodendron* spp., *Claoxylon sandwicense*, *Cyrtandra* spp., *Dubautia* spp., *Ilex anomala*, *Lepidium serra*, *Lysimachia* spp., *Myrsine linearifolia*, *Nototrichium* spp., *Pleomele aurea*, *Poa mannii*, *Sadleria* spp., *Scaevola* spp., *Stenogyne campanulata*, *Tetraplasandra* spp., or *Zanthoxylum dipetalum*; and

(ii) Elevations between 336 and 1,345 m (1,102 and 4,411 ft).

Family Asteraceae: *Wilkesia hobdyi* (dwarf iliau)

Kauai 11—*Wilkesia hobdyi*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Wilkesia hobdyi* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Coastal dry cliffs or very dry ridges containing one or more of the following associated native plant species: *Artemisia australis*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Hibiscus kokio* ssp.

saint johnianus, *Lipochaeta connata*, *Lobelia niihauensis*, *Myoporum sandwicense*, *Peperomia blanda*, *Peperomia* spp., *Peperomia tetraphylla*, *Peucedanum sandwicense*, *Psydrax odorata*, *Sida fallax*, *Waltheria indica*, or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 12 and 685 m (40 and 2,246 ft).

Family Campanulaceae: *Brighamia insignis* (olulu)

Kauai 6—*Brighamia insignis*—a, Kauai 7—*Brighamia insignis*—b, and Kauai 11—*Brighamia insignis*—c identified in the legal descriptions in paragraph (a)(1) of this section, and Niihau 1—*Brighamia insignis*—a, identified in the legal description in paragraph (a)(2) of this section, constitute critical habitat for *Brighamia insignis* on Kauai and Niihau. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rocky ledges with little soil or steep sea cliffs in lowland dry grasslands or shrublands with annual rainfall that is usually less than 170 cm (65 in) and containing one or more of the following native plant species: *Artemisia australis*, *Chamaesyce celastroides*, *Eragrostis variabilis*, *Heteropogon contortus*, *Hibiscus kokio*, *Hibiscus kokio* ssp. *saintjohnianus*, *Lepidium serra*, *Lipochaeta succulenta*, *Munroidendron racemosum*, or *Sida fallax*; and

(ii) Elevations between 0 and 748 m (0 and 2,453 ft).

Family Campanulaceae: *Cyanea asarifolia* (haha)

Kauai 4—*Cyanea asarifolia*—a, and Kauai 10—*Cyanea asarifolia*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea asarifolia* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Pockets of soil on sheer wet rock cliffs and waterfalls in lowland wet forests and containing one or more of the following native plant species: *Bidens* spp., *Dubautia plantaginea*, *Hedyotis centranthoides*, *Hedyotis elatior*, *Lysimachia filifolia*, *Machaerina angustifolia*, *Metrosideros polymorpha*, or *Panicum lineale*; and

(ii) Elevations between 182 and 1,212 m (597 and 3,976 ft).

Family Campanulaceae: *Cyanea recta* (haha)

Kauai 4—*Cyanea recta*—a, Kauai 4—*Cyanea recta*—b, Kauai 11—*Cyanea recta*—c, and Kauai 11—*Cyanea recta*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea recta* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Gulches or slopes in lowland wet or mesic *Metrosideros polymorpha* forest or shrubland and containing one or more of the following native plant species: *Antidesma platyphyllum*, *Cheirodendron platyphyllum*, *Cibotium* spp., *Dicranopteris linearis*, *Diplazium* spp., or *Psychotria* spp.; and
- (ii) Elevations between 297 and 1,345 m (975 and 4,411 ft).

Family Campanulaceae: *Cyanea remyi* (haha)

Kauai 4—*Cyanea remyi*—a, Kauai 10—*Cyanea remyi*—b, Kauai 11—*Cyanea remyi*—c, and Kauai 11—*Cyanea remyi*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyanea remyi* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Narrow drainages and wet stream banks in lowland wet forest or shrubland and containing one or more of the following native plant species: various grammitid and filmy ferns (Grammitidaceae and Hymenophyllaceae), *Adenophorus* spp., *Antidesma platyphyllum*, *Bidens* spp., *Broussaisia arguta*, *Cheirodendron* spp., *Cyrtandra* spp., *Diplazium sandwichianum*, *Eragrostis grandis*, *Freycinetia arborea*, *Hedyotis terminalis*, *Machaerina angustifolia*, *Metrosideros polymorpha*, *Perrottetia sandwicensis*, *Pipturus* spp., *Psychotria hexandra*, *Syzygium sandwicensis*, *Thelypteris* spp., *Touchardia latifolia*, or *Urera glabra*; and
- (ii) Elevations between 219 and 1,089 m (719 and 3,571 ft).

Family Campanulaceae: *Cyanea undulata* (haha)

Kauai 10—*Cyanea undulata*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Cyanea undulata* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Narrow drainages and wet stream banks in *Metrosideros polymorpha* dry to montane wet forest or shrubland and containing one or more of the following associated native species: various grammitid and filmy ferns (Grammitidaceae and Hymenophyllaceae), *Adenophorus* spp., *Antidesma platyphyllum*, *Bidens* spp., *Broussaisia arguta*, *Cheirodendron* spp., *Diplazium sandwichianum*, *Dryopteris glabra*, *Eragrostis grandis*, *Freycinetia arborea*, *Machaerina angustifolia*, *Mariscus* spp., *Melicope feddei*, *Perrottetia sandwicensis*, *Pipturus* spp., *Psychotria hexandra*, *Psychotria mariniana*, *Sadleria pallida*, *Sadleria squarrosa*, *Smilax melastomifolia*, *Sphenomeris chinensis*, *Syzygium sandwicensis*, or *Thelypteris* spp.; and
- (ii) Elevations between 375 and 1,046 m (1,231 and 3,430 ft).

Family Campanulaceae: *Delissea rhytidosperra* (no common name)

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

- (i) Well-drained soils with medium or fine-textured subsoil in *Diospyros* diverse lowland mesic forests or diverse *Metrosideros polymorpha*-*Acacia koa* forests and containing one or more of the following native species: *Adenophorus* spp., *Cyanea* spp., *Dianella sandwicensis*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Doodia kunthiana*, *Euphorbia haelealeana*, grammitid ferns (Grammitidaceae), *Hedyotis* spp., *Leptocophylla tameiameia*, *Microlepia strigosa*, *Nestegis sandwicensis*, *Pisonia* spp., *Psychotria hobydi*, or *Pteralyxia kauaiensis*; and
- (ii) Elevations between 167 and 895 m (547 and 2,935 ft).

Family Campanulaceae: *Delissea rivularis* (oha)

Kauai 11—*Delissea rivularis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Delissea rivularis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Steep slopes near streams in *Metrosideros polymorpha*-*Cheirodendron trigynum* montane wet

or mesic forest and containing one or more of the following native plant species: *Boehmeria grandis*, *Broussaisia arguta*, *Carex* spp., *Coprosma* spp., *Diplazium sandwichianum*, *Dubautia knudsenii*, *Hedyotis foggiana*, *Ilex anomala*, *Machaerina angustifolia*, *Melicope anisata*, *Melicope clusiifolia*, *Pipturus* spp., *Psychotria hexandra*, or *Sadleria* spp.; and

- (ii) Elevations between 823 and 1,307 m (2,701 and 4,286 ft).

Family Campanulaceae: *Delissea undulata* (NCN)

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

- (i) Dry or open *Acacia koa*-*Metrosideros polymorpha* mesic forests or *Alphitonia ponderosa* montane forest and containing one or more of the following native plant species: *Diospyros sandwicensis*, *Dodonaea viscosa*, *Doodia kunthiana*, *Eragrostis variabilis*, *Euphorbia haelealeana*, *Kokia kauaiensis*, *Microlepia strigosa*, *Panicum* spp., *Pleomele aurea*, *Psychotria mariniana*, *Psychotria greenwelliae*, or *Santalum freycinetianum*; and
- (ii) Elevations between 139 and 1,006 m (456 and 3,299 ft).

Family Campanulaceae: *Lobelia niihauensis* (NCN)

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

- (i) Exposed mesic mixed shrubland or coastal dry cliffs and containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens sandwicensis*, *Chamaesyce celastroides*, *Charpentiera* spp., *Eragrostis variabilis*, *Hibiscus kokio* ssp. *saint-johnianus*, *Lipochaeta connata* var. *acris*, *Lythrum* spp., *Nototrichium* spp., *Plectranthus parviflorus*, *Schiedea apokremnos*, or *Wilkesia hobydi*; and
- (ii) Elevations between 36 and 888 m (117 and 2,911 ft).

Family Caryophyllaceae:
Alsinidendron lychnoides
(kuawawaenohu)

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

- (i) Steep riparian clay or silty soil banks in montane wet forests dominated by *Metrosideros polymorpha* and *Cheirodendron* spp., or by *Metrosideros polymorpha* and *Dicranopteris linearis* and containing one or more of the following native plant species: *Asplenium* spp., *Astelia* spp., *Broussaisia arguta*, *Carex* spp., *Cyrtandra* spp., *Diplazium sandwichianum*, *Elaphoglossum* spp., *Hedyotis terminalis*, *Machaerina* spp., *Peperomia* spp., or *Vaccinium* spp.; and
- (ii) Elevations between 828 and 1,344 m (2,715 and 4,408 ft).

Family Caryophyllaceae:
Alsinidendron viscosum (NCN)

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

- (i) Steep slopes in *Acacia koa*-*Metrosideros polymorpha* lowland and montane mesic forest and containing one or more of the following native plant species: *Alyxia oliviformis*, *Asplenium polyodon*, *Bidens cosmoides*, *Bobea* spp., *Carex meyenii*, *Carex wahuensis*, *Coprosma* spp., *Dianella sandwicensis*, *Dodonaea viscosa*, *Doodia kunthiana*, *Dryopteris glabra*, *Dryopteris unidentata*, *Dryopteris wallichiana*, *Dubautia laevigata*, *Gahnia* spp., *Ilex anomala*, *Melicope* spp., *Panicum nephelophilum*, *Pleomele aurea*, *Psychotria* spp., *Pteridium aquilinum* var. *decompositum*, *Schiedea stellarioides*, or *Vaccinium dentatum*; and
- (ii) Elevations between 754 and 1,224 m (2,474 and 4,016 ft).

Family Caryophyllaceae: *Schiedea apokremnos* (maolioli)

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

- (i) Crevices of near-vertical basalt coastal cliff faces in sparse dry coastal cliff shrub vegetation and containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens* spp., *Carex meyenii*, *Chamaesyce celastroides*, *Eragrostis variabilis*, *Lepidium serra*, *Lipochaeta connata*, *Lobelia niihauensis*, *Myoporum sandwicense*, *Peperomia* spp., *Pleomele aurea*, *Psydrax odorata*, or *Wilkesia* spp.; and
- (ii) Elevations between 11 and 538 m (35 and 1,765 ft).

Family Caryophyllaceae: *Schiedea helleri* (NCN)

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

- (i) Ridges and steep cliffs in closed *Metrosideros polymorpha*-*Dicranopteris linearis* montane wet forest, *M. polymorpha*-*Cheirodendron* spp. montane wet forest, or *Acacia koa*-*M. polymorpha* montane mesic forest and containing one or more of the following associated native plant species: *Broussaisia arguta*, *Cheirodendron* spp., *Cibotium* spp., *Cyanea* spp., *Dianella sandwicensis*, *Dubautia* spp., *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Melicope* spp., *Myrsine* spp., *Poa sandwicensis*, *Scaevola procera*, *Syzygium sandwicensis*, or *Viola wailenalanae*; and
- (ii) Elevations between 664 and 1,361 m (2,178 and 4,464 ft).

Family Caryophyllaceae: *Schiedea kauaiensis* (NCN)

Kauai 11—*Schiedea kauaiensis*—a, Kauai 11—*Schiedea kauaiensis*—b, Kauai 11—*Schiedea kauaiensis*—c, and Kauai 11—*Schiedea kauaiensis*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Schiedea*

kauaiensis on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Steep slopes in diverse mesic to wet *Acacia koa*-*Metrosideros polymorpha* forest and containing one or more of the following associated plant species: *Alphitonia ponderosa*, *Cryptocarya mannii*, *Diospyros* spp., *Dodonaea viscosa*, *Euphorbia haeleleana*, *Exocarpos luteolus*, *Leptocophylla tameiameiae*, *Microlepia strigosa*, *Nestegis sandwicensis*, *Peucedanum sandwicense*, *Pisonia* spp., *Psychotria* spp., or *Psydrax odorata*; and
- (ii) Elevations between 117 and 1,290 m (385 and 4,232 ft).

Family Caryophyllaceae: *Schiedea membranacea* (NCN)

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

- (i) Cliffs or cliff bases in mesic or wet habitats in lowland or montane shrubland or forest communities dominated by *Acacia koa*, *Pipturus* spp. and *Metrosideros polymorpha* or *Urticaceae* shrubland on talus slopes and containing one or more of the following associated native plant species: *Alphitonia ponderosa*, *Alyxia oliviformis*, *Asplenium* spp., *Athyrium sandwicensis*, *Bobea brevipes*, *Boehmeria grandis*, *Cyrtandra* spp., *Diplazium sandwichianum*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Hedyotis terminalis*, *Hibiscus waimeae*, *Joinvillea ascendens* spp. *ascendens*, *Labordia helleri*, *Lepidium serra*, *Lysimachia kalalauensis*, *Machaerina angustifolia*, *Mariscus pennatifolius*, *Melicope* spp., *Myrsine* spp., *Perrottetia sandwicensis*, *Pisonia* spp., *Pleomele aurea*, *Poa mannii*, *Poa sandwicensis*, *Pouteria sandwicensis*, *Psychotria* spp., *Psydrax odorata*, *Remya kauaiensis*, *Sadleria cyatheoides*, *Scaevola procera*, *Thelypteris cyatheoides*, *Thelypteris sandwicensis*, or *Touchardia latifolia*; and
- (ii) Elevations between 423 and 1,259 m (1,386 and 4,131 ft).

Family Caryophyllaceae: *Schiedea nuttallii* (NCN)

Kauai 7—*Schiedea nuttallii*—a, identified in the legal description in

paragraph (a)(1) of this section, constitutes critical habitat for *Schiedea nuttallii* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Cliffs in lowland diverse mesic forest dominated by *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Bidens valida*, *Chamaesyce celastroides*, *Eragrostis variabilis*, *Hedyotis acuminata*, *Hedyotis fluvialis*, *Heteropogon contortus*, *Lepidium* spp., *Lobelia niihauensis*, *Psychotria* spp., *Perrottetia sandwicensis*, or *Pisonia* spp.; and
- (ii) Elevations between 127 and 702 m (418 and 2,303 ft).

Family Caryophyllaceae: *Schiedea spergulina* var. *leiopoda* (NCN)

Kauai 9—*Schiedea spergulina* var. *leiopoda*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Schiedea spergulina* var. *leiopoda* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic forests and containing one or more of the following native plant species: *Acacia koa*, *Artemisia australis*, *Bidens sandwicensis*, *Carex meyenii*, *Chamaesyce celastroides*, *Dianella sandwicensis*, *Doryopteris* spp., *Eragrostis variabilis*, *Erythrina sandwicensis*, *Gahnia* spp., *Heliotropium* spp., *Lepidium serra*, *Lipochaeta connata*, *Microlepia strigosa*, *Nestegis sandwicensis*, *Nototrichium sandwicense*, *Panicum lineale*, *Peucedanum sandwicense*, or *Wilkesia gymnoxiphium*; and
- (ii) Elevations between 21 and 90 m (69 and 294 ft).

Family Caryophyllaceae: *Schiedea spergulina* var. *spergulina* (NCN)

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

- (i) Bare rock outcrops or sparsely vegetated portions of rocky cliff faces or cliff bases in diverse lowland dry to mesic forests and containing one or more of the following associated plant species: *Acacia koa*, *Artemisia australis*, *Bidens sandwicensis*, *Carex meyenii*, *Chamaesyce celastroides*, *Dianella sandwicensis*, *Doryopteris* spp., *Eragrostis variabilis*, *Erythrina sandwicensis*, *Gahnia* spp., *Heliotropium* spp., *Lepidium serra*, *Lipochaeta connata*, *Microlepia strigosa*, *Nestegis sandwicensis*, *Nototrichium sandwicense*, *Panicum lineale*, *Peucedanum sandwicense*, or *Wilkesia gymnoxiphium*; and
- (ii) Elevations between 145 and 829 m (474 and 2,718 ft).

Family Caryophyllaceae: *Schiedea stellarioides* (lauhilihi (=maolioli))

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

- (i) Steep slopes in closed *Acacia koa*-*Metrosideros polymorpha* lowland or montane mesic forest or shrubland and containing one or more of the following native plant species: *Alsinidendron viscosum*, *Artemisia australis*, *Bidens cosmoides*, *Chenopodium* spp., *Dianella sandwicensis*, *Dodonaea viscosa*, *Mariscus* spp., *Melicope* spp., *Nototrichium sandwicense*, *Pipturus* spp., *Leptecophylla tameiameia*, *Syzygium sandwicensis*, or *Zanthoxylum dipetalum*; and
- (ii) Elevations between 376 and 1,251 m (1,135 and 4,102 ft).

Family Convolvulaceae: *Bonamia menziesii* (NCN)

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

- (i) Dry, mesic, or wet *Metrosideros polymorpha*-*Cheirodendron-Dicranopteris* forest and containing one or more of the following native plant species: *Antidesma platyphyllum*, *Alphitonia ponderosa*, *Acacia koa*, *Cyanea* spp., *Cyrtandra pickeringii*, *Cyrtandra limahuliensis*, *Dianella sandwicensis*, *Diospyros sandwicensis*,

Dodonaea viscosa, *Dubautia knudsenii*, *Hedyotis terminalis*, *Isodendron longifolium*, *Labordia hirtella*, *Melicope anisata*, *Melicope barbigera*, *Myoporum sandwicense*, *Nestegis sandwicensis*, *Pisonia* spp., *Pittosporum* spp., *Pouteria sandwicensis*, *Psychotria mariniana*, *Psychotria hexandra*, *Psydrax odorata*, *Sapindus oahuensis*, *Scaevola procera*, or *Syzygium sandwicensis*; and

- (ii) Elevations between 566 and 1,127 m (1,858 and 3,695 ft).

Family Cyperaceae: *Cyperus trachysanthos* (puukaa)

Kauai 11—*Cyperus trachysanthos*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Cyperus trachysanthos* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Wet sites (mud flats, wet clay soil, or wet cliff seeps) on seepy flats or talus slopes and containing the native plant species *Talipariti tiliaceum*; and
- (ii) Elevations between 0 and 235 m (0 and 771 ft).

Family Cyperaceae: *Mariscus pennatiformis* (NCN)

Kauai 11—*Mariscus pennatiformis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Mariscus pennatiformis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Open sites in *Metrosideros polymorpha*-*Acacia koa* mixed mesic forest and containing one or more of the following associated native plant species: *Alsinidendron viscosum*, *Antidesma platyphyllum* var. *hillebrandii*, *Carex alligata*, *Cyperus laevigatus*, *Dianella sandwicensis*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Leptecophylla tameiameia*, *Myrsine linearifolia*, *Nestegis sandwicensis*, *Panicum nephelophilum*, *Poa sandwicensis*, *Psydrax odorata*, *Schiedea stellarioides*, or endemic ferns; and
- (ii) Elevations between 605 and 1,065 m (1,983 and 3,493 ft).

Family Euphorbiaceae: *Chamaesyce halemanui* (NCN)

Kauai 11—*Chamaesyce halemanui*—a, Kauai 11—*Chamaesyce halemanui*—b, and Kauai 11—*Chamaesyce halemanui*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for

Chamaesyce halemanui on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Steep slopes of gulches in mesic *Acacia koa* forests and containing one or more of the following native plant species: *Asplenium* spp., *Alphitonia ponderosa*, *Antidesma platyphyllum*, *Bobea brevipes*, *Carex meyenii*, *Carex wahuensis*, *Cheirodendron trigynum*, *Coprosma* spp., *Diospyros sandwicensis*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Kokia kauaiensis*, *Leptecophylla tameiameia*, *Microlepia strigosa*, *Melicope haupuensis*, *Metrosideros polymorpha*, *Panicum nephelophilum*, *Pisonia* spp., *Pittosporum* spp., *Pleomele aurea*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Pouteria sandwicensis*, or *Santalum freycinetianum*; and
- (ii) Elevations between 556 and 1,249 m (1,825 and 4,097 ft).

Family Euphorbiaceae: *Euphorbia haeleleana* (akoko)

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

- (i) Lowland mixed mesic or dry *Diospyros* forest that is often codominated by *Metrosideros polymorpha* and *Alphitonia ponderosa* and containing one or more of the following native plant species: *Acacia koa*, *Antidesma platyphyllum*, *Carex meyenii*, *Carex wahuensis*, *Claoxylon sandwicense*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Erythrina sandwicensis*, *Kokia kauaiensis*, *Pisonia sandwicensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Sapindus oahuensis*, *Tetraplasandra kawaiensis*, or *Xylosma* spp.; and
- (ii) Elevations between 284 and 1,179 m (931 and 3,866 ft).

Family Euphorbiaceae: *Flueggea neowawraea* (mehamehame)

Kauai 11—*Flueggea neowawraea*—a, Kauai 11—*Flueggea neowawraea*—b, Kauai 11—*Flueggea neowawraea*—c, Kauai 11—*Flueggea neowawraea*—d, Kauai 11—*Flueggea neowawraea*—e, and Kauai 11—*Flueggea neowawraea*—f, identified in the legal descriptions in

paragraph (a)(1) of this section, constitute critical habitat for *Flueggea neowawraea* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Dry or mesic forests containing one or more of the following native plant species: *Alectryon macrococcus*, *Antidesma platyphyllum*, *Bidens sandwicensis*, *Bobea timonioides*, *Caesalpinia kawaiensis*, *Charpentiera* spp., *Diospyros* spp., *Diplazium sandwichianum*, *Freycinetia arborea*, *Hibiscus* spp., *Isodendron laurifolium*, *Kokia kauaiensis*, *Melicope* spp., *Metrosideros polymorpha*, *Munroidendron racemosum*, *Myrsine lanaiensis*, *Nesoluma polynesicum*, *Nestegis sandwicensis*, *Pittosporum* spp., *Pouteria sandwicensis*, *Pritchardia minor*, *Psychotria* spp., *Psydrax odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Streblus pendulinus*, *Tetraplasandra* spp., *Xylosma crenatum*, or *Xylosma hawaiiense*; and
- (ii) Elevations between 210 and 1,178 m (689 and 3,865 ft).

Family Fabaceae: *Sesbania tomentosa* (ohai)

Kauai 8—*Sesbania tomentosa*—a, and Kauai 14—*Sesbania tomentosa*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Sesbania tomentosa* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Sandy beaches, dunes, or pond margins in coastal dry shrublands or mixed coastal dry cliffs, and containing one or more of the following associated native plant species: *Chamaesyce celastroides*, *Cuscuta sandwighiana*, *Dodonaea viscosa*, *Heteropogon contortus*, *Myoporum sandwicense*, *Nama sandwicensis*, *Scaevola sericea*, *Sida fallax*, *Sporobolus virginicus*, *Vitex rotundifolia*, or *Waltheria indica*; and
- (ii) Elevations between 0 and 130 m (0 and 427 ft).

Family Flacourtiaceae: *Xylosma crenatum* (NCN)

Kauai 11—*Xylosma crenatum*—a, and Kauai 12—*Xylosma crenatum*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Xylosma crenatum* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Diverse *Acacia koa*-*Metrosideros polymorpha* montane mesic or wet forest, or *Metrosideros polymorpha*-*Dicranopteris linearis* montane wet forest, and containing one or more of the following associated native plant species: *Athyrium sandwicensis*, *Cheirodendron* spp., *Claoxylon sandwicense*, *Coprosma* spp., *Cyanea* spp., *Diplazium sandwichianum*, *Dubautia knudsenii*, *Hedyotis* spp., *Ilex anomala*, *Lobelia yuccoides*, *Myrsine* spp., *Nestegis sandwicensis*, *Perrottetia sandwicensis*, *Pleomele aurea*, *Poa sandwicensis*, *Pouteria sandwicensis*, *Psychotria* spp., *Scaevola procera*, *Streblus pendulinus*, *Tetraplasandra* spp., *Touchardia latifolia*, or *Zanthoxylum dipetalum*; and
- (ii) Elevations between 941 and 1,284 m (3,086 and 4,212 ft).

Family Gentianaceae: *Centaurium sebaeoides* (awiwi)

Kauai 11—*Centaurium sebaeoides*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Centaurium sebaeoides* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Volcanic or clay soils or on cliffs in arid coastal areas and containing one or more of the following native plant species: *Artemisia* spp., *Bidens* spp., *Chamaesyce celastroides*, *Cyperus phleoides*, *Dodonaea viscosa*, *Fimbristylis cymosa*, *Heteropogon contortus*, *Jacquemontia ovalifolia*, *Lipochaeta* spp., *Lycium sandwicense*, *Lysimachia mauritiana*, *Melanthera integrifolia*, *Panicum fauriei*, *Panicum torridum*, *Scaevola sericea*, *Sida fallax*, or *Wikstroemia uva-ursi*; and
- (ii) Elevations between 0 and 147 m (0 and 483 ft).

Family Gesneriaceae: *Cyrtandra cyaneoides* (mapele)

Kauai 4—*Cyrtandra cyaneoides*—a, Kauai 11—*Cyrtandra cyaneoides*—b, and Kauai 11—*Cyrtandra cyaneoides*—c, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyrtandra cyaneoides* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Talus rubble on steep slopes or cliffs with water seeps running below, near streams or waterfalls in lowland or montane wet forest or shrubland dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha*, *Cheirodendron* spp., and

Dicranopteris linearis and containing one or more of the following native species: *Bidens* spp., *Boehmeria grandis*, *Coprosma* spp., *Cyanea* spp., *Cyrtandra kauaiensis*, *Cyrtandra limahuliensis*, *Cyrtandra longifolia*, *Diplazium sandwichianum*, *Freycinetia arborea*, *Gunnera kauaiensis*, *Hedyotis terminalis*, *Hedyotis tryblum*, *Machaerina* spp., *Melicope clusiifolia*, *Melicope puberula*, *Perrottetia sandwicensis*, *Pipturus* spp., *Psychotria* spp., *Pritchardia* spp., or *Stenogyne purpurea*; and

(ii) Elevations between 157 and 1,407 m (514 and 4,614 ft).

Family Gesneriaceae: *Cyrtandra limahuliensis* (haiwale)

Kauai 4—*Cyrtandra limahuliensis*—a, Kauai 4—*Cyrtandra limahuliensis*—b, Kauai 10—*Cyrtandra limahuliensis*—c, Kauai 11—*Cyrtandra limahuliensis*—d, and Kauai 11—*Cyrtandra limahuliensis*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Cyrtandra limahuliensis* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Stream banks in lowland wet forests containing one or more of the following native plant species: *Antidesma platyphyllum*, *Bidens* spp., *Boehmeria grandis*, *Charpentiera* spp., *Cibotium glaucum*, *Cyanea* spp., *Cyrtandra kealiae*, *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dubautia* spp., *Eugenia reinwardtiana*, *Gunnera kauaiensis*, *Hedyotis terminalis*, *Hibiscus waimeae*, *Metrosideros polymorpha*, *Perrottetia sandwicensis*, *Pisonia* spp., *Pipturus* spp., *Pritchardia* spp., *Psychotria* spp., or *Touchardia latifolia*; and

(ii) Elevations between 208 and 1,591 m (681 and 5,217 ft).

Family Lamiaceae: *Phyllostegia knudsenii* (NCN)

Kauai 11—*Phyllostegia knudsenii*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Phyllostegia knudsenii* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Metrosideros polymorpha* lowland mesic or wet forest containing one or more of the following associated native plant species: *Bobea timonioides*, *Claoxylon sandwicense*, *Cryptocarya mannii*, *Cyrtandra kauaiensis*, *Cyrtandra paludosa*, *Diospyros sandwicensis*, *Elaeocarpus bifidus*, *Ilex*

anomala, *Myrsine linearifolia*, *Perrottetia sandwicensis*, *Pittosporum kauaiense*, *Pouteria sandwicensis*, *Pritchardia minor*, *Selaginella arbuscula*, *Tetraplasandra oahuensis*, or *Zanthoxylum dipetalum*; and

(ii) Elevations between 401 and 1,059 m (1,315 and 3,475 ft).

Family Lamiaceae: *Phyllostegia waimeae* (no common name)

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

(i) *Acacia koa*-*Metrosideros polymorpha* dominated wet or mixed mesic forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominants and containing one or more of the following associated native plant species: *Broussaisia arguta*, *Claoxylon sandwicense*, *Diplazium sandwichianum*, *Dubautia knudsenii*, *Elaphoglossum* spp., *Gunnera kauaiensis*, *Hedyotis* spp., *Myrsine lanaiensis*, *Pleomele aurea*, *Psychotria* spp., *Sadleria* spp., *Scaevola procera*, *Syzygium sandwicensis*, or *Vaccinium* spp.; and

(ii) Elevations between 655 and 1,224 m (2,149 and 4,016 ft).

Family Lamiaceae: *Phyllostegia wawrana* (no common name)

Kauai 4—*Phyllostegia wawrana*—a, Kauai 11—*Phyllostegia wawrana*—b, Kauai 11—*Phyllostegia wawrana*—c, and Kauai 11—*Phyllostegia wawrana*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Phyllostegia wawrana* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Acacia koa*-*Metrosideros polymorpha*-*Cheirodendron* mixed mesic forest containing one or more of the following associated native plant species: *Alectryon macrococcus*, *Asplenium polyodon*, *Athyrium microphyllum*, *Carex* spp., *Claoxylon sandwicense*, *Cyanea fissa*, *Delissea rivularis*, *Dianella sandwicensis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Doodia kunthiana*, *Dryopteris wallichiana*, *Dubautia knudsenii*, *Dubautia laevigata*, *Hedyotis tryblum*, *Machaerina angustifolia*, *Panicum nephelophilum*, *Peperomia* spp., *Perrottetia sandwicensis*, *Poa*

sandwicensis, *Pleomele aurea*, *Pteridium aquilinum* var. *decompositum*, *Sadleria pallida*, *Scaevola procera*, *Schiedea stellarioides*, *Syzygium sandwicensis*, *Touchardia latifolia*, or *Vaccinium dentatum*; and

(ii) Elevations between 400 and 1,284 m (1,311 and 4,212 ft).

Family Lamiaceae: *Stenogyne campanulata* (NCN)

Kauai 11—*Stenogyne campanulata*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Stenogyne campanulata* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rock faces of nearly vertical, north-facing cliffs in diverse lowland or montane mesic forest and containing one or more of the following associated native plant species: *Lepidium serra*, *Lobelia niihauensis*, *Lysimachia* spp., *Melicope pallida*, *Metrosideros polymorpha*, *Neraudia kauaiensis*, *Nototrichium divaricatum*, *Poa mannii*, *Remya montgomeryi*, or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 335 and 1,290 (1,100 and 4,232 ft).

Family Loganiaceae: *Labordia lydgatei* (kamakahala)

Kauai 4—*Labordia lydgatei*—a, Kauai 10—*Labordia lydgatei*—b, Kauai 11—*Labordia lydgatei*—c, Kauai 11—*Labordia lydgatei*—d, and Kauai 11—*Labordia lydgatei*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Labordia lydgatei* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streambanks in *Metrosideros polymorpha*-*Dicranopteris linearis* lowland wet forest containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Cyanea* spp., *Cyrtandra* spp., *Dubautia knudsenii*, *Hedyotis terminalis*, *Ilex anomala*, *Labordia hirtella*, *Psychotria* spp., or *Syzygium sandwicensis*; and

(ii) Elevations between 182 and 1,148 m (597 and 3,737 ft).

Family Loganiaceae: *Labordia tinifolia* var. *wahiawaensis* (kamakahala)

Kauai 10—*Labordia tinifolia* var. *wahiawaensis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Labordia tinifolia* var. *wahiawaensis* on

Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Streambanks in lowland wet forests dominated by *Metrosideros polymorpha* and containing one or more of the following associated species: *Antidesma platyphyllum*, *Athyrium microphyllum*, *Cheirodendron* spp., *Cyrtandra* spp., *Dicranopteris linearis*, *Hedyotis terminalis*, or *Psychotria* spp.; and
- (ii) Elevations between 458 and 1,006 m (1,502 and 3,301 ft).

Family Malvaceae: *Hibiscadelphus woodii* (hau kuahiwi)

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

- (i) Basalt talus or cliff walls in *Metrosideros polymorpha* montane mesic forest and containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens sandwicensis*, *Carex meyenii*, *Chamaesyce celastroides* var. *hanapeensis*, *Dubautia* spp., *Hedyotis* spp., *Lepidium serra*, *Lipochaeta* spp., *Lobelia niihauensis*, *Lysimachia glutinosa*, *Melicope pallida*, *Myrsine* spp., *Nototrichium* spp., *Panicum lineale*, *Poa mannii*, or *Stenogyne campanulata*; and
- (ii) Elevations between 219 and 1,197 m (717 and 3,926 ft).

Family Malvaceae: *Hibiscus clayi* (Clay's hibiscus)

Kauai 4—*Hibiscus clayi*—a, Kauai 4—*Hibiscus clayi*—b, Kauai 4—*Hibiscus clayi*—c, Kauai 4—*Hibiscus clayi*—d, Kauai 4—*Hibiscus clayi*—e, and Kauai 5—*Hibiscus clayi*—f, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Hibiscus clayi* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Slopes in *Acacia koa* or *Diospyros* spp.-*Pisonia* spp.-*Metrosideros polymorpha* lowland dry or mesic forest and containing one or more of the following associated native plant species: *Artemisia australis*, *Bidens* spp., *Cyanea hardyi*, *Gahnia* spp., *Hedyotis acuminata*, *Munroidendron racemosum*, *Pandanus tectorius*, *Panicum tenuifolium*, *Pleomele aurea*,

Pipturus spp., *Psychotria* spp., or *Psydrax odorata*; and

- (ii) Elevations between 121 and 765 m (396 and 2,509 ft).

Family Malvaceae: *Hibiscus waimeae* ssp. *hannerae* (kokio keokeo)

Kauai 11—*Hibiscus waimeae* ssp. *hannerae*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Hibiscus waimeae* ssp. *hannerae* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) *Metrosideros polymorpha*-*Dicranopteris linearis* or *Pisonia* spp.-*Charpentiera elliptica* lowland wet or mesic forest and containing one or more of the following associated native plant species: *Antidesma* spp., *Bidens* spp., *Bobea* spp., *Cibotium* spp., *Cyanea* spp., *Cyrtandra* spp., *Perrottetia sandwicensis*, *Pipturus* spp., *Psychotria* spp., *Sadleria* spp., or *Syzygium sandwicensis*; and
- (ii) Elevations between 174 and 1,155 m (570 and 3,787 ft).

Family Malvaceae: *Kokia kauaiensis* (kokio)

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

- (i) Diverse mesic forest containing one or more of the following associated native plant species: *Acacia koa*, *Alyxia oliviformis*, *Antidesma* spp., *Bobea* spp., *Chamaesyce celastroides*, *Claoxylon sandwicense*, *Dicranopteris linearis*, *Diellia pallida*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Flueggea neowawraea*, *Hedyotis* spp., *Hibiscus* spp., *Isodendron laurifolium*, *Lipochaeta fauriei*, *Melicope* spp., *Metrosideros polymorpha*, *Nestegis sandwicensis*, *Nototrichium* spp., *Pisonia* spp., *Pleomele aurea*, *Pouteria sandwicensis*, *Psydrax odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Santalum freycinetianum* var. *pyrularium*, *Streblus pendulinus*, *Syzygium sandwicensis*, *Tetraplasandra* spp., or *Xylosma* spp.; and

- (ii) Elevations between 300 and 1,049 m (984 and 3,441 ft).

Family Myrsinaceae: *Myrsine linearifolia* (kolea)

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

- (i) Diverse mesic or wet lowland or montane *Metrosideros polymorpha* forest with *Cheirodendron* spp. or *Dicranopteris linearis* as co-dominant species, and containing one or more of the following associated native plant species: *Bobea brevipes*, *Cryptocarya mannii*, *Dubautia* spp., *Eurya sandwicensis*, *Freycinetia arborea*, *Hedyotis terminalis*, *Lysimachia glutinosa*, *Machaerina angustifolia*, *Melicope* spp., *Myrsine* spp., *Nothocestrum* spp., *Psychotria* spp., *Sadleria pallida*, or *Syzygium sandwicensis*; and
- (ii) Elevations between 129 and 1,345 m (424 and 4,411 ft).

Family Orchidaceae: *Platanthera holochila* (NCN)

Kauai 11—*Platanthera holochila*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Platanthera holochila* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

- (i) Montane *Metrosideros polymorpha*—*Dicranopteris linearis* wet forest or *M. polymorpha* mixed bog and containing one or more of the following associated native plant species: *Carex montis-eeka*, *Cibotium* spp., *Clermontia fauriei*, *Coprosma elliptica*, *Dichanthelium* spp., grammitid ferns (Grammitidaceae), *Leptocophylla tameiameiae*, *Lobelia kauaensis*, *Machaerina angustifolia*, *Myrsine denticulata*, *Oreobolus furcatus*, *Rhynchospora* spp., *Vaccinium* spp., or *Viola kauaensis*; and
- (ii) Elevations between 861 and 1,453 m (2,825 and 4,766 ft).

Family Plantaginaceae: *Plantago princeps* (laukahi kuahiwi)

Kauai 10—*Plantago princeps*—a, Kauai 11—*Plantago princeps*—b, Kauai 11—*Plantago princeps*—c, and Kauai 11—*Plantago princeps*—d, identified in

the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Plantago princeps* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Windswept areas near waterfalls in *Metrosideros polymorpha*-*Cheirodendron* montane wet forest with riparian vegetation or *Metrosideros polymorpha* lowland to montane transitional wet forest on cliffs and ridges, growing on basalt rocky outcrops, and containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Bidens forbesii*, *Bidens sandwicensis*, *Bobea elatior*, *Boehmeria grandis*, *Carex meyenii*, *Carex wahuensis*, *Charpentiera elliptica*, *Cyrtandra* spp., *Diplazium sandwichianum*, *Freycinetia arborea*, *Gunnera kauaiensis*, *Hedyotis* spp., *Huperzia* spp., *Isachne pallens*, *Lipochaeta connata*, *Lysimachia glutinosa*, *Lysimachia kalalauensis*, *Metacharina angustifolia*, *Melicope* spp., *Myrsine linearifolia*, *Perrottetia sandwicensis*, *Pilea peploides*, *Pipturus* spp., *Poa mannii*, *Sadleria cyatheoides*, *Tetraplasandra* spp., or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 434 and 1,563 m (1,424 and 5,128 ft).

Family Poaceae: *Ischaemum byrone* (Hilo ischaemum)

Kauai 1—*Ischaemum byrone*—a, Kauai 2—*Ischaemum byrone*—b, Kauai 3—*Ischaemum byrone*—c, and Kauai 11—*Ischaemum byrone*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Ischaemum byrone* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Coastal shrubland near the ocean among rocks and seepy cliffs and containing one or more of the following associated native plant species: *Bidens* spp., *Chamaesyce celastroides*, *Fimbristylis cymosa*, *Lipochaeta succulenta*, *Lysimachia mauritiana*, or *Scaevola sericea*; and

(ii) Elevations between 0 and 159 m (0 and 523 ft).

Family Poaceae: *Panicum niihauense* (lau ehū)

Kauai 14—*Panicum niihauense*—a, Kauai 15—*Panicum niihauense*—b, Kauai 16—*Panicum niihauense*—c, and Kauai 17—*Panicum niihauense*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Panicum*

niihauense on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Sand dunes in coastal shrubland and containing one or more of the following associated native plant species: *Cassytha filiformis*, *Chamaesyce celastroides*, *Dodonaea viscosa*, *Nama sandwicensis*, *Ophioglossum pendulum* ssp. *falcatum*, *Scaevola sericea*, *Sida fallax*, *Sporobolus virginicus*, or *Vitex rotundifolia*; and

(ii) Elevations between 0 and 29 m (0 and 95 ft).

Family Poaceae: *Poa mannii* (Mann's bluegrass)

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

(i) Cliffs or rock faces in lowland or montane mesic *Metrosideros polymorpha* or *Acacia koa*-*Metrosideros polymorpha* forest and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Artemisia australis*, *Bidens cosmoides*, *Bidens sandwicensis*, *Carex meyenii*, *Carex wahuensis*, *Chamaesyce celastroides* var. *hanapeensis*, *Cyperus phleoides*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Eragrostis variabilis*, *Hedyotis terminalis*, *Lobelia niihauensis*, *Lobelia yuccoides*, *Luzula hawaiiensis*, *Melicope anisata*, *Melicope barbiger*, *Melicope pallida*, *Nototrichium* spp., *Panicum lineale*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Schiedea* spp., or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 327 and 1,222 m (1,072 and 4,009 ft).

Family Poaceae: *Poa sandwicensis* (Hawaiian bluegrass)

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

(i) Wet, shaded, gentle to steep slopes, ridges, and rock ledges of stream banks in semi-open to closed, wet, diverse *Acacia koa*-*Metrosideros polymorpha* montane forest and containing one or more of the following associated native species: *Alyxia oliviformis*, *Bidens sandwicensis*, *Cheirodendron* spp., *Claoxylon sandwicense*, *Coprosma* spp., *Dianella sandwicensis*, *Dicranopteris linearis*, *Dodonaea viscosa*, *Dubautia* spp., *Hedyotis* spp., *Melicope* spp., *Peperomia* spp., *Psychotria* spp., *Scaevola procera*, *Schiedea stellarioides*, or *Syzygium sandwicensis*; and

(ii) Elevations between 473 and 1,270 m (1,553 and 4,165 ft).

Family Poaceae: *Poa siphonoglossa* (NCN)

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

(i) Shady banks on steep slopes in mesic *Metrosideros polymorpha*-*Acacia koa* forests and containing one or more of the following associated native plant species: *Alphitonia ponderosa*, *Alyxia oliviformis*, *Bobea brevipes*, *Carex meyenii*, *Carex wahuensis*, *Coprosma waimeae*, *Dianella sandwicensis*, *Dodonaea viscosa*, *Dubautia* spp., *Hedyotis* spp., *Leptecophylla tameiameia*, *Lobelia yuccoides*, *Melicope* spp., *Microlepia strigosa*, *Myrsine* spp., *Panicum nephelophilum*, *Poa sandwicensis*, *Psychotria* spp., *Scaevola procera*, *Tetraplasandra kawaiensis*, *Vaccinium* spp., *Wilkesia gymnoxiphium*, *Xylosma* spp., or *Zanthoxylum dipetalum*; and

(ii) Elevations between 480 and 1,296 m (1,573 and 4,251 ft).

Family Primulaceae: *Lysimachia filifolia* (no common name)

Kauai 10—*Lysimachia filifolia*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Lysimachia filifolia* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Mossy banks at the base of cliff faces within the spray zone of waterfalls or along streams in lowland wet forests and containing one or more of the following associated native plant species: *Antidesma platyphyllum*,

Bidens valida, *Bobea elatior*, *Chamaesyce remyi* var. *kauaiensis*, *Cyanea asarifolia*, *Dubautia plantaginea* ssp. *magnifolia*, *Eragrostis variabilis*, *Machaerina angustifolia*, *Melicope* spp., *Metrosideros polymorpha*, or *Panicum lineale*; and

(ii) Elevations between 454 and 1,308 m (1,490 and 4,290 ft).

Family Rhamnaceae: *Gouania meyenii* (NCN)

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

(i) Rocky ledges, cliff faces, and ridge tops in dry shrubland or *Metrosideros polymorpha* lowland diverse mesic forest and containing one or more of the following native plant species: *Bidens* spp., *Carex meyenii*, *Chamaesyce* spp., *Dodonaea viscosa*, *Diospyros* spp., *Eragrostis variabilis*, *Euphorbia haelealeana*, *Hedyotis* spp., *Hibiscadelphus* spp., *Lysimachia* spp., *Melicope pallida*, *Neraudia kauaiensis*, *Nestegis sandwicensis*, *Nototrichium divaricatum*, *Panicum lineale*, *Poa mannii*, *Psychotria* spp., *Senna gaudichaudii*, or *Wilkesia gymnoxiphium*; and

(ii) Elevations between 375 and 1,179 m (1,231 and 3,867 ft).

Family Rubiaceae: *Hedyotis cookiana* (awiiwi)

Kauai 11—*Hedyotis cookiana*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Hedyotis cookiana* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Streambeds or steep cliffs close to water sources in relict *Metrosideros polymorpha* lowland mesic and lowland wet forest communities containing one or more of the following associated native plant species: *Boehmeria grandis*, *Chamaesyce celastroides* var. *hanapeensis*, *Hibiscus kokio* ssp. *saintjohnianus*, *Machaerina angustifolia*, *Nototrichium sandwicense*, *Pipturus kauaiensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psydrax odorata*, or *Rauvolfia sandwicensis*; and

(ii) Elevations between 120 and 553 m (392 and 1,814 ft).

Family Rubiaceae: *Hedyotis st. johnii* (Na Pali beach hedyotis)

Kauai 11—*Hedyotis st. johnii*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Hedyotis st. johnii* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Crevices of north-facing, near-vertical coastal cliff faces within the spray zone in sparse dry coastal shrubland and containing one or more of the following native plant species: *Artemisia australis*, *Bidens* spp., *Capparis sandwichiana*, *Chamaesyce celastroides*, *Eragrostis variabilis*, *Heteropogon contortus*, *Lipochaeta connata*, *Lycium sandwicense*, *Myoporum sandwicense*, *Nototrichium sandwicense*, or *Schiedea apokremnos*; and

(ii) Elevations between 0 and 187 m (0 and 613 ft).

Family Rutaceae: *Melicope haupuensis* (alani)

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

(i) Moist talus slopes in *Metrosideros polymorpha*-dominated lowland mesic forests or *Metrosideros polymorpha*-*Acacia koa* montane mesic forest and containing one or more of the following associated native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Bobea brevipes*, *Cheirodendron trigynum*, *Claoxylon sandwicense*, *Cryptocarya mannii*, *Dianella sandwicensis*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Melicope anisata*, *Melicope barbigera*, *Melicope ovata*, *Pleomele aurea*, *Pouteria sandwicensis*, *Pritchardia minor*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Tetraplasandra waimeae*, or *Zanthoxylum dipetalum*; and

(ii) Elevations between 125 and 1,249 m (410 and 4,097 ft).

Family Rutaceae: *Melicope knudsenii* (alani)

Kauai 11—*Melicope knudsenii*—a, and Kauai 11—*Melicope knudsenii*—b, identified in the legal descriptions in

paragraph (a)(1) of this section, constitute critical habitat for *Melicope knudsenii* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Forested flats with brown granular soil in lowland dry to montane mesic forests and containing one or more of the following associated native plant species: *Alectryon macrococcus*, *Antidesma platyphylla*, *Bobea brevipes*, *Carex meyenii*, *Cryptocarya mannii*, *Diospyros sandwicensis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Euphorbia haelealeana*, *Gahnia becheyi*, *Hedyotis* spp., *Hibiscus waimeae*, *Isodendron laurifolium*, *Leptecophylla tameiameia*, *Melicope* spp., *Metrosideros polymorpha*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Panicum nephelophilum*, *Peucedanum sandwicense*, *Pisonia sandwicensis*, *Pittosporum kauaiensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Pritchardia minor*, *Psychotria hobdyi*, *Psydrax odorata*, *Rauvolfia sandwicensis*, *Remya kauaiensis*, *Scaevola procera*, or *Xylosma hawaiiense*; and

(ii) Elevations between 346 and 1,065 m (1,135 and 3,492 ft).

Family Rutaceae: *Melicope pallida* (alani)

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

(i) Steep rock faces in lowland to montane mesic to wet forests or shrubland and containing one or more of the following associated native plant species: *Alyxia oliviformis*, *Artemisia australis*, *Boehmeria grandis*, *Carex meyenii*, *Chamaesyce celastroides* var. *hanapeensis*, *Coprosma kauensis*, *Coprosma waimeae*, *Dodonaea viscosa*, *Dryopteris* spp., *Hedyotis terminalis*, *Lepidium serra*, *Melicope* spp., *Metrosideros polymorpha*, *Nototrichium* spp., *Pipturus albidus*, *Pleomele aurea*, *Poa mannii*, *Psychotria mariniana*, *Pritchardia minor*, *Sapindus oahuensis*, *Schiedea membranacea*, *Tetraplasandra waialealae*, or *Xylosma hawaiiense*; and

(ii) Elevations between 418 and 1,081 m (1,371 and 3,546 ft).

Family Rutaceae: *Zanthoxylum hawaiiense* (ae)

Kauai 11—*Zanthoxylum hawaiiense*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Zanthoxylum hawaiiense* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Lowland dry or mesic forests dominated by *Metrosideros polymorpha* or *Diospyros sandwicensis*, and containing one or more of the following associated plant species: *Alectryon macrococcus*, *Antidesma platyphyllum*, *Charpentiera elliptica*, *Dodonaea viscosa*, *Melicope* spp., *Myrsine lanaiensis*, *Pisonia* spp., *Pleomele aurea*, *Streblus pendulinus*, or *Zanthoxylum dipetalum*; and

(ii) Elevations between 332 and 1,151 m (1,089 and 3,774 ft).

Family Santalaceae: *Exocarpos luteolus* (heau)

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

(i) Wet places bordering swamps or open bogs or on open or dry ridges in lowland or montane mesic *Acacia koa*-*Metrosideros polymorpha*-dominated forest communities with *Dicranopteris linearis* and containing one or more of the following native plant species: *Bobea brevipes*, *Cheirodendron trigynum*, *Claoxylon sandwicense*, *Dianella sandwicensis*, *Dodonaea viscosa*, *Dubautia laevigata*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Leptecophylla tameiameia*, *Melicope haupuensis*, *Peperomia* spp., *Pleomele aurea*, *Poa sandwicensis*, *Pouteria sandwicensis*, *Psychotria greenwelliae*, *Psychotria mariniana*, *Santalum freycinetianum*, or *Schiedea stellarioides*; and

(ii) Elevations between 416 and 1,453 m (1,364 and 4,766 ft).

Family Sapindaceae: *Alectryon macrococcus* (mahoe)

Kauai 11—*Alectryon macrococcus*—a, and Kauai 11—*Alectryon macrococcus*—b, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for

Alectryon macrococcus on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Dry slopes or gulches in *Diospyros* spp.-*Metrosideros polymorpha* lowland mesic forest, *Metrosideros polymorpha* mixed mesic forest, or *Diospyros* spp. mixed mesic forest, and containing one or more of the following native plant species: *Acacia koa*, *Alyxia oliviformis*, *Antidesma* spp., *Bobea timonioides*, *Caesalpinia kavaianse*, *Canavalia* spp., *Carex meyenii*, *Carex wahuensis*, *Doodia kunthiana*, *Hibiscus waimeae*, *Kokia kauaiensis*, *Melicope knudsenii*, *Microlepis strigosa*, *Munroidendron racemosum*, *Myrsine lanaiensis*, *Nesoluma polynesianum*, *Nestegis sandwicensis*, *Pisonia* spp., *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria* spp., *Psychotria odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Streblus pendulinus*, *Tetraplasandra* spp., *Xylosma* spp., or *Zanthoxylum* spp.; and

(ii) Elevations between 343 and 954 m (1,126 and 3,129 ft).

Family Solanaceae: *Nothocestrum peltatum* (aiea)

Kauai 11—*Nothocestrum peltatum*—a, Kauai 11—*Nothocestrum peltatum*—b, Kauai 11—*Nothocestrum peltatum*—c, and Kauai 12—*Nothocestrum peltatum*—d, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Nothocestrum peltatum* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rich soil on steep slopes in mesic or wet forest dominated by *Acacia koa* or a mixture of *Acacia koa* and *Metrosideros polymorpha* and containing one or more of the following associated native plant species: *Alphitonia ponderosa*, *Antidesma* spp., *Bobea brevipes*, *Broussaisia arguta*, *Cheirodendron trigynum*, *Claoxylon sandwicense*, *Coprosma* spp., *Cryptocarya mannii*, *Dianella sandwicensis*, *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dodonaea viscosa*, *Elaeocarpus bifidus*, *Hedyotis terminalis*, *Ilex anomala*, *Melicope anisata*, *Melicope barbigera*, *Melicope haupuensis*, *Perrottetia sandwicensis*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria mariniana*, *Psychotria greenwelliae*, *Tetraplasandra kavaianse*, or *Xylosma* spp.; and

(ii) Elevations between 581 and 1,290 m (1,906 and 4,232 ft).

Family Solanaceae: *Solanum sandwicense* (aiakeakua, popolo)

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

(i) Under forest canopies in diverse lowland or montane *Acacia koa* or *Acacia koa*-*Metrosideros polymorpha* mesic or wet forests and containing one or more of the following associated plant species: *Alphitonia ponderosa*, *Athyrium sandwicensis*, *Bidens* spp., *Carex meyenii*, *Coprosma* spp., *Cryptocarya mannii*, *Dianella sandwicensis*, *Dicranopteris linearis*, *Dubautia* spp., *Hedyotis* spp., *Ilex anomala*, *Melicope* spp., *Poa* spp., *Pouteria sandwicensis*, *Psychotria* spp., *Syzygium sandwicensis*, or *Xylosma hawaiiense*; and

(ii) Elevations between 540 and 1,290 m (1,770 and 4,232 ft).

Family Violaceae: *Isodendron laurifolium* (aupaka)

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

(i) Diverse mesic forest dominated by *Metrosideros polymorpha*, *Acacia koa* or *Diospyros* spp. and containing one or more of the following associated native plant species: *Alphitonia ponderosa*, *Antidesma* spp., *Claoxylon sandwicense*, *Dodonaea viscosa*, *Dubautia* spp., *Elaeocarpus bifidus*, *Euphorbia haeleleana*, *Hedyotis terminalis*, *Kokia kauaiensis*, *Melicope anisata*, *Melicope barbigera*, *Melicope ovata*, *Melicope peduncularis*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Pisonia* spp., *Pittosporum glabrum*, *Pleomele aurea*, *Pouteria sandwicensis*, *Psychotria odorata*, *Streblus pendulinus*, or *Xylosma hawaiiense*; and

(ii) Elevations between 397 and 1,164 m (1,303 and 3,817 ft).

Family Violaceae: *Isodendron longifolium* (aupaka)

Kauai 7—*Isodendron longifolium*—a, Kauai 10—*Isodendron longifolium*—b, Kauai 11—*Isodendron longifolium*—c, Kauai 11—*Isodendron longifolium*—d,

and Kauai 11—*Isodendron longifolium*—e, identified in the legal descriptions in paragraph (a)(1) of this section, constitute critical habitat for *Isodendron longifolium* on Kauai.

Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Steep slopes, gulches, or streambanks and flats in undisturbed areas, in mesic or wet *Metrosideros polymorpha*-*Acacia koa* forests and containing one or more of the following native species: *Antidesma* spp., *Bidens* spp., *Bobea brevipes*, *Cheirodendron* spp., *Cibotium* spp., *Cyanea hardyi*, *Cyrtandra* spp., *Dicranopteris linearis*, *Diospyros* spp., *Eugenia reinwardtiana*, *Hedyotis* spp., *Ilex anomala*, *Melicope* spp., *Nestegis sandwicensis*, *Peperomia* spp., *Perrottetia sandwicensis*, *Pipturus* spp., *Pittosporum* spp., *Pritchardia* spp., *Psychotria* spp., *Psydrax odorata*, or *Syzygium sandwicensis*; and

(ii) Elevations between 127 and 1,295 m (418 and 4,246 ft).

Family Violaceae: *Viola helenae* (NCN)

Kauai 10—*Viola helenae*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Viola helenae* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Stream drainage banks or adjacent valley bottoms in light to moderate shade in *Metrosideros polymorpha*-*Dicranopteris linearis* lowland wet forest or *Metrosideros polymorpha*-*Cheirodendron* wet forest and containing one or more of the following native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Broussaisia arguta*, *Dicranopteris linearis*, *Diplazium sandwichianum*, *Dubautia* spp., *Freycinetia arborea*, *Hesperomannia lydgatei*, *Melicope* spp., or *Pritchardia* spp.; and

(ii) Elevations between 522 and 1,006 m (1,712 and 3,301 ft).

Family Violaceae: *Viola kauaiensis* var. *wahiawaensis* (nani waialeale)

Kauai 10—*Viola kauaiensis* var. *wahiawaensis*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Viola kauaiensis* var. *wahiawaensis* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) *Machaerina angustifolia*-*Rhynchospora rugosa* lowland bog or mixed wet shrubland and adjacent *Metrosideros polymorpha* wet forest and containing one or more of the following native plant species: *Antidesma platyphyllum* var. *hillebrandii*, *Bidens forbesii*, *Chamaesyce remyi*, *Chamaesyce sparsiflora*, *Coprosma* spp., *Cyanea fissa*, *Dicranopteris linearis*, *Diplopterygium pinnatum*, *Dubautia imbricata*, *Dubautia raillardii*, *Gahnia vitiensis*, *Leptecophylla tameiameia*, *Lobelia kauaensis*, *Machaerina angustifolia*, *Machaerina mariscoides*, *Melicope* spp., *Psychotria wawrae*, *Sadleria pallida*, *Scaevola gaudichaudii*, *Sphenomeris chinensis*, *Syzygium sandwicensis*, *Tetraplasandra oahuensis*, or *Vaccinium dentatum*; and

(ii) Elevations between 394 and 1,006 m (1,291 and 3,301 ft).

(2) Ferns and allies.

Family Aspleniaceae: *Diellia erecta* (no common name)

Kauai 11—*Diellia erecta*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Diellia erecta* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Brown granular soil with leaf litter and occasional terrestrial moss on north-facing slopes in deep shade on steep slopes or gulch bottoms in *Metrosideros polymorpha*-*Dicranopteris linearis* wet forest or *Metrosideros polymorpha* mixed mesic forest with *Acacia koa* and *Acacia koa* as co-dominants and containing one or more of the following native plant species: *Asplenium aethiopicum*, *Asplenium contiguum*, *Asplenium macraei*, *Coprosma* spp., *Dodonaea viscosa*, *Dryopteris fuscoides*, *Dryopteris unidentata*, *Hedyotis terminalis*, *Leptecophylla tameiameia*, *Melicope* spp., *Microlepia strigosa*, *Myrsine* spp., *Nestegis sandwicensis*, *Psychotria* spp., *Syzygium sandwicensis*, or *Wikstroemia* spp.; and

(ii) Elevations between 655 and 1,224 m (2,149 and 4,016 ft).

Family Aspleniaceae: *Diellia pallida* (no common name)

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

(i) Bare granular soil with dry to mesophytic leaf litter with a pH of 6.9 to 7.9 on steep talus slopes in lowland mesic forests and containing one or more of the following native plant species: *Acacia koa*, *Alectryon macrococcus*, *Alphitonia ponderosa*, *Alyxia oliviformis*, *Antidesma platyphyllum*, *Asplenium* spp., *Carex meyenii*, *Diospyros hillebrandii*, *Diospyros sandwicensis*, *Doodia kunthiana*, *Hedyotis knudsenii*, *Leptecophylla tameiameia*, *Metrosideros polymorpha*, *Microlepia strigosa*, *Myrsine lanaiensis*, *Nestegis sandwicensis*, *Psychotria mariniana*, *Psydrax odorata*, *Pteralyxia kauaiensis*, *Rauvolfia sandwicensis*, *Tetraplasandra kawaiensis*, *Wilkesia gymnoxiphium*, or *Zanthoxylum dipetalum*; and

(ii) Elevations between 445 and 1,028 m (1,461 and 3,371 ft).

Family Aspleniaceae: *Diplazium molokaiense* (NCN)

Kauai 11—*Diplazium molokaiense*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Diplazium molokaiense* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Brown soil with basalt outcrops near waterfalls in lowland or montane mesic *Metrosideros polymorpha*-*Acacia koa* forest; and

(ii) Elevations between 624 and 1,234 m (2,048 and 4,048 ft).

Family Aspleniaceae: *Ctenitis squamigera* (pauoa)

Kauai 11—*Ctenitis squamigera*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Ctenitis squamigera* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Rock faces in gulches in the understory of *Metrosideros polymorpha*-*Diospyros* spp. mesic forest and diverse mesic forest and containing one or more of the following native plant species: *Myrsine* spp., *Psychotria* spp., or *Xylosma* spp.; and

(ii) Elevations between 538 and 1,069 m (1,765 and 3,507 ft).

Family Grammitidaceae: *Adenophorus periens* (pendent kihi fern)

Kauai 4—*Adenophorus periens*—a, Kauai 10—*Adenophorus periens*—b, Kauai 11—*Adenophorus periens*—c, and Kauai 11—*Adenophorus periens*—d, identified in the legal descriptions in

paragraph (a)(1) of this section, constitute critical habitat for *Adenophorus periens* on Kauai. Within these units, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) On *Metrosideros polymorpha* trunks, in riparian banks of stream systems in well-developed, closed canopy that provides deep shade or high humidity in *Metrosideros polymorpha*-*Cibotium glaucum* lowland wet forests, open *Metrosideros polymorpha* montane wet forest, or *Metrosideros polymorpha*-*Dicranopteris linearis* lowland wet forest and containing one or more of the following native plant species: *Antidesma platyphyllum*, *Athyrium sandwichianum*, *Broussaisia arguta*, *Cheirodendron trigynum*, *Cyanea* spp.,

Cyrtandra spp., *Dicranopteris linearis*, *Freycinetia arborea*, *Hedyotis terminalis*, *Labordia hirtella*, *Machaerina angustifolia*, *Psychotria* spp., *Syzygium sandwicensis*, or *Tetraplasandra oahuensis*; and
(ii) Elevations between 169 and 1,345 m (553 and 4,411 ft).

Family Lycopodiaceae:

***Phlegmariurus nutans* (wawaeiole)**

Kauai 10—*Phlegmariurus nutans*—a, identified in the legal description in paragraph (a)(1) of this section, constitutes critical habitat for *Phlegmariurus nutans* on Kauai. Within this unit, the currently known primary constituent elements of critical habitat include, but are not limited to, the habitat components provided by:

(i) Tree trunks, usually on open ridges and slopes in *Metrosideros polymorpha*-

Dicranopteris linearis wet or mesic forests and containing one or more of the following associated native plant species: *Antidesma platyphyllum*, *Broussaisia arguta*, *Cheirodendron fauriei*, *Cibotium* spp., *Diplopterygium pinnatum*, *Hedyotis terminalis*, *Hibiscus kokio* ssp. *kokio*, *Melicope waialealae*, *Perrottetia sandwicensis*, *Psychotria hexandra*, *Psychotria mariniana*, *Psychotria wawrae*, *Scaevola gaudichaudii*, or *Syzygium sandwicensis*; and

(ii) Elevations between 615 and 1,591 m (2,016 and 5,217 ft).

Dated: January 30, 2003.

Craig Manson,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 03-2840 Filed 2-26-03; 8:45 am]

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Federal Register

**Thursday,
February 27, 2003**

Part III

Securities and Exchange Commission

17 CFR Part 242

**Regulation Analyst Certification; Final
Rule**

SECURITIES AND EXCHANGE COMMISSION

17 CFR PART 242

[Release Nos. 33-8193; 34-47384; File No. S7-30-02]

RIN 3235-A160

Regulation Analyst Certification

AGENCY: Securities and Exchange Commission.

ACTION: Final rule.

SUMMARY: The Securities and Exchange Commission ("Commission" "SEC" or "we") is adopting new Regulation Analyst Certification ("Regulation AC"). Regulation AC requires that brokers, dealers, and certain persons associated with a broker or dealer include in research reports certifications by the research analyst that the views expressed in the report accurately reflect his or her personal views, and disclose whether or not the analyst received compensation or other payments in connection with his or her specific recommendations or views. Broker-dealers would also be required to obtain periodic certifications by research analysts in connection with the analyst's public appearances. By requiring these certifications and disclosures, Regulation AC should promote the integrity of research reports and investor confidence in those reports.

EFFECTIVE DATE: April 14, 2003.

FOR FURTHER INFORMATION CONTACT: James Brigagliano, Thomas Eidt, or Racquel Russell in the Office of Risk Management and Control, Division of Market Regulation, at (202) 942-0772.

SUPPLEMENTARY INFORMATION: We are adopting new Regulation Analyst Certification ¹ under the Securities Act of 1933 ("Securities Act") and the Securities Exchange Act of 1934 ("Exchange Act").

I. Introduction and Summary of Regulation Analyst Certification

During 1999, the Commission and Congress began to closely examine research analysts' conflicts of interest. We were particularly concerned that many investors who rely on analysts' recommendations may not know, among other things, that favorable research coverage could be used to market the investment banking services provided by an analyst's firm, and that an analyst's compensation may be based significantly on generating investment banking business. Moreover, news

reports stated that some analysts had issued reports that did not reflect their true beliefs and communicated to institutional investors views that differed materially from those expressed in their research reports.² Regulation AC, together with other efforts, is intended to address these issues.³

On May 10, 2002, we approved rule changes filed by the NYSE and NASD governing analyst conflicts of interest.⁴ On December 31, 2002, we noticed for comment a second set of proposed rules filed by the NYSE and NASD to further address research analyst conflicts of interest.⁵ These self-regulatory organization rules are part of an ongoing process on our part and that of the NYSE and NASD to address conflicts of interest affecting the integrity and objectivity of research by securities firms. Regulation AC is intended to complement other rules governing conflicts of interest disclosure by research analysts, including NYSE Rule 472, NASD Rule 2711, and the anti-fraud provisions of the federal securities law.

On July 30, 2002, President Bush signed into law the Sarbanes-Oxley Act of 2002 ("SOA").⁶ Section 501 of the SOA requires that rules governing analyst conflicts be adopted within a year of enactment, including rules: limiting the supervision and compensatory evaluation of securities analysts; defining periods in which brokers or dealers engaged in a public offering of a security as underwriter or dealer may not publish research on such security; and requiring securities analysts and brokers or dealers to disclose specified conflicts of interest. The Commission voted to propose Regulation AC on July 24, 2002, before the passage of the SOA.⁷ In the

Proposing Release, the Commission noted that it would abide by the directives of the SOA as it continues to address analyst conflicts of interest issues, including with respect to the possible adoption of Regulation AC.

The Commission received twenty-one comment letters in response to the Proposing Release,⁸ which generally supported the proposed regulation. After considering the comments, we are adopting Regulation AC with modifications to the rule to reflect commenters' concerns and to clarify and limit certain provisions. We are also providing interpretive guidance requested by commenters.

A. Certifications in Connection With Research Reports

As adopted, Regulation Analyst Certification requires that brokers, dealers, and their associated persons that are "covered persons"⁹ that publish,¹⁰ circulate, or provide research reports include in those research reports:

(A) A statement by the research analyst (or analysts) certifying that the views expressed in the research report accurately reflect such research analyst's personal views about the subject securities and issuers; and

(B) A statement by the research analyst (or analysts) certifying either:

(1) That no part of his or her compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in the research report; or

⁸ See Letters to Jonathan G. Katz, Secretary, Commission, from: The Alliance in Support of Independent Research, dated September 20, 2002 ("Alliance"); Association for Investment Management and Research, dated September 30, 2002 ("AIMR"); The Bond Market Association, dated September 23, 2002 ("TBMA"); Charles Schwab & Co., Inc., dated September 23, 2002 ("Schwab"); Cleary, Gottlieb, Steen & Hamilton, dated September 12, 2002 ("Cleary"); Credit Suisse First Boston, dated September 23, 2002 ("CSFB"); David Norr Inc., dated August 16, 2002 ("David Norr"); Goldman Sachs, dated September 23, 2002 ("Goldman"); Investment Company Institute, dated September 23, 2002 ("ICI"); Investment Counsel Association of America, letters dated September 23, 2002 and January 13, 2003 ("ICAA"); Investorside Research Association, dated September 20, 2002 ("Investorside"); Karr Tuttle Campbell, dated September 27, 2002 ("Karr Tuttle"); Rupert Kenna, dated October 10, 2002; Merrill Lynch, dated September 18, 2002 ("Merrill"); North American Securities Administrators Association, Inc., dated September 23, 2002 ("NASAA"); Salomon Smith Barney, dated September 27, 2002 ("SSB"); Securities Industry Association, dated September 23, 2002 ("SIA"); Sullivan & Cromwell, dated September 23, 2002 ("Sullivan"); Thomson Financial, dated September 23, 2002; and Weiss Ratings, Inc., dated September 10, 2002 ("Weiss").

⁹ "Covered person" is defined in Rule 500 of Regulation AC, and is discussed in detail below at II.A.2.

¹⁰ Publish means to disseminate by any means, including through any third party.

² See, e.g., Gretchen Morgenson, "NASD Sues Star Analyst Over Research," *The New York Times* at A1 (September 24, 2002).

³ On December 20, 2002, the Commission, New York Attorney General, North American Securities Administrators Association, New York Stock Exchange ("NYSE"), National Association of Securities Dealers ("NASD"), and state securities regulators announced an agreement in principle that, if approved by the Commission, would result in a settlement with major investment firms to resolve issues of conflicts of interest relating to the production of research reports. Securities and Exchange Commission Press Release No. 2002-179 (December 20, 2002).

⁴ Securities Exchange Act Release No. 45908 (May 10, 2002), 67 FR 34968 (May 16, 2002).

⁵ Securities Exchange Act Release No. 47110 (December 31, 2002), 68 FR 826 (January 7, 2003). The Commission will consider action on these proposed rules after the close of the comment period, which is March 10, 2003.

⁶ Pub. L. 107-204 (2002).

⁷ Securities Exchange Act Release No. 46301 (August 2, 2002), 67 FR 51510 (August 8, 2002) ("Proposing Release").

¹ 17 CFR 242.500 through 505.

(2) That part or all of his or her compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in the research report. If the analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in the research report, the statement must include the source, amount, and purpose of such compensation, and further disclose that it may influence the recommendation in the research report.

All certifications must be clear and prominent.¹¹ If the analyst is unable to certify that the report accurately reflects his or her personal views, distribution of the report by the broker-dealer or covered person would be in violation of Regulation AC. Similarly, if the report does not contain one of the two alternative compensation certifications, distribution of the report by the broker-dealer or covered person would be in violation of Regulation AC.¹²

Research reports generally contain an analyst's summary rating of the security based on his or her particular firm's rating system, as well as an analysis. The summary rating or recommendation is often one word (e.g., buy, sell, overweight), while the analysis may be very detailed and lengthy. Generally, the analysis explains the basis for the rating and provides extensive supplementary information, which, in some instances, significantly qualifies or conditions the stated rating. The Regulation AC certification that the views in the report accurately reflect the analyst's personal views applies to the analysis as reflected in the rating as well as the substance of a research report.

A rating is designed to be a severable summary statement of the analysis in the report. In situations where the analysis significantly qualifies or conditions the stated rating, a communication by the firm or the analyst of only the rating to an investor as representing the analyst's views

about the security could be misleading.¹³ Further, where the analysis contradicts the stated rating, an analyst and the firm could be in violation of the anti-fraud provisions of the federal securities laws. A rating that contradicts the analysis could also render false the analyst's certification, because the analyst's certification reflects both the analysis as well as the rating.

B. Certifications in Connection With Public Appearances

Under Regulation AC, broker-dealers must make and keep records related to public appearances by research analysts. Specifically, if a broker-dealer publishes, circulates, or provides a research report prepared by a research analyst employed by the broker-dealer or a covered person, the broker-dealer is required to make a record within thirty days after each calendar quarter in which the research analyst made any public appearance, that includes:

- A statement by the research analyst attesting that the views expressed by the research analyst in all public appearances during the calendar quarter accurately reflected the research analyst's personal views at that time about any and all of the subject securities or issuers; and
- A written statement by the research analyst certifying that no part of such research analyst's compensation was, is, or will be directly or indirectly related to any specific recommendations or views expressed in any such public appearance.

In cases where the broker-dealer does not obtain a statement by the research analyst in connection with public appearances as described above, the broker-dealer must promptly notify its examining authority, designated pursuant to section 17(d) of the Exchange Act and Rule 17d-2 thereunder, that the analyst did not provide certification in connection with public appearances. In addition, for 120 days following such notification, the broker-dealer must disclose in any research report it distributes authored by that analyst that the analyst did not provide certification specified in Rule 502(a) of Regulation AC. Further, broker-dealers must keep and maintain these records pursuant to Rule 17a-4.

II. Response to Comments on Regulation Analyst Certification

In the Proposing Release, the Commission sought comment on specific aspects of the proposed

regulation, as well as general comments. We received twenty-one comment letters in response to the release. Many commenters expressed support for Regulation AC, although a number also expressed concerns regarding one or more aspects of the proposal, and some suggested alternatives for addressing particular issues. We are adopting Regulation AC with modifications from the proposal that clarify or limit provisions or reflect commenters' views.

A. Defined Terms

We requested comment on whether the proposed definitions of "research report," "research analyst," or "public appearance" should be broader or narrower than proposed. Eleven commenters discussed the scope of the definitions proposed in Regulation AC and noted differences in certain respects compared to definitions contained in the self-regulatory organization ("SRO") rules and the SOA.¹⁴ Generally, commenters believed that compliance efforts would be significantly enhanced by the use of consistent terminology throughout the rules wherever possible.¹⁵ The Commission has conformed the terminology and definitions of Regulation AC to the SRO rules and the SOA wherever appropriate.

1. Definition of "Research Analyst"

Commenters noted that Regulation AC defines "research analyst" more broadly than do the current SRO analyst rules and the SOA. Specifically, the Regulation AC definition as proposed covers "any natural person," rather than only "associated persons of a member" (in the case of the SRO rules) or "associated persons of a registered broker or dealer" (in the case of the SOA). Commenters argued that Regulation AC applies to any person, including employees of investment advisers, foreign entities, or any other third party that prepares a research report that is circulated by a broker-dealer or associated persons.¹⁶

In this regard, Regulation AC is designed to be broader than the SRO rules and the SOA in that it applies to brokers, dealers, and certain associated persons,¹⁷ which may also include investment advisers and others that prepare research reports. We believe that the broad scope of Regulation AC

¹¹ Regulation AC, 17 CFR 242.501(a). The Commission expects that the certifications will be included on the front page of the research report, or that the front page will specify the page or pages on which each certification is found. Disclosures and references to disclosures must be clear and prominent. Electronic research reports may utilize hyperlinks to this disclosure, provided that the first screen that the investor sees clearly and prominently labels the hyperlinks to the required disclosures. When hyperlinks are not possible (such as a report in PDF format), firms should follow the requirements for paper reports. See NYSE Information Memo No. 02-26 (June 26, 2002), and NASD Notice to Members 02-39 (July 2002).

¹² Communications relating to the certifications should be treated as being within the purview of Exchange Act Rule 17a-4(b)(4). See Exchange Act Rule 17a-4(b)(4), 17 CFR 240.17a-4(b)(4).

¹³ Cf. *Hanly v. SEC*, 415 F.2d 589, 597 (2d Cir. 1969).

¹⁴ See Alliance, AIMR, Cleary, Goldman, ICI, ICAA, SIA, SSB, Schwab, Sullivan, and Thomson Financial.

¹⁵ See, e.g., Cleary and SIA.

¹⁶ See, e.g., Cleary, ICAA, SSB, Sullivan, and Thomson Financial.

¹⁷ See Rule 500 of Regulation AC (definition of "covered person").

is warranted because Regulation AC imposes core standards of integrity that should pertain to all research distributed by broker-dealers and covered persons. On the other hand, we note that Regulation AC is narrower than the SRO rules and the SOA in that its certification requirements apply only to the research analyst or analysts primarily responsible for the content of a research report; junior analysts are not required to certify.¹⁸ This distinction is reasonable because the core integrity standards promoted by Regulation AC are achieved where the analysts primarily responsible for the views expressed in the research report are required to certify. In comparison, the coverage of junior analysts by the SRO rules is appropriate because the concerns those provisions seek to address (for example, trading ahead of research reports) exist with respect to all analysts associated with a member firm and those persons who report to analysts.

2. Definition of "Covered Person"

In response to comments, we have added the definition of "covered person" to narrow the scope of persons to which Regulation AC applies. Covered person means persons associated with a broker or dealer,¹⁹ but not including an associated person that has no officers or employees in common with the broker or dealer and where the broker or dealer maintains and enforces written policies and procedures reasonably designed to prevent the broker or dealer or any of its controlling persons, officers, or employees from influencing the activities of research analysts and the content of research reports prepared by the associated person. In adopting Regulation AC, we have sought to focus the rule on research that appears to be most susceptible to pressures that might compromise its integrity, for example pressures to generate investment banking business.

We believe that it is unnecessary to apply Regulation AC to research published, circulated, or provided by associated persons who have a sufficient

level of independence from the broker or dealer with which they are associated. Associated persons who meet the independence criteria in this definition should have a sufficient level of independence so that pressures from the broker-dealer with which they are associated should not compromise their research. In order to avoid the possibility that an associated person might incorrectly believe that the broker-dealer had policies and procedures to prevent influencing the research of the associated person and, therefore, fail to certify when certification was required, we have added a provision to Regulation AC (Rule 504) that requires a broker or dealer to notify its associated persons that it issues research reports as to whether the broker or dealer maintains and enforces such written policies and procedures and whether the associated person has any officers (or persons performing similar functions) or employees in common with the broker or dealer who can influence the activities of research analysts or the content of research reports and, if so, the identity of those persons.²⁰ We also would not expect that such policies and procedures would interfere with other communications between the associated person and the broker-dealer made in the ordinary course of business and not in violation of any other provision of the securities laws.

We have also excluded from the rule investment advisers that are prohibited under section 203A of the Investment Advisers Act of 1940²¹ ("Advisers Act") from registering with the Commission as investment advisers and not otherwise registered or required to be registered as a broker-dealer. Section 203A was added to the Advisers Act by the National Securities Markets Improvement Act of 1996 ("NSMIA"), which amended the Advisers Act to divide responsibility for regulating investment advisers between the Commission and state securities authorities.²² Section 203A of the

Advisers Act effects this division by generally prohibiting investment advisers from registering with us unless they have at least \$25 million of assets under management or advise a registered investment company.²³ Advisers prohibited from registering with us are subject to the regulation of state securities authorities, but also continue to be subject to the federal securities laws, including the anti-fraud provisions of the federal securities laws.

We also make clear that no provision of the regulation shall apply to the publisher of any newspaper, news magazine, or business or financial publication of general and regular circulation that is not registered or required to be registered with the Commission as a broker or dealer or investment adviser. Regulation AC was never intended to govern media coverage of issuers.²⁴

3. Definition of "Research Report"

The Commission requested comment on whether the definition of "research report" should be broader or narrower than proposed. Commenters discussed several aspects of the proposed definition, including whether it should cover debt securities, whether it should include electronic communications, and guidance concerning what will and will not be considered a research report.

a. Application to Debt Securities

We specifically requested comment on whether the proposed definition of "research report" should be limited to cover only equity securities. Five commenters discussed the application of Regulation AC to fixed income and all supported the application to debt to some extent.²⁵

The Commission has determined that applying the requirements of Regulation AC to debt securities as well as equity securities would benefit investors because it would provide to debt investors the same benefits as equity

Advisers Act to make them inapplicable to state-registered advisers because "application of these provisions to state-registered advisers is more appropriately a matter for state law." Investment Advisers Act Release No. 1633 (May 15, 1997), 62 FR 28112 (May 22, 1997).

²³ Pursuant to authority under Advisers Act section 203(a)(1)(A) the Commission adopted Advisers Act Rule 203A-1, which made SEC registration optional for certain investment advisers that have between \$25 and \$30 million of assets under management. See Advisers Act Rule 203A-1(a)(1), 17 CFR 275.203A-1(a)(1).

²⁴ It is possible that a broker or dealer or covered person could provide a research report to a media entity intending that it be published. In that case, the report must be certified by the research analyst.

²⁵ See CSFB, Goldman, NASAA, SSB, and TBMA. We note that the SOA and the SRO rules apply only to equity securities.

¹⁸ The proposed definition of "research analyst" referred to any natural person "principally" responsible for research reports; the adopted definition refers to any natural person "primarily" responsible. This modification clarifies that, whether or not a natural person is considered to be principally responsible for research reports as a job description, any natural person who is primarily responsible for the preparation of the content of any research report is a research analyst for the purposes of Regulation AC unless otherwise exempted.

¹⁹ The term "person associated with a broker or dealer" is defined in Exchange Act section 3(a)(18), 15 U.S.C. 78c(a)(18).

²⁰ Associated persons of a member are required under SRO rules to provide prompt notice to his or her employer of employment with any other persons as a result of a business activity. See NASD Rule 3030.

²¹ 15 U.S.C. 80b-3a.

²² Pub. L. No. 104-290, 110 Stat. 3416 (1996) (codified in scattered sections of the United States Code). Section 203A was designed to allow the Commission to better use its limited resources by concentrating its regulatory responsibilities on advisers with national businesses, and to reduce the burden to investment advisers of the overlapping and duplicative regulation existing prior to the enactment of NSMIA. See S. Rep. No. 293, 104th Cong., 2d Sess. 2-4 (1996). In conjunction with implementing NSMIA, the Commission amended several "prophylactic" anti-fraud rules under the

investors by promoting the integrity of research reports and confidence in research analyst recommendations.

b. Electronic Communications

Commenters noted that, unlike the SRO rules, the proposed definition of "research report" in Regulation AC did not explicitly include "electronic communications," and requested that the Commission clarify that the regulation would apply to research reports transmitted electronically.

The Commission believes that electronic communications were included under proposed Regulation AC's definition of "research report." However, in response to commenters' concerns, the Commission has modified the proposed definition of "research report" to explicitly include written communications in electronic form.

c. What Constitutes a Research Report?

The Commission has deleted the "recommendation" element from Regulation AC's proposed definition of "research report" to conform to the definition in the SOA. Therefore, "research report" is defined as "a written communication (including an electronic communication) that includes an analysis of a security or an issuer and provides information reasonably sufficient upon which to base an investment decision."

Commenters requested that the Commission provide guidance concerning what types of communications the rule is not intended to cover.²⁶ Commenters also requested clarification that Regulation AC would not apply to internal communications.

It is not possible to provide a complete list of all types of communications that would or would not fall within the definition of "research report." Whether a particular communication constitutes a research report for the purposes of Regulation AC will turn on the individual facts and circumstances surrounding that communication. In general, however, the following communications would not be research reports if they do not include an analysis of, or recommend or rate, individual securities or companies:

- Reports discussing broad-based indices, such as the Russell 2000 or S&P 500 index.
- Reports commenting on economic, political, or market conditions.
- Reports commenting on or analyzing particular types of debt securities or characteristics of debt securities.

- Technical analysis concerning the demand and supply for a sector, index, or industry based on trading volume and price.

- Reports that recommend increasing or decreasing holdings in particular industries or sectors or types of securities.

The following communications would generally not be research reports even if they recommend or rate individual securities or companies:

- Statistical summaries of multiple companies' financial data (including listings of current ratings) that do not include any analysis of individual companies' data.
- An analysis prepared for a specific person or a limited group of fewer than fifteen persons.²⁷
- Periodic reports or other communications prepared for investment company shareholders or discretionary investment account clients discussing past performance or the basis for previously made discretionary investment decisions.
- Internal communications that are not given to customers.

4. Definition of "Third Party Research Analyst"

In response to commenters' concerns, we have added a definition of "third party research analyst" in order to refine the scope of Regulation AC. A "third party research analyst" is, with respect to a particular broker or dealer, any research analyst not employed by that broker or dealer or any associated person of that broker or dealer. With respect to a covered person, a "third party research analyst" is any research analyst not employed by that covered person, by the broker or dealer with whom that covered person is associated, or by any other associated person of the broker or dealer with whom that covered person is associated. We believe that research prepared by third party research analysts will not be susceptible to pressures from broker-dealers who distribute their research provided that the analyst's employer meets certain independence criteria.

²⁷ We have focused on a group of fewer than fifteen persons in part because Congress made a determination that an investment adviser who, during the course of the preceding twelve months, has had fewer than fifteen clients and who, among other things, does not hold themselves out generally to the public as an investment adviser, does not have to register with the Commission as an investment adviser. See Advisers Act Rule 203(b)(3), 15 U.S.C. 80b-3(b)(3).

B. Discussion of Certification Requirements

1. Certification by the Primarily Responsible Analyst

Commenters requested clarification on identifying the research analyst that would be required to make the certifications. Commenters argued that multiple certifications would likely be confusing or have other undesirable effects.²⁸

Regulation AC requires that the analyst or analysts primarily responsible for the preparation of the content of a research report comply with the certification requirements. Thus, certification by junior analysts involved in the preparation of a research report is not necessary.²⁹ In some cases, however, there may be more than one research analyst primarily responsible for the content of a research report. In such instances, all analysts who are primarily responsible for the views expressed in the report must provide the certifications. Removing the names of all analysts from a report would not allow the firm to avoid including the required certifications and disclosures; the analyst or analysts primarily responsible for the report must certify.

2. Quantitative and Technical Research

Commenters argued that research based on quantitative and technical models may not be attributed to a particular analyst, may not reflect an analyst's views, and therefore, requested that the Commission provide guidance that these types of research would not be covered.³⁰ One commenter suggested, as an alternative, that Regulation AC should require a certification by the firm that the views expressed in the report are derived from the firm's systematic quantitative research model.³¹

The Commission has determined that, in cases where there is no identified analyst because the report is based on the firm's quantitative or technical model, the firm itself may provide the certifications that the views expressed in the research report accurately reflect the firm's quantitative research model, and that no part of the firm's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views disclosed in the research report.

²⁸ See, e.g., SIA and SSB.

²⁹ The Commission notes that any person not required to comply with the certification requirements of Regulation AC (e.g., junior analysts) would nonetheless be subject to the antifraud provisions of the federal securities laws.

³⁰ See Schwab and SIA.

³¹ See Schwab.

²⁶ See SIA and Schwab.

However, tying an analyst's compensation to the performance of a quantitative or technical model would indicate that the report is the product of the analyst's subjective views (reflected by the design of the model employed). In that case, that analyst must certify the report containing the model's results in accordance with Rule 501 of Regulation AC.

C. Certifications or Disclosures During Public Appearances

We requested comment on what, if any, disclosures should be required during public appearances by analysts. The four commenters that addressed this issue generally were opposed to requiring certifications during analyst public appearances.³² We have determined not to require certifications during public appearances by analysts.

The Commission believes that the proposed quarterly certification requirements in connection with analyst public appearances are sufficient. If the analyst does not provide a certification in connection with public appearances, Rule 502 of Regulation AC requires the broker-dealer to provide readers of research reports that it distributes, as well as the broker-dealer's designated examining authority, with notice that the analyst did not provide the certifications.³³ A Rule 502(b) notice in a research report must be in plain English.

D. Compendium Reports

The Commission requested comment on whether Regulation AC should make allowances for compendium research reports covering six or more securities. Commenters that discussed the treatment of certifications in compendium research reports believed that Regulation AC should permit the required disclosures to appear in a place other than the report itself.³⁴ Most of these commenters specifically supported treatment of compendium reports for the purpose of Regulation AC similar to the treatment allowed under SRO rules. Under SRO rules, members are not obligated to include disclosures in compendiums if the report directs readers to a toll-free number or postal address to write for required disclosures.³⁵ Electronic compendiums may instead include a hyperlink and paper compendiums may also include a web address where disclosures are

located. Two commenters suggested the use of a combined certification that each analyst referenced in the report certifies that the analysis attributed to him or her accurately reflects his or her views.³⁶

The Commission has determined not to permit treatment of compendium research reports in a manner similar to that permitted by the SROs because, unlike the SRO rules, the certifications required by Regulation AC are very concise. Nonetheless, when a research report covers more than one company and each research analyst required to certify with respect to the views expressed in a portion of the report is able to certify that: (a) the views expressed in the research report accurately reflect such research analyst's personal views about the subject securities and companies; and (b) that no part of his or her compensation was, is, or will be directly or indirectly related to the specific recommendation or views contained in the research report, the firm may comply with Regulation AC by including one clear and prominent combined certification that, as to each company covered, the respective research analyst (or analysts) certifies as to (a) and (b) above.³⁷

E. Application of Regulation AC to Investment Advisers and Banks

Regulation AC is directed at brokers, dealers, and covered persons, because we believe that these entities are subject to the greatest conflicts. Therefore, investment advisers and banks, among others, may be required to comply with the regulation if they are covered persons of a broker-dealer. The Commission noted in the Proposing Release that the term "research analyst" would not include personnel of an investment adviser, such as a mutual fund portfolio manager, who are not principally responsible for preparing research reports, even if the individuals are registered persons of a broker-dealer (similar to the guidance provided by the SROs in the joint interpretive memorandum).³⁸ The Commission requested comment on whether the regulation should cover banks that are not associated persons and other independent entities, and whether the rule should explicitly exclude investment advisers.

Commenters who addressed the application of Regulation AC to investment advisers generally opposed the rule's coverage of investment advisers and investment advisory personnel.³⁹ Some commenters called for the specific exclusion of investment advisers.⁴⁰ Commenters who addressed the application of Regulation AC to banks generally opposed the rule's coverage of banks.⁴¹ One commenter favored the application of Regulation AC to investment advisers and banks.⁴²

The Commission has determined that Regulation AC should not exclude all investment advisers or banks that are associated with broker-dealers. However, as discussed above, the definition of "covered person" substantially narrows the scope of persons associated with a broker-dealer, such as investment advisers and banks, that are subject to Regulation AC. Where the broker-dealer has informational and structural separations from its associated person, the rule does not apply to that associated person. Where the protections are lacking, however, with respect to a person associated with a broker-dealer, that person is a covered person.⁴³ Accordingly, if an investment adviser or bank is a covered person and publishes, circulates, or provides research reports, the research report certification provisions of Regulation AC will apply. We believe those investment advisers and banks that do not meet the independence criteria that would exclude them from the definition of "covered person" may be subject to greater conflicts than are other investment advisers and banks. Specifically, a broker-dealer's investment banking department could pressure these investment adviser or bank affiliates to comment favorably in a research report or public appearance about a client or prospective client. Moreover, if associated persons that are covered persons were not subject to the certification requirements of Regulation AC, broker-dealers could attempt to funnel research through them to avoid complying with Regulation AC.⁴⁴

³⁹ See Alliance, ICAA, ICI, Investorside, SIA, SSB, Sullivan, and Thomson Financial.

⁴⁰ See, e.g., ICAA and ICI.

⁴¹ See Investorside, SSB, Sullivan, and Thomson Financial.

⁴² See NASAA.

⁴³ As discussed above, Regulation AC requires a broker-dealer to inform its associated persons as to whether or not it maintains and enforces the informational barriers described in Regulation AC.

⁴⁴ Regulation AC is directed at those regulated persons that prepare research reports, as well as persons associated with regulated persons who might be used if attempts were made to improperly circumvent the rule. See also Exchange Act section 20(b), 15 U.S.C. 78t(b).

³² See AIMR, Goldman, SIA, and SSB.

³³ The Commission believes that merely citing to the rule provision would not constitute an adequate notice.

³⁴ See CSFB, Cleary, Goldman, SIA, SSB, and Schwab.

³⁵ See CSFB, Cleary, SIA, SSB, and Schwab.

³⁶ See SIA and SSB.

³⁷ This certification must be in plain English. The Commission would expect that broker-dealers would be able to demonstrate that the combined certification in the report is accurate.

³⁸ See NYSE Information Memo No. 02-26 (June 26, 2002), and NASD Notice to Members 02-39 (July 2002).

F. Application of Regulation AC to Third Party Research

In Proposing Regulation AC, we did not propose to treat research prepared by third parties but distributed by a broker-dealer differently from research produced by the broker-dealer itself. Commenters argued that broker-dealers should not be responsible for certifying research by independent third parties. Moreover, they pointed out practical problems, including the difficulty of tracking analysts employed by third parties.⁴⁵ They also cited increased costs. They argued that firms would discontinue providing the valuable service of making third party research available to customers.⁴⁶

We have determined not to apply Regulation AC where a broker-dealer distributes research prepared by a third party research analyst whose employer satisfies certain independence criteria. The independence criteria require that the third party research analyst's employer does not have officers or employees in common with the broker-dealer or covered person distributing its research, and that the broker-dealer has written policies and procedures designed to prevent the broker-dealer, its controlling persons, officers, and employees from influencing the activities of the third party research analyst and the content of his or her research reports. We believe that research analysts employed by these independent third parties will not be sufficiently susceptible to pressures from distributing broker-dealers to warrant certification. Where a broker-dealer distributes the research of a third party that does not meet the independence criteria, however, the broker-dealer must confirm that the research report includes the same research analyst certification as required by Regulation AC.

Commenters argued that it would be difficult to track analysts employed by third parties, some of whom are overseas, in order to monitor their public appearances and obtain written statements from them. In response to commenters' concerns, we have determined that broker-dealers who distribute third party research are not required to obtain the public appearance certifications required by Rule 502 of Regulation AC with respect to public appearances by third party research analysts.

G. Application of Regulation AC to Foreign Research

In proposing Regulation Analyst Certification, the Commission did not distinguish between research that was issued by a U.S. entity and research that was issued by a non-U.S. entity. Several commenters raised the issue of the Regulation's effect on research originating from a foreign entity. These commenters generally opposed the proposed scope of Regulation AC, which captured foreign entities (and their associated persons) that issue research reports, including those who are not required to be registered with the Commission under section 15 of the Exchange Act.⁴⁷

In light of these comments, we have created a narrow exception for foreign persons that are located outside of the United States and are not associated with a registered broker-dealer that prepares and provides research on foreign securities⁴⁸ to major United States institutions in the U.S. in accordance with the provisions of Rule 15a-6(a)(2). In these instances, the foreign person is excepted from the requirements of Regulation AC.

In addition, in the case of a research analyst employed outside the United States by a foreign person located outside the United States, Rule 502 of Regulation AC only applies to public appearances while the research analyst is physically present in the United States.

H. Supervision and Oversight

Commenters requested that the Commission clarify that the certification pertaining to the analyst's personal views is not intended to prevent research supervisors or review committees from seeking changes to the research product.⁴⁹ One commenter argued that Regulation AC should not impede the ability of a supervisor or a review committee to require that a report follow a written firm policy on when a research report can upgrade or downgrade a rating, or when it must withhold a rating to prevent conflicts or for other reasons.⁵⁰ Commenters argued that certification also should not preclude the ability of an analyst or a firm to modify the report due to a change in the analyst's opinion or to remove statements that create legal or regulatory concerns.⁵¹

⁴⁷ See, e.g., Cleary and Thomson Financial.

⁴⁸ As defined in the rule, for purposes of Regulation AC, "foreign security" means a security issued by a foreign company for which a U.S. market is not the principal trading market.

⁴⁹ See, e.g., SIA and SSB.

⁵⁰ See SIA.

⁵¹ See SIA and SSB.

The certification required by Rule 501 of Regulation AC does not impede the oversight or review of research reports. If, at the end of the revision process, the analyst still believes that the report accurately reflects his or her personal views about the subject securities or issuers, then that analyst may certify and the firm may use the research report. If, however, after the review process the research report no longer reflects the analyst's personal views, then that analyst would be unable to certify and the firm would not be in compliance with Regulation AC if it uses the research report without a certification.

I. Regulation AC and Fraud Liability Under Federal Securities Laws

Several commenters requested that the Commission reiterate the position stated in the Proposing Release that Regulation AC does not impose new liability on analysts or their firms.⁵² Regulation AC formalizes and potentially adds rigor to analysts' responsibilities to express their views truthfully and without guile.⁵³ Regulation AC makes explicit the representations that are already implicit when an analyst publishes his or her views—that the analysis of a security published by the analyst reflects the analyst's honestly held views.⁵⁴

Regulation AC does not alter any other existing obligation under the federal securities laws for research analysts or broker-dealers.⁵⁵ A research report contains an inherent representation that the views expressed in the report are not knowingly false and do not omit material facts necessary in order to make statements made not misleading.⁵⁶ Thus, even without

⁵² See, e.g., Karr Tuttle, NASAA, SIA, and SSB.

⁵³ As the Commission stated in the Proposing Release, Regulation AC is not intended to create new duties under section 10(b) of the Exchange Act. As a result, no private liability will arise from a broker, dealer, or associated person's failure to make the required disclosure, or make, keep, and maintain required records. However, Regulation AC is subject to the full range of the Commission's enforcement authority. With regard to the enforcement of Regulation AC by the SROs, nothing in Regulation AC is inconsistent with Exchange Act Rule 19g2-1. See 17 CFR 240.19g2-1.

⁵⁴ The use of a certification process echoes and is consistent with one approach employed in the Sarbanes-Oxley Act of 2002, which requires certifications by officers of corporations relating to issuers' financial statements. See Sarbanes-Oxley Act sections 302 and 906, Pub. L. 107-204 (2002).

⁵⁵ See, e.g., Securities Act sections 17(a) and 17(b), 15 U.S.C. 77q; Exchange Act section 10(b), 15 U.S.C. 78j(b), and Rule 10b-5, 17 CFR 240.10b-5.

⁵⁶ See, e.g., Securities Act section 17(a), 15 U.S.C. 77q(a); Exchange Act Rule 10b-5, 17 CFR 240.10b-5; Exchange Act section 15(c)(1)(A), 15 U.S.C. 78o(c)(1)(A); and Exchange Act Rule 15c1-2(b), 17 CFR 240.15c1-2.

⁴⁵ See Alliance and Thomson Financial.

⁴⁶ See, e.g., Schwab.

Regulation AC, analysts may be found to have violated the anti-fraud provisions of the federal securities laws if they make baseless recommendations or recommendations that they disbelieve.⁵⁷

J. Performance-Based Compensation

Commenters expressed concern that Regulation AC could be read to require disclosure of analyst compensation arrangements based on the accuracy or performance of the views expressed as to the subject company's prospects.⁵⁸ Commenters thought that the compensation disclosure provision should be clarified to only require disclosure of compensation that was intended to influence or induce the particular view expressed in the research report.⁵⁹

In the Proposing Release, the Commission noted that Regulation AC does not preclude an analyst from providing otherwise permissible services to his or her firm's investment banking department, and it does not prohibit analysts generally from receiving compensation for covering issuers or for preparing research reports. Instead, Regulation AC focuses on disclosure where the analyst compensation that is related to the specific recommendations or views expressed by the research analyst in the research report. Regulation AC is not intended to address compensation based on the performance of the views expressed regarding the securities discussed.

III. Paperwork Reduction Act

Regulation AC contains "collection of information" requirements within the meaning of the Paperwork Reduction Act of 1995 ("PRA").⁶⁰ We have submitted the proposal to the Office of Management and Budget ("OMB") for review in accordance with the PRA.⁶¹ An agency may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a currently valid OMB control number.

In the Proposing Release, the Commission solicited comments on the

collection of information requirements. In response to comments, the Commission has revised the estimates published in the Proposing Release regarding the collection of information burdens associated with the new rule.

A. Summary of Collection of Information

Regulation AC generally requires that research reports published, circulated, or provided by a broker or dealer or covered person contain a statement attesting that the views expressed in each research report accurately reflect the analyst's personal views and whether or not the research analyst received or will receive any compensation in connection with the views or recommendations expressed in the research report. Regulation AC also requires broker-dealers to, on a quarterly basis, make, keep, and maintain records of research analyst statements regarding whether the views expressed in public appearances accurately reflected the analyst's personal views, and whether any part of the analyst's compensation is related to the specific recommendations or views expressed in the public appearance.

B. Reporting and Cost Burden Estimates

Regulation AC provides that brokers, dealers, and covered persons must include in research reports they publish, circulate, or provide certain certifications and disclosures about the analyst's views expressed in the research reports and any relationship between the analyst's compensation and the specific recommendations or views expressed. The regulation also requires broker-dealers to periodically make, keep, and maintain records of research analyst certifications and disclosures in connection with public appearances.

The staff of the Commission believes that the average amount of time it would take to include the required certifications and disclosures in each research report is one minute per report. In the Proposing Release, the Commission staff estimated that broker-dealers publish approximately 657,000 research reports per year. One commenter provided the Commission with data in response to the Proposing Release.⁶² After considering this

additional information, the staff of the Commission believes that broker-dealers publish approximately 1,375,865 research reports per year.⁶³ Therefore, the Commission estimates that the total annual burden in hours for broker-dealers to comply with the research report certification and disclosure requirements is approximately 22,930 hours per year ((1 minute × 1,375,865 reports)/60 minutes).

The Commission staff expects that research analysts will likely be the employees primarily charged with executing certifications and including them in research reports. According to industry sources, research analysts, on average, earn \$189,250 per year, for an hourly pay rate of approximately \$90. Including 35% overhead, Commission staff estimates that the hourly pay rate for a research analyst would be approximately \$121.50. Therefore, the Commission estimates that the total annual burden in dollars for broker-dealers to comply with the research report certification and disclosure requirements is approximately \$2,785,995.00⁶⁴ per year (22,930 hours × \$121.50 per hour).

Rule 501 of Regulation AC, which applies to research reports, may also impose requirements on certain entities if they are associated with a broker-dealer and meet the definition of "covered person." However, "covered persons" are not subject to Rule 502 of Regulation AC, which addresses public appearances. The Commission estimates that approximately 2,650 SEC registered investment advisers are associated with a broker-dealer. We believe that not all of these entities write research reports, and that those who do write research reports write relatively few. Of those investment advisers that are associated with a broker-dealer and that write research reports, we do not believe that all of them will meet the definition of a "covered person," as defined by

through First Call Research Direct. Thomson Financial asserted that, when these additional sell-side reports are accounted for, the total exceeds 2 million reports a year. Thomson Financial suggested that the compliance costs for sell-side firms could run as high as \$4,116,784.50.

⁶³ After further consultation with Thomson Financial, they have revised their total estimated number of research reports per year for 2001 to range between 1,375,865 and 1,540,150. The staff believes that the overall calculations are over-inclusive and possibly duplicative. As a result, we are basing our estimates on the lower-end of the range of the number of research reports per year. The staff believes that this estimate continues to be conservative.

⁶⁴ The estimated total annual burden in dollars for broker-dealers to comply with the research report certification and disclosure requirements would be approximately \$3,118,642.00 if calculated using the high-end of the estimated range for the number of research reports.

⁵⁷ See Securities Exchange Act Release No. 45908 (May 10, 2002), 67 FR 34968, 34977 (May 16, 2002); Proposing Release at 51512; *Cf. Hanly*, supra, note 13, at 597. See also *In the Matter of Robertson Stephens, Inc.*, Administrative Proceeding File No. 3-11003 (January 9, 2003) (settled fraud action against broker-dealer where Commission found that a research analyst employed by the broker-dealer issued recommendations about a public company that were inconsistent with his privately communicated beliefs about the company.)

⁵⁸ See, e.g., Goldman and Merrill.

⁵⁹ See, e.g., Cleary, SIA, SSB, and Sullivan.

⁶⁰ 44 U.S.C. section 3501 *et seq.*

⁶¹ 44 U.S.C. section 3507(d) and 5 CFR 1320.11.

⁶² Thomson Financial asserted in its comment letter that the Commission's cost estimate in the Proposing Release was too low. Thomson Financial noted that the Commission cited data from Thomson Financial First Call and estimated that broker-dealers publish 657,000 research reports per year. Thomson Financial asserted that, while this estimate may accurately reflect equity research on U.S. securities transmitted via First Call Notes, it did not capture fixed-income research, research on non-U.S. equities or full-text reports transmitted

Regulation AC. As a conservative estimate, however, if all SEC registered investment advisers are covered persons and on average publish as many research reports per year as the average broker-dealer (250 research reports), the estimated total number of research reports published by SEC registered investment advisers who are associated with a broker-dealer would be approximately 662,500 ($250 \times 2,650$).⁶⁵ Therefore, the Commission estimates that the total annual analyst certification burden in hours for these investment advisers would be 11,040 hours ($(1 \text{ minute} \times 662,500 \text{ research reports}) / 60 \text{ minutes}$). The Commission estimates that the annual burden in dollars of complying with the research report certification and disclosure requirements for SEC registered investment advisers is approximately \$1,341,360 per year⁶⁶ ($11,040 \times \$121.50$). Unlike Rule 501, Rule 502 of Regulation AC (public appearances) does not apply to covered persons. We note, however, that we believe that a significant number of associated persons would not be "covered person(s)," as defined in Rule 500 of Regulation AC and, as a result, the aggregate burden for persons associated with broker-dealers to comply with the research report certification and disclosure requirements will be significantly lower.

The staff of the Commission believes that the research analyst will prepare the quarterly statement required for public appearances. The staff estimates that the average amount of time it would take a research analyst to prepare the quarterly statements regarding public appearances as required by the regulation is ten minutes per analyst. The staff of the Commission believes that, on average, approximately 519 public appearances by research analysts occur per quarter,⁶⁷ or about 2,076 per year. Therefore, the Commission believes that the total annual burden for broker-dealers in hours of complying

with the public appearance certification and disclosure requirements would be approximately 346 hours per year ($(10 \text{ minutes} \times 2076 \text{ appearances}) / 60 \text{ minutes}$).

In cases where the broker or dealer does not obtain a statement by the research analyst in connection with public appearances as described above, the broker-dealer must promptly notify its examining authority, designated pursuant to section 17(d) of the Exchange Act and Rule 17d-2 thereunder, that the analyst did not provide certification in connection with public appearances. In addition, for 120 days following such notification, the broker-dealer must disclose in any research report it distributes authored by that analyst that the analyst did not provide certification specified in Rule 502(a) of Regulation AC. Further, broker-dealers must keep and maintain these records pursuant to Rule 17a-4(b)(4). Broker-dealers are also expected to have records that document the process they followed in producing each research analyst certification. The staff of the Commission believes that there will be few, if any, instances where a broker-dealer will provide notification to their examining authority, as analysts and their firms will have strong incentives to avoid having to make the type of disclosures required to be provided to their examining authority. Therefore, the total annual burden, in dollars, of complying with the public appearance certification requirements would be approximately \$42,039 ($346 \text{ hours} \times \$121.50$).

The regulation requires that the records of statements regarding public appearances be preserved in accordance with Exchange Act Rule 17a-4(b)(4). Exchange Act Rule 17a-4(b)(4) requires that any communication relating to a broker-dealer's business, including inter-office communications, must be kept for at least three years. In light of the existing record preservation requirement for brokers and dealers under Exchange Act Rule 17a-4(b)(4),⁶⁸ the staff of the Commission believes that any additional costs to preserve the records of the certifications required by the regulation would be minimal.

Rule 500 of Regulation AC includes a definition of "covered person," which limits the scope of the regulation's application. Rule 504 of Regulation AC requires a broker-dealer to notify its associated persons that issue research reports as to whether associated persons would meet the definition of "covered persons" under Regulation AC, and, therefore, be subject to the rule.

Specifically, the broker-dealer must inform its associated persons whether the broker or dealer maintains and enforces written policies and procedures reasonably designed to prevent the broker or dealer or any of its controlling persons, officers, or employees from influencing the activities of research analysts and the content of research reports prepared by associated persons. Broker-dealers must also inform its associated persons whether associated persons have any officers or employees in common with the broker or dealer who can influence the activities of research analysts or the content of research reports and, if so, the identity of those persons.

The staff has not obtained data on the amount of time it would take for broker-dealers to make the necessary determinations and to draft and provide the notification required under Rule 504 of Regulation AC. For PRA purposes, the below calculations represent the staff's estimates of the amount of time that would be required for broker-dealers to comply with Rule 504. The staff estimates that there are approximately 2,650 investment advisers that are associated with at least one broker-dealer. The staff estimates that it would take approximately one hour per year for each of the approximately 2,650 broker-dealers to determine whether it maintains and enforces written policies and procedures reasonably designed to prevent the broker or dealer or any of its controlling persons, officers, or employees from influencing the activities of research analysts and the content of research reports prepared by associated persons. The staff estimates that it would take approximately thirty minutes per year for each broker-dealer to determine whether its associated persons have any officers or employees in common with the broker or dealer who can influence the activities of research analysts or the content of research reports and, if so, the identity of those persons.⁶⁹

The staff estimates that it would take fifteen minutes per year for each broker-dealer to draft and provide the required notification to its associated persons. The Commission staff expects that a compliance officer will likely be the employee primarily charged with making the necessary determinations, and drafting and providing the required notification. According to industry sources, in 2002, compliance officers,

⁶⁹ Broker-dealers should already have mechanisms in place to determine whether such persons exist and, if so, the identity of those persons because of NASD Rule 3030. See NASD Rule 3030.

⁶⁵ We believe that including all SEC registered investment advisers in calculating the paperwork burden as to covered persons is over-inclusive as to investment advisers, and that this estimate is therefore sufficient to account for other types of entities who would meet the definition of "covered person."

⁶⁶ The estimated total annual burden in dollars for SEC registered investment advisers to comply with the research report certification and disclosure requirements would be approximately \$1,501,518.00 if calculated using the high-end of the estimated range for the number of research reports.

⁶⁷ 519 is approximately 10% of the estimated 5,186 research analysts employed in the U.S., which is based on information provided by Nelson Information. One commenter believes that this estimate is low, but did not provide specific data in support of its views. See Thomson Financial.

⁶⁸ OMB Control No. 3235-0279.

on average, earned approximately \$82.00/per hour. Including 35% overhead, Commission staff estimates that the hourly pay rate for a compliance officer would be \$110.70 per hour. Therefore, the Commission estimates that the annual burden for broker-dealers in hours of complying with the notification requirements would be approximately 4,638 hours $([2,650 \times 105 \text{ minutes}]/60)$. The staff estimates that the annual burden for broker-dealers of complying with the notification requirements in dollars would be approximately \$513,427.00 $(4,638 \text{ hours} \times \$110.70)$.

Therefore, the Commission estimates that the regulation would result in a total annual burden in hours of approximately 38,954 hours (22,930 hours for broker-dealers to comply with the research report requirements + 11,040 hours for investment advisers to comply with the research report requirements + 346 hours for broker-dealers to comply with the public appearance requirements + 4,638 hours for broker-dealers to comply with the notification requirements), for a total annual cost in dollars of approximately \$4,682,821 (\$2,785,995 for broker-dealers to comply with the research report requirements + \$1,341,360 for investment advisers to comply with research the report requirements + \$42,039 for broker-dealers to comply with the public appearance requirements + \$513,427 for broker-dealers to comply with the notification requirements).

IV. Costs and Benefits of Adopted Regulation Analyst Certification

To assist the Commission in evaluating the costs and benefits that may result from adopting Regulation AC, the Commission sought comment on any potential costs, as well as any potential benefits, resulting from the proposal for investors, issuers, broker-dealers, other securities industry professionals, SROs, or others. The Commission also requested that commenters provide analysis and data to support their views. Regulation AC is part of an ongoing process by the Commission to address conflicts of interest affecting the production and dissemination of research by securities firms, and to provide increased disclosure to investors. Regulation AC includes a requirement that broker-dealers and covered persons include in research reports they publish certain certifications and disclosures about the analyst's views expressed in the research reports and any relationship between the analyst's compensation and the specific recommendations or views

expressed. Regulation AC would also require broker-dealers to make, keep, and maintain records of research analyst certifications and disclosures in connection with public appearances. We are sensitive to the costs and benefits that result from our rules. The Commission initially identified certain costs and benefits relating to the proposals and encouraged commenters to discuss any additional costs or benefits. We discuss these costs and benefits below.

A. Costs

The Commission received letters from twenty-one commenters concerning Regulation AC. Only one commenter provided actual data to quantify the costs identified. This commenter believed that the estimates set forth in the proposing release were low primarily because the estimated number of research reports per year did not capture, among other things, reports by investment advisers and certain full-text reports.⁷⁰ The Commission modified its estimates in response to these comments.

The Commission also requested comment on how many public appearance certifications would likely be submitted to brokerage firms per quarter, and how many of those statements would be required to be provided to the firm's examining authority. One commenter believed that the estimate of the number of public appearances was too low, but did not provide specific data in support of its views.⁷¹

While Regulation AC may lead to some additional costs for brokers, dealers, and covered persons, we continue to believe that any costs should not be significant. In light of current requirements for broker-dealers under SRO rules, the Commission estimates that, beyond the paperwork costs described above, any additional costs to broker-dealers that would result from the required certifications and disclosures would be minimal. In the Proposing Release, the staff estimated that broker-dealers publish approximately 657,000 research reports per year. One commenter provided information that suggests that broker-dealers publish as many as 1,375,865 research reports per year.⁷² Given the refined scope of Regulation AC, the staff believes that these two estimates represent a reasonable range with which to estimate research reports affected by

the rule. Accordingly, the Commission estimates the total direct costs to be approximately \$2.5 million to \$4.7 million.⁷³ In addition, because the rule is minimally burdensome, the Commission believes that, beyond the paperwork costs described above, any additional costs to associated persons that would result from certifications and disclosures would be minimal.

Moreover, with respect to the compensation certifications and disclosures that are required by Regulation AC, broker-dealers are already required to make certain disclosures regarding research analyst compensation under SRO rules. For example, SRO rules currently require that firms disclose in research reports if the associated person preparing the report received compensation that is based upon (among other factors) the member's overall investment banking revenues.⁷⁴ Further, SRO rules prohibit members from offering favorable research to a company as consideration or inducement for the receipt of business or for compensation.⁷⁵ Additionally, Exchange Act Rule 17a-3(a)(19) currently requires broker-dealers to maintain a record of all agreements pertaining to the relationship between each associated person and the broker-dealer, including a summary of each associated person's compensation arrangement or plan.

In response to commenters' concerns, we modified the proposed rule text to include a definition of "covered person," which limits the scope of the regulation's application. Rule 504 of Regulation AC requires broker-dealers to notify its associated persons that issue research reports as to whether the broker-dealer maintains and enforces written policies and procedures reasonably designed to prevent the broker or dealer or any of its controlling

⁷³ The total burden range of approximately \$2.5 million to \$4.7 million is obtained by applying both the low and the high research report estimates. Costs are proportionate to the number of research reports assumed to be issued each year. For purposes of the Paperwork Reduction Act analysis, we used the estimate of 1,375,865 research reports to obtain the high end of the burden range. If we instead substitute the low estimate of 657,000 research reports in place of the high estimate, the low end of the burden range is approximately \$2.5 million. The low research report estimate is approximately 48% of the high estimate and the resulting total annual cost burden is approximately \$2.5 million (\$1,337,278 for broker-dealers to comply with the research report requirements + \$643,853 for investment advisers to comply with the research report requirements + \$42,039 for broker-dealers to comply with the public appearance requirements + \$513,427 for broker-dealers to comply with the notification requirements = \$2,536,596).

⁷⁴ NASD 2711(h)(2)(A)(i); NYSE 472(k)(2).

⁷⁵ NASD Rule 2711(e); NYSE Rule 472(g).

⁷⁰ See Thomson Financial.

⁷¹ *Id.*

⁷² See Thomson Financial and footnote 63 for a discussion of revisions to the original estimate.

persons, officers, or employees from influencing the activities of research analysts and the content of research reports prepared by the associated person, and to inform associated persons as to whether the associated person has any officers (or persons performing similar functions) or employees in common with the broker or dealer who can influence the activities of research analysts or the content of research reports and, if so, the identity of those persons. Broker-dealers may incur costs in providing this notification to each of its associated persons. As noted previously, the staff estimates that the paperwork costs for broker-dealers of complying with the notification requirements in dollars would be approximately \$513,427.00. Any additional costs should not be significant in part because associated persons of an SRO member are required under SRO rules to provide prompt notice to his or her employer of employment with any other persons as a result of a business activity.⁷⁶

With respect to public appearances, current SRO rules require analysts to make certain disclosures during public appearances, such as the member's or the analyst's ownership interests in the subject company. SRO rules also require analysts to disclose any other actual, material conflict of interest of which the research analyst knows, or has reason to know, at the time of the public appearance.⁷⁷

Broker-dealers should already have in place procedures necessary to comply with many components of Regulation AC due to existing obligations under SRO rules, although these procedures might require some minor modifications to conform with Regulation AC. As noted previously, the Commission estimates that the annual paperwork costs in dollars of complying with the regulation would be approximately \$4,682,821.

B. Benefits

We believe that investor confidence in the integrity of research has suffered because there is evidence that, in some cases, research analyst objectivity has been compromised due to, among other things, analysts' personal compensation and firms' investment banking relationships with issuers that are the subjects of research reports. Requiring research analysts to certify that the views expressed in research reports reflect their personal views, and requiring disclosure of information regarding whether analyst compensation

is related to the specific recommendations made, should help bolster investor confidence in the quality of research. This, in turn, should help increase investor confidence in the securities markets.

The Commission requested comment on whether the certification and disclosure requirements, if adopted, would promote investor confidence in the views expressed by research analysts and provide investors with useful information with which to evaluate potential biases. Ten commenters expressed support for Regulation AC. Generally, these commenters were of the view that Regulation AC would promote the integrity of research and investor confidence.⁷⁸ Three commenters did not agree that Regulation AC would advance investor protection and/or investor confidence to any significant degree.⁷⁹

Regulation AC requires that broker-dealers and covered persons include certifications in research reports regarding the truthfulness of the views expressed in research reports and whether or not the analyst received compensation in connection with his or her specific recommendations or views. Many investors rely on the research reports and recommendations provided by their brokers and covered persons. To the extent that the Regulation AC requires disclosures that provide more transparency than provided by current regulation, these disclosures should provide investors with important information with which to determine the value of the research available to them.⁸⁰

Regulation AC may result in an increase in the overall quality of the research available to the public because broker-dealers and covered persons would be in violation of Regulation AC when issuing research reports unless the reports include the required certifications and disclosures. The requirement that the research analyst (or analysts) primarily responsible for preparing the research report personally certify that the views expressed in the report accurately reflect his or her personal views creates an incentive for analysts to examine, even more carefully, the basis and foundations for his or her recommendations in preparing research reports.

Regulation AC may also result in an increase in the quality of research because of competitive reasons. Firms

that publish research reports that do not contain certain analyst certifications will be in violation of the regulation, and firms whose research analysts' compensation is related to the specific recommendations or views provided in research reports (to the extent allowed by SRO rules) may lose some business to firms that are less conflicted. Regulation AC is intended to enhance investor confidence in the integrity of the research available to them. We believe that by requiring research analysts to certify as to the truthfulness of the views expressed in research reports, investor confidence in the securities markets should be enhanced, thereby leading to the benefit of more liquid and efficient markets. The Commission does not have data to quantify the value of the benefits described above. The Commission requested, but did not receive, comment on how it may quantify these benefits. The Commission also requested, but did not receive, comment concerning any benefits, not already identified, that may result from the adoption of Regulation AC.

V. Regulatory Flexibility Act Certification

Pursuant to section 605(b) of the Regulatory Flexibility Act,⁸¹ the Commission certified that Regulation AC will not have a significant economic impact on a substantial number of small entities. This certification, including the reasons supporting the certification, were set forth in the Proposing Release.

The Commission solicited comments on the potential impact of Regulation AC on small entities in the Proposal. No comments were received that discussed the Regulatory Flexibility Act Certification. However, in response to other comments, the Commission has revised its estimates and believes that the total burden in hours required to comply with proposed Regulation AC would be approximately 5.78 hours per year, per small firm, as compared to the original estimate of two hours and two minutes per year, per small firm.

VI. Consideration of Burden on Competition, and Promotion of Efficiency, Competition and Capital Formation

Section 3(f) of the Exchange Act⁸² requires us, when engaging in rulemaking where we are required to consider or determine whether an action is necessary or appropriate in the public interest, to consider whether the action will promote efficiency, competition,

⁷⁸ See AIMR, CSFB, Goldman, ICAA, ICI, Merrill, SIA, SSB, Schwab, and TBMA.

⁷⁹ See David Norr, NASAA, and Thomson Financial.

⁸⁰ See Securities Exchange Act Release No. 45908 (May 10, 2002), 67 FR 34968 (May 16, 2002).

⁸¹ 5 U.S.C. 605(b).

⁸² 15 U.S.C. section 78c(f).

⁷⁶ See NASD Rule 3030.

⁷⁷ NASD Rule 2711(h); NYSE 472(k)(1).

and capital formation. In addition, section 23(a)(2)⁸³ of the Exchange Act requires the Commission to consider the impact any rule would have on competition. Further, the law requires that the Commission not adopt any rule that would impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act.

In the Proposing Release, the Commission solicited comment on the proposal's effect on competition, efficiency, and capital formation. Three commenters believed that Regulation AC would impose an inappropriate burden on competition.⁸⁴ One commenter asserted that the scope of Regulation AC was overly broad and would apply unnecessarily to, and be an onerous burden on, broker-dealer firms that are not subject to the conflicts the regulation is designed to address.⁸⁵ Another commenter asserted that Regulation AC may serve as a barrier to entry and an impediment to competition for firms seeking to provide an alternative to sell-side research.⁸⁶

Regulation AC is intended to enhance investor confidence in the integrity of the research available to them. Further, we have modified the rule from the proposal and have limited the scope of its application. We believe that requiring broker-dealers and covered persons to include analyst certifications in research reports, as well as the other disclosures required by Regulation AC, should enhance investor confidence in the securities markets, thereby leading to a more efficient market.

The Commission has considered Regulation AC in light of the standards in section 23(a)(2) and believes that it would not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act. As discussed above in the Cost-Benefit section, the Commission recognizes that Regulation AC may lead to some additional costs for broker-dealers and covered persons. On balance, we think that the application of Regulation AC is tailored to those situations where the conflicts are most likely to affect research. As such, we do not believe that the rule would create an unreasonable burden on competition. Further, we believe that providing the benefits that will result from the rule in those conflict-laden situations will further the purposes of the rule,

including enhancing investor confidence in the market, thereby leading to a more efficient market.

VII. Statutory Authority

Regulation AC is being adopted pursuant to sections 3, 15, 17, and 23 of the Exchange Act and pursuant to sections 17 and 19 of the Securities Act.

Text of the Rule

List of Subjects in 17 CFR Part 242

Brokers, Securities.

For the reasons set out in the preamble, Title 17, Chapter II, of the Code of Federal Regulations is amended as follows.

PART 242—REGULATIONS M, ATS, AND AC AND CUSTOMER MARGIN REQUIREMENTS FOR SECURITY FUTURES

1. The authority citation for part 242 continues to be read as follows:

Authority: 15 U.S.C. 77g, 77q(a), 77s(a), 78b, 78c, 78g(c)(2), 78i(a), 78j, 78k-1(c), 78l, 78m, 78mm, 78n, 78o(b), 78o(c), 78o(g), 78q(a), 78q(b), 78q(h), 78w(a), 78dd-1, 80a-23, 80a-29, and 80a-37.

2. The part heading for part 242 is revised as set forth above.

3. Part 242 is amended by adding Regulation AC, §§ 242.500 through 242.505 to read as follows:

Sec.

242.500 Definitions.

242.501 Certifications in connection with research reports.

242.502 Certifications in connection with public appearances.

242.503 Certain foreign research reports.

242.504 Notification to associated persons.

242.505 Exclusion for news media.

Regulation AC—Analyst Certification

§ 242.500 Definitions.

For purposes of Regulation AC (§§ 242.500 through 242.505 of this chapter) the term:

Covered person of a broker or dealer means an associated person of that broker or dealer but does not include:

(1) An associated person:

(i) If the associated person has no officers (or persons performing similar functions) or employees in common with the broker or dealer who can influence the activities of research analysts or the content of research reports; and

(ii) If the broker or dealer maintains and enforces written policies and procedures reasonably designed to prevent the broker or dealer, any controlling persons, officers (or persons performing similar functions), and employees of the broker or dealer from

influencing the activities of research analysts and the content of research reports prepared by the associated person.

(2) An associated person who is an investment adviser:

(i) Not registered with the Commission as an investment adviser because of the prohibition of section 203A of the Investment Advisers Act of 1940 (15 U.S.C. 80b-3a); and

(ii) Not registered or required to be registered with the Commission as a broker or dealer.

Note to definition of covered person: An associated person of a broker or dealer who is not a covered person continues to be subject to the federal securities laws, including the anti-fraud provisions of the federal securities laws.

Foreign person means any person who is not a U.S. person.

Foreign security means a security issued by a foreign issuer for which a U.S. market is not the principal trading market.

Public appearance means any participation by a research analyst in a seminar, forum (including an interactive electronic forum), or radio or television or other interview, in which the research analyst makes a specific recommendation or provides information reasonably sufficient upon which to base an investment decision about a security or an issuer.

Registered broker or dealer means a broker or dealer registered or required to register pursuant to section 15 or section 15B of the Securities Exchange Act of 1934 (15 U.S.C. 78o or 78o-4) or a government securities broker or government securities dealer registered or required to register pursuant to section 15C(a)(1)(A) of the Securities Exchange Act of 1934 (15 U.S.C. 78o-5(a)(1)(A)).

Research analyst means any natural person who is primarily responsible for the preparation of the content of a research report.

Research report means a written communication (including an electronic communication) that includes an analysis of a security or an issuer and provides information reasonably sufficient upon which to base an investment decision.

Third party research analyst means:

(1) With respect to a broker or dealer, any research analyst not employed by that broker or dealer or any associated person of that broker or dealer; and

(2) With respect to a covered person of a broker or dealer, any research analyst not employed by that covered person, by the broker or dealer with whom that covered person is associated,

⁸³ 15 U.S.C. section 78w(a)(2).

⁸⁴ See Alliance, Investorside, and Thomson Financial.

⁸⁵ See Alliance.

⁸⁶ See Investorside.

or by any other associated person of the broker or dealer with whom that covered person is associated.

United States has the meaning contained in § 230.902(l) of this chapter.

U.S. person has the meaning contained in § 230.902(k) of this chapter.

§ 242.501 Certifications in connection with research reports.

(a) A broker or dealer or covered person that publishes, circulates, or provides a research report prepared by a research analyst to a U.S. person in the United States shall include in that research report a clear and prominent certification by the research analyst containing the following:

(1) A statement attesting that all of the views expressed in the research report accurately reflect the research analyst's personal views about any and all of the subject securities or issuers; and

(2)(i) A statement attesting that no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the research analyst in the research report; or

(ii) A statement:

(A) Attesting that part or all of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the research analyst in the research report;

(B) Identifying the source, amount, and purpose of such compensation; and

(C) Further disclosing that the compensation could influence the recommendations or views expressed in the research report.

(b) A broker or dealer or covered person that publishes, circulates, or provides a research report prepared by a third party research analyst to a U.S. person in the United States shall be exempt from the requirements of this section with respect to such research report if the following conditions are satisfied:

(1) The employer of the third party research analyst has no officers (or persons performing similar functions) or employees in common with the broker or dealer or covered person; and

(2) The broker or dealer (or, with respect to a covered person, the broker or dealer with whom the covered person is associated) maintains and enforces written policies and procedures reasonably designed to prevent the

broker or dealer, any controlling persons, officers (or persons performing similar functions), and employees of the broker or dealer from influencing the activities of the third party research analyst and the content of research reports prepared by the third party research analyst.

§ 242.502 Certifications in connection with public appearances.

(a) If a broker or dealer publishes, circulates, or provides a research report prepared by a research analyst employed by the broker or dealer or covered person to a U.S. person in the United States, the broker or dealer must make a record within 30 days after any calendar quarter in which the research analyst made a public appearance that contains the following:

(1) A statement by the research analyst attesting that the views expressed by the research analyst in all public appearances during the calendar quarter accurately reflected the research analyst's personal views at that time about any and all of the subject securities or issuers; and

(2) A statement by the research analyst attesting that no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the research analyst in such public appearances.

(b) If the broker or dealer does not obtain a statement by the research analyst in accordance with paragraph (a) of this section:

(1) The broker or dealer shall promptly notify in writing its examining authority, designated pursuant to section 17(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78q(d)) and § 240.17d-2 of this chapter, that the research analyst did not provide the certifications specified in paragraph (a) of this section; and

(2) For 120 days following notification pursuant to paragraph (b)(1) of this section, the broker or dealer shall disclose in any research report prepared by the research analyst and published, circulated, or provided to a U.S. person in the United States that the research analyst did not provide the certifications specified in paragraph (a) of this section.

(c) In the case of a research analyst who is employed outside the United States by a foreign person located outside the United States, this section shall only apply to a public appearance

while the research analyst is physically present in the United States.

(d) A broker or dealer shall preserve the records specified in paragraphs (a) and (b) of this section in accordance with § 240.17a-4 of this chapter and for a period of not less than 3 years, the first 2 years in an accessible place.

§ 242.503 Certain foreign research reports.

A foreign person, located outside the United States and not associated with a registered broker or dealer, who prepares a research report concerning a foreign security and provides it to a U.S. person in the United States in accordance with the provisions of § 240.15a-6(a)(2) of this chapter shall be exempt from the requirements of this regulation.

§ 242.504 Notification to associated persons.

A broker or dealer shall notify any person with whom that broker or dealer is associated who publishes, circulates, or provides research reports:

(a) Whether the broker or dealer maintains and enforces written policies and procedures reasonably designed to prevent the broker or dealer, any controlling persons, officers (or persons performing similar functions), or employees of the broker or dealer from influencing the activities of research analysts and the content of research reports prepared by the associated person; and

(b) Whether the associated person has any officers (or persons performing similar functions) or employees in common with the broker or dealer who can influence the activities of research analysts or the content of research reports and, if so, the identity of those persons.

§ 242.505 Exclusion for news media.

No provision of this Regulation AC shall apply to any person who:

(a) Is the publisher of any bona fide newspaper, news magazine or business or financial publication of general and regular circulation; and

(b) Is not registered or required to be registered with the Commission as a broker or dealer or investment adviser.

Dated: February 20, 2003.

By the Commission.

Margaret H. McFarland,
Deputy Secretary.

[FR Doc. 03-4576 Filed 2-26-03; 8:45 am]

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Federal Register

**Thursday,
February 27, 2003**

Part IV

Department of Transportation

Federal Aviation Administration

14 CFR Part 93

**Modification of the Dimensions of the
Grand Canyon National Park Special
Flight Rules Area and Flight Free Zones;
Final Rule**

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 93****Docket No. FAA-2001-8690****RIN 2120-AG74****Modification of the Dimensions of the Grand Canyon National Park Special Flight Rules Area and Flight Free Zones****AGENCY:** Federal Aviation Administration (FAA), DOT.**ACTION:** Final rule.

SUMMARY: On April 4, 2000, the FAA published two final rules regarding commercial air tour operations over Grand Canyon National Park (GCNP). The first rule, Commercial Air Tour Limitation in Grand Canyon National Park Special Flight Rules Area, limited the number of commercial air tour operations that may be flown in the GCNP Special Flight Rules Area (SFRA) on an annual basis. This rule became effective on May 4, 2000. The second rule, Modification of the Dimensions of the Grand Canyon National Park Special Flight Rules Area and Flight Free Zones, modified the airspace in the SFRA to accommodate a new route system for commercial air tour operations and to expand the amount of overall airspace protected by flight free zones. This rule initially was scheduled to become effective December 1, 2000. After several delays, the new routes and airspace were adopted for the west end of the GCNP SFRA on April 19, 2001. The routes and airspace on the east end of the GCNP SFRA have been delayed several times since the adoption of the final rule. In December 2001, the FAA delayed the east end routes and airspace until February 20, 2003. This rule stays 14 CFR 93.305 (a) and (b) of the Airspace Modification Final Rule for the east end of the GCNP until February 20, 2006.

DATES: Effective February 20, 2003, 14 CFR 93.305 (a) and (b) are stayed until February 20, 2006. This rule was originally published at 61 FR 69330 on December 31, 1996, and amended April 4, 2000 (65 FR 17736).

ADDRESSES: You may view a copy of this final rule, Modification of the Dimensions of the Grand Canyon National Park Special Flight Rules Area and Flight Free Zones, through the Internet at: <http://dms.dot.gov>. You may also review the public dockets on this regulation in person in the Docket Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal

holidays. The Docket Office is on the plaza level of the Nassif Building at the Department of Transportation, 400 7th St., SW., Room 401, Washington, DC 20590.

As an alternative, you may search the **Federal Register's** Internet site at http://www.access.gpo.gov/su_docs for access to this final rule.

You may also request a paper copy of this final rule from the Office of Rulemaking, Federal Aviation Administration, 800 Independence Ave., SW., Washington, DC 20591, or by calling (202) 267-9680.

FOR FURTHER INFORMATION CONTACT: Kent Stephens, Flight Standards Service, (AFS-200) Federal Aviation Administration, Seventh and Maryland Streets, SW., Washington, DC 20591; Telephone: (202) 267-7493.

SUPPLEMENTARY INFORMATION:**Small Business Regulatory Enforcement Fairness Act**

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. Therefore, any small entity that has a question regarding this document may contact their local FAA official, or the person listed under **FOR FURTHER INFORMATION CONTACT**. You can find out more about SBRFA on the Internet at our site, <http://www.gov/avr/arm/sbreffa.htm>. For more information on SBREFA, e-mail us 9-AWA-SBREFA@faa.gov.

Background

On April 4, 2000, the Federal Aviation Administration published two final rules, the Modification of the Dimensions of the Grand Canyon National Park Special Flight Rules Area and Flight Free Zones (Airspace Modification), and the Commercial Air Tour Limitation in the Grand Canyon National Park Special Flight Rules Area (Commercial Air Tour Limitation). See 65 FR 17736; 65 FR 17708; April 4, 2000. The FAA also published concurrently a notice of availability of Commercial Routes for the Grand Canyon National Park (Routes Notice). See 65 FR 17698, April 4, 2000. The Commercial Air Tour Limitations final rule was implemented, effective May 4, 2000. The Airspace Modification final rule and the routes set forth in the Notice of Availability were scheduled to become effective December 1, 2000. The Final Supplemental Environmental Assessment for Special Flight Rules in the Vicinity of Grand Canyon National

Park (SEA) was completed on February 22, 2000, and the Finding of No Significant Impact was issued on February 25, 2000.

Following the publication of the final rules, the United States Air Tour Association and seven air tour operators petitioned the United States Court of Appeals for the District of Columbia to review the rules. See *USATA v. FAA, et al.* (Docket No. 00-1201). During the course of this litigation, the USATA raised new safety concerns regarding the new routes in the east end of the GCNP SFRA. As a result, the FAA first delayed implementation of the routes until December 28, 2000 (November 20, 2000; 65 FR 69848) so that it could evaluate the new issues. During this evaluation, the FAA determined that modifications could be made to the routes to enhance safety. On December 13, 2000, the FAA published a second Notice of Availability seeking comment on proposed changes to routes in the east-end of the GCNP SFRA (65 FR 78071). Subsequently, the FAA delayed the implementation of the routes until April 1, 2001. (66 FR 2001, January 4, 2001).

During the comment period for the second Notice of Availability, additional safety concerns were raised regarding the proposed revisions to the east end routes. Consequently, the FAA decided to implement the modifications to the route structure of the GCNP SFRA in two phases. First, on April 19, 2001, the FAA implemented the routes and airspace in the west-end (defined as all areas of the SFRA west of the Dragon corridor) of the GCNP SFRA that originally were published on April 4, 2000. Also, on April 19, 2001, the SFRA boundary in the eastern part of the GCNP SFRA over the Navajo Nation lands was extended five miles to the east. Second, the route structure on the east-end (Dragon Corridor and all airspace east of that Corridor) in the GCNP SFRA was stayed until December 1, 2001, to enable the FAA and NPS to determine what changes should be made in the east end of GCNP. In December 2001, the east end route structure was again stayed until February 20, 2003. (66 FR 63293, December 5, 2001). Accordingly, the routes now flown remain almost exactly as that shown under Special Federal Aviation Regulation (SFAR) 50-2, with only slight modification to certain entry and exit points.

In a case decided on August 16, 2002, (*U.S. Air Tour Association, et al. v. Federal Aviation Administration*, 298 F.3d 997), the U.S. Court of Appeals for the District of Columbia concluded that the FAA's use of an "average annual day" in lieu of "any given day," in

measuring substantial restoration of natural quiet at Grand Canyon National Park “appears inconsistent with both the [National] Park Service’s definition of the term and the premise on which that definition was based.” The Court also determined that the FAA’s explanation for excluding non-tour aircraft in its noise modeling was inadequate and that the FAA had not provided sufficient evidence to conclude that noise from non-tour aircraft did not impact the calculations of substantial restoration of natural quiet achieved in GCNP. The court remanded the matter to the FAA for further proceedings consistent with its opinion.

Once the FAA obtains guidance from the NPS concerning the appropriate way to measure noise in the park and determines how to address non-air tour aircraft noise, the FAA and NPS will conduct the necessary environmental analysis and review process. FAA and NPS may initiate supplemental rulemaking to consider further modifications to the east-end routes and the west-end routes to achieve substantial restoration of natural quiet in the GCNP. The GCNP Noise Model Validation project has begun to yield data that suggests there may be a need to recalibrate the Integrated Noise Model (INM) for use in the GCNP. Recalibration of the INM would affect the determination of how much natural quiet has already been restored and the benefits of pursuing the alternative of quiet technology and may warrant public notice and an opportunity for review and comment.

Following a recent congressional hearing on Grand Canyon overflights, the FAA and NPS are also considering a dispute resolution process to assist in developing measures to fulfill the mandate under the National Park Overflights Act. Because this process is not complete, and, based on prior experience, we believe it could take several years to resolve all of the issues and complete the necessary environmental review and any additional rulemaking process, it is necessary to stay 14 CFR 93.305 (a) and (b) as they apply to the east end of GCNP until February 20, 2006. The FAA and the NPS will work to resolve the issues remanded by the court together with the issues surrounding the routes.

The FAA notes that the changes to the routes and airspace in the west end of GCNP finalized in the April 2000 rule have been in effect since April 19, 2001. Those changes were implemented to further the goal of substantial restoration of natural quiet in GCNP.

Immediate Effective Date

The FAA finds that good cause exists under 5 U.S.C. 553(d) for this final rule to become a final rule upon issuance. The FAA notes that the stay only affects the east end of the GCNP SFRA; changes to the west end have been in effect since April 19, 2001.

Environmental Review

In March 2001, the FAA completed a written reevaluation (WR) of the February 22, 2000 Final Supplemental Environmental Assessment (FSEA) for Special flight rules in the Vicinity of Grand Canyon National Park (GCNP). The WR examined the potential environmental impacts associated with a phased implementation of the Airspace rule and the Commercial Air Tour Route Modifications described in the February 2000 FSEA. This phased approach involved implementation of the agency’s “preferred” alternative for airspace and air tour route structures as described in the February 2000 FSEA for the GCNP SFRA west of Dragon Corridor. Since no changes to the western portion of the GCNP SFRA as described in the FSEA occurred, the impact evaluation for the “preferred” alternative contained in the FSEA remained valid for the stage-one airspace and routes implementation at the west-end of the GCNP SFRA. The WR also analyzed the planned implementation of the stage-one airspace, routes, and route modifications on the east-end and determined that they were not significant changes from the plans analyzed under the “no action” alternative in the February 2000 FSEA. Therefore, the FAA determined that the proposed route revisions to the SFAR 50–2 route structure conformed to the “no action” alternative analyzed in the FSEA. The FAA determined that the data and analyses contained in the February 2000 FSEA were still substantially valid and all pertinent conditions and requirements of the prior approval have or would be met in the April 2001 action.

While the stay of the east-end route and airspace structure lessens the percentage of the GCNP substantially restored to natural quiet, it is only a temporary delay. In addition, given that the majority of the revised routes and airspace for GCNP were implemented during phase one, the phased implementation process resulted in a gain of substantial restoration of natural quiet for GCNP as described in the February 2000 FSEA.

Therefore for the above reasons and pursuant to FAA Order 1050.1D,

Paragraph 92, the FAA determined that the contents of the Final Supplemental Environmental Assessment and its conclusions issued on February 22, 2000 were still valid. Additionally, the FAA found that the previous Section 106 Determination of No Adverse Effect to Traditional Cultural Properties identified by Native Americans issued for the FSEA was also still valid. Copies of the written reevaluation were placed in the public docket for the April 2001 rulemaking, were circulated to interested parties, and were available for inspection at the same time and location as the April 2001 final rule. The findings of the March 2001 WR remain valid for this final rule staying the provisions of 14 CFR 93.305 (a) and (b).

Economic Analysis

The economic analysis completed for the final rule published April 4, 2000 evaluates the east-end and the west-end operations separately since these are distinct markets. This action does not affect the April 19, 2001 implementation of the west-end airspace structure, and the economic analysis from the April 4, 2000 final rule remains valid. At this time the FAA is staying the implementation of the east-end routes. The FAA does not consider that this rulemaking effort imposes any costs on the public since it merely stays the provisions for the east end of GCNP. Commercial air tour operators will continue to use established air tour routes. Benefits from reduced aircraft noise in the east end of GCNP, however, will be delayed. This rulemaking is not a final action. If the agency takes a final action that is different than that published on April 4, 2000, then it may be necessary to complete a revised economic evaluation.

Initial Regulatory Flexibility Determination and Assessment

The Regulatory Flexibility Act (RFA) of 1980 establishes “as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the business, organization, and government jurisdictions subject to regulation.” To achieve that principle, the RFA requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The RFA covers a wide range of small entities, including small businesses, not-for-profit organizations and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final

rule will have a significant economic impact on a substantial number of small entities. If the determination is that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA. However, if an agency determines that a proposed or final rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the RFA provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

This final rule will have only a *de minimus* cost impact on the certificate holders. Accordingly, pursuant to the Regulatory Flexibility Act, 5 U.S.C. 605(b), the Federal Aviation Administration certifies that this final rule will not have a significant impact on a substantial number of small entities.

International Trade Impact Assessment

The Trade Agreement Act (TAA) of 1979 prohibits Federal agencies from engaging in any standards or related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The TAA also requires consideration of international standards and where appropriate, that they be the basis for U.S. standards. In addition, consistent with the Administration's belief in the general superiority and desirability of free trade, it is the policy of the Administration to remove or diminish to the extent feasible, barriers to international trade, including both barriers affecting the export of American goods and services to foreign countries and barriers affecting the import of

foreign goods and services into the United States. In accordance with the above Act and policy, the FAA has assessed the potential effect of this final rule and has determined that it will have only a domestic impact and therefore no effect on any trade-sensitive activity.

Federalism Implications

This amendment 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. Therefore, in accordance with Executive Order 12612, it is determined that this amendment would not have sufficient Federalism implications to warrant the preparation of a Federalism Assessment.

Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (the Act), enacted as Pub. L. 104-4 on March 22, 1995, requires each Federal agency, to the extent permitted by law, to prepare a written assessment of the effects of any Federal mandate in a proposed or final agency rule that may result in the expenditure of \$100 million or more (when adjusted annually for inflation) in any one year by State, local, and tribal governments in the aggregate, or by the private sector. Section 204(a) of the Act, 2 U.S.C. 1534(a), requires the Federal agency to develop an effective process to permit timely input by elected officers (or their designees) of State, local, and tribal governments on a proposed "significant intergovernmental mandate." A "significant intergovernmental mandate" under the Act is any provision in a Federal agency regulation that would impose an enforceable duty upon State, local, and tribal governments in the aggregate of \$100

million (adjusted annually for inflation) in any one year. Section 203 of the Act, 2 U.S.C. 1533, which supplements section 204(a), provides that, before establishing any regulatory requirements that might significantly or uniquely affect small governments, the agency shall have developed a plan, which, among other things, must provide for notice to potentially affected small governments, if any, and for a meaningful and timely opportunity for these small governments to provide input in the development of regulatory proposals. The FAA has determined that this rule will not impose any unfunded mandates.

List of Subjects in 14 CFR Part 93

Air traffic control, Airports, Navigation (Air).

Adoption of Amendments

Accordingly, the Federal Aviation Administration (FAA) amends 14 CFR part 93 as follows:

PART 93—SPECIAL AIR TRAFFIC RULES AND AIRPORT TRAFFIC PATTERNS

1. The authority citation for part 93 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46502, 46504, 46506–46507, 47122, 47508, 47528–47531.

2. Section 93.305 is amended by staying paragraphs (a) and (b) published on December 31, 1996 (61 FR 69330), and amended on April 4, 2000 (65 FR 17736), until February 20, 2006.

Issued in Washington, DC on February 20, 2003.

Marion Blakey,

Administrator.

[FR Doc. 03-4495 Filed 2-24-03; 3:40 pm]

BILLING CODE 4910-13-P



Federal Register

**Thursday,
February 27, 2003**

Part V

Department of the Interior

**Office of Surface Mining Reclamation and
Enforcement**

**30 CFR Part 875
Abandoned Mine Land Reclamation
Notices; Final Rule**

DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

30 CFR Part 875

RIN: 1029-AB99

Abandoned Mine Land Reclamation Notices

AGENCY: Office of Surface Mining Reclamation and Enforcement, Interior.

ACTION: Final rule.

SUMMARY: We are revising our regulations governing the processing of State and tribal grant applications to build public facilities using Abandoned Mine Land (AML) Reclamation Funds. The existing regulations require us to publish a **Federal Register** notice whenever we receive a grant application to build a public facility. We are changing this requirement to one that requires us to publish a notice only when the Director of the Office of Surface Mining (OSM) finds it necessary to ensure adequate public notice of the grant application. We are also correcting errors in four cross-references.

EFFECTIVE DATE: March 31, 2003.

FOR FURTHER INFORMATION CONTACT:

Danny Lytton, Office of Surface Mining Reclamation and Enforcement, U.S. Department of the Interior, 1951 Constitution Avenue, NW., MS-121-SIB, Washington DC 20240; Telephone: 202-208-2788; E-mail: dlytton@osmre.gov.

SUPPLEMENTARY INFORMATION:

- I. Background and Discussion of the Final Rule
- II. Discussion of the Public Comments Received
- III. How Will This Rule Affect State and Indian Programs?
- IV. Procedural Matters and Required Determinations

I. Background and Discussion of the Final Rule

On June 19, 2002, we published in the **Federal Register** (67 FR 41756) proposed revisions to our regulations at 30 CFR 875.15(f). Those regulations govern public notification for certain non-coal reclamation projects funded by the AML Reclamation Fund. There are 23 States and 3 Indian tribes with approved AML programs. Only 6 of these programs are currently certified for non-coal reclamation projects, *i.e.*, all of their existing known coal-related reclamation objectives have been completed. They are the programs of the States of Louisiana, Montana, Texas and Wyoming, and the Hopi Tribe and Navajo Nation. Only these 6 programs

are, therefore, eligible for 30 CFR part 875 AML funding of non-coal reclamation projects.

The current regulations at 30 CFR 875.15(f) require that the Director publish a **Federal Register** notice announcing the receipt of, and seeking comments on, AML grant applications for non-coal reclamation projects submitted by a governor of a State or the equivalent head of an Indian tribe. The grant applications are requests for funds for the construction of specific public facilities related to the coal or minerals industry in communities impacted by coal or other mineral mining and processing practices. Such construction projects are authorized by section 411(f) of the Surface Mining Control and Reclamation Act of 1977 (SMCRA) after all coal-related reclamation objectives have been or are in the process of being completed. For the reasons set forth below, we are making the OSM Director's (hereinafter Director) **Federal Register** notice requirement a discretionary action.

The current regulatory scheme for 30 CFR part 875 provides for a level of public notice that, in most cases, makes the additional **Federal Register** notice of § 875.15(f) redundant. For example, § 875.13 provides for a public notice of a State or Indian tribe's certification that it has completed all existing known coal-related reclamation objectives for eligible lands or waters. Section 875.15(d) then allows the State or Indian tribe to submit to the Director a grant application for AML funding of specific non-coal projects. Section 875.15(e) details the information required in the grant application. In particular, paragraph (e)(7) requires the Director to conduct an analysis and review of the procedures used by the State or Indian tribe to notify and involve the public in the funding request and a copy of all comments received and their resolution by the State or Indian tribe. The 1994 preamble discussion of the § 875.15(e) grant information requirements noted that they were intended to assist the Director in determining whether a "need" exists and whether the public had been "fully appraised and informed" of the grant request. May 31, 1994; 59 FR 28163.

Irrespective of the outcome of the Director's § 875.15(e) public notice determination, § 875.15(f) next requires that the Director prepare a **Federal Register** notice of the State's or Indian tribe's grant application. Following receipt and evaluation of comments generated by that **Federal Register** notice, the Director is to make his/her decision on the grant application. It is not clear why the 1994 rule required the

additional § 875.15(f) **Federal Register** notice of the grant application as there was no preamble discussion of this provision and the enabling statute for § 875.15 does not require the additional notice. May 31, 1994; 59 FR 28163-4; 30 U.S.C. 1240(a).

Accordingly, we are making the **Federal Register** notice required by § 875.15(f) discretionary. We believe that if the Director can determine from the § 875.15(e)(7) information previously submitted by the State or Indian tribe in its grant application that the public has already been "fully appraised and informed" of the grant request, a subsequent § 875.15(f) required **Federal Register** notice covering the same ground would not meaningfully add to the Director's decision-making process. Conversely, if the Director cannot determine from the (e)(7) information submitted by the State or Indian tribe that the public has been "fully appraised and informed" of the grant request, the Director should prepare a § 875.15(f) **Federal Register** notice of the grant request so as to ensure adequate public notice. This final rule will give the Director the option of requiring an additional **Federal Register** notice dependent on the extent of prior (e)(7) public notice. This seems to be a reasonable course. It ensures adequate public notice of the State's or Indian tribe's grant request (with or without a **Federal Register** notice) while avoiding the delay and expense of an unnecessary **Federal Register** notice. We are, therefore, revising § 875.15(f) by inserting the words "if necessary to ensure adequate public notification." The first sentence of § 875.15(f), with inserts italicized, will read as follows: "After review of the information contained in the application, the Director shall, *if necessary to ensure adequate public notification*, prepare a **Federal Register** notice regarding the State's or Indian tribe's submission and provide for public comment."

There are several other practical reasons to reject the current rule's § 875.15(f) requirement of a **Federal Register** notice and to adopt the proposed rule's more flexible approach. The first is that, since the rule was initially promulgated seven years ago, there have been no comments submitted in response to any of the required **Federal Register** notices published by the Director. This fact was brought to light as a result of an inquiry from several of the States and Indian tribes attending the August 2001 AML Conference held in Athens, Ohio, who questioned the need for the Director's required § 875.15(f) **Federal Register**

notice. We subsequently reviewed our own records and discovered that we had never received any public comments to the required § 875.15(f) **Federal Register** notices. We then polled the 6 eligible AML programs on the public response to their own subsection (e)(7) public notice efforts. All of the programs questioned the need for the required § 875.15(f) **Federal Register** notice and reported a general lack of public response to their individual (e)(7) public notice efforts. The response of Wyoming, which is by far the largest of the AML programs certified under § 875.13 and which has funded thirty-six (36) § 875.15 public facilities projects with AML grant funds, was of particular note. Although Wyoming's AML program provides for extensive local public notice and a public hearing on all proposed § 875.15 projects, that State reported that "even these local opportunities for comment elicit little if any response from those directly impacted by the project." This consistent lack of local response to local notice from the Wyoming AML program regarding prospective § 875.15 projects underscores the fact that the current rule's requirement for additional **Federal Register** notice, while helpful in theory, has not produced meaningful public notice and comment.

Our polling of the 6 States and Indian tribes brought to light additional reasons not to retain the current rule's **Federal Register** notice requirement. The Navajo Nation, which has a substantial number of applications ready for processing as soon as its revised AML plan is approved, strongly opposes the current rule's required **Federal Register** notice because of its own internal AML notice procedures. By tribal law, the Navajo Nation has had to hold public meetings for each of its 100 or more individual political units whenever AML funds are to be used anywhere in their tribal boundaries for the construction of public facilities. The current rule's § 875.15(f) required **Federal Register** notice would, therefore, trigger a redundant, time-consuming round of tribal meetings on the very same projects.

Another reason given by some of the States and Indian tribes for opposing the continuance of the § 875.15(f) required **Federal Register** notice is that, for programs with shorter construction seasons like those of Montana and Wyoming, the required **Federal Register** notice adds 45 to 60 days to the project approval process. These additional 45 to 60 days can push completion of a funded public facility well into the next construction season.

In light of the above, we are removing the requirement in § 875.15(f) that the Director always publish a **Federal Register** notice informing the public of the grant application. Instead, the Director will retain the option of publishing such notice if his/her analysis and review of the notice information required under § 875.15(e)(7) indicates that inadequate procedures were used to notify and involve the public in the funding request. In this way, we can ensure that the public has been fully apprised of the grant application while also being protected from the delay and expense of an unnecessary **Federal Register** notice.

Technical Corrections

In addition to the above, we are also revising our regulations at §§ 875.15(d) and (e) to correct errors in four existing cross-references. In § 875.15(d), we are changing the cross references from paragraphs (a), (d), and (e) to paragraphs (b), (e), and (f), respectively. In § 875.15(e), we are changing the cross reference from paragraph (c) to paragraph (d). These revisions to the cross references will not result in any substantive changes in the application of our regulations.

Finally, we have rewritten § 875.15(f) in plain language format by incorporating numbered paragraphs to make the section more reader friendly. No substantive changes resulted from using the plain language format.

II. Discussion of the Public Comments Received

Comments were requested on the proposed rule and a total of two comments were received. They were from the State of Wyoming's Abandoned Mine Land Program and the Interstate Mining Compact Commission. Both commenters supported the proposed revisions. No one requested a public hearing and none was held.

III. How Will This Rule Affect State and Indian Programs?

Following publication of this final rule, we will evaluate the State and Indian programs approved under section 405 of SMCRA to determine any changes in those programs that may be necessary. When we determine that a particular State program provision should be amended, the particular State will be notified in accordance with the provisions of 30 CFR 884.15. We have made a preliminary determination that no program revisions will be required.

IV. Procedural Matters and Required Determinations

Executive Order 12866—Regulatory Planning and Review

This document is not a significant rule and is not subject to review by the Office of Management and Budget under Executive Order 12866.

a. This rule will not have an effect of \$100 million or more on the economy. It will not adversely affect in a material way the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities. The elimination of the mandatory requirement to publish a **Federal Register** notice is not expected to have an adverse economic impact on States and Indian tribes. It may in fact reduce construction costs in northern climates by eliminating delays.

b. This rule will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency.

c. This rule does not alter the budgetary effects of entitlements, grants, user fees, or loan programs or the rights or obligations of their recipients.

d. This rule does not raise novel legal or policy issues.

Regulatory Flexibility Act

The Department of the Interior certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). As previously stated, the elimination of the requirement for a mandatory **Federal Register** notice is not expected to have an adverse economic impact. Further, the rule produces no adverse effects on competition, employment, investment, productivity, innovation, or the ability of United States enterprises to compete with foreign-based enterprises in domestic or export markets.

Small Business Regulatory Enforcement Fairness Act

This rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. This rule:

a. Does not have an annual effect on the economy of \$100 million or more.

b. Will not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions.

c. Does 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 for the reasons stated above.

Unfunded Mandates

This rule does not impose an unfunded mandate on State, local, or Tribal governments or the private sector of more than \$100 million per year. The rule does not have a significant or unique effect on State, Tribal, or local governments or the private sector. A statement containing the information required by the Unfunded Mandates Reform Act (2 U.S.C. 1534) is not required.

Executive Order 12630—Takings

In accordance with Executive Order 12630, the rule does not have significant takings implications.

Executive Order 12612—Federalism

In accordance with Executive Order 12612, the rule does not have significant Federalism implications to warrant the preparation of a Federalism Assessment for the reasons discussed above.

Executive Order 12988—Civil Justice Reform

In accordance with Executive Order 12988, the Office of the Solicitor has determined that this rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order.

Executive Order 13175—Consultation and Coordination With Indian Tribal Governments

In accordance with Executive Order 13175, we have evaluated the potential effects of this rule on Federally recognized Indian tribes and have determined that the rule does not have substantial direct effects 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 previously stated, 2 tribes will be

affected by the rule, the Hopi Tribe and Navajo Nation. The rule will most likely shorten the processing time for most grant applications received from the Hopi and Navajo by eliminating the mandatory requirement to publish a **Federal Register** notice whenever we receive a grant application to build a public facility.

Executive Order 13211—Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This rule is not considered a “significant energy action” under Executive Order 13211. The elimination of the mandatory requirement to publish a **Federal Register** notice will not have a significant affect on the supply, distribution, or use of energy. The elimination of the mandatory requirement may reduce construction costs in northern climates by eliminating delays.

Paperwork Reduction Act

This rule does not require an information collection from 10 or more parties and a submission under the Paperwork Reduction Act to the Office of Management and Budget is not required.

National Environmental Policy Act

We have reviewed this rule and determined that it is categorically excluded from the National Environmental Policy Act process in accordance with the Departmental Manual 516 DM 2, Appendix 1.10.

List of Subjects in 30 CFR Part 875

Grant program—natural resources, Indian lands, Reclamation, Surface mining, Underground mining.

Dated: January 29, 2003.

Rebecca W. Watson,

Assistant Secretary, Land and Minerals Management.

Accordingly, we are amending 30 CFR part 875 as set forth below.

PART 875—NONCOAL RECLAMATION FUND

1. The authority citation for part 875 continues to read as follows:

Authority: 30 U.S.C. 1201 *et seq.*

2. Amend § 875.15 as follows:

a. In paragraph (d), remove the phrases “paragraph (a),” “paragraph (d),” and “paragraph (e)” and in their place add “paragraph (b),” “paragraph (e),” and “paragraph (f),” respectively.

b. In paragraph (e), remove the phrase “paragraph (c)” and add “paragraph (d).”

c. Revise paragraph (f) to read as follows:

§ 875.15 Reclamation priorities for noncoal program.

* * * * *

(f) After review of the information contained in the application, the Director will, if necessary to ensure adequate public notification, prepare a **Federal Register** notice regarding the State's or Indian Tribe's submission and provide for public comment. The Director will then:

- (1) Evaluate any comments received;
- (2) Determine whether the funding meets the requirements of this part;
- (3) Determine whether the funding is in the best interest of the State or Indian tribe AML program;
- (4) If the determinations under paragraphs (f)(2) and (f)(3) of this section are positive, approve the request for funding the activity or construction; and
- (5) Approve funding under paragraph (f)(4) of this section only at a cost commensurate with its benefits towards achieving the purposes of the Surface Mining Control and Reclamation Act of 1977.

[FR Doc. 03-4647 Filed 2-26-03; 8:45 am]

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To improve the calculation of the Federal subsidy rate with respect to certain small business loans, and for other purposes. (Feb. 25, 2003; 117 Stat. 555)

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