DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R4–ES–2022–0116; FF09E21000 FXES1111090FEDR 223]

RIN 1018–BE51

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for *Chamaecrista lineata* var. *keyensis* (Big Pine Partridge Pea), *Chamaesyce deltoidea* ssp. *serpyllum* (Wedge Spurge), *Linum arenicola* (Sand Flax), and *Argythamnia blodgettii* (Blodgett's Silverbush)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for *Chamaecrista lineata* var. *keyensis* (Big Pine partridge pea), *Chamaesyce deltoidea* ssp. *serpyllum* (wedge spurge), *Linum arenicola* (sand flax), and *Argythamnia blodgettii* (Blodgett's silverbush) under the Endangered Species Act (Act). In total, approximately 1,462 acres (592 hectares) for Big Pine partridge pea and approximately 1,379 acres (558 hectares) for wedge spurge, in Monroe County, Florida, and approximately 5,090 acres (2,060 hectares) for sand flax and 16,635 acres (6,732 hectares) for Blodgett's silverbush in Miami-Dade and Monroe Counties, Florida, fall within the boundaries of the proposed critical habitat designations. If we finalize this rule as proposed, it would extend the Act's protections to the species' critical habitat. We also announce the availability of a draft economic analysis of the proposed designation of critical habitat for these four plant species.

DATES: We will accept comments received or postmarked on or before December 13, 2022. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES** below) must be received by 11:59 p.m. eastern time on the closing date. We must receive requests for public hearings, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by November 28, 2022.

ADDRESSES: You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal: *https://www.regulations.gov.* In the Search box, enter FWS–R4–ES–2022–0116, which is the docket number for this rulemaking action. Then, click on the Search button. On the resulting page, in the panel on the left side of the screen, under the Document Type heading, check the Proposed Rule box to locate this document. You may submit a comment by clicking on ''Comment.''

(2) *By hard copy:* Submit by U.S. mail to: Public Comments Processing, Attn: FWS–R4–ES–2022–0116, U.S. Fish and Wildlife Service, MS: PRB/3W, 5275 Leesburg Pike, Falls Church, VA 22041–3803.

We request that you send comments only by the methods described above. We will post all comments on *https://www.regulations.gov.* This generally means that we will post any personal information you provide us (see Information Requested, below, for more information).

Availability of supporting materials: For the proposed critical habitat designation, the coordinates or plot points or both from which the maps are generated are included in the decision file and are available at *https://www.fws.gov/office/florida-ecological-services/library* and at *https://www.regulations.gov* under Docket No. FWS–R4–ES–2022–0116. Any supporting information that we developed for this critical habitat designation will be available on the Service's website or at *https://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Lourdes Mena, Classification and Recovery Division Manager, U.S. Fish and Wildlife Service, Florida Ecological Services Field Office, 7915 Baymeadows Way, Suite 200, Jacksonville, FL 32256; by telephone 904–731–3134; or by facsimile 904–731–3045. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a proposed rule. Under the Act, when we determine that any species is a threatened or endangered species, we must designate critical habitat, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule through the Administrative Procedure Act rulemaking process (5 U.S.C. 1531 *et seq.*).

What this document does. This document proposes to designate critical habitat for three plant species, Big Pine partridge pea, wedge spurge, and sand flax, listed as endangered species under the Act, and one plant species, Blodgett's silverbush, listed as a threatened species under the Act (September 29, 2016 (81 FR 66842)).

The basis for our action. Section 3(5)(A) of the Act defines critical habitat as (i) the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protections; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. Section 4(b)(2) of the Act states that the Secretary must make the designation on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impacts of specifying any particular area as critical habitat.

Draft economic analysis of the proposed designation of critical habitat. We have prepared an analysis of the probable economic impacts of the proposed critical habitat designation and related factors. In this document, we announce the availability of the draft economic analysis and seek additional public review and comment.

Public comment. We are seeking comments and soliciting information from the public on our proposed designation to make sure we consider the best scientific and commercial information available in developing our final designation. Because we will consider all comments and information we receive during the comment period, our final determination may differ from this proposal. We will respond to substantive comments we receive during the comment period in our final rule.

Peer review. In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review of determinations under section 4 of the Act, including listing determinations and critical habitat designations, we are seeking comments from independent specialists. The purpose of peer review is to ensure that our critical habitat

designation is based on scientifically sound data, assumptions, and analyses. The peer reviewers have expertise in the biology, habitat, and threats to the species addressed herein. We have invited these peer reviewers to comment on our specific assumptions and conclusions in this critical habitat proposal during the public comment period for this proposed rule (see **DATES**, above).

Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other governmental agencies, Native American tribes, the scientific community, industry, or any other interested parties concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not designate habitat as ''critical habitat'' under section 4 of the Act (16 U.S.C. 1531 *et seq.*), including information regarding the following factors that the regulations identify as reasons why designation of critical habitat may be not prudent:

(a) 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

(b) Such designation of critical habitat would not be beneficial to the species. In determining whether a designation would not be beneficial, the factors the Services may consider include but are not limited to: whether the present or threatened destruction, modification, or curtailment of a species' habitat or range is not a threat to the species, or whether any areas meet the definition of ''critical habitat.''

(2) Specific information on:

(a) The amount and distribution of Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush habitat.

(b) Any additional areas occurring within the range of the species, *i.e.,* south and central Florida peninsula and the Florida Keys, that should be included in the designation because they (i) were occupied at the time of listing in 2016 and contain the physical or biological features that are essential to the conservation of the species and that may require special management considerations, or (ii) were unoccupied at the time of listing, and are essential for the conservation of the species, because they have potential to successfully support introduced or reintroduced populations of these species.

(c) While we seek comments on any additional areas under (b)(i) and (ii) above, we particularly seek comments on the following unoccupied areas, including information on whether these areas have the potential to support introduced or reintroduced populations: No Name Key, Upper and Lower Sugarloaf Keys, Cudjoe Key, and Little Pine Key in Monroe County, Florida; and Trinity Pinelands, Nixon Smiley, Quail Roost Pineland, and Navy Wells in Miami-Dade County, Florida.

(d) Special management considerations or protection that may be needed in critical habitat areas we are proposing, including managing for the potential effects of climate change.

(e) Whether we have appropriately identified the physical or biological features that are essential to the conservation for each species.

(3) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed critical habitat.

(4) Information on the projected and reasonably likely impacts of climate change on Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush and proposed critical habitat.

(5) Information on the extent to which the description of probable economic impacts in the draft economic analysis is a reasonable estimate of the likely economic impacts and any additional information regarding probable economic impacts that we should consider.

(6) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and whether the benefits of potentially excluding any specific area outweigh the benefits of including that area under section 4(b)(2) of the Act. If you think we should exclude any additional areas, please provide information regarding the existence of a meaningful economic or other relevant impact supporting a benefit of exclusion.

(7) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include. Please note that submissions merely stating support for, or opposition to, the action under consideration without providing supporting information, although noted, will not be considered in making a final critical habitat determination. Section 4(b)(2) of the Act directs that the Secretary shall designate critical habitat on the basis of the best scientific information data available.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments only by the methods described in **ADDRESSES**.

If you submit information via *https://www.regulations.gov,* your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on *https://www.regulations.gov.*

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on *https://www.regulations.gov.*

Because we will consider all comments and information we receive during the comment period, our final designation may differ from this proposal. Based on the new information we receive (and any comments on that new information), our final designation may not include all areas proposed, may include some additional areas that meet the definition of critical habitat, or may exclude some areas if we find the benefits of exclusion outweigh the benefits of inclusion. Such final decisions would be a logical outgrowth of this proposal, as long as we: (1) base the decisions on the best scientific and commercial data available after considering all of the relevant factors; (2) do not rely on factors Congress has not intended us to consider; and (3) articulate a rational connection between the facts found and the conclusions made, including why we changed our conclusion.

Public Hearing

Section 4(b)(5) of the Act provides for a public hearing on this proposal, if requested. Requests must be received by the date specified in **DATES**. Such requests must be sent to the address shown in **FOR FURTHER INFORMATION CONTACT**. We will schedule a public hearing on this proposal, if requested, and announce the date, time, and place of the hearing, as well as how to obtain reasonable accommodations, in the

Federal Register and local newspapers at least 15 days before the hearing. We may hold the public hearing in person or virtually via webinar. We will announce any public hearing on our website, in addition to the **Federal Register**. The use of virtual public hearings is consistent with our regulation at 50 CFR 424.16(c)(3).

Acronyms Used in This Document

For the convenience of the reader, we provide this list of some of the acronyms used in this proposed rule:

CCAA = candidate conservation agreements with assurances
CCP = comprehensive conservation plan
DoD = Department of Defense
ENP = Everglades National Park
FKWEA = Florida Keys Wildlife and Environmental Area
FNAI = Florida Natural Areas Inventory
HARB = Homestead Air Reserve Base
HCP = habitat conservation plan
INRMP = integrated natural resources management plan
KWNAS = Key West Naval Air Station
NKDR = National Key Deer Refuge
NWRs = National Wildlife Refuges
SHA = safe harbor agreements
SOCSO = Special Operations Command South
USDA = U.S. Department of Agriculture

Previous Federal Actions

On September 29, 2015, we proposed to list Big Pine partridge pea, wedge spurge, and sand flax as endangered species and Blodgett's silverbush as a threatened species under the Act (80 FR 58536). On September 29, 2016, we finalized the listing (81 FR 66842). At the time of our proposal, we determined that critical habitat was prudent, but not determinable because we lacked specific information on the impacts of our designation. In our final listing rule, we stated we were in the process of obtaining information on the impacts of the designation (81 FR 66842). All previous Federal actions for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush are described in detail in our final rule listing the four plant species as endangered and threatened species under the Act (81 FR 66842).

It is our intent to discuss in this proposed rule only those topics directly relevant to the designation of critical habitat for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush. For more information on the taxonomy, life history, habitat, population descriptions, and factors affecting the species, please refer to the September 29, 2015, proposed listing rule for these species (80 FR 58536) and the September 29, 2016, final listing rule (81 FR 66842).

Critical Habitat

Background

Section 4 of the Act (16 U.S.C. 1533) and the implementing regulations in title 50 of the Code of Federal Regulations set forth the procedures for determining whether a species is an endangered species or a threatened species, issuing protective regulations for threatened species, and designating critical habitat for threatened and endangered species. In 2019, jointly with the National Marine Fisheries Service, the Service issued final rules that revised the regulations in 50 CFR parts 17 and 424 regarding how we add, remove, and reclassify threatened and endangered species and the criteria for designating listed species' critical habitat (84 FR 45020 and 84 FR 44752; August 27, 2019). At the same time the Service also issued final regulations that, for species listed as threatened species after September 26, 2019, eliminated the Service's general protective regulations automatically applying to threatened species the prohibitions that section 9 of the Act applies to endangered species (collectively, the 2019 regulations).

However, on July 5, 2022, the U.S. District Court for the Northern District of California vacated the 2019 regulations (*Center for Biological Diversity* v. *Haaland,* No. 4:19–cv–05206–JST, Doc. 168 (N.D. Cal. July 5, 2022) (*CBD* v. *Haaland*)), reinstating the regulations that were in effect before the effective date of the 2019 regulations as the law governing species classification and critical-habitat decisions. Accordingly, in developing the analysis contained in this proposal, we applied the pre-2019 regulations, which may be reviewed in the 2018 edition of the Code of Federal Regulations at 50 CFR 424.02 and 424.12(a)(1) and (b)(2). Because of the ongoing litigation regarding the court's vacatur of the 2019 regulations, and the resulting uncertainty surrounding the legal status of the regulations, we also undertook an analysis of whether the proposal would be different if we were to apply the 2019 regulations. That analysis, which we described in a separate memo in the decisional file and posted on *https://www.regulations.gov,* concluded that we would have reached the same proposal if we had applied the 2019 regulations. For the four plants, we find that critical habitat is prudent under either regulatory scheme because we determined that the present or threatened destruction, modification, or curtailment of habitat or range is a threat to all four species. In addition, in the final listing rule (81 FR 66842; September 29, 2016), illegal collection of any of the four Florida Keys plants was not identified as a threat under Factor B, and identification and mapping of critical habitat is not expected to initiate any such threat. We also determined the occupied areas may be adequate to ensure the conservation of these species. For Blodgett's silverbush, the amount and distribution of critical habitat we are proposing for designation in occupied areas would allow existing and future established populations to maintain their existing distributions; expand their distributions into suitable nearby areas (needed to offset habitat loss and fragmentation); increase the size of each population to a level where the threats of genetic, demographic, and normal environmental uncertainties are diminished; and maintain their ability to withstand local or unit-level environmental fluctuations or catastrophic events. Accordingly, we have not identified unoccupied areas that are essential for the conservation of this species at this time. For Big Pine partridge pea, wedge spurge, and sand flax, we identified areas of remaining pine rockland habitat that we are considering whether these areas meet the definition of unoccupied critical habitat for these three species.

On September 21, 2022, the U.S. Circuit Court of Appeals for the Ninth Circuit stayed the district court's July 5, 2022, order vacating the 2019 regulations until a pending motion for reconsideration before the district court is resolved (*In re: Cattlemen's Ass'n,* No. 22–70194). The effect of the stay is that the 2019 regulations are currently the governing law. Because a court order requires us to submit this proposal to the **Federal Register** by September 30, 2022, it is not feasible for us to revise the proposal in response to the Ninth Circuit's decision. Instead, we hereby adopt the analysis in the separate memo that applied the 2019 regulations as our primary justification for the proposal. However, due to the continued uncertainty resulting from the ongoing litigation, we also retain the analysis in this preamble that applies the pre-2019 regulations and we conclude that, for the reasons stated in our separate memo analyzing the 2019 regulations, this proposal would have been the same if we had applied the 2019 regulations.

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Our regulations at 50 CFR 424.02 define the geographical area occupied by the species as an area that may generally be delineated around species' occurrences, as determined by the Secretary (*i.e.,* range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (*e.g.,* migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals).

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Designation also does not allow the government or public to access private lands, nor does designation require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the Federal agency would be required to consult with the Service under section 7(a)(2) of the Act. However, even if the Service were to conclude that the proposed activity would result in destruction or adverse modification of the critical habitat, the Federal action agency and the landowner are not required to abandon the proposed activity, or to restore or recover the species; instead, they must implement ''reasonable and prudent alternatives'' to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical or biological features that occur in specific occupied areas, we focus on those features that are essential to support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information from the listing process for the species. Additional information sources may include any generalized conservation strategy, criteria, or outline that may have been developed for the species; the recovery plan for the species; articles in peer-reviewed journals; conservation plans developed by States and counties; scientific status surveys and studies; biological assessments; other unpublished materials; or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of the species. 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 (HCPs), or other species conservation planning efforts if new information available at the time of those planning efforts calls for a different outcome.

Prudency Determination

Section 4(a)(3) of the Act, as amended, and implementing regulations

(50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary shall designate critical habitat at the time the species is determined to be an endangered or threatened species. Our regulations (50 CFR 424.12(a)(1)) state that a designation of critical habitat is not prudent when any 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. In determining whether a designation would not be beneficial, the factors the Services may consider include but are not limited to: Whether the present or threatened destruction, modification, or curtailment of a species' habitat or range is not a threat to the species, or whether any areas meet the definition of ''critical habitat.''

As discussed in the final listing rule (81 FR 66842), there is currently no imminent threat of take attributed to collection or vandalism identified under Factor B for these species, and identification and mapping of critical habitat is not expected to initiate or increase the degree of any such threat. In our listing determination for these species, we determined that the present or threatened destruction, modification, or curtailment of habitat or range is a threat to these species. Accordingly, the designation of critical habitat is likely to be beneficial. Therefore, because none of the circumstances enumerated in our regulations at 50 CFR 424.12(a)(1) have been met, we have determined that the designation of critical habitat is prudent for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush.

Critical Habitat Determinability

Having determined that designation of critical habitat is prudent for each species, under section 4(a)(3) of the Act, we must find whether critical habitat for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush is determinable. Our regulations at 50 CFR 424.12(a)(2) state that critical habitat is not determinable when one or both of the following situations exist:

(i) Data sufficient to perform required analyses are lacking, or

(ii) The biological needs of the species are not sufficiently well known to identify any area that meets the definition of ''critical habitat.''

When critical habitat is not determinable, the Act allows the Service an additional year to publish a critical habitat designation (16 U.S.C. 1533(b)(6)(C)(ii)).

At the time of our proposal, we determined that critical habitat was prudent, but not determinable because we lacked specific information on the impacts of our designation (80 FR 58536). In our final listing rule, we stated we were in the process of obtaining information on the impacts of the designation (81 FR 66842). We reviewed the available information pertaining to the biological needs of the species and habitat characteristics where these species are located. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is determinable for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush.

Physical or Biological Features

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12(b), in determining which areas we will designate as critical habitat from within the geographical area occupied by the species at the time of listing, we consider the physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. The regulations at 50 CFR 424.02 define ''physical or biological features'' as the features that support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity. For example, physical features essential to the conservation of the species might include gravel of a particular size required for spawning, alkali soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include prey species, forage grasses, specific kinds or ages of trees for roosting or nesting, symbiotic fungi, or absence of a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic essential to support the life history of the species.

In considering whether features are essential to the conservation of the species, the Service may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics 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 (or development) of offspring; and habitats that are protected from disturbance.

We derive the specific physical or biological features essential to Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush from studies of the species' habitat, ecology, and life history as described below. Additional information can be found in the September 29, 2015, proposed listing rule (80 FR 58536) and the September 29, 2016, final listing rule (81 FR 66842) for these species. We have determined that the following physical or biological features are essential to the conservation of Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush.

Big Pine Partridge Pea, Wedge Spurge, and Sand Flax

Space for Individual and Population Growth and for Normal Behavior

Plant Community and Competitive Ability

Big Pine partridge pea, wedge spurge, and sand flax occur in the lower Florida Keys in Monroe County in communities classified as pine rockland and on disturbed sites adjacent to pine rocklands, such as roadside and mowed areas still dominated by native species (see more detailed description of disturbed sites below). In addition, sand flax occurs on the Miami Rock Ridge in Miami-Dade County in pine rockland, on disturbed sites adjacent to pine rockland, and on two canal banks that likely incorporated pine rockland substrate as fill (Bradley and Gann 1999, p. 61; Hodges and Bradley 2006, p. 37). These communities and their associated native plant species are described in the Background section of the September 29, 2015, proposed listing rule (80 FR 58536) and in the September 29, 2016, final listing rule (81 FR 66842) for Big Pine partridge pea, wedge spurge, and sand flax. These habitats and their associated plant communities provide

vegetation structure that allows for adequate growing space, moisture, sunlight, pollinators, and a competitive regime that is required for Big Pine partridge pea, wedge spurge, and sand flax to persist and spread.

Pine rocklands are a fire-maintained ecosystem characterized by an open canopy, understory, and a limestone substrate (often exposed). Open canopy conditions are required to allow sufficient sunlight to reach the herbaceous layer and permit growth and flowering of Big Pine partridge pea, wedge spurge, and sand flax (Ross and Ruiz 1996, pp. 5–6; Bradley and Saha 2009, p. 4). These species also require a calcareous limestone substrate that varies from nearly bare to thin layers or small pockets of shallow soil to provide suitable growing conditions (*e.g.,* pH, nutrients, anchoring, and proper drainage). As a result of these marginal soil conditions, plants such as Big Pine partridge pea, wedge spurge, and sand flax rely on sparse competition and periodic disturbance to thrive and persist. This combination of ecosystem characteristics (*i.e.,* open canopy with a partially exposed limestone substrate and periodic disturbance) occurs only in pine rockland habitats (as opposed to rockland hammock, which occurs in conjunction with pine rockland and has a limestone substrate but a closed canopy).

Disturbed areas that support Big Pine partridge pea, wedge spurge, and sand flax consist of sites that formerly were pine rocklands, but in most cases have no remaining pine canopy because of previous disturbance from clearing or scraping. In addition, some disturbed areas that support sand flax are sites where pine rockland substrate was used as fill. These include roadsides, firebreaks, and other areas that are infrequently mowed, or have no pine canopy but retain native pine rockland herbs, grass species, and substrate (Bradley and van der Heiden 2013, pp. 7–12; Bradley 2006, p. 37: Bradley and Gann 1999, p. 61).

Sand flax occurrences reported from marl prairie are at sites that have been artificially drained (Bradley and Van Der Heiden 2013, p. 11) or are scraped pine rocklands that function more like marl prairie (Kernan and Bradley 1996, p. 11). As with disturbed roadside habitats, it is possible that dry marl prairies have become refugia for the sand flax as fire regimes and natural areas were altered and destroyed over the last century. However, the Service does not consider marl prairie to be a primary habitat for sand flax.

The total remaining area of pine rockland in the lower Florida Keys (Monroe County) is now approximately 1,899 acres (ac) (769 hectares (ha)), most of which is on Big Pine Key (1,480 ac (599 ha)) (U.S. Geological Survey (USGS) 2019). In mainland south Florida (Miami-Dade County), development and agriculture have reduced pine rockland habitat by 90 percent. Recent vegetation mapping in Everglades National Park (ENP) indicates there are a total of 14,211 ac (5,751 ha) of pine rocklands remaining in ENP, which includes the largest remaining area of pine rockland (approximately 10,895 ac (4,409 ha)) in Florida (Long Pine Key) (Ruiz 2022). Outside of ENP, pine rockland habitat decreased from approximately 185,329 ac (75,000 ha) in the early 1900s to only 3,707 ac (1,500 ha) in 2014 (Possley et al. 2014, p. 154) and 2,275 ac (921 ha) in 2019 (USGS 2019), leaving only about 1.2 percent of the pine rocklands on the Miami Rock Ridge remaining, and much of what is left are small remnants scattered throughout the Miami metropolitan area, isolated from other natural areas (Herndon 1998, p. 1). Based on the data presented above, outside of ENP the total remaining area of pine rockland in Miami-Dade and Monroe Counties is now 4,174 ac (1,689 ha) (approximately 2,275 ac (921 ha) in Miami-Dade County and 1,899 ac (769 ha) in the Florida Keys (Monroe County)). The extreme rarity of high-quality pine rockland habitat supporting Big Pine partridge pea, wedge spurge, and sand flax elevates the importance of disturbed remnant sites that still retain some pine rockland species.

We consider pine rockland to be the primary habitat for Big Pine partridge pea, wedge spurge, and sand flax. However, adjacent disturbed areas currently supporting the species are considered essential when adjacent pine rocklands do not support an existing population or are of insufficient size or connectivity to support a population of Big Pine partridge pea, wedge spurge, and sand flax. Therefore, based on the information above, we identify upland habitats consisting of pine rocklands and adjacent disturbed areas to be a physical or biological feature essential to the conservation of these species.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Climate (Temperature and Precipitation)

Big Pine partridge pea, wedge spurge, and sand flax require adequate rainfall and do not tolerate prolonged freezing temperatures. The climate of south Florida where these species occur is characterized by distinct wet and dry seasons, a monthly mean temperature above 64.4°F (F) (18° Celsius (C)) in every month of the year, and annual rainfall averaging 30 to 60 inches (in) (75 to 150 centimeters (cm)) (Gabler et al. 1994, p. 211). Rainfall within the range of sand flax varies from an annual average of 60–65 in (153–165 cm) in the northern portion of the Miami Rock Ridge to an average of 35–40 in (89–102 cm) in the lower Florida Keys (Snyder et al. 1990, p. 238). Areas of pine rockland that are adjacent to wetlands may experience prolonged flooded periods lasting up to 60 days, while those at higher elevation have shorter or no annual flooding period (Florida Natural Areas Inventory (FNAI) 2010a, p. 2). Freezes can occur in the winter months but are very infrequent at this latitude in Florida. Therefore, based on the information above, we determined a subtropical humid (Miami-Dade County) or tropical humid (Monroe County) climate to be an essential physical feature for Big Pine partridge pea, wedge spurge, and sand flax.

Soils

Substrates supporting Big Pine partridge pea, wedge spurge, and sand flax are composed of oolitic limestone that is at or very near the surface. Solution holes occasionally form where the surface limestone is dissolved by organic acids. There is typically very little soil development, consisting primarily of accumulations of low-nutrient sand, marl, clayey loam, and organic debris found in solution holes, depressions, and crevices on the limestone surface (FNAI 2010a, p. 62). However, extensive sandy pockets can be found at the northern end of the Miami Rock Ridge, beginning from approximately North Miami Beach and extending south to approximately SW 216 Street (which runs east-west approximately one-half mile south of Quail Roost Pineland) (Service 1999, p. 3–162).

These substrates provide anchoring, nutrients, moisture regime, and suitable soil chemistry for Big Pine partridge pea, wedge spurge, and sand flax; they facilitate a community of associated plant species that creates competition which allows Big Pine partridge pea, wedge spurge, and sand flax to persist and spread. Therefore, based on the information above, we identify substrates derived from calcareous limestone (often exposed with little soil development) that provide nutritional requirements and suitable growing conditions (*e.g.,* pH, nutrients, anchoring and drainage) to be an essential physical feature for Big Pine

partridge pea, wedge spurge, and sand flax.

Cover or Shelter

As mentioned previously, Big Pine partridge pea, wedge spurge, and sand flax occur in pine rocklands and adjacent disturbed areas in the lower Florida Keys (Bradley and Gann 1999, pp. 17–18; Bradley 2006, p. 21). In addition, sand flax occurs in pine rocklands on the Miami Rock Ridge in Miami-Dade County. These pine rocklands are characterized by an open canopy of *Pinus elliottii* var. *densa* (South Florida slash pine). The shrub/understory layer is also characteristically open, although the height and density of the shrub layer varies based on fire frequency, with understory plants growing taller and denser as time since fire increases. The open canopy and understory of pine rocklands are required to allow sufficient sunlight to reach the herbaceous layer and permit growth and flowering of Big Pine partridge pea, wedge spurge, and sand flax (Bradley and Gann 1999, pp. 17–18; Bradley 2006, p. 37).

Disturbed areas that are adjacent to pine rocklands that support Big Pine partridge pea, wedge spurge, and sand flax may have little to no pine canopy, but an herbaceous layer dominated by native herbs and grasses. Usually, these are former (remnant) pine rocklands that have a history of disturbance (clearing or scraping). These sites tend to be infrequently (every 2–3 months) mowed areas adjacent to existing pine rocklands, such as roadsides and fields. These areas can provide the open conditions required by Big Pine partridge pea, wedge surge, and sand flax (Bradley 2006, p. 37).

Therefore, based on the information above, we identify vegetation composition and structure characterized by an open canopy of South Florida slash pine and understory that allows for sufficient sunlight and space for individual growth and population expansion to be an essential feature for Big Pine partridge pea, wedge spurge, and sand flax.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

Big Pine partridge pea reproduction is sexual, and flowers require insect visitation for pollination. Though many types of insects visit Big Pine partridge pea flowers, effective pollination can be performed only by buzz-pollinating bees (Liu and Koptur 2003, pp. 1184–1186). Seed production is higher when cross-pollination occurs. In addition, seed germination rates are higher from cross-pollinated flowers, suggesting that inbreeding depression occurs in seeds produced through self-pollination (Liu and Koptur 2003, pp. 1184–1186). Taken together, these findings indicate that insect pollination is crucial to the plant's reproduction and progeny fitness. Declines in pollinator visitation may cause decreased seed production, which could lead to lower seedling establishment and numbers of mature plants.

The biology and demography of wedge spurge have received considerable study. Small groups of the plant are scattered widely across the pine rocklands of Big Pine Key (Herndon 1993, in Bradley and Gann 1999, p. 31), with a population estimated at 368,557 in 2014 (Bradley et al. 2015, p. 21). The population was confirmed to still be present in 2019 (Lange et al. 2019, p. 16). Wedge spurge reproduction is sexual and likely requires insect visitation for pollination. Other species of *Chamaesyce* are completely reliant on insects for pollination and seed production while others are capable of self-pollination. Pollinators may include bees, flies, ants, and wasps (Ehrenfeld 1976, pp. 95–97, 406).

Little is known about the life history of sand flax, including pollination biology, seed production, or dispersal. Sand flax reproduction is sexual, with new plants generated from seeds. A recent study found that pollinators are important in fruit production of sand flax (Harris and Koptur 2022, pp. 7–8). Effective pollination has been found from small bees and flies that visit the flowers of sand flax (Harris and Koptur 2022, pp. 4–6). This recent information suggests that insect pollination is important to the species' reproduction. Therefore, like Big Pine partridge pea and wedge spurge, declines in pollinator visitation may cause decreased seed or fruit production of sand flax, which could lead to lower seedling establishment and numbers of mature plants.

The pine rocklands and adjacent disturbed habitats identified above as essential physical or biological features provide a plant community with associated plant species that foster a competitive regime suitable to Big Pine partridge pea, wedge spurge, and sand flax and contain adequate open space for the recruitment of new plants. Associated plant species in these habitats attract and provide cover for insect pollinators required for Big Pine partridge pea pollination, wedge spurge, and sand flax.

Therefore, based on the information above, we identify pine rockland habitat and adjacent disturbed areas containing the presence of native pollinators for natural pollination and reproduction to be an essential feature for Big Pine partridge pea, wedge spurge, and sand flax.

Habitats Representative of the Historical, Geographical, and Ecological Distributions of the Species

Big Pine partridge pea, wedge spurge, and sand flax continue to occur in habitats that are representative of the species' historical, geographical, and ecological distribution, although their current ranges have been reduced. These species are currently found in pine rocklands, and they also occur in adjacent disturbed areas, such as roadsides. As described above, these habitats provide a community of associated plant and animal species that are compatible with Big Pine partridge pea, wedge spurge, and sand flax. In addition, these habitats provide the vegetation structure that provides adequate sunlight levels and open space for plant growth and regeneration, and substrates with adequate moisture availability and suitable soil chemistry needed for these species. Representative communities are located on Federal, State, local, and private conservation lands that implement conservation measures benefitting these species.

Disturbance Regime

Pine rockland habitat that could support or currently supports Big Pine partridge pea, wedge spurge, and sand flax depend on a disturbance regime of wild or prescribed fire to open the canopy in order to provide light levels sufficient to support these species. Fire return intervals of 5 to 7 years generate the lowest extinction and population decline probabilities for Big Pine partridge pea (Liu et al. 2005, p. 210). The historical frequency and magnitude of fire allowed for the persistence of Big Pine partridge pea, wedge spurge, and sand flax by maintaining an open canopy and understory and preventing succession (transition) of pine rocklands to hardwood-dominated community (rockland hammock). In the absence of fire, some areas of pine rockland may have closed canopies, resulting in areas lacking enough available sunlight to support Big Pine partridge pea, wedge spurge, and sand flax. Most of these areas can be enhanced if habitats are managed with a combination of mechanical hardwood removal and prescribed fire. Disturbed sites that support Big Pine partridge pea, wedge spurge, and sand flax are typically maintained by infrequent mowing. Mowing is similar in effect to fire in that

it limits encroachment of hardwood species and maintains open canopy conditions suitable for these species. We consider wildfire to be the natural disturbance factor for pine rocklands and Big Pine partridge pea, wedge spurge, and sand flax. In adjacent disturbed areas currently supporting the species, mowing serves some of the ecological function of fire and maintains suitable habitat conditions (open canopy) for these species.

Therefore, based on the information above, we identify periodic natural (*e.g.,* fire) or nonnatural (*e.g.,* prescribed fire, mowing) disturbance regimes to maintain open canopy conditions in South Florida pine rocklands, to be an important process to maintain essential features for Big Pine partridge pea, wedge spurge, and sand flax.

Summary of Physical or Biological Features Essential to the Conservation of Big Pine Partridge Pea, Wedge Spurge, and Sand Flax

Based on the best available science related to the life history and ecology of these species, as outlined in the discussion above, we have determined that the following physical or biological features are essential to the conservation of Big Pine partridge pea, wedge spurge, and sand flax:

South Florida pine rockland habitat and adjacent disturbed areas:

(1) Consisting of calcareous limestone substrate (often exposed with little soil development) that provides nutritional requirements and suitable growing conditions (*e.g.,* pH, nutrients, anchoring and drainage);

(2) Characterized by an open canopy of *Pinus elliottii* var. *densa* (South Florida slash pine) and understory with a high proportion of native pine rockland plant species to provide for sufficient sunlight to permit growth and flowering;

(3) Subjected to a monthly mean temperature characteristic of the subtropical humid classification in Miami-Dade County and tropical humid classification in Monroe County in every month of the year and short hydroperiods ranging of up to 60 days each year;

(4) Subjected to periodic natural (*e.g.,* fire) or nonnatural (*e.g.,* prescribed fire, mowing) disturbance regimes to maintain open canopy conditions; and

(5) Containing the presence of native pollinators for natural pollination and reproduction.

Blodgett's Silverbush

Space for Individual and Population Growth and for Normal Behavior

Plant Community and Competitive Ability

Blodgett's silverbush occurs in the Florida Keys in Monroe County and on the Miami Rock Ridge in Miami-Dade County in communities classified as pine rockland, rockland hammock, and coastal berm, as well as disturbed sites adjacent to these habitats, such as roadsides and mowed areas still dominated by native species (Bradley and Gann 1999, p. 3). These communities and their associated native plant species are described in the final listing rule for Blodgett's silverbush published in the **Federal Register** on September 29, 2016 (81 FR 66842). These habitats and their associated plant communities provide vegetation structure that allows for adequate growing space, moisture, sunlight, pollinators, and a competitive regime that is required for Blodgett's silverbush to persist and spread. As discussed above for Big Pine partridge pea, wedge spurge, and sand flax, pine rocklands are a fire-maintained ecosystem characterized by an open canopy and understory and a limestone substrate (often exposed). Rockland hammock is a species-rich tropical hardwood forest on upland sites in areas where limestone is very near the surface and often exposed. Coastal berms are landscape features found along low-energy coastlines in south Florida and the Florida Keys. Coastal berm is a short forest or shrub thicket found on long, narrow, storm-deposited ridges (sand dunes) of loose sediment formed by a mixture of coarse shell fragments, pieces of coralline algae, and other coastal debris.

Similar to the other species, open canopy conditions are required to allow sufficient sunlight to reach the herbaceous layer and permit growth and flowering of Blodgett's silverbush. These conditions are maintained by fire in pine rocklands. In rockland hammocks, only the edges and canopy disruption in the interior provide enough sunlight for Blodgett's silverbush. Canopy disruption on rockland hammocks can occur due to natural events such as hurricanes and storm surge. Human disturbance, especially mowing, also maintains suitable conditions in disturbed areas, as discussed above for Big Pine partridge pea, wedge spurge, and sand flax. The plant also requires a calcareous limestone substrate that varies from nearly bare to thin layers or small pockets of shallow soil in pine rocklands, to shallow organic soils over calcareous limestone in rockland hammocks, and deep, calcareous sandy soils typical of coastal berm to provide suitable growing conditions (*e.g.,* pH, nutrients, anchoring, and proper drainage). As a result of these marginal soil conditions, plants such as Blodgett's silverbush rely on sparse competition and periodic disturbance to thrive and persist. This combination of ecosystem characteristics (*i.e.,* open canopy and limestone substrate) occurs in pine rocklands, along edges and gaps in rockland hammocks, and in coastal berm.

Disturbed areas that support Blodgett's silverbush consist of sites that formerly were pine rocklands or rockland hammocks, but in most cases have no remaining pine or hardwood canopy because of previous disturbance (clearing or scraping). These include roadsides, firebreaks, and other areas that are infrequently mowed or have no tree canopy but retain native herbs, grass species, and substrate (Bradley 2006, p. 37: Bradley and Gann 1999, p. 61).

Loss of pine rockland habitat in Miami-Dade and Monroe County is discussed above for Big Pine partridge pea, wedge spurge, and sand flax. In addition, modification and destruction from residential and commercial development have severely impacted rockland hammocks and coastal berm that support Blodgett's silverbush. Rockland hammocks were once abundant in Miami-Dade and Monroe Counties but are now considered imperiled locally and globally (FNAI 2010b, pp. 24–26). The tremendous development and agricultural pressures in south Florida have resulted in significant reductions of rockland hammock (Phillips 1940, p. 167; Snyder et al. 1990, pp. 271–272; FNAI 2010b, pp. 24–26).

The extreme rarity of high-quality pine rockland, rockland hammock, and coastal berm habitat supporting Blodgett's silverbush in Miami-Dade and Monroe Counties elevates the importance of disturbed remnant sites that still retain some habitat values.

We consider pine rocklands, edges or gaps in rockland hammocks, and coastal berm to be the primary habitats for Blodgett's silverbush. However, adjacent disturbed areas currently supporting the species are considered more important when adjacent pine rocklands, rockland hammocks, or coastal berm do not support an existing population, or are of insufficient size or connectivity to support a population of Blodgett's silverbush. Therefore, based on the information above, we identify upland

habitats consisting of pine rocklands, rockland hammocks, coastal berms, and adjacent disturbed areas to be physical or biological features essential to the conservation of Blodgett's silverbush.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Climate (Temperature and Precipitation)

Blodgett's silverbush requires adequate rainfall and does not tolerate prolonged freezing temperatures. The climate of south Florida where Blodgett's silverbush occurs is classified as subtropical humid (Miami-Dade County) and tropical humid (Monroe County), as described above for Big Pine partridge pea, wedge spurge, and sand flax. Rainfall within the range of Blodgett's silverbush varies from an annual average of 60–65 in (153–165 cm) in the northern portion of the Miami Rock Ridge to an average of 35–40 in (89–102 cm) in the lower Florida Keys (Snyder et al. 1990, p. 238). Areas of pine rockland that are adjacent to wetlands may experience prolonged flooded periods lasting up to 60 days, while those at higher elevation have shorter or no annual flooding period (FNAI 2010a, p. 2). Freezes can occur in the winter months but are very infrequent at this latitude in Florida. Therefore, based on the information above, we determined this type of climate to be an essential physical feature for Blodgett's silverbush.

Soils

Substrates supporting Blodgett's silverbush are composed of oolitic limestone that is at or very near the surface. Solution holes occasionally form where the surface limestone is dissolved by organic acids. In pine rocklands, there is typically very little soil development, consisting primarily of accumulations of low-nutrient sand, marl, clayey loam, and organic debris found in solution holes, depressions, and crevices on the limestone surface (FNAI 2010a, p. 62). However, extensive sandy pockets can be found at the northern end of the Miami Rock Ridge, beginning from approximately North Miami Beach and extending south to approximately SW 216 Street (which runs east-west approximately one-half mile south of Quail Roost Pineland) (Service 1999, p. 3–162). Rockland hammock occurs on a thin layer of highly organic soil covering limestone on high ground that does not regularly flood (FNAI 2010b p. 1). In coastal berms, deep, calcareous sandy soils are the typical substrate of this habitat.

These substrates provide anchoring, nutrients, moisture regime, and suitable soil chemistry for Blodgett's silverbush; and facilitate a community of associated plant species that create a competitive regime that allows Blodgett's silverbush to persist and spread. Therefore, based on the information above, we identify substrates derived from calcareous limestone (often exposed with little soil development in pine rocklands; with a thin to thick organic soil layer in the case of rockland hammocks; deep, calcareous soils in coastal berm) that provide nutritional requirements and suitable growing conditions (*e.g.,* pH, nutrients, anchoring and drainage) to be an essential physical feature for Blodgett's silverbush.

Cover or Shelter

As previously mentioned, Blodgett's silverbush occurs in pine rockland, rockland hammock, and coastal berm habitats in the lower Florida Keys in Monroe County and the Miami Rock Ridge in Miami-Dade County; and adjacent disturbed areas (Bradley and Gann, 1999, p. 3). Pine rocklands of the Florida Keys are characterized by an open canopy of South Florida slash pine. The shrub/understory layer is also characteristically open, although the height and density of the shrub layer varies based on fire frequency, with understory plants growing taller and denser as time since fire increases. The open canopy and understory of pine rocklands are required to allow sufficient sunlight to reach the herbaceous layer and permit growth and flowering of Blodgett's silverbush (Ross and Ruiz 1996, pp. 5–6; Bradley and Saha 2009, p.4).

Rockland hammock forest floor is largely covered by leaf litter and may have an organic soil layer of variable depth. Rockland hammocks typically have larger, more mature trees and deep organic soil layer in the interior, while the margins can be almost impenetrable in places with dense growth of smaller shrubs, trees, and vines and shallow organic soil layer. Mature hammocks may be open beneath a tall, well-defined canopy and subcanopy. More commonly, in less mature or disturbed hammocks, dense woody vegetation of varying heights from canopy to short shrubs is often present. Herbaceous species are occasionally present and generally sparse in coverage (FNAI 2010b p. 1).

Coastal berm is a short forest or shrub thicket found on long, narrow, storm-deposited ridges (sand dunes). Structure and composition of the vegetation is variable depending on height and time since the last storm event. The most stable berms may share some tree species with rockland hammocks, but generally have a greater proportion of shrubs and herbs. This is a structurally variable community that may appear in various stages of succession following storm disturbance, from scattered herbaceous beach colonizers to a dense stand of tall shrubs (FNAI 2010c, p. 2).

Disturbed areas that are adjacent to pine rocklands, rockland hammocks, and coastal berms that support Blodgett's silverbush may have little to no pine or hardwood canopy, but an herbaceous layer dominated by native herbs and grasses. Usually these are former (remnant) pine rocklands or rockland hammocks that have a history of disturbance (clearing or scraping). These sites tend to be infrequently (every 2–3 months) mowed areas adjacent to existing pine rocklands or rockland hammocks, such as roadsides and fields. These areas provide the open conditions required by Blodgett's silverbush (Bradley 2006, p. 37).

Therefore, based on the information above, we identify vegetation composition and structure characterized by an open canopy and understory that allows for sufficient sunlight, and space for individual growth and population expansion, to be an essential feature for Blodgett's silverbush.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

Little is known about the life history of Blodgett's silverbush, including pollination biology, seed production, or dispersal. Blodgett's silverbush reproduction is sexual, with new plants generated from seeds. This species likely requires insect visitation for pollination, although there is limited information on this.

The pine rocklands, rockland hammocks, coastal berms, and adjacent disturbed habitats identified above as physical or biological features provide a plant community with associated plant species that foster a competitive regime suitable to Blodgett's silverbush and contain adequate open space for the recruitment of new plants. Associated plant species in these habitats attract and provide cover for insect pollinators required for Blodgett's silverbush pollination.

Therefore, based on the information above, we identify pine rockland, rockland hammock, and coastal berm habitat and adjacent disturbed areas containing the presence of native pollinators for natural pollination and reproduction to be an essential feature for Blodgett's silverbush.

Habitats Representative of the Historical, Geographic, and Ecological Distributions of the Species

Blodgett's silverbush continues to occur in habitats that are representative of the species' historical, geographical, and ecological distribution although its range has been reduced. The species is currently found in pine rocklands, rockland hammocks, and coastal berms, and it also occurs in adjacent disturbed areas. As described above, these habitats provide a community of associated plant and animal species that are compatible with Blodgett's silverbush, vegetation structure that provides adequate sunlight levels and open space for plant growth and regeneration, and substrates with adequate moisture availability and suitable soil chemistry. Representative communities are located on Federal, State, local, and private conservation lands that implement conservation measures benefitting the species.

Disturbance Regime

Pine rockland habitat that could or currently support Blodgett's silverbush depend on a disturbance regime of wild or prescribed fire to open the canopy and provide light levels sufficient to support Blodgett's silverbush. The historical frequency and magnitude of fire allowed for the persistence of Blodgett's silverbush, maintaining an open canopy and understory, and preventing succession (transition) of pine rocklands to hardwood-dominated community (rockland hammock). In the absence of fire, some areas of pine rockland may have closed canopies, resulting in areas lacking enough available sunlight to support Blodgett's silverbush. Most of these areas can be restored if habitats are managed with a combination of mechanical hardwood removal and prescribed fire.

Rockland hammock is susceptible to fire, frost, canopy disruption, and ground water reduction. Rockland hammock can be the advanced successional stage of pine rockland, especially in cases where rockland hammock is adjacent to pine rockland. In such cases, when fire is excluded from pine rockland for 15 to 25 years, it can succeed to rockland hammock vegetation. Historically, rockland hammocks in south Florida evolved with fire in the landscape, fire most often extinguished near the edges when it encountered the hammock's moist microclimate and litter layer. However, rockland hammocks are susceptible to damage from fire during extreme drought or when the water table is lowered. In these cases, fire can cause tree mortality and consume the organic soil layer. Rockland hammocks are also sensitive to the strong winds and storm surge associated with hurricanes (FNAI 2010b p. 2).

Coastal berms are deposited by storm waves along low-energy coasts. Their distance inland depends on the height of the storm surge. Coastal berms that are deposited far enough inland and remain undisturbed may in time succeed to hammock. This is a structurally variable community that may appear in various stages of succession following storm disturbance, from scattered herbaceous beach colonizers to a dense stand of tall shrubs (FNAI 2010c, p. 2).

The sparsely vegetated edges or interior portions laid open by canopy disruption are the areas of rockland hammock and coastal berm that have light levels sufficient to support Blodgett's silverbush. However, the dynamic nature of the habitat means that areas not currently open may become open in the future as a result of canopy disruption from hurricanes, while areas currently open may develop denser canopy over time, eventually rendering that portion of the hammock unsuitable for Blodgett's silverbush.

Disturbed sites that support Blodgett's silverbush are typically maintained by infrequent mowing. Mowing is similar in effect to fire in that it limits encroachment of hardwood species and maintains open canopy conditions suitable for Blodgett's silverbush. We consider wildfire to be the natural disturbance factor for pine rocklands. Periodic hurricanes and storm surge are the natural disturbance factors for rockland hammock and coastal berm. In adjacent disturbed areas currently supporting the species, mowing serves some of the ecological function of fire and maintains suitable habitat conditions (open canopy) for the species.

Therefore, based on the information above, we identify periodic natural (*e.g.,* fire, hurricanes) or nonnatural (*e.g.,* prescribed fire, mowing) disturbance regimes that maintain open canopy conditions to be essential features for Blodgett's silverbush.

Summary of Physical or Biological Features Essential to the Conservation of Blodgett's Silverbush

Based on the best available science related to the life history and ecology of the species, as outlined in the discussion above, we have determined that the following physical or biological features are essential to the conservation of Blodgett's silverbush:

South Florida pine rockland, rockland hammock, or coastal berm habitats and adjacent disturbed areas:

(1) Consisting of limestone substrate that provides nutritional requirements and suitable growing conditions (*e.g.,* pH, nutrients, anchoring and drainage);

(2) Characterized by an open canopy and understory with a high proportion of native plant species to provide for sufficient sunlight to permit growth and flowering;

(3) Subjected to a monthly mean temperature characteristic of the subtropical humid classification in Miami-Dade County and tropical humid classification in Monroe County in every month of the year, with short hydroperiods ranging of up to 60 days each year;

(4) Subjected to periodic natural (*e.g.,* fire, hurricanes, storm surge) or nonnatural (*e.g.,* prescribed fire, mowing) disturbance regimes to maintain open canopy conditions; and

(5) Containing the presence of native pollinators for natural pollination and reproduction.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. The features essential to the conservation of Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush may require special management considerations or protection to reduce threats related to habitat loss, fragmentation, and modification primarily due to development; inadequate fire management; nonnative plants; hurricanes and storm surge; changes in disturbance regime; and sea level rise. For an in-depth discussion of threats, see Summary of Factors Affecting the Species in our September 29, 2015, proposed listing rule (80 FR 58536) and September 29, 2016, final listing rule (81 FR 66842).

Some of these threats (*e.g.,* habitat loss, inadequate fire management) can be addressed by special management considerations or protection while others (*e.g.,* sea level rise, hurricanes, storm surge) may be beyond the control of landowners and managers. However, even when landowners or land managers may not be able to control all the threats, they may be able to address or ameliorate the effects of the threats. Habitat loss is a primary threat to Big Pine partridge pea, wedge spurge, sand

flax, and Blodgett's silverbush. Loss of pine rocklands, rockland hammock, and coastal berm to development has reduced these habitats in Monroe and Miami-Dade Counties.

Habitat fragmentation can have negative effects on populations, especially rare plants, and can affect survival and recovery (Aguilar et al. 2006, pp. 968–980; Aguilar et al. 2008, pp. 5177–5188; Potts et al. 2010, pp. 345–352). In general, habitat fragmentation causes habitat loss, habitat degradation, habitat isolation, changes in species composition, changes in species interactions, increased edge effects, and reduced habitat connectivity (Fahrig 2003, pp. 487–515; Fischer and Lindenmayer 2007, pp. 265–280). Habitat fragments are often functionally smaller than they appear because edge effects (such as increased nonnative, invasive species or wind speeds) impact the available habitat within the fragment (Lienert and Fischer 2003, p. 597). For example, decreases in Big Pine partridge pea seed production near urban areas due to increased seed predation, compared with areas away from development have been reported (Liu and Koptur 2003, p. 1184).

Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush occur on a mix of private and publicly owned lands, most of which are managed for conservation. Populations that occur on private land or non-conservation public land are vulnerable to habitat loss, while populations on conservation lands are vulnerable to the effects of habitat degradation if disturbance regimes are disrupted (*e.g.,* through inadequate fire management or change in management practices on disturbed sites that support the species). Prolonged lack of fire in pine rockland typically results in succession to rockland hammock, and displacement of native species by invasive, nonnative plants often occurs. Changes in management practices at disturbed sites may include changes in mowing frequency or height, herbicide use, deposition of fill material, and sodding. Further development and degradation of pine rockland, rockland hammock, and coastal berm increase fragmentation and decrease the conservation value of the remaining functioning habitats. In addition, pine rocklands are expected to be further degraded and fragmented due to anticipated sea level rise, which would fully or partially inundate most pine rocklands and increase salinity of the water table and soils. These impacts are likely to cause vegetation shifts in additional pine rocklands, particularly in the lower Florida Keys. Some existing pine rockland, rockland hammock, and coastal berm areas are also projected to be developed for housing as the human population grows and adjusts to rising sea levels.

In summary, the features essential to the conservation of Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush may require special management considerations or protection to reduce threats and conserve these features. Actions that could ameliorate threats include, but are not limited to:

(1) Increase habitat restoration and management efforts, including fire management and nonnative plant control;

(2) Protect, restore, or enhance inland or higher elevation habitats where these species occur and are predicted to be unaffected or less affected by sea level rise;

(3) Augment existing small populations; and

(4) Conduct annual or seasonal monitoring efforts, or monitoring conducted prior to, but coordinated with habitat and fire management planning to refine management efforts over time.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify specific areas within the geographical area occupied by the species at the time of listing and any specific areas outside the geographical area occupied by the species to be considered for designation as critical habitat.

We are proposing to designate critical habitat in areas within the geographical area occupied by these species at the time of listing in 2016. At this time, we have not identified specific areas outside the geographical range occupied by the species that are essential for the species' conservation. However, as discussed below, we are considering whether areas outside the geographical range of the Big Pine Partridge Pea, wedge spurge, and sand flax at the time of listing meet the definition of critical habitat. If we determine some or all of those areas are critical habitat for these species, we will include them in our final designation.

We anticipate that full recovery for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush will require continued protection of the remaining extant populations and habitat and augmenting existing small populations. Recovery of Big Pine partridge pea, wedge spurge, and sand flax may also require reestablishing populations in additional areas (*i.e.,* unoccupied areas) to approximate more closely the species' historical distribution to ensure adequate numbers of plants exist in stable populations and these populations occur over their entire geographic range. This scenario could help to reduce the chance that catastrophic events, such as storms, will simultaneously affect all known populations. However, some of the historical locations no longer contain suitable habitat, and thus are not proposed.

Small plant populations or those with limited distributions, such as Big Pine partridge pea, wedge spurge, and sand flax, are vulnerable to relatively minor environmental disturbances (Frankham 2005, pp. 135–136) that could result in the loss of genetic diversity from genetic drift, the random loss of genes, and inbreeding (Ellstrand and Elam 1993, pp. 217–237; Leimu et al. 2006, pp. 942–952). Plant populations with lowered genetic diversity are more prone to local extinction (Barrett and Kohn 1991, pp. 4, 28). Smaller plant populations generally have lower genetic diversity, and lower genetic diversity may in turn lead to even smaller populations by decreasing the species' ability to adapt, thereby increasing the probability of population extinction (Newman and Pilson 1997, p. 360; Palstra and Ruzzante 2008, pp. 3428–3447). Because of the dangers associated with small populations or limited distributions, the recovery of many rare plant species, such as Big Pine partridge pea, wedge spurge, and sand flax, may include the creation of new sites or reintroductions to ameliorate these effects.

In considering our proposal of critical habitat, we identified the following conservation strategy and goals for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush:

(1) Conserve existing viable populations with sufficient native habitat;

(2) Work with partners to conserve existing populations, and implement efforts that will benefit the species and its habitat; and

(3) Augment existing populations and facilitate establishment/reestablishment of populations into suitable protected habitat.

To facilitate the application of our conservation strategy and goals for these species, we utilized the Shaffer and Stein (2000, entire) methodology for

conserving the resiliency, representation, and redundancy of imperiled species. Resiliency is the ability to sustain populations through the natural range of favorable and unfavorable conditions. Representation ensures adaptive capacity within a species and allows it to respond to environmental changes. This can be facilitated by conserving not just genetic diversity, but also the species' associated habitat type and plant communities. Redundancy ensures an adequate number of sites with resilient populations such that the species has the ability to withstand catastrophic events. Implementation of this methodology has been widely accepted as a reasonable conservation strategy (Tear et al. 2005, p. 841).

Big Pine Partridge Pea

Big Pine partridge pea is endemic to the lower Florida Keys in Monroe County, Florida. Historical records exist for occurrences in pine rocklands on five islands: Big Pine Key, Ramrod Key, Cudjoe Key, No Name Key, and Lower Sugarloaf Key (Hodges and Bradley 2006, pp. 20–21). At the time of listing and currently, native populations of the plant occur only on Big Pine Key and Cudjoe Key since the species has been extirpated from Ramrod Key and Lower Sugarloaf Key (Bradley and Gann 1999, p. 18; Hodges and Bradley 2006, p. 21; Lange et al. 2019). In 2019, a population was successfully introduced in NKDR on No Name Key. Except for Ramrod Key, all these Keys still contain pine rockland habitat. While the Big Pine Key population is relatively large, estimated at 313,914 plants in 2013 (Bradley et al. 2015, p. 21), the Cudjoe Key population was relatively small, consisting of approximately 150 individuals ((Hodges and Bradley 2006, p. 21), and recent surveys did not find the species there (Lange et al. 2019, p. 16). Therefore, if the species is not found at Cudjoe Key during future surveys, reintroductions may be needed at Cudjoe Key.

Given the species occurs only within the lower Florida Keys, it has inherently low redundancy; with only two extant populations at the time of listing, the current redundancy of native populations has been even further reduced from historical levels. In addition, because there currently are three populations (two native and one reintroduced) across the naturally limited historical range of the species, Big Pine partridge pea is vulnerable to stochastic extinction events from natural or other disturbances (such as hurricanes or storm surge) that could affect the entire geographic range of the species. Both natural populations occur on small islands where the amount of suitable remaining habitat is limited (low resiliency), and much of the remaining habitat may be lost to sea level rise over the next century. Therefore, we are proposing critical habitat units that contain the physical or biological features essential to the conservation of the species and that support both extant populations at the time of listing.

Additionally, we acknowledge that areas unoccupied at the time of listing may be essential for the conservation of the Big Pine partridge pea. We are considering whether areas of remaining pine rockland habitat on Little Pine Key, No Name Key, and Sugarloaf Keys meet the definition of critical habitat. The area on Little Pine Key consists of approximately 97 ac (39 ha) of pine rockland habitat in Monroe County and is comprised entirely of lands in Federal ownership, 100 percent of which are located within NKDR. Pine rocklands cover about two-thirds of the interior portion of the island. We note that this area wholly overlaps with designated critical habitat for silver rice rat and Bartram's scrub-hairstreak butterfly. The area on No Name Key includes approximately 123 ac (50 ha) of pine rockland habitat in Monroe County comprised of a combination of Federal lands within NKDR, State lands, County lands, and property in private or other ownership). State lands are interspersed within NKDR lands and managed as part of the Refuge. We note that this area wholly overlaps with designated critical habitat for Bartram's scrub-hairstreak butterfly. Finally, on Sugarloaf Keys, we are considering approximately 73 ac (30 ha) of pine rockland habitat north of U.S. 1, comprised of a combination of Federal lands within NKDR, County lands, and property in private or other ownership. We note that these areas on Sugarloaf Keys wholly overlap with the areas being proposed as critical habitat for the sand flax and the endangered key deer occurs throughout this area. We will determine whether these areas are essential to protect habitat needed to recover the species and establish new populations within the range of the species such that they meet the definition of critical habitat. If we decide some or all of these areas are essential to the conservation of the Big Pine partridge pea, we will include them in our final critical habitat determination (see also Information Requested, above).

Wedge Spurge

Wedge spurge is endemic to the lower Florida Keys in Monroe County, Florida. Its historical range encompassed pine rocklands on Big Pine Key. At the time of listing and currently, the only native population of the plant currently occurs on Big Pine Key, with small groups of plants scattered widely across the island. The Big Pine population is relatively large, estimated at 368,557 individuals in 2014 (Bradley et al. 2015, pp. 24–25); the presence of this population was verified in 2019 (Lange et al. 2019, p. 16). However, since the time the species was listed, a population was successfully introduced in NKDR on No Name Key. While the Big Pine Key population is relatively large, estimated at 368,557 individuals in 2014 (Bradley et al. 2015, pp. 24–25), it is the only extant native population.

Given the species occurs within the lower Florida Keys, it has inherently low redundancy; with only one extant populations at the time of listing, the current redundancy of native population has been reduced from historical levels. Because there currently are only two populations (one native and one introduced) across the naturally limited historical range, wedge spurge is vulnerable to stochastic extinction events from natural or other disturbances (such as hurricanes or storm surge) that could affect the entire geographic range of wedge spurge. The sole natural population occurs on a small island where the amount of suitable habitat is limited (low resiliency) and much of that habitat may be lost to sea level rise over the next century. Therefore, the resiliency of the population and redundancy of the wedge spurge will continue to be limited by the amount of pine rockland habitat remaining in the lower Florida Keys. We are proposing a critical habitat unit that contains the physical or biological features essential to the conservation of the species and supports the single native population on Big Pine Key extant at the time of listing.

Additionally, we acknowledge that areas unoccupied at the time of listing may be essential for the conservation of the wedge spurge. We are considering whether areas of remaining pine rockland habitat on Little Pine Key, No Name Key, Cudjoe Key, and Sugarloaf Keys of the wedge spurge meet the definition of critical habitat. The area on Little Pine Key consists of approximately 97 ac (39 ha) of pine rockland habitat in Monroe County and is comprised entirely of lands in Federal ownership, 100 percent of which are located within NKDR. Pine rocklands cover about two-thirds of the interior portion of the island. We note that this area wholly overlaps with designated critical habitat for silver rice rat and

Bartram's scrub-hairstreak butterfly. The area on No Name Key includes approximately 123 ac (50 ha) of pine rockland habitat in Monroe County comprised of a combination of Federal lands within NKDR, State lands, County lands, and property in private or other ownership. State lands are interspersed within NKDR lands and managed as part of the Refuge. We note that this area wholly overlaps with designated critical habitat for Bartram's scrub-hairstreak butterfly. The area on Cudjoe Key consists of approximately 88 ac (33 ha) of pine rockland habitat in Monroe County and is comprised of a combination of Federal lands within NKDR, State lands, County lands, and property in private or other ownership. State lands are interspersed within NKDR lands and managed as part of the Refuge. We note that this area wholly overlaps with designated critical habitat for silver rice rat. Finally, on Sugarloaf Keys, we are considering approximately 73 ac (30 ha) of pine rockland habitat north of U.S. 1, comprised of a combination of Federal lands within NKDR, County lands, and property in private or other ownership. We note that these areas on Sugarloaf Keys wholly overlap with the areas being proposed as critical habitat for the sand flax and the endangered key deer occurs throughout this area. We will determine whether these areas are essential to protect habitat needed to recover the species and establish new populations within the range of the species such that they meet the definition of critical habitat. If we decide some or all of these areas are essential for the conservation of the wedge spurge, we will include them in our final critical habitat determination (see also Information Requested, above).

Sand Flax

Sand flax has a historical range consisting of central and southern Miami-Dade County and Monroe County in the lower Florida Keys (Bradley and Gann 1999, p. 61). At the time of listing and currently, there were twelve extant populations of sand flax, with eight extant populations in Miami-Dade County and four extant populations in the Florida Keys. In Miami-Dade County, historical records for the species were widespread from the Coconut Grove area to the southern part of the county, close to what is now the main entrance to ENP and Turkey Point (Bradley and Gann 1999, p. 61). In 2013, sand flax populations were found at six sites, containing an estimated total of 107,060 plants (Bradley and van der Heiden 2013, p. 4). In Miami-Dade County, recent observations include confirmation of the species' continued presence at the Richmond Pinelands, Martinez Pineland Preserve, Department of Defense (DoD) Special Operations Command South (SOCSO) and Homestead Air Reserve Base (HARB), and the C–102 and L–31E canal levee populations. Additionally, a new population was established at Rockdale Pineland in 2019 (Possley, pers. comm. 2019). The four largest populations of sand flax include Homestead, Florida (located on the HARB and SOCSO DoD sites), estimated at 96,037 individuals; the C–102 canal levee and L–31E canal levee sites, estimated at 1,000 to 10,000 plants, respectively; and Big Pine Key, estimated at 2,676 individuals. All other sites have fewer than 100 individuals, except Martinez pinelands (100–200 individuals) and Lower Sugarloaf Key (531 individuals). Two populations occupy levees that cannot be restored to pine rockland habitat, rendering sand flax vulnerable to stochastic extinction events from natural or other disturbances (such as hurricanes or storm surge) that could affect the entire geographic range of sand flax.

In the Florida Keys (Monroe County), there are historical records of the species from Big Pine Key, Ramrod Key, Upper and Lower Sugarloaf Keys, Park Key, Boca Chica Key, Middle Torch Key (Bradley and Gann 1999, p. 61), and Big Torch Key (Hodges 2010, p. 10). The current distribution of sand flax includes four islands: Big Pine Key, Upper and Lower Sugarloaf Keys, and Big Torch Key. Additionally, a population was successfully introduced in NKDR on No Name Key since the time of listing.

Resiliency of sand flax will continue to be limited by the reduced amount of pine rockland habitat remaining in Florida. All Miami-Dade populations are on small remnant pine rockland sites and adjacent disturbed areas, while all Monroe County populations occur on small islands. In both cases, the amount of suitable remaining habitat is limited (low resiliency) and much of the remaining habitat may be lost to sea level rise over the next century. Therefore, we are proposing critical habitat units that contain the physical or biological features essential to the conservation of the species and support the seven extant populations at the time of listing.

Additionally, we acknowledge that areas unoccupied at the time of listing may be essential for the conservation of the sand flax. We are considering whether areas of remaining pine rockland habitat on Little Pine Key, No Name Key, Cudjoe Key, and Sugarloaf Keys of the wedge spurge meet the definition of critical habitat. The area on Little Pine Key consists of approximately 97 ac (39 ha) of pine rockland habitat in Monroe County and is comprised entirely of lands in Federal ownership, 100 percent of which are located within NKDR. Pine rocklands cover about two-thirds of the interior portion of the island. We note that this area wholly overlaps with designated critical habitat for silver rice rat and Bartram's scrub-hairstreak butterfly. The area on No Name Key includes approximately 123 ac (50 ha) of pine rockland habitat in Monroe County comprised of a combination of Federal lands within NKDR, State lands, County lands, and property in private or other ownership. State lands are interspersed within NKDR lands and managed as part of the Refuge. We note that this area wholly overlaps with designated critical habitat for Bartram's scrub-hairstreak butterfly. The area on Cudjoe Key consists of approximately 88 ac (33 ha) of pine rockland habitat in Monroe County and is comprised of a combination of Federal lands within NKDR, State lands, County lands, and property in private or other ownership. State lands are interspersed within NKDR lands and managed as part of the Refuge. We note that this area wholly overlaps with designated critical habitat for silver rice rat. The area of Trinity Pinelands consists of approximately 48 ac (19 ha) of pine rockland habitat in Miami-Dade County and is comprised of a combination of State lands, County lands, and property in private or other ownership. We note that this area wholly overlaps with designated critical habitat for Carter's small-flowered flax (*Linum carteri var. carteri*) and Florida brickell-bush. The area of Nixon Smiley consists of approximately 264 ac (107 ha) of pine rockland habitat in Miami-Dade County comprised of a combination of State lands, County lands, and property in private or other ownership. We note that this area wholly overlaps with designated critical habitat for Carter's small-flowered flax and Florida brickell-bush. The area of U.S. Department of Agriculture (USDA) Subtropical Horticulture Research Station consists of approximately 297 ac (120 ha) of pine rockland habitat in Miami-Dade County and is comprised of a combination of Federal lands, State lands, and property in private or other ownership. We note that this area wholly overlaps with designated critical habitat for Carter's small-flowered flax and Florida brickell-bush. The area of Quail's Roost consists of approximately 256 ac (104 ha) of pine rockland habitat in Miami-Dade County and is comprised

of a combination of State lands, County lands, and property in private or other ownership. We note that this area wholly overlaps with designated critical habitat for Carter's small-flowered flax, Florida brickell-bush, and Bartram's scrub hairstreak butterfly. The area of Navy Wells consists of approximately 558 ac (226 ha) of pine rockland habitat in Miami-Dade County and is comprised of a combination of State lands, County lands, and property in private or other ownership. We note that this area wholly overlaps with designated critical habitat for Carter's small-flowered flax, Florida brickell-bush, Bartram's scrub hairstreak butterfly, and Florida leafwing butterfly. We will determine whether these areas are essential to protect habitat needed to recover the species and establish new populations within the range of the species such that they meet the definition of critical habitat. If we decide some or all of these areas are essential for the conservation of the wedge spurge, we will include them in our final critical habitat determination (see also Information Requested, above).

Blodgett's Silverbush

Blodgett's silverbush historically occurred from central and southern Miami-Dade County from Brickell Hammock to Long Pine Key in ENP, and in Monroe County throughout the Florida Keys (Monroe County) from Totten Key south to Key West (Bradley and Gann 1999, p. 2). At the time of listing and currently, the Blodgett's silverbush consists of 20 extant populations in Miami-Dade County and Monroe County in the Florida Keys. Blodgett's silverbush is currently known from central Miami-Dade County from Coral Gables and southern Miami-Dade County to Long Pine Key in ENP, and from nine islands in the Florida Keys, from Windley Key (Bradley and Gann 1999, p. 3) southwest to Boca Chica Key (Hodges and Bradley 2006, pp. 10, 43). At least eight of the 20 extant populations of Blodgett's silverbush consist of fewer than 100 individuals. These small populations are at risk of adverse effects from reduced genetic variation, an increased risk of inbreeding depression, and reduced reproductive output. Many of these populations are small and isolated from each other, decreasing the likelihood that they could be naturally reestablished if extinction from one location occurred.

Resiliency will continue to be limited by the reduced amount of pine rockland, rockland hammock, and coastal habitat remaining in Miami-Dade and Monroe Counties. All Miami-Dade County populations are on small remnant pine rockland, rockland hammock, and coastal berm sites and adjacent disturbed areas, while all Monroe County populations occur on small islands. In both cases, the amount of suitable remaining habitat is limited (low resiliency) and much of the remaining habitat may be lost to sea level rise over the next century. Therefore, we are proposing to designate critical habitat units within the historical range of Blodgett's silverbush and that contain the physical or biological features essential to the conservation of the species, where the species was extant at the time of listing.

The amount and distribution of critical habitat being proposed for designation would allow existing (native) populations of Blodgett's silverbush to:

(1) Maintain their existing distribution;

(2) Expand their distribution into suitable nearby areas (needed to offset habitat loss and fragmentation);

(3) Use habitat depending on habitat availability (response to changing nature of coastal habitat including sea level rise) and support genetic diversity;

(4) Increase the size of each population to a level where the threats of genetic, demographic, and normal environmental uncertainties are diminished; and

(5) Maintain their ability to withstand local or unit-level environmental fluctuations or catastrophes.

Sources of Data to Identify Critical Habitat Boundaries

We have determined that all areas known to be occupied at the time of listing should be proposed for critical habitat designation because all occupied sites are necessary to conserve the species. To determine the location and boundaries of occupied critical habitat, the Service used sources of data and information for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush that include the following:

(1) Species occurrence spatial data and ArcGIS geographic information system software to spatially depict the location and extent of documented populations of the species;

(2) Reports prepared by FNAI, Fairchild Tropical Botanical Garden, Institute for Regional Conservation, National Park Service, and Florida Department of Environmental Protection;

(3) Historical records found in reports and associated voucher specimens housed at herbaria, all of which are referenced in the above-mentioned reports;

(4) Digitally produced habitat maps provided by Miami-Dade and Monroe Counties; and

(5) Aerial images of Miami-Dade and Monroe Counties. The presence of pine rocklands was determined through the use of GIS spatial data depicting the current habitat status. These habitat data for the Florida Keys were developed by Monroe County from 2006 aerial images, and ground conditions for many areas were checked in 2009. Habitat data from Monroe County identifies pine rockland habitat. Habitat data for Miami-Dade County were developed by Miami-Dade Department of Environmental Protection for the Natural Forest Community program and include pine rocklands and rockland hammocks. Pine rockland, rockland hammock, and coastal berm habitat follow predictable landscape patterns and have a recognizable signature in the aerial imagery. Aerial imagery was utilized to identify disturbed areas adjacent to pine rocklands, rockland hammock, and coastal berm.

We delineated critical habitat unit boundaries for these species using the following criteria:

(1) The delineation included space to allow for the successional nature of the habitats (*i.e.,* gain and loss of areas with sufficient light availability due to disturbance of the vegetation, driven by natural events such as inundation and hurricanes, or through natural or prescribed fire) and habitat transition or loss due to sea level rise.

(2) All areas (*i.e.,* physical or biological features) will require special management to be able to support a higher density of plants within the occupied space. These areas generally are habitats where some of the habitat features have been degraded or lost through natural or human causes. These areas would help to offset the anticipated loss and degradation of habitat occurring or expected from the effects of climate change (such as sea level rise) or development.

(3) The areal extent of a plant population is dynamic over time within suitable habitat, while a survey represents a snapshot in time. Unsurveyed areas near mapped populations likely support plants currently or did in the past.

Areas Occupied at the Time of Listing

The proposed occupied critical habitat designation for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush focuses on areas within the historical range that have retained the necessary habitat characteristics that will allow for the maintenance and expansion of existing

populations, and the establishment or reestablishment of populations through reintroduction (*i.e.,* Cudjoe Key for Big Pine partridge pea). The proposed occupied critical habitat units were delineated based on documented extant populations at the time of listing. These units include the mapped extent of the population and nearby areas that contain one or more of the physical or biological features essential to the conservation of the species.

In summary, for areas within the geographic area occupied by Big Pine partridge pea, wedge spurge, and sand flax at the time of listing, we delineated critical habitat unit boundaries using the following criteria:

(1) Pine rockland habitat that was occupied by the species at the time of listing;

(2) Presence of suitable pine rockland habitat and sufficient essential features; and

(3) Whether the pine rockland habitat is natural versus human-made habitat that was not historically pine rockland.

For Big Pine partridge pea, two occupied units (Big Pine Key and Cudjoe Key) are proposed as critical habitat. We consider pine rockland to be the primary habitat for Big Pine partridge pea. Adjacent disturbed areas currently supporting the species are also considered essential when adjacent pine rocklands do not support an existing population or are of insufficient size or connectivity to support a population of the species. While pine rockland habitat occurs on numerous other Keys, including nearby Sugarloaf Keys and Little Pine Key, none support existing populations of Big Pine partridge pea now nor did they at the time of listing. As mentioned previously, after the time of listing, a population of Big Pine partridge pea was introduced on No Name Key, which has high-quality pine rockland habitat and currently supports the reintroduced population. Plants and seeds were introduced in 2019 by Fairchild Tropical Botanical Garden, in cooperation with NKDR and the Florida Department of Agriculture and Consumer Services. This action aligns with the recovery strategy that the Service will seek to implement for this species. We are considering whether areas on these Keys may be essential for the conservation of the Big Pine partridge pea. If we determine they are, they will be included in our final designation.

For wedge spurge, one unit (one population: Big Pine Key) is proposed as critical habitat. We consider pine rockland to be the primary habitat for wedge spurge. Adjacent disturbed areas currently supporting the species are also considered essential when adjacent pine rocklands do not support an existing population or are of insufficient size or connectivity to support a population of the species. Even though pine rockland habitat is present on numerous other Keys, including nearby Little Pine Key, Cudjoe Key, and Sugarloaf Keys, none support existing populations of the species now, nor did they at the time of listing or historically. As mentioned previously, after the time of listing, a population of wedge spurge was introduced on No Name Key. We are considering whether areas on these Keys may be essential for the conservation of the wedge spur. If we determine they are, they will be included in our final designation.

For sand flax, five units containing seven populations are proposed for critical habitat. We consider pine rockland to be the primary habitat for sand flax. While pine rockland habitat occurs on numerous other keys in Monroe County and other areas in Miami-Dade County, these do not support existing populations of sand flax now, nor did they historically or at the time of listing, and are therefore not proposed as critical habitat. Adjacent disturbed areas currently supporting the species are also considered essential when adjacent pine rocklands do not support an existing population or are of insufficient size or connectivity to support a population of sand flax. Such is the case for the area we are proposing as critical habitat on Sugarloaf Key (see below).

Two well-maintained levees in Miami-Dade County support large populations of sand flax, which were established when fill used to construct the levees included pine rockland substrate and the seeds of pine rockland species, such as sand flax. While these levees support robust populations of sand flax, they are not included in proposed critical habitat because the habitat is human-made, and these populations are not natural populations or purposefully established. In addition, we do not expect these areas to support the needs of the species long-term, as the maintenance of these areas may not be compatible with the species over time. In addition, there are roadside areas on Middle Torch Key, Big Torch Key, and Lower Sugarloaf Keys that support sand flax, but are not associated with an adjacent pine rockland. These populations may also have been established at these sites through the deposition of fill. Because these areas are mowed occasionally, they provide the open conditions required by sand flax (Bradley 2006, p. 37). However, these areas are not included in proposed critical habitat, because the habitat is human-made, do not contain the physical or biological features (*i.e.,* these disturbed areas are not adjacent to native pine rockland and are not characterized by an open canopy and understory with a high proportion of native plant species occurring in pine rockland habitat), and they are not adjacent to pine rockland that would facilitate expansion of the population into natural habitat.

As mentioned previously, there is remaining pine rockland habitat on numerous other Keys, including Little Pine Key and Cudjoe Key, and areas in Miami-Dade County, including Trinity Pinelands, Nixon Smiley, Quail's Roost, Navy Wells, and USDA Horticulture Research Station, but these areas do not currently or at the time of listing support existing populations of sand flax. No Name Key currently supports a reintroduced populations of sand flax in NKDR. We are considering whether these areas may be essential for the conservation of the sand flax. If so, we will include them in our final designation.

For Blodgett's silverbush, for areas within the geographic area occupied at the time of listing, we delineated critical habitat unit boundaries using the following criteria:

(1) Pine rockland, rockland hammock, and coastal berm habitats that were occupied by Blodgett's silverbush at the time of listing;

(2) Presence of suitable pine rockland, rockland hammock, and coastal berm habitats and sufficient essential features; and

(3) Whether the pine rockland, rockland hammock, and coastal berm habitats are natural versus human-made habitat that was not historically pine rockland, rockland hammock, or coastal berm.

For Blodgett's silverbush, 13 occupied units contain 18 populations are proposed as critical habitat for the species. We consider pine rockland to be one of the primary habitats for Blodgett's silverbush. In addition, we consider rockland hammock and coastal berm to be primary habitats for the species. Adjacent disturbed areas currently supporting the species are also considered essential when adjacent pine rocklands, rockland hammocks, or coastal berms do not support an existing population or are of insufficient size or connectivity to support a population of sand flax. While pine rockland habitat, rockland hammock, and coastal berm occurs on numerous other Keys and areas in Miami-Dade County, these do not support existing populations of Blodgett's silverbush now, nor did they

historically or at the time of listing, and therefore, are not proposed as critical habitat. We have not identified any specific areas outside the geographical area occupied by the species at the time it was listed that are essential for the conservation of the species. Accordingly, we are not proposing any unoccupied areas as critical habitat.

In summary, for areas within the geographical area occupied by Big Pine partridge pea, wedge spurge, and sand flax at the time of listing, we delineated critical habitat unit boundaries by evaluating habitat suitability of pine rockland habitat within the historical range of the plant and retained those areas that contain some or all of the physical or biological features essential to the conservation of the species and that may require special management. For areas within the geographical area occupied by Blodgett's silverbush at the time of listing, we delineated critical habitat unit boundaries by evaluating habitat suitability of pine rockland, rockland hammocks, and coastal berm habitats within the historical range of the plant and retained those areas that contain some or all of the physical or biological essential to the conservation of the species and that may require special management.

When determining proposed critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features essential to the conservation of these species, nor are they essential to the conservation of the species themselves. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

We are proposing for designation as critical habitat those lands that we have determined were occupied at the time of listing and which contain one or more of the physical or biological features that are essential to support life-history processes of the species. For Big Pine partridge pea, two units are proposed for designation based on one or more of the physical or biological features being present to support the specie's life-history processes. Both units contain all of the identified physical or biological features and support multiple life-history processes. For wedge spurge, one unit is proposed for designation based on one or more of the physical or biological features being present to support wedge spurge's life-history processes. The unit contains all of the identified physical or biological features and supports multiple life-history processes. For sand flax, five units are proposed for designation based on one or more of the physical or biological features being present to support sand flax's life-history processes. Some units contain all of the identified physical or biological features and support multiple life-history processes. Some units contain only some of the physical or biological features necessary to support sand flax particular use of that habitat. For Blodgett's silverbush, 13 units are proposed for designation based on one or more of the physical or biological features being present to support Blodgett's silverbush's life-history processes. Some units contain all of the identified physical or biological features and support multiple life-history processes. Some units contain only some of the physical or biological features necessary to support Blodgett's silverbush's particular use of that habitat.

The proposed critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document under Proposed Regulation Promulgation. We include more detailed information on the boundaries of the proposed critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on *https://www.regulations.gov* at Docket No. FWS–R4–ES–2022–0116, on our internet site at *https://www.fws.gov/office/florida-ecological-services/library* and at the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT** above).

Proposed Critical Habitat Designation for Big Pine Partridge Pea

We are proposing to designate approximately 1,462 ac (592 ha) in two units as critical habitat for Big Pine partridge pea. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for Big Pine partridge pea. The two areas we propose as critical habitat are:

(1) BPP1—Big Pine Key, Monroe County, Florida, and

(2) BPP2—Cudjoe Key in Monroe County, Florida.

Land ownership within the proposed critical habitat consists of Federal (67 percent), State (16 percent), County (10 percent), and private and other (7 percent). Other lands include areas for which ownership information is unclear or unavailable. Table 1 shows each critical habitat unit by area, land ownership, and occupancy.

TABLE 1—PROPOSED CRITICAL HABITAT UNITS FOR BIG PINE PARTRIDGE PEA

[Includes total area, area by land ownership, and occupancy. All areas rounded to the nearest whole acre (ac) and hectare (ha)]

Critical habitat unit	Total ac (ha)	Federal ac (ha)	State ac (ha)	County ac (ha)	Private/other ac (ha)
BPP1—Big Pine Key	1,379 (558)	912 (369)	228 (92)	144 (58)	96 (39)
BPP2—Cudjoe Key	83 (33)	66 (27)	3 (1)	1 (0.5)	12 (5)
Total	1,462 (592)	978 (396)	231 (93)	145 (59)	108 (44)
Percent of Total		67%	16%	10%	7%

Note: Area sizes may not sum due to rounding or minor mapping discrepancies. Both units are occupied by the species.

Nearly all the lands (99.7 percent; all except approximately 4 ac (2 ha)) contained within units proposed as critical habitat for Big Pine partridge pea are designated critical habitat for other federally listed species.

We present brief descriptions of each proposed critical habitat unit and the justification for why each meets the definition of critical habitat for Big Pine partridge pea, below.

Unit BPP1: Big Pine Key, Monroe County, Florida

Unit BPP1 consists of 1,379 ac (558 ha) in Monroe County, Florida. This unit includes Federal lands within NKDR (912 ac (369 ha)), State lands (228 ac (92 ha)), County lands (144 ac (58 ha)), and property in private or other ownership (96 ac (39 ha)). State lands are interspersed within NKDR lands and managed as part of the Refuge.

This unit was occupied at the time the species was listed and is currently occupied by one Big Pine Partridge pea population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Big Pine partridge pea.

The unit is part of lands contained within the Lower Florida Keys National Wildlife Refuges (NWRs), which includes NKDR, Key West NWR, and Great White Heron NWR. The Comprehensive Conservation Plan (CCP) for the Lower Florida Keys NWRs promotes the enhancement of wildlife populations by maintaining and enhancing a diversity and abundance of habitats for native plants and animals and provides specifically for maintaining and expanding populations of plant species including Big Pine partridge pea. The Service conducts nonnative species control and prescribed fire in areas that could support Big Pine partridge pea.

Unit BPP1 is also designated critical habitat for the Florida leafwing (*Anaea troglodyta floridalis*) and Bartram's scrub-hairstreak (*Strymon acis bartrami*) butterflies.

Unit BPP2: Cudjoe Key, Monroe County, Florida

Unit BPP2 consists of 83 ac (33 ha) in Monroe County, Florida. This unit includes Federal lands within NKDR (66 ac (27 ha)), State lands (3 ac (1 ha)), County lands (1 ac (0.5 ha)), and property in private or other ownership (12 ac (5 ha)). State lands are interspersed within NKDR lands and managed as part of the Refuge.

This unit was occupied at the time the species was listed, but the population here may have since been extirpated (Possley 2020, pers. comm.). The unit does, however, still contain all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Big Pine partridge pea.

The unit is part of lands contained within the Lower Florida Keys NWRs, which includes NKDR, Key West NWR, and Great White Heron NWR. The CCP for the Lower Florida Keys NWRs promotes the enhancement of wildlife populations by maintaining and enhancing a diversity and abundance of habitats for native plants and animals and provides specifically for maintaining and expanding populations of plant species including Big Pine partridge pea. The Service conducts nonnative species control in areas that could support Big Pine partridge pea.

The entirety of Unit BPP2 is also designated critical habitat for the silver rice rat (*Oryzomys palustris natator*).

Proposed Critical Habitat Designation for Wedge Spurge

We are proposing to designate approximately 1,379 ac (558 ha) in one unit as critical habitat for wedge spurge. The critical habitat area we describe below constitutes our current best assessment of lands that meet the definition of critical habitat for wedge spurge. The area we propose as critical habitat is: WS1—Big Pine Key, Monroe County, Florida.

Land ownership within the proposed critical habitat consists of Federal (66 percent), State (16 percent), County (10 percent), and private and other (7 percent). Other lands include areas for which ownership information is unclear or unavailable. Table 2 shows these units by land ownership, area, and occupancy.

TABLE 2—PROPOSED CRITICAL HABITAT UNIT FOR WEDGE SPURGE

[Includes area, area by land ownership, and occupancy. All areas rounded to the nearest whole acre (ac) and hectare (ha)]

Critical habitat unit	Total ac (ha)	Federal ac (ha)	State ac (ha)	County ac (ha)	Private/other ac (ha)
WS1—Big Pine Key	1,379 (558)	912 (369)	228 (92)	144 (58)	96 (39)
Total	1,379 (558)	912 (369)	228 (92)	144 (58)	96 (39)
Percent of Total		66%	16%	10%	7%

Note: Area sizes may not sum due to rounding or minor mapping discrepancies. The one unit is occupied by the species.

Nearly all the lands (99.7 percent; all except approximately 4 ac (2 ha)) contained within units proposed as critical habitat for wedge spurge are designated critical habitat for other federally listed species. Additionally, the lands in Unit WS1—Big Pine Key are the same lands proposed for Big Pine partridge pea in BPP1, above.

We present brief descriptions of the proposed critical habitat unit and the justification for why it meets the definition of critical habitat for wedge spurge, below.

Unit WS1: Big Pine Key, Monroe County, Florida

Unit WS1 consists of 1,379 ac (558 ha) in Monroe County. This unit includes Federal lands within NKDR (912 ac (369 ha)), State lands (228 ac (92 ha)), County land (144 ac (58 ha)), and property in private or other ownership (96 ac (39 ha)). State lands are interspersed within NKDR lands and managed as part of the Refuge.

This unit was occupied at the time the species was listed and is currently occupied by one wedge spurge

population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports wedge spurge.

The unit is part of lands contained within the Lower Florida Keys NWRs, which includes NKDR, Key West NWR, and Great White Heron NWR. The CCP for the Lower Florida Keys NWRs promotes the enhancement of wildlife populations by maintaining and enhancing a diversity and abundance of habitats for native plants and animals and provides specifically for maintaining and expanding populations of candidate plant species including wedge spurge. The Service conducts nonnative species control and prescribed fire in areas that support wedge spurge.

Nearly all (99.7 percent; all except 4 ac (2 ha)) of unit WS1 is also designated critical habitat for the Florida leafwing and Bartram's scrub-hairstreak butterflies.

Proposed Critical Habitat Designation for Sand Flax

We are proposing to designate approximately 5,090 ac (2,060 ha) in five units as critical habitat for sand flax. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for sand flax.

The five areas we propose as critical habitat are:

(1) SF1—Big Pine Key, Monroe County, Florida;

(2) SF2—Upper and Lower Sugarloaf Keys, Monroe County, Florida;

(3) SF3—Richmond Pinelands, Miami-Dade County, Florida;

(4) SF4—Camp Owaissa Bauer, Miami-Dade County, Florida; and

(5) SF5—Homestead, Miami-Dade County, Florida.

We have determined that these five areas meet the definition of critical habitat. While Unit 5 meets the definition of critical habitat, a portion of the lands and features contained therein are on lands of SOCSO and covered by their INRMP, and as a result the SOCSO lands within this unit are being exempted from critical habitat (please refer to the Exemptions: *Application of Section 4(a)(3) of the Act* section of this proposed rule).

Land ownership within the proposed critical habitat consists of Federal (49 percent), State (6 percent), County (35 percent), and private and other (10 percent). Table 3 shows these units by land ownership, area, and occupancy.

TABLE 3—PROPOSED CRITICAL HABITAT UNITS FOR SAND FLAX

[Includes area, area by land ownership, and occupancy. All areas rounded to the nearest whole acres (ac) and hectares (ha)]

Critical habitat unit	Total ac (ha)	Federal ac (ha)	State ac (ha)	County ac (ha)	Private/other ac (ha)
SF1—Big Pine Key	1,379 (558)	912 (369)	228 (92)	144 (58)	96 (39)
SF2—Upper and Lower Sugarloaf Keys	116 (47)	63 (25)	38 (15)	10 (4)	6 (2)
SF3—Richmond Pinelands	987 (399)	191 (77)	0 (0)	609 (247)	187 (76)
SF4—Camp Owaissa Bauer	315 (128)	0 (0)	49 (20)	154 (62)	113 (46)
SF5—Homestead	2,292 (928)	1,334 (540)	0 (0)	867 (351)	91 (37)
Total	5,090 (2,060)	2,499 (1,011)	314 (127)	1,783 (722)	493 (199)
Percent of Total		49%	6%	35%	10%

Note: Area sizes may not sum due to rounding or minor mapping discrepancies. All 5 units are occupied by the species.

The Big Pine Key unit (SF1) proposed for sand flax in the Florida Keys comprises the same lands proposed for Big Pine partridge pea (BPP1) and wedge spurge (WS1) above. Of the five units, two are currently designated under the Act as critical habitat for the silver rice rat; five are designated as critical habitat for the Bartram's scrub-hairstreak butterfly; three are designated as critical habitat for the Florida leafwing butterfly; and two are designated as critical habitat for the Florida brickell-bush (*Brickellia mosieri*) and Carter's small-flowered flax (*Linum carteri* ssp. *smallii*).

Approximately half of the lands contained within units proposed as critical habitat for sand flax (52 percent; 2,660 ac (1,076 ha)) are designated critical habitat for other federally listed species.

We present brief descriptions of each proposed critical habitat unit and the justification for why each meets the definition of critical habitat for sand flax, below.

Unit SF1: Big Pine Key, Monroe County, Florida

Unit SF1 consists of 1,379 ac (558 ha) in Monroe County. This unit includes Federal lands within NKDR (912 ac (369 ha)), State lands (228 ac (92 ha)), County land (144 ac (58 ha), and property in private or other ownership (96 ac (39 ha)). State lands are interspersed within NKDR lands and managed as part of the Refuge.

This unit was occupied at the time the species was listed and is currently occupied by one sand flax population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports sand flax.

The unit is part of lands contained within the Lower Florida Keys NWRs, which includes NKDR, Key West NWR, and Great White Heron NWR. The CCP for the Lower Florida Keys NWRs promotes the enhancement of wildlife populations by maintaining and enhancing a diversity and abundance of habitats for native plants and animals and provides specifically for maintaining and expanding populations of candidate plant species including sand flax. The Service conducts nonnative species control and

prescribed fire in areas that support sand flax.

The entirety of unit SF1 is also designated critical habitat for the Florida leafwing and Bartram's scrub-hairstreak butterflies.

Unit SF2: Sugarloaf Keys, Monroe County, Florida

Unit SF2 consists of 116 ac (47 ha) in Monroe County. This unit includes Federal lands within NKDR (63 ac (25 ha)), State lands (38 ac (15 ha)), County lands (10 ac (4 ha)), and property in private or other ownership (6 ac (2 ha)).

This unit was occupied at the time the species was listed and is currently occupied by one sand flax population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address threats of lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports sand flax. The unit is part of lands contained within the Lower Florida Keys NWRs, which includes NKDR, Key West NWR, and Great White Heron NWR. The CCP for the Lower Florida Keys NWRs promotes the enhancement of wildlife populations by maintaining and enhancing a diversity and abundance of habitats for native plants and animals and provides specifically for maintaining and expanding populations of candidate plant species including sand flax. The Service conducts nonnative species control in areas that could support sand flax.

Unit SF2 is not designated critical habitat for any other species.

Unit SF3: Richmond Pinelands and Surrounding Areas, Miami-Dade County, Florida

Unit SF3 consists of approximately 987 ac (399 ha) in Miami-Dade County. The unit comprises Federal lands owned by the U.S. Coast Guard (USCG), U.S. Army Corps of Engineers (USACE), Federal Bureau of Prisons (FBP), and National Oceanic and Atmospheric Administration (NOAA) (191 ac (77 ha)); County lands within and adjacent to Larry and Penny Thompson Park, Martinez Preserve, Zoo Miami, and Eachus Pineland (609 ac (247 ha)); and parcels in private or other ownership (187 ac (76 ha)), including the onsite preserve and offsite mitigation areas associated with the Coral Reef Commons HCP (110 ac (44.5) ha)).

This unit was occupied at the time the species was listed and is currently occupied by two sand flax populations. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports sand flax.

Sand flax is a covered species under the Coral Reef Commons HCP. Because sand flax is a covered species under this HCP and the preserves included within this proposed critical habitat unit are being managed for the conservation of the species and pine rockland habitat, the onsite preserve and the offsite mitigation area are being considered for exclusion from critical habitat under section 4(b)(2) of the Act (please refer to Consideration of Impacts Under Section 4(b)(2) of the Act section of this proposed rule).

The entirety of unit SF3 is also designated critical habitat for Carter's small-flowered flax and Florida brickell-bush; significant portions are designated for Bartram's scrub-hairstreak butterfly and Florida leafwing butterfly.

Unit SF4: Camp Owaissa Bauer and Surrounding Areas, Miami-Dade County, Florida

Unit SF4 consists of approximately 315 ac (128 ha) of habitat in Miami-Dade County. The unit comprises State lands within Owaissa Bauer Pineland Addition, Ingram Pineland, West Biscayne Pineland, and Fuchs Hammock Addition (49 ac (20 ha)); County lands including Camp Owaissa Bauer, Pine Island Lake Park, Seminole Wayside Park, and Northrop Pineland (154 ac (62 ha)); and parcels in private and other ownership (113 ac (46 ha)), including the private conservation area, Pine Ridge Sanctuary.

This unit was occupied at the time the species was listed and is currently occupied by one sand flax population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports sand flax.

The entirety of unit SF4 is also designated critical habitat for Carter's small-flowered flax and Florida brickell-bush; and large portions of unit SF4 are designated critical habitat for Bartram's scrub-hairstreak butterfly and Florida leafwing butterfly.

Unit SF5: Homestead and Surrounding Areas, Miami-Dade County, Florida

Unit SF5 consists of approximately 2,292 ac (928 ha) in Miami-Dade County. The unit comprises Federal lands owned by DoD (1,334 ac (540 ha)), lands owned by Miami-Dade County (867 ac (351 ha)), and parcels in private or other ownership (91 ac (37 ha)).

A portion (approximately 25 ac (10 ha)) of the lands and features contained within this unit are on lands of SOCSO and covered by their updated and signed INRMP, and as a result, the SOCSO lands within this unit are being exempted from critical habitat (please refer to the Exemptions: *Application of Section 4(a)(3) of the Act* section of this proposed rule). The HARB is working with the Service to incorporate additional conservation measures for sand flax in revisions to their INRMP, but the revised INRMP is currently being drafted and has not yet been approved and signed. Therefore, lands that are part of HARB that have been determined to be essential to the conservation of sand flax are not being exempted and are included in this proposal. If the revised INRMP is approved and signed before we finalize this designation, we would exempt this area in the final designation.

This unit was occupied at the time the species was listed and is currently occupied by two sand flax populations. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports sand flax.

Unit SF5 does not contain previously designated critical habitat, but the

endangered Small's milkpea (*Galactia smallii*) occurs throughout the unit.

Proposed Critical Habitat Designation for Blodgett's Silverbush

We are proposing to designate approximately 16,667 ac (6,745 ha) in 13 units as critical habitat for Blodgett's silverbush. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for Blodgett's silverbush. The 13 areas we propose as critical habitat are:

(1) BS1—Key Largo, Monroe County, Florida;

(2) BS2—Plantation Key, Monroe County, Florida;

(3) BS3—Windley Key, Monroe County, Florida;

(4) BS4—Lignumvitae Key, Monroe County, Florida;

(5) BS5—Lower Matecumbe Key, Monroe County, Florida;

(6) BS6—Marathon, Monroe County, Florida;

(7) BS7—Big Pine Key, Monroe County, Florida;

(8) BS8—Big Munson Island, Monroe County, Florida;

(9) BS9—U.S. Department of Agriculture (USDA) Subtropical Horticulture Research Station, Miami-Dade County, Florida;

(10) BS10—Richmond Pineland, Miami-Dade County, Florida;

(11) BS11—Quail Roost Pineland, Miami-Dade County, Florida;

(12) BS12—Camp Owaissa Bauer, Miami-Dade County, Florida; and

(13) BS13—Everglades National Park, Miami-Dade County, Florida.

We have determined that these 13 areas meet the definition of critical habitat. While the habitat within Key West Naval Air Station (KWNAS) meets the definition of critical habitat, the lands and features contained therein are covered under the KWNAS INRMP that provides benefits to Blodgett's silverbush and its habitat and therefore will be exempted from critical habitat (see Exemptions: *Application of Section 4(a) (3) of the Act,* below).

Land ownership within the proposed critical habitat consists of Federal (64 percent), State 17 (19 percent), County (7 percent), and private and other (9 percent). Table 4 shows these units by land ownership, area, and occupancy.

TABLE 4—PROPOSED CRITICAL HABITAT UNITS FOR BLODGETT'S SILVERBUSH

[Including area, area by land ownership, and occupancy. All areas rounded to the nearest whole acre (ac) and hectare (ha)]

Critical habitat unit	Total ac (ha)	Federal ac (ha)	State ac (ha)	County ac (ha)	Private/other ac (ha)
BS1—Key Largo	3,060 (1,238)	595 (241)	2,024 (819)	214 (86)	227 (92)
BS2—Plantation Key	175 (71)	0 (0)	26 (10)	33 (13)	116 (47)
BS3—Windley Key	30 (12)	0 (0)	28 (11)	1 (1)	0 (0)
BS4—Lignumvitae Key	159 (64)	0 (0)	157 (64)	2 (1)	0 (0)
BS5—Lower Matecumbe Key	64 (26)	0 (0)	27 (11)	6 (3)	31 (13)
BS6—Marathon	103 (42)	0 (0)	66 (27)	0 (0)	38 (15)
BS7—Big Pine Key	1,867 (756)	1,259 (509)	328 (133)	160 (65)	122 (49)
BS8—Big Munson Island	28 (11)	0 (0)	0 (0)	0 (0)	28 (11)
BS9—USDA Subtropical Horticulture Research Station	630 (255)	155 (63)	253 (103)	182 (74)	40 (16)
BS10—Richmond Pinelands	987 (399)	191 (77)	0 (0)	609 (247)	187 (76)
BS11—Quail Roost Pineland	412 (167)	0 (0)	174 (70)	100 (40)	139 (56)
BS12—Camp Owaissa Bauer	392 (159)	0 (0)	69 (28)	184 (74)	139 (56)
BS13—Everglades National Park	8,728 (3,532)	8,595 (3,478)	0 (0)	0 (0)	133 (54)
Total	16,635 (6,732)	10,794 (4,368)	3,151 (1,275)	1,490 (603)	1,199 (485)
Percent of Total		64%	19%	7%	9%

Note: Area sizes may not sum due to rounding or minor mapping discrepancies. All 13 units are occupied by the species.

Many of the lands contained within units proposed as critical habitat for Blodgett's silverbush (15,247 ha (6,170 ha), or 91.5 percent) are designated critical habitat for other federally listed species.

We present brief descriptions of each proposed critical habitat unit and the justification for why each meets the definition of critical habitat for Blodgett's silverbush, below.

Unit BS1: Key Largo, Monroe County, Florida

Unit BS1 consists of 3,060 ac (1,238 ha) in Monroe County. This unit includes Federal lands within Crocodile Lake NWR (595 ac (241 ha)), State lands within Dagny Johnson Botanical State Park, John Pennekamp Coral Reef State Park, and the Florida Keys Wildlife and Environmental Area (FKWEA) (2,024 ac (819 ha)), County lands (214 ac (86 ha)), and property in private or other ownership (227 ac (92 ha)).

This unit was occupied at the time the species was listed and is currently occupied by two Blodgett's silverbush populations. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

Part of the unit is within the Crocodile Lake NWR. The CCP for Crocodile Lake NWR promotes the enhancement of wildlife populations by maintaining and enhancing a diversity and abundance of habitats for native plants and animals and provides specifically for maintaining and expanding populations of plant species including Blodgett's silverbush. The Service conducts nonnative species control in areas that could support the species.

The entirety of unit BS1 is included in designated critical habitat for the American crocodile *(Crocodylus acutus),* Cape Sable thoroughwort (*Chromolaena frustrata*), and Florida semaphore cactus (*Consolea corallicola*).

Unit BS2: Plantation Key, Monroe County, Florida

Unit BS2 consists of 175 ac (71 ha) in Monroe County. This unit includes State lands within the FKWEA (26 ac (10 ha)), County lands (33 ac (13 ha)), and property in private or other ownership (116 ac (47 ha)).

This unit was occupied at the time the species was listed and is currently occupied by one Blodgett's silverbush population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

The entirety of Unit BS2 is designated critical habitat for the American crocodile.

Unit BS3: Windley Key, Monroe County, Florida

Unit BS3 consists of 30 ac (12 ha) in Monroe County. This unit includes State lands within Windley Key Fossil Reef Geologic State Park (28 ac (11 ha)) and County property (1 ac (0.5 ha)). The unit is located on Windley Key on the north side of the Overseas Highway.

This unit was occupied at the time the species was listed and is currently occupied by one Blodgett's silverbush population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

The entirety of Unit BS3 includes designated critical habitat for the American crocodile.

Unit BS4: Lignumvitae Key, Monroe County, Florida

Unit BS4 consists of 159 ac (64 ha) in Monroe County. This unit comprises State lands in Lignumvitae Key Botanical State Park (157 ac (64 ha)) and County property (1 ac (0.5 ha)). This unit includes the entire upland area of Lignumvitae Key.

This unit was occupied at the time the species was listed and is currently occupied by one Blodgett's silverbush population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

The management activities implemented by Florida State Parks promote the enhancement of wildlife populations by maintaining and enhancing a diversity and abundance of habitats for native plants and animals. Florida State Parks conducts nonnative species control in areas that could support Blodgett's silverbush.

The entirety of unit BS4 is included in designated critical habitat for the American crocodile and Cape Sable thoroughwort.

Unit BS5: Lower Matecumbe Key, Monroe County, Florida

Unit BS5 consists of 64 ac (26 ha) in Monroe County. This unit includes State lands that are part of Lignumvitae Key Botanical State Park (27 ac (11 ha)), County property (6 ac (3 ha)), and property in private or other ownership (31 ac (13 ha)).

This unit was occupied at the time the species was listed and is currently occupied by one Blodgett's silverbush population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

The management activities implemented by Florida State Parks in part of this unit promote the enhancement of wildlife populations by maintaining and enhancing a diversity and abundance of habitats for native plants and animals. Florida State Parks conducts nonnative species control in areas that support Blodgett's silverbush.

The entirety of unit BS5 is included in designated critical habitat for the American crocodile and Cape Sable thoroughwort.

Unit BS6: Marathon, Monroe County, Florida

Unit BS6 consists of 103 ac (42 ha) in Monroe County. This unit includes State lands within FKWEA (66 ac (27 ha)) and property in private or other ownership, including land owned by The Florida Keys Land and Sea Trust (38 ac (15 ha)).

This unit was occupied at the time the species was listed and is currently occupied by one Blodgett's silverbush population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

Unit BS6 does not include any designated critical habitat for other species.

Unit BS7: Big Pine Key, Monroe County, Florida

Unit BS7 consists of 1,867 ac (756 ha) in Monroe County. This unit includes Federal lands within NKDR (1,259 ac (509 ha)), State lands (328 ac (133 ha)), County lands (160 ac (65 ha)), and property in private or other ownership (122 ac (49 ha)).

This unit was occupied at the time the species was listed and is currently occupied by two Blodgett's silverbush populations. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that

help improve habitat that supports Blodgett's silverbush.

The unit is part of lands contained within the Lower Florida Keys NWRs, which includes NKDR, Key West NWR, and Great White Heron NWR. The CCP for the Lower Florida Keys NWRs promotes the enhancement of wildlife populations by maintaining and enhancing a diversity and abundance of habitats for native plants and animals and provides specifically for maintaining and expanding populations of plant species including Blodgett's silverbush. The Service conducts nonnative species and prescribed fire control in areas that support Blodgett's silverbush.

The entirety of unit BS7 is designated critical habitat for the Florida leafwing and Bartram's scrub-hairstreak butterflies; Cape Sable thoroughwort; and Florida semaphore cactus. The endangered Key Deer occurs through the unit, but no critical habitat is designated for that species.

Unit BS8: Big Munson Island, Monroe County, Florida

Unit BS8 consists of 28 ac (11 ha) in Monroe County. This unit is composed entirely of lands owned by the Boy Scouts of America. The unit includes all of the coastal berm and rockland hammock habitat on the island.

This unit was occupied at the time the species was listed and is currently occupied by one Blodgett's silverbush population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

The entirety of unit BS8 is designated critical habitat for the Cape Sable thoroughwort. The endangered Key deer occurs through the unit, but no critical habitat is designated for that species.

Unit BS9: USDA Subtropical Horticulture Research Station and Surrounding Areas, Miami-Dade County, Florida

Unit BS9 consists of approximately 630 ac (255 ha) of habitat in Miami-Dade County. The unit comprises Federal lands within the USDA Subtropical Horticulture Research Station (155 ac (63 ha)); State lands within the R. Hardy Matheson Preserve, Ludlam Pineland, Deering Estate at Cutler, and Deering Estate South Addition (253 ac (103 ha)); County lands within Bill Sadowski Park and Matheson Hammock (182 ac (74 ha)), and parcels in private ownership (40 ac (16 ha)).

This unit was occupied at the time the species was listed and is currently occupied by two Blodgett's silverbush populations. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

The entirety of unit BS9 includes designated critical habitat for the Carter's small-flowered flax and Florida brickell-bush.

Unit BS10: Richmond Pinelands and Surrounding Areas, Miami-Dade County, Florida

Unit BS10 consists of approximately 987 ac (399 ha) in Miami-Dade County. The unit comprises Federal lands owned by the USCG, USACE, FBP, and NOAA (191 ac (77 ha)); County lands within and adjacent to Larry and Penny Thompson Park, Martinez Preserve, Zoo Miami, and Eachus Pineland (609 ac (247 ha)); and parcels in private or other ownership (187 ac (76 ha)), including the onsite preserve and offsite mitigation areas associated with the Coral Reef Commons HCP (110 ac (44.5) ha).

This unit was occupied at the time the species was listed and is currently occupied by one Blodgett's silverbush population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

Blodgett's silverbush is a covered species under the Coral Reef Commons HCP. Because Blodgett's silverbush is a covered species under this HCP and the preserves included within this proposed critical habitat unit are being managed for the conservation of the species and pine rockland habitat, the onsite preserve and the offsite mitigation area are being considered for exclusion from critical habitat under section 4(b)(2) of the Act (please refer to Consideration of Impacts Under Section 4(b)(2) of the Act section of this proposed rule).

The entirety of unit BS10 is designated critical habitat for Carter's small-flowered flax, Florida brickell-bush, Bartram's scrub hairstreak butterfly, and Florida leafwing butterfly.

Unit BS11: Quail Roost Pineland and Surrounding Areas, Miami-Dade County, Florida

Unit BS11 consists of approximately 412 ac (167 ha) in Miami-Dade County. The unit comprises State lands within Quail Roost Pineland, Goulds Pineland and Addition, Silver Palm Groves Pineland, Castellow Hammock, Ross Hammock, Hardin Hammock, and Silver Palm Hammock (174 ac (70 ha)); County/local lands including Medsouth Park, Black Creek Forest, and Rock Pit #46 (100 ac (40 ha)); and parcels in private ownership (139 ac (56 ha)), including Porter-Russell Pineland owned by the Tropical Audubon Society.

This unit was occupied at the time the species was listed and is currently occupied by one possibly extirpated Blodgett's silverbush population and one population with uncertain status. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

The entirety of unit BS11 is designated critical habitat for the Carter's small-flowered flax, Florida brickell-bush, and Bartram's scrub hairstreak butterfly.

Unit BS12: Camp Owaissa Bauer and Surrounding Areas, Miami-Dade County, Florida

Unit BS12 consists of approximately 392 ac (159 ha) of habitat in Miami-

Dade County. The unit comprises State lands within Owaissa Bauer Pineland Addition, West Biscayne Pineland, Ingram Pineland, Fuchs Hammock Addition, and Meissner Hammock (69 ac (28 ha)); County lands, including Camp Owaissa Bauer, Pine Island Lake Park, Seminole Wayside Park, Northrop Pineland, Hattie Bauer Hammock, and Fuchs Hammock (184 ac (74 ha)); and parcels in private ownership (139 ac (56 ha)), including the private conservation area, Pine Ridge Sanctuary.

This unit was occupied at the time the species was listed and is currently occupied by three Blodgett's silverbush populations. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

The entirety of Unit BS12 is designated critical habitat for Carter's small-flowered flax, Florida brickell-bush, and Bartram's scrub hairstreak butterfly.

Unit BS13: Everglades National Park—Pine Island and Surrounding Areas, Miami-Dade County, Florida

Unit BS13 consists of approximately 8,728 ac (3,532 ha) in Miami-Dade County. The unit comprises Federal lands in ENP (8,595 ac (3,478 ha)) and parcels in private or other ownership (133 ac (54 ha)). The unit includes pine rocklands and numerous rockland hammocks in the vicinity of Long Pine Key in ENP.

This unit was occupied at the time the species was listed and is currently occupied by one Blodgett's silverbush population. This unit contains all the physical or biological features, including suitable climate, hydrology, substrate, associated native plant species, and disturbance regimes, essential to the conservation of the species.

Special management considerations or protection may be required within this unit to address lack of fire; nonnative plant and animal species; and sea level rise. Nonnative species control, prescribed fire, and mechanical vegetation treatments are all actions that help improve habitat that supports Blodgett's silverbush.

The entirety of unit BS13 is designated critical habitat for Bartram's scrub hairstreak butterfly and Florida leafwing butterfly.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

We published a final rule revising the definition of destruction or adverse modification on February 11, 2016 (81 FR 7214) (although we also published a revised definition after that (on August 27, 2019. Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, Tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat—and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or carried out by a Federal agency—do not require section 7 consultation.

Compliance with the requirements of section 7(a)(2) is documented through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define ''reasonable and prudent alternatives'' (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Service Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying 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.

Regulations at 50 CFR 402.16 set forth requirements for Federal agencies to reinitiate formal consultation on previously reviewed actions. These requirements apply when the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law) and, if subsequent to the previous consultation: (a) if the amount or extent of taking specified in the incidental take statement is exceeded; (b) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (c) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (d) if a new species is listed or critical habitat designated that may be affected by the identified action. In such situations, Federal agencies sometimes may need to

request reinitiation of consultation with us, but the regulations also specify some exceptions to the requirement to reinitiate consultation on specific land management plans after subsequently listing a new species or designating new critical habitat. See the regulations for a description of those exceptions.

Application of the ''Destruction or Adverse Modification'' Standard

The key factor related to the destruction or adverse modification determination is whether implementation of the proposed Federal action directly or indirectly alters the designated critical habitat in a way that appreciably diminishes the value of the critical habitat for the conservation of the listed species. As discussed above, the role of critical habitat is to support physical or biological features essential to the conservation of a listed species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may violate section 7(a)(2) of the Act by destroying or adversely modifying such habitat, or that may be affected by such designation.

Activities that we may, during a consultation under section 7(a)(2) of the Act, find are likely to destroy or adversely modify critical habitat for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush include, but are not limited to:

(1) Actions that would significantly alter the hydrology or substrate, such as ditching or filling. Such activities may include, but are not limited to, road construction or maintenance, and residential, commercial, or recreational development.

(2) Actions that would significantly alter vegetation structure or composition, such as clearing vegetation for construction of roads, residential and commercial development, recreational facilities, and trails.

(3) Actions that would introduce nonnative species that would significantly alter vegetation structure or composition. Such activities may include, but are not limited to, residential and commercial development and road construction.

Exemptions

Application of Section 4(a)(3) of the Act

Section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that the Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the DoD, or designated for its use, that are subject to an integrated natural resources management plan (INRMP) prepared under section 101 of the Sikes Act Improvement Act of 1997 (16 U.S.C. 670a) (Sikes Act), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.

The Sikes Act required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an INRMP by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

(1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;

(2) A statement of goals and priorities;

(3) A detailed description of management actions to be implemented to provide for these ecological needs; and

(4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that: ''The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act, if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.''

We consult with the military on the development and implementation of INRMPs for installations with listed species. We analyzed INRMPs developed by military installations located within the range of the proposed critical habitat designation for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush to determine if they meet the criteria for exemption from critical habitat under section 4(a)(3) of the Act. The following areas are DoD lands with completed, Service-approved INRMPs within the proposed critical habitat designation for Blodgett's silverbush: KWNAS and SOCSO.

Approved INRMPs

Key West Naval Air Station (KWNAS). We have determined that approximately 133 ac (54 ha) of coastal berm and pine rocklands habitat on Boca Chica Key contain the physical or biological features that are essential to the conservation of Blodgett's silverbush. These specific lands are owned and managed by DoD as part of the KWNAS. In July 2020, KWNAS, in coordination with the Service, updated their INRMP to included management and protective measures that provide a conservation benefit to Blodgett's silverbush and its habitat. The Service has approved these management and protective measures, and the INRMP has been signed. As a result, the DoD lands on KWNAS that we have determined contain the physical or biological features that are essential to the conservation of Blodgett's silverbush are being exempted from inclusion in critical habitat under section 4(a)(3)(B)(i) of the Act. Therefore, these specific lands within this installation are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 133 ac (54 ha) of habitat in this proposed critical habitat designation for Blodgett's silverbush because of this exemption.

Special Operations Command South (SOCSO). We have determined that approximately 25 ac (10 ha) pine rocklands habitat located within SOCSO contain physical or biological features that are essential to the conservation of Blodgett's silverbush. These specific lands are owned and managed by DoD. In July 2020, SOCSO in coordination with the Service, updated their INRMP to included management and protective measures that provide a conservation benefit to Blodgett's silverbush and its habitat. The Service has approved these management and protective measures, and the INRMP has been signed. As a result, the DoD lands on SOCSO that we have determined contain the physical or biological features that are essential to the conservation of Blodgett's silverbush are being exempted from inclusion in critical habitat under section 4(a)(3)(B)(i) of the Act. Therefore, these specific lands within this installation are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 25 ac (10 ha) of habitat in this proposed critical habitat

designation for Blodgett's silverbush because of this exemption.

Homestead Air Reserve Base (HARB). We have determined that approximately 1,309 ac (530 ha) of pine rocklands and adjacent disturbed areas of habitat on HARB contain physical or biological features that are essential to the conservation of sand flax. These specific lands are owned and managed by DoD as part of the HARB. In July 2020, HARB, in coordination with the Service, began discussions about revising their INRMP to include management and protective measures that provide a conservation benefit to sand flax and its habitat. The Service will review these management and protective measures. If the revised INRMP is approved and signed before we finalize this designation, we would exempt this area in the final designation.

Consideration of Impacts Under Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. Exclusion decisions are governed by the regulations at 50 CFR 424.19 and the Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act, 81 FR 7226 (Feb. 11, 2016) (2016 Policy)—both of which were developed jointly with the National Marine Fisheries Service (NMFS). We also refer to a 2008 Department of the Interior Solicitor's opinion entitled ''The Secretary's Authority to Exclude Areas from a Critical Habitat Designation under Section 4(b)(2) of the Endangered Species Act'' (M–37016). We explain each decision to exclude areas, as well as decisions not to exclude, to demonstrate that the decision is reasonable.

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise discretion to exclude the area only if such exclusion would not result in the extinction of the species. In making the determination to exclude a particular area, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor. We describe below the process that we undertook for taking into consideration each category of impacts and our analyses of the relevant impacts.

Consideration of Economic Impacts

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. To assess the probable economic impacts of a designation, we must first evaluate specific land uses or activities and projects that may occur in the area of the critical habitat. We then must evaluate the impacts that a specific critical habitat designation may have on restricting or modifying specific land uses or activities for the benefit of the species and its habitat within the areas proposed. We then identify which conservation efforts may be the result of the species being listed under the Act versus those attributed solely to the designation of critical habitat for this particular species. The probable economic impact of a proposed critical habitat designation is analyzed by comparing scenarios both ''with critical habitat'' and ''without critical habitat.''

The ''without critical habitat'' scenario represents the baseline for the analysis, which includes the existing regulatory and socio-economic burden imposed on landowners, managers, or other resource users potentially affected by the designation of critical habitat (*e.g.,* under the Federal listing as well as other Federal, State, and local regulations). The baseline, therefore, represents the costs of all efforts attributable to the listing of the species under the Act (*i.e.,* conservation of the species and its habitat incurred regardless of whether critical habitat is designated). The ''with critical habitat'' scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts would not be expected without the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat, above and beyond the baseline costs. These are the costs we use when evaluating the benefits of inclusion and exclusion of particular areas from the final designation of critical habitat should we choose to conduct a discretionary section 4(b)(2) exclusion analysis.

Executive Orders (E.O.s) 12866 and 13563 direct Federal agencies to assess the costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consistent with the E.O. regulatory analysis requirements, our effects analysis under the Act may take into consideration impacts to both directly and indirectly affected entities, where practicable and reasonable. If sufficient data are available, we assess to the extent practicable the probable impacts to both directly and indirectly affected entities. Section 3(f) of E.O. 12866 identifies four criteria when a regulation is considered a ''significant'' rulemaking, and requires additional analysis, review, and approval if met. The criterion relevant here is whether the designation of critical habitat may have an economic effect of greater than $100 million in any given year (section 3(f)(1)). Therefore, our consideration of economic impacts uses a screening analysis to assess whether a designation of critical habitat for these species is likely to exceed the economically significant threshold.

For this particular designation, we developed an incremental effects memorandum (IEM) considering the probable incremental economic impacts that may result from this proposed designation of critical habitat. The information contained in our IEM was then used to develop a screening analysis of the probable effects of the designation of critical habitat for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush (IEc 2021, entire). We began by conducting a screening analysis of the proposed designation of critical habitat in order to focus our analysis on the key factors that are likely to result in incremental economic impacts. The purpose of the screening analysis is to filter out particular geographic areas of critical habitat that are already subject to such protections and are, therefore, unlikely to incur incremental economic impacts. In particular, the screening analysis considers baseline costs (*i.e.,* absent critical habitat designation) and includes probable economic impacts where land and water use may be subject to conservation plans, land management plans, best management practices, or regulations that protect the habitat area as a result of the Federal listing status of the species. Ultimately, the screening analysis allows us to focus our analysis on evaluating the specific areas or sectors that may incur probable incremental economic impacts as a result of the designation.

The presence of the listed species in occupied areas of critical habitat means

that any destruction or adverse modification of those areas will also likely jeopardize the continued existence of the species. Therefore, designating occupied areas as critical habitat typically causes few if any incremental impacts above and beyond the impacts of listing the species. Accordingly, the screening analysis focuses on areas of unoccupied critical habitat. The screening analysis also assesses whether units are unoccupied by the species and thus may require additional management or conservation efforts as a result of the critical habitat designation for the species; these additional efforts may incur incremental economic impacts. This screening analysis combined with the information contained in our IEM are what we consider our draft economic analysis (DEA) of the proposed critical habitat designation for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush; our DEA is summarized in the narrative below.

As part of our screening analysis, we considered the types of economic activities that are likely to occur within the areas that may be affected by the critical habitat designation. In our evaluation of the probable incremental economic impacts that may result from the proposed designation of critical habitat for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush, first we identified, in the IEM dated September 15, 2021, probable incremental economic impacts associated with the following categories of activities:

(1) Land management and restoration (including, but not limited to, nonnative species control, prescribed fire, and hydrologic restoration);

(2) Roadway and bridge construction and maintenance;

(3) Right-of-way maintenance;

(4) Commercial or residential development; and

(5) Recreation (including construction and maintenance of recreation infrastructure).

We considered each industry or category individually. Additionally, we considered whether their activities have any Federal involvement. Critical habitat designations generally will not affect activities that do not have any Federal involvement; designation of critical habitat only affects activities conducted, funded, permitted, or authorized by Federal agencies. In areas where Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush are present, Federal agencies already are required to consult with the Service under section 7 of the Act on activities they authorize, fund, or carry out that may affect the species. If we finalize this proposed critical habitat designation, consultations to avoid the destruction or adverse modification of critical habitat would be incorporated into the existing consultation process. In our IEM, we attempted to clarify the distinction between the effects that will result from the species being listed and those attributable to the critical habitat designation (*i.e.,* difference between the jeopardy and adverse modification standards) for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush critical habitat. Because the designation of critical habitat for these species is being proposed several years following the listing of these species, data, such as from consultation history, is available to help us discern which conservation efforts are attributable to these species being listed and those which will result solely from the designation of critical habitat. The following specific circumstances in this case help to inform our evaluation: (1) The essential physical or biological features identified for critical habitat are the same features essential for the life requisites of the species and (2) any actions that would likely adversely affect the essential physical or biological features of occupied critical habitat are also likely to adversely affect these species. The IEM outlines our rationale concerning this limited distinction between baseline conservation efforts and incremental impacts of the designation of critical habitat for these species. This evaluation of the incremental effects has been used as the basis to evaluate the probable incremental economic impacts of this proposed designation of critical habitat.

Approximately 1,462 ac (592 ha) in two units in Monroe County, Florida, are being proposed for designation as critical habitat for the Big Pine partridge pea. Both units are occupied by the Big Pine partridge pea. Approximately 1,379 ac (558 ha) in one unit in Monroe County, Florida, is being proposed for designation as critical habitat for the wedge spurge; the unit is occupied by the species. Approximately 5,090 ac (2,060 ha) in five units in Monroe and Miami-Dade Counties, Florida, are being proposed for designation as critical habitat for sand flax. All five units are occupied by sand flax. Approximately 16,635 ac (6,732 ha) in 13 units in Miami-Dade and Monroe Counties, Florida, are being proposed for designation as critical habitat for the Blodgett's silverbush. All 13 units are occupied by the Blodgett's silverbush. Land ownership across the units for all four plants includes Federal lands (64 percent), State of Florida lands (17 percent), county lands (12 percent), and private lands (7 percent). Approximately 83 percent of the total proposed designated critical habitat area for all four plants overlaps with existing designated critical habitat for other species.

Because all of the area proposed for designation is occupied, most actions that may affect these species would also affect designated critical habitat, and it is unlikely that any additional conservation efforts would be recommended to address the adverse modification standard over and above those recommended as necessary to avoid jeopardizing the continued existence of these four plants. Therefore, only administrative costs are expected in the proposed critical habitat designation. While the analysis for adverse modification of critical habitat will require time and resources by both the Federal action agency and the Service, it is believed that, in most circumstances, these costs would predominantly be administrative in nature and would not be significant.

The economic costs of critical habitat designation for these species will most likely be limited to additional administrative efforts to consider adverse modification in section 7 consultations. This finding is based on the following factors: (1) All of the proposed critical habitat units for the four plants are considered occupied by the species; (2) A number of additional baseline protections exist for the species due to the presence of other listed species and designated critical habitats, with approximately 83 percent of the proposed critical habitat overlapping with designated critical habitat for other pine rockland habitat species; and (3) A number of management plans and conservation plans also provide baseline protections to the species in proposed critical habitat areas. Additionally, if we finalize critical habitat to include areas that are unoccupied by the Big Pine partridge pea, wedge spurge, and sand flax, those areas under consideration wholly overlap with other federally listed species or designated critical habitat for other listed species. Accordingly, the costs associated with designation of unoccupied areas would also likely be limited to additional administrative efforts to consider adverse modification in section 7 consultations.

In total, approximately 2 formal consultations, 39 informal consultations, and 2 technical assistance efforts that will include these species are anticipated to occur during the next 10 years in proposed critical habitat

areas, with costs to the Service and action agencies of approximately $11,500 annually. Although the specific geographic distribution of these costs is uncertain, it appears likely that most costs would occur in the ENP unit, which comprises 46 percent of proposed critical habitat for these four plants. Any costs that would be associated with unoccupied critical habitat would not significantly increase this amount.

Potential private property value effects are possible due to public perception of impacts to private lands. The designation of critical habitat may cause some developers or landowners to perceive those private lands will be subject to use restrictions or litigation from third parties, resulting in costs. However, any costs associated with public perception are speculative and not possible to quantify. Further, only seven percent of the proposed critical habitat designation is privately owned land, leading to, at most, nominal incremental costs potentially arising from changes in public perception of lands included in the designation.

The total annual incremental costs of critical habitat designation for these four plants are anticipated to be approximately $11,500 per year, and economic benefits are also anticipated to be small. Therefore, critical habitat designation for these four plants is unlikely to generate costs or benefits exceeding $100 million in a single year, and this proposed rule is unlikely to meet the threshold for an economically significant rule, with regard to costs under E.O. 12866.

We are soliciting data and comments from the public on the DEA discussed above, as well as on all aspects of this proposed rule and our required determinations. During the development of a final designation, we will consider the information presented in the DEA and any additional information on economic impacts we receive during the public comment period to determine whether any specific areas should be considered for exclusion from the final critical habitat designation under authority of section 4(b)(2) and our implementing regulations at 50 CFR 424.19. We may exclude an area from critical habitat if we determine that the benefits of excluding the area outweigh the benefits of including the area, provided the exclusion will not result in the extinction of this species.

Exclusions

Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we prepared an analysis of the probable economic impacts of the proposed critical habitat designation and related factors. At this time, we are not considering any exclusions based on economic impacts.

During the development of a final designation, we will consider any additional economic impact information received through the public comment period, and as such areas may be excluded from the final critical habitat designation under section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19.

Consideration of National Security Impacts

Section 4(a)(3)(B)(i) of the Act may not cover all DoD lands or areas that pose potential national-security concerns (*e.g.,* a DoD installation that is in the process of revising its INRMP for a newly listed species or a species previously not covered). If a particular area is not covered under section 4(a)(3)(B)(i), then national-security or homeland-security concerns are not a factor in the process of determining what areas meet the definition of ''critical habitat.'' However, the Service must still consider impacts on national security, including homeland security, on those lands or areas not covered by section 4(a)(3)(B)(i) because section 4(b)(2) requires the Service to consider those impacts whenever it designates critical habitat. Accordingly, if DoD, Department of Homeland Security (DHS), or another Federal agency has requested exclusion based on an assertion of national-security or homeland-security concerns, or we have otherwise identified national-security or homeland-security impacts from designating particular areas as critical habitat, we generally have reason to consider excluding those areas.

However, we cannot automatically exclude requested areas. When DoD, DHS, or another Federal agency requests exclusion from critical habitat on the basis of national-security or homeland-security impacts, it must provide a reasonably specific justification of an incremental impact on national security that would result from the designation of that specific area as critical habitat. That justification could include demonstration of probable impacts, such as impacts to ongoing border-security patrols and surveillance activities, or a delay in training or facility construction, as a result of compliance with section 7(a)(2) of the Act. If the agency requesting the exclusion does not provide us with a reasonably specific justification, we will contact the agency to recommend that it provide a specific justification or clarification of its concerns relative to the probable incremental impact that could result from the designation. If we conduct an exclusion analysis because the agency provides a reasonably specific justification or because we decide to exercise the discretion to conduct an exclusion analysis, we will defer to the expert judgment of DoD, DHS, or another Federal agency as to: (1) Whether activities on its lands or waters, or its activities on other lands or waters, have national-security or homeland-security implications; (2) the importance of those implications; and (3) the degree to which the cited implications would be adversely affected in the absence of an exclusion. In that circumstance, in conducting a discretionary section 4(b)(2) exclusion analysis, we will give great weight to national-security and homeland-security concerns in analyzing the benefits of exclusion.

We have evaluated whether any of the lands within the proposed designation of critical habitat are owned by DoD or DHS or could lead to national-security or homeland-security impacts if designated. In this section, we describe the areas within the proposed designation that are owned by DoD or DHS or for which designation could lead to national-security or homeland-security impacts. For each area, we describe the available information indicating whether we have reason to consider excluding the area from the designation. If, during the comment period, we identify or receive information about additional areas for which designation may result in incremental national-security or homeland-security impacts, then we may consider conducting a discretionary exclusion analysis to determine whether to exclude those additional areas under authority of section 4(b)(2) and our implementing regulations at 50 CFR 424.19.

DHS Land Parcel

We have determined that some lands within the Richmond Pinelands and surrounding areas units (Units SF3 and BS10) of the proposed designation of critical habitat for sand flax and Blodgett's silverbush are owned, managed, or used by the USCG, which is part of the DHS.

The USCG property is separated into two main areas: the Communication Station (COMMSTA) Miami and the Civil Engineering Unit (CEU). The COMMSTA houses transmitting and receiving antennas. The CEU plans and executes projects at regional shore

facilities, such as construction and post-disaster assessments.

The USCG parcel contains approximately 100 ac (40 ha) of standing pine rocklands. The remainder of the site, outside of the developed areas, is made up of scraped pine rocklands that are mowed three to four times per year for maintenance of a communications antenna field. While disturbed, this scraped area maintains sand substrate and many native pine rockland species, including documented occurrences of sand flax and Blodgett's silverbush. As of the drafting of this document, the USCG parcel has a draft management plan that includes management of pine rockland habitats, including vegetation control and prescribed fire and protection of lands from further development or degradation. This management plan is anticipated to be finalized in late 2022. In addition, the standing pine rockland area is partially managed through an active recovery grant to the Institute for Regional Conservation. Under this grant, up to 39 ac (16 ha) of standing pine rocklands will undergo invasive vegetation control.

Based on a review of the specific mission of the USCG facility in conjunction with the measures and efforts set forth in the draft management plan to preserve pine rockland habitat and protect sensitive and listed species, we have determined that it is unlikely that the critical habitat, if finalized as proposed, would negatively impact the facility or its operations. As a result, we do not anticipate any impact on national security. However, if through the public comment period we receive information regarding impacts on national security or homeland security from designating this area as critical habitat, then as part of developing the final designation of critical habitat, we will conduct a discretionary exclusion analysis to determine whether to exclude these areas under authority of section 4(b)(2) and our implementing regulations at 50 CFR 424.19.

DoD Land Parcel

As discussed above, we have determined that the USACE, a branch of the Department of Defense, retains ownership over a 121-ac (49-ha) parcel in Units SF3 and BS10 of the proposed designation of critical habitat for sand flax and Blodgett's silverbush, respectively. More than 85 ac (34 ha) of this parcel are forested but not managed for preservation of natural resources. The USACE does not have an INRMP or any specific management plan for sand flax or Blodgett's silverbush or their habitat covering these lands. Activities conducted on this site are unknown; however, we do not anticipate any impact on national security.

Following our process for coordinating with Federal partners, we contacted the DoD and DHS about this designation and shared the IEM for their feedback. Neither agency identified any potential national-security impact, nor requested an exclusion from critical habitat based on potential national-security impacts. However, if through the public comment period we receive information regarding impacts on national security or homeland security from designating particular areas as critical habitat, then as part of developing the final designation of critical habitat, we may consider conducting a discretionary exclusion analysis to determine whether to exclude those areas under authority of section 4(b)(2) and our implementing regulations at 50 CFR 424.19.

Considerations of Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security discussed above. To identify other relevant impacts that may affect the exclusion analysis, we consider a number of factors, including whether there are permitted conservation plans covering the species in the area—such as HCPs, safe harbor agreements (SHAs), or candidate conservation agreements with assurances (CCAAs)—or whether there are non-permitted conservation agreements and partnerships that may be impaired by designation of, or exclusion from, critical habitat. In addition, we look at whether Tribal conservation plans or partnerships, Tribal resources, or government-to-government relationships of the United States with Tribal entities may be affected by the designation. We also consider any State, local, social, or other impacts that might occur because of the designation. When analyzing other relevant impacts of including a particular area in a designation of critical habitat, we weigh those impacts relative to the conservation value of the particular area. To determine the conservation value of designating a particular area, we consider a number of factors, including, but not limited to, the additional regulatory benefits that the area would receive due to the protection from destruction or adverse modification as a result of actions with a Federal nexus, the educational benefits of mapping essential habitat for recovery of the listed species, and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

In the case of these species, the benefits of critical habitat include public awareness of the presence of these species and the importance of habitat protection, and, where a Federal nexus exists, habitat protection for these species due to protection from destruction or adverse modification of critical habitat. Continued implementation of an ongoing management plan that provides conservation equal to or more than the protections that result from a critical habitat designation would reduce those benefits of including that specific area in the critical habitat designation.

We evaluate the existence of a conservation plan when considering the benefits of inclusion. We consider a variety of factors, including, but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After identifying the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to evaluate whether the benefits of exclusion outweigh those of inclusion. If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then determine whether exclusion would result in extinction of the species. If excluding an area from critical habitat will result in extinction, we will not exclude it from the designation.

Private or Other Non-Federal Conservation Plans Related to Permits Under Section 10 of the Act

HCPs for incidental take permits under section 10(a)(1)(B) of the Act provide for partnerships with non-Federal entities to minimize and mitigate impacts to listed species and their habitat. In some cases, HCP permittees agree to do more for the conservation of the species and their habitats on private lands than designation of critical habitat would provide alone. We place great value on the partnerships that are developed during the preparation and implementation of HCPs.

CCAAs and SHAs are voluntary agreements designed to conserve candidate and listed species, respectively, on non-Federal lands. In exchange for actions that contribute to the conservation of species on non-Federal lands, participating property owners are covered by an ''enhancement of survival'' permit under section 10(a)(1)(A) of the Act, which authorizes incidental take of the covered species that may result from implementation of conservation actions, specific land uses, and, in the case of SHAs, the option to return to a baseline condition under the agreements. The Service also provides enrollees assurances that we will not impose further land-, water-, or resource-use restrictions, or require additional commitments of land, water, or finances, beyond those agreed to in the agreements.

When we undertake a discretionary section 4(b)(2) exclusion analysis based on permitted conservation plans (*e.g.,* CCAAs, SHAs, and HCPs), we anticipate consistently excluding such areas if incidental take caused by the activities in those areas is covered by the permit under section 10 of the Act and the CCAA/SHA/HCP meets all of the following three factors (see the 2016 Policy for additional details):

a. The permittee is properly implementing the CCAA/SHA/HCP and is expected to continue to do so for the term of the agreement. A CCAA/SHA/HCP is properly implemented if the permittee is and has been fully implementing the commitments and provisions in the CCAA/SHA/HCP, implementing agreement, and permit.

b. The species for which critical habitat is being designated is a covered species in the CCAA/SHA/HCP, or very similar in its habitat requirements to a covered species. The recognition that the Services extend to such an agreement depends on the degree to which the conservation measures undertaken in the CCAA/SHA/HCP would also protect the habitat features of the similar species.

c. The CCAA/SHA/HCP specifically addresses that species' habitat and meets the conservation needs of the species in the planning area.

The proposed critical habitat designation includes areas that are covered by the following permitted plan providing for the conservation of sand flax and Blodgett's silverbush: Coral Reef Commons HCP.

Coral Reef Commons Habitat Conservation Plan

In preparing this proposal, we have determined that lands associated with the Coral Reef Commons HCP within Unit SF3 for sand flax and Unit BS10 for Blodgett's silverbush (Richmond Pinelands and surrounding areas) are included within the boundaries of the proposed critical habitat.

Coral Reef Commons is a mixed-use community, which consists of 900 apartments, retail stores, restaurants, and parking. In 2017, an HCP and associated permit under section 10 of the Act was developed and issued for the Coral Reef Commons development.

As part of the HCP and permit, an approximately 53-ac (21-ha) onsite preserve (same as the area for proposed critical habitat designation) was established under a conservation encumbrance that will be managed in perpetuity for pine rockland habitat and sensitive and listed species, including sand flax and Blodgett's silverbush.

The Center for Southeastern Tropical Advanced Remote Sensing site is an offsite mitigation area for Coral Reef Commons comprising 57 ac (23 ha). Both the onsite preserve and the offsite mitigation area are being managed to maintain healthy pine rockland habitat using invasive, exotic plant management, mechanical treatment, and prescribed fire, addressing both the habitat and conservation needs of the species. Since initiating the Coral Reef Commons HCP, pine rockland restoration efforts have been conducted within all of the management units in both the onsite preserve and the offsite mitigation area. A second round of prescribed fire began in February 2021. Currently, the onsite preserve meets or exceeds the success criteria described for proper implementation of the HCP.

Critical habitat within Units SF3 and BS10 that is associated with the Coral Reef Commons HCP is limited to the onsite preserve and offsite mitigation area. Based on a cursory review of the HCP and proposed critical habitat for sand flax and Blodgett's silverbush, we do not anticipate requesting any additional conservation measures for these species beyond those that are currently in place. Therefore, at this time, we are considering excluding those specific lands associated with the Coral Reef Commons HCP that are in the preserve and off-site mitigation area from the final designation of critical habitat for sand flax and Blodgett's silverbush. However, we will more thoroughly review the HCP, its implementation of the conservation measures for sand flax and Blodgett's silverbush and their habitat therein, and public comment on this issue prior to finalizing critical habitat, and if appropriate, exclude from critical habitat for sand flax and Blodgett's silverbush those lands associated with the Coral Reef Commons HCP that are in the preserves and offsite mitigation area.

Monroe County HCP for Big Pine and No Name Keys

Lands within the Monroe County HCP for Big Pine and No Name Keys are included within proposed critical habitat for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush. However, we have determined that the Monroe County HCP for Big Pine and No Name Keys does not include Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush as ''covered species,'' and they are not mentioned specifically anywhere in the HCP document. Because they are not covered species, the HCP will not trigger surveys or conservation measures for these species. We are requesting comments on the benefit to Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush from the Monroe County HCP for Big Pine and No Name Keys; however, at this time, we are not proposing the exclusion of any areas within the HCP from the proposed critical habitat.

We have determined that there are no additional HCPs or other management plans for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush.

Tribal Lands

Several Executive orders, Secretarial orders, and policies concern working with Tribes. These guidance documents generally confirm our trust responsibilities to Tribes, recognize that Tribes have sovereign authority to control Tribal lands, emphasize the importance of developing partnerships with Tribal governments, and direct the Service to consult with Tribes on a government-to-government basis.

A joint Secretarial Order that applies to both the Service and the National Marine Fisheries Service (NMFS)—Secretarial Order 3206, *American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act* (June 5, 1997) (S.O. 3206)—is the most comprehensive of the various guidance documents related to Tribal relationships and Act implementation, and it provides the most detail directly relevant to the designation of critical habitat. In addition to the general direction discussed above, the Appendix to S.O. 3206 explicitly recognizes the right of Tribes to participate fully in any listing process that may affect Tribal rights or Tribal trust resources; this includes the designation of critical habitat. Section

3(b)(4) of the Appendix requires the Service to consult with affected Tribes ''when considering the designation of critical habitat in an area that may impact Tribal trust resources, Tribally-owned fee lands, or the exercise of Tribal rights.'' That provision also instructs the Service to avoid including Tribal lands within a critical habitat designation unless the area is essential to conserve a listed species, and it requires the Service to ''evaluate and document the extent to which the conservation needs of the listed species can be achieved by limiting the designation to other lands.''

Our implementing regulations at 50 CFR 424.19 and the 2016 Policy are consistent with S.O. 3206. When we undertake a discretionary exclusion analysis, in accordance with S.O. 3206 we consult with any Tribe whose Tribal trust resources, tribally owned fee lands, or Tribal rights may be affected by including any particular areas in the designation, and we evaluate the extent to which the conservation needs of the species can be achieved by limiting the designation to other areas. When we undertake a discretionary section 4(b)(2) exclusion analysis, we always consider exclusion of Tribal lands, and give great weight to Tribal concerns in analyzing the benefits of exclusion. However, S.O. 3206 does not override the Act's statutory requirement of designation of critical habitat. As stated above, we must consult with any Tribe when a designation of critical habitat may affect Tribal lands or resources. The Act requires us to identify areas that meet the definition of ''critical habitat'' (*i.e.,* areas occupied at the time of listing that contain the essential physical or biological features that may require special management or protection and unoccupied areas that are essential to the conservation of a species), without regard to land ownership. While S.O. 3206 provides important direction, it expressly states that it does not modify the Secretary's statutory authority under the Act or other statutes.

The proposed critical habitat designation does not include any Tribal lands.

Summary of Exclusions Considered Under 4(b)(2) of the Act

Based on the information provided by entities seeking exclusion, as well as any additional public comments we receive, we will evaluate whether areas in the proposed critical habitat units are appropriate for exclusion from the final designation under section 4(b)(2) of the Act. If our analysis indicates that the benefits of excluding lands from the final designation outweigh the benefits of designating those lands as critical habitat, then the Secretary may exercise her discretion to exclude the lands from the final designation. At this time, we are considering excluding those specific lands associated with the Coral Reef Commons HCP that are in the preserve and offsite mitigation area from the final designation of critical habitat for sand flax and Blodgett's silverbush (units SF3 and BS10). In conclusion, we specifically solicit comments on the inclusion or exclusion of such areas.

During the development of a final designation, we will consider any information currently available or received during the public comment period regarding other relevant impacts of the proposed designation and will determine whether these or any other specific areas should be considered for exclusion from the final critical habitat designation under authority of section 4(b)(2), our implementing regulations at 50 CFR 424.19, and the 2016 Policy.

Required Determinations

Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

(1) Be logically organized;

(2) Use the active voice to address readers directly;

(3) Use clear language rather than jargon;

(4) Be divided into short sections and sentences; and

(5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES.** To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. OIRA has determined that this proposed rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this proposed rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 *et seq.*), whenever an 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 effects of the rule on small entities (*i.e.,* small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). 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 considered the types of activities that might trigger regulatory impacts under

this designation as well as 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.

Under the RFA, as amended, and as understood in light of recent court decisions, Federal agencies are required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself; in other words, the RFA does not require agencies to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, it is our position that only Federal action agencies would be directly regulated if we adopt the proposed critical habitat designation. The RFA does not require evaluation of the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities. Therefore, because no small entities would be directly regulated by this rulemaking, the Service certifies that, if made final as proposed, the proposed critical habitat designation will not have a significant economic impact on a substantial number of small entities. In summary, we have considered whether the proposed designation would result in a significant economic impact on a substantial number of small entities. For the above reasons and based on currently available information, we certify that, if made final, the proposed critical habitat designation will not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare statements of energy effects when undertaking certain actions. We do not foresee any energy development projects, supply distribution, or use that may affect or be affected by the proposed critical habitat for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush. Further, in our evaluation of potential economic impacts, we did not find that this proposed critical habitat designation would significantly affect energy supplies, distribution, or use. 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.*), we make the following finding:

(1) This proposed rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both ''Federal intergovernmental mandates'' and ''Federal private sector mandates.'' These terms are defined in 2 U.S.C. 658(5)–(7). ''Federal intergovernmental mandate'' includes a regulation that ''would impose an enforceable duty upon State, local, or tribal governments'' with two exceptions. It excludes ''a condition of Federal assistance.'' It also excludes ''a duty arising from participation in a voluntary Federal program,'' unless the regulation ''relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,'' if the provision would ''increase the stringency of conditions of assistance'' or ''place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding,'' and the State, local, or tribal governments ''lack authority'' to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. ''Federal private sector mandate'' includes a regulation that ''would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.''

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this proposed rule would significantly or uniquely affect small governments. The government lands being proposed for critical habitat designation are owned by the State of Florida, DoD, National Park Service, and the Service. None of these government entities fit the definition of ''small governmental jurisdiction.'' Therefore, a small government agency plan is not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush in a takings implications assessment. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat designation. Designation of critical habitat does not affect land ownership, or establish any closures, or restrictions on use of or access to the designated areas. Furthermore, the designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that would destroy or adversely modify critical habitat. A takings implications assessment has been completed for the proposed designation of critical habitat for Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush, and it concludes that, if

adopted, this designation of critical habitat does not pose significant takings implications for lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), this proposed rule does not have significant federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of this proposed critical habitat designation with, appropriate State resource agencies. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the proposed rule does not have substantial direct effects either on the States, or on the relationship between the national government and the States, or on the distribution of powers and responsibilities among the various levels of government. The proposed designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical or biological features of the habitat necessary for the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist State and local governments in long-range planning because they no longer have to wait for case-by-case section 7 consultations to occur.

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) of the Act would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule would not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, this proposed rule identifies the elements of physical or biological features essential to the conservation of the species. The proposed areas of designated critical habitat are presented on maps, and the proposed rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This proposed rule does not contain information collection requirements, and a submission to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) is not required. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) in connection with regulations adopted pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County* v. *Babbitt,* 48 F.3d 1495 (9th Cir. 1995)).

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 (Consultation and Coordination with Indian Tribal Governments), 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. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes.

As discussed above (see *Exclusions Based on Other Relevant Impacts*), we have determined that there are no Tribal lands that were occupied by Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush at the time of listing that contain the features essential for conservation of the species, and no Tribal lands unoccupied by Big Pine partridge pea, wedge spurge, sand flax, and Blodgett's silverbush that are essential for the conservation of the species. As a result, there are no Tribal lands affected by the proposed designation of critical habitat for these species.

References Cited

A complete list of references cited in this rulemaking is available on the internet at *https://www.regulations.gov* and upon request from the Florida Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this proposed rule are the staff members of the Fish and Wildlife Service's Florida Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Plants, Reporting and recordkeeping requirements, Transportation, Wildlife.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

■ 1. The authority citation for part 17 continues to read as follows:

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

■ 2. In § 17.12 in paragraph (h), revise the entries for ''*Argythamnia blodgettii* (Blodgett's silverbush)'', ''*Chamaesyce deltoidea* ssp. *serpyllum* (Wedge spurge)'', ''*Chamaecrista lineata* var. *keyensis* (Big Pine partridge pea)'', and ''*Linum arenicola* (Sand flax)'', under ''Flowering Plants'' in the List of Endangered and Threatened Plants to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Scientific name	Common name	Where listed	Status	Listing citations and applicable rules
		Flowering Plants		
*	*	*	*	*
Argythamnia blodgettii	Blodgett's silverbush	Wherever found	T	81 FR 66842, 9/29/2016; 50 CFR 17.96(a).[CH]
*	*	*	*	*
Chamaecrista lineata var. *keyensis*.	Big Pine partridge pea	Wherever found	E	81 FR 66842, 9/29/2016; 50 CFR 17.96(a).[CH]
*	*	*	*	*
Chamaesyce deltoidea ssp. *serpyllum*.	Wedge spurge	Wherever found	E	81 FR 66842; 9/29/2016; 50 CFR 17.96(a).[CH]
*	*	*	*	*
Linum arenicola	Sand flax	Wherever found	E	81 FR 66842, 9/29/2016;50 CFR 17.96(a).[CH]
*	*	*	*	*

■ 3. Amend § 17.96 in paragraph (a) by adding entries in alphabetical order under Family Euphorbiaceae for ''*Argythamnia blodgettii* (Blodgett's silverbush)'' and ''*Chamaesyce deltoidea* ssp. *serpyllum* (wedge spurge)'', under Family Fabaceae for ''*Chamaecrista lineata* var. *keyensis* (Big Pine partridge pea)'', and under Family Linaceae for ''*Linum arenicola* (sand flax)'', to read as follows:

§ 17.96 Critical habitat—plants.

(a) *Flowering plants.*

* * * * *

Family Euphorbiaceae: *Argythamnia blodgettii* (Blodgett's Silverbush)

(1) Critical habitat units are depicted for Miami-Dade and Monroe Counties, Florida, on the maps below.

(2) Within these areas, the physical or biological features essential to the conservation of *Argythamnia blodgettii* consist of south Florida pine rockland, rockland hammock, or coastal berm habitats and adjacent disturbed areas that:

(i) Consist of limestone substrate that provides nutritional requirements and suitable growing conditions (*e.g.,* pH, nutrients, anchoring, and drainage);

(ii) Are characterized by an open canopy and understory with a high proportion of native plant species to provide for sufficient sunlight to permit growth and flowering;

(iii) Are subjected to a monthly mean temperature characteristic of the subtropical humid classification in Miami-Dade County and tropical humid classification in Monroe County in every month of the year and short hydroperiods ranging of up to 60 days each year;

(iv) Are subjected to periodic natural (*e.g.,* fire, hurricanes) or nonnatural (*e.g.,* prescribed fire, mowing) disturbance regimes to maintain open canopy conditions; and

(v) Contain the presence of native pollinators for natural pollination and reproduction.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on [EFFECTIVE DATE OF FINAL RULE].

(4) Critical habitat map units. Data layers defining map units were created using ESRI ArcGIS mapping software. The projection used was Albers Conical Equal Area (Florida Geographic Data Library), NAD 1983 HARN. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. Shapefiles for the critical habitat units are available to the public at the Service's internet site, *https://www.fws.gov/office/florida-ecological-services/library,* and a list of coordinates outlining the units are available at *https://www.regulations.gov* at Docket No. FWS–R4–ES–2022–0116, at *https://www.fws.gov/office/florida-ecological-services/library,* and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Note: Index maps of all critical habitat units for *Argythamnia blodgettii* (Blodgett's silverbush) follow:

Figure 1 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (5)

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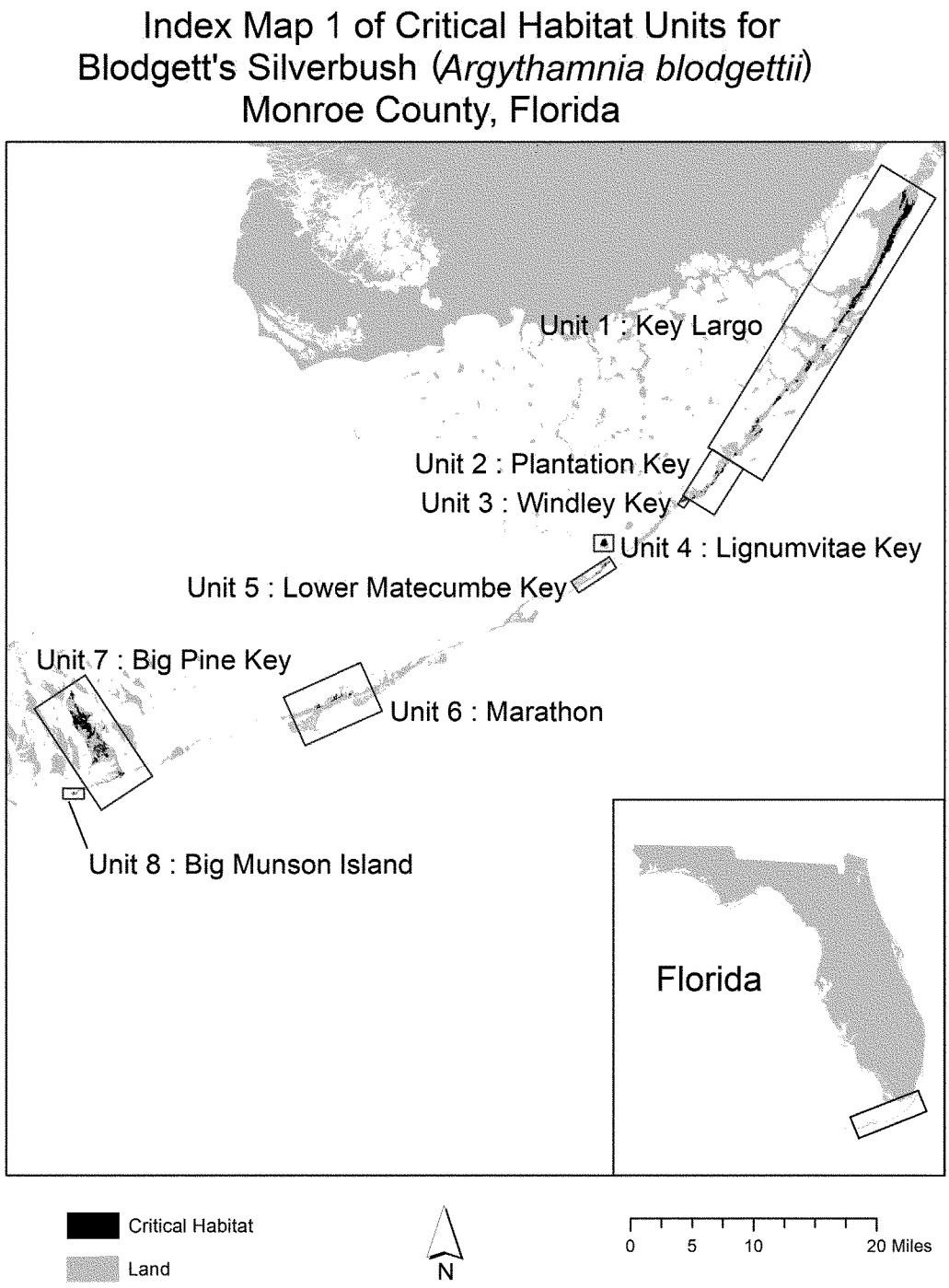
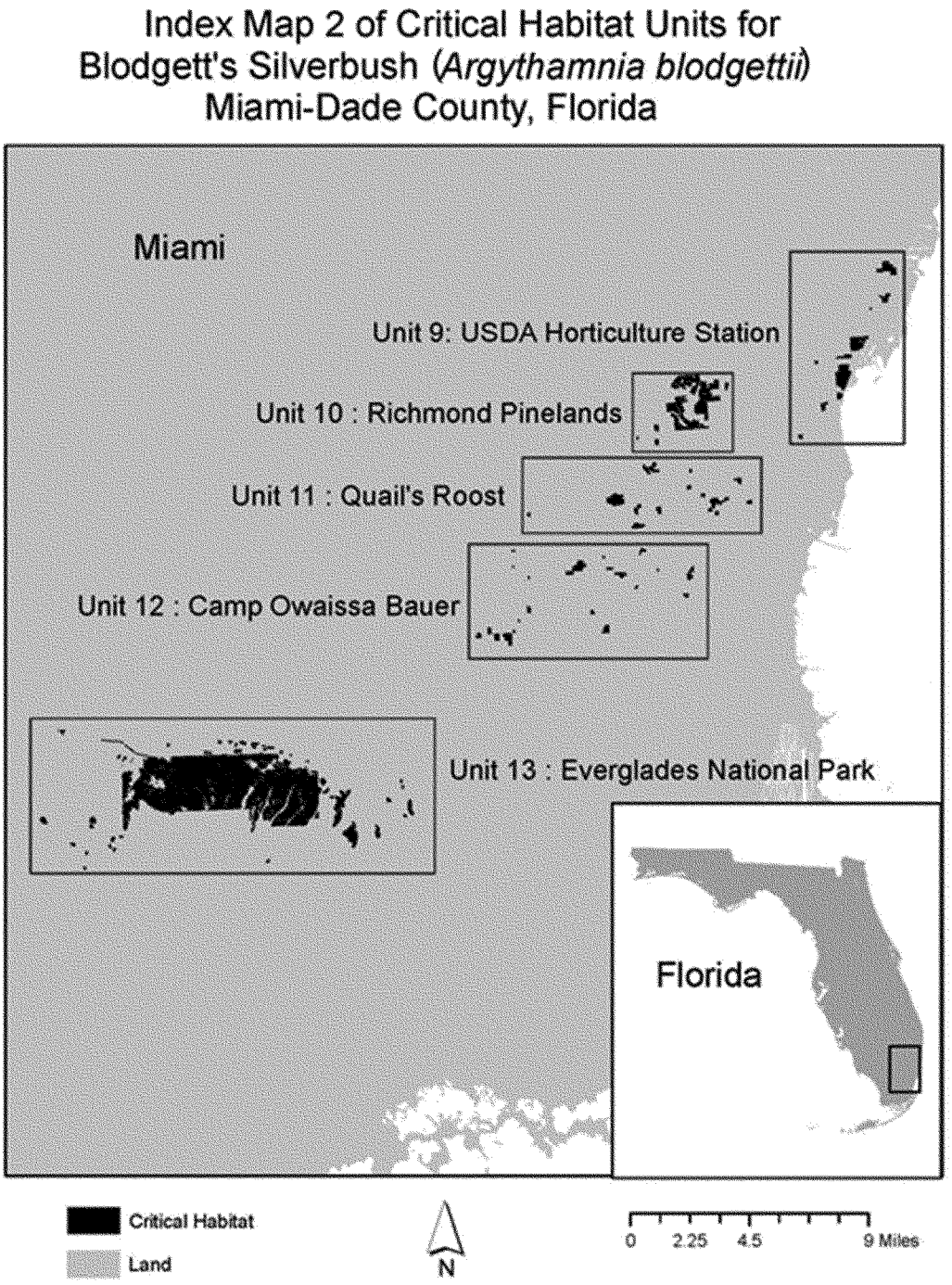


Figure 2 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (5)



(6) Unit 1: BS1—Key Largo, Monroe County, Florida.

(i) This unit consists of 3,060 ac (1,238 ha). This unit extends from near the northern tip of Key Largo, along the length of the island to the southern tip. It is bordered on the east by the Atlantic Ocean and on the west by Florida Bay. The unit also includes a portion of El Radabob Key.

(ii) Map of Unit 1 follows:

Figure 3 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (6)(ii)

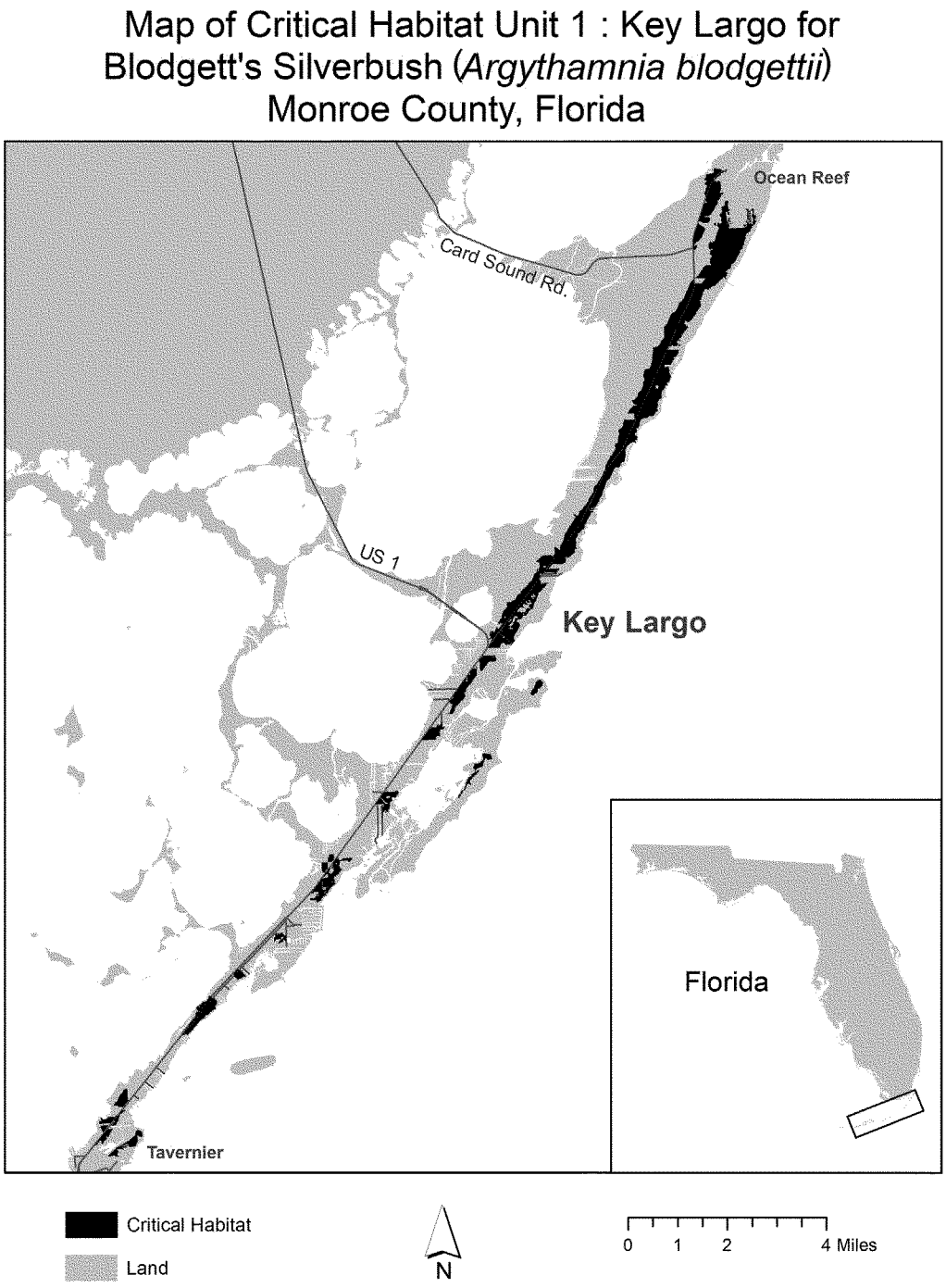
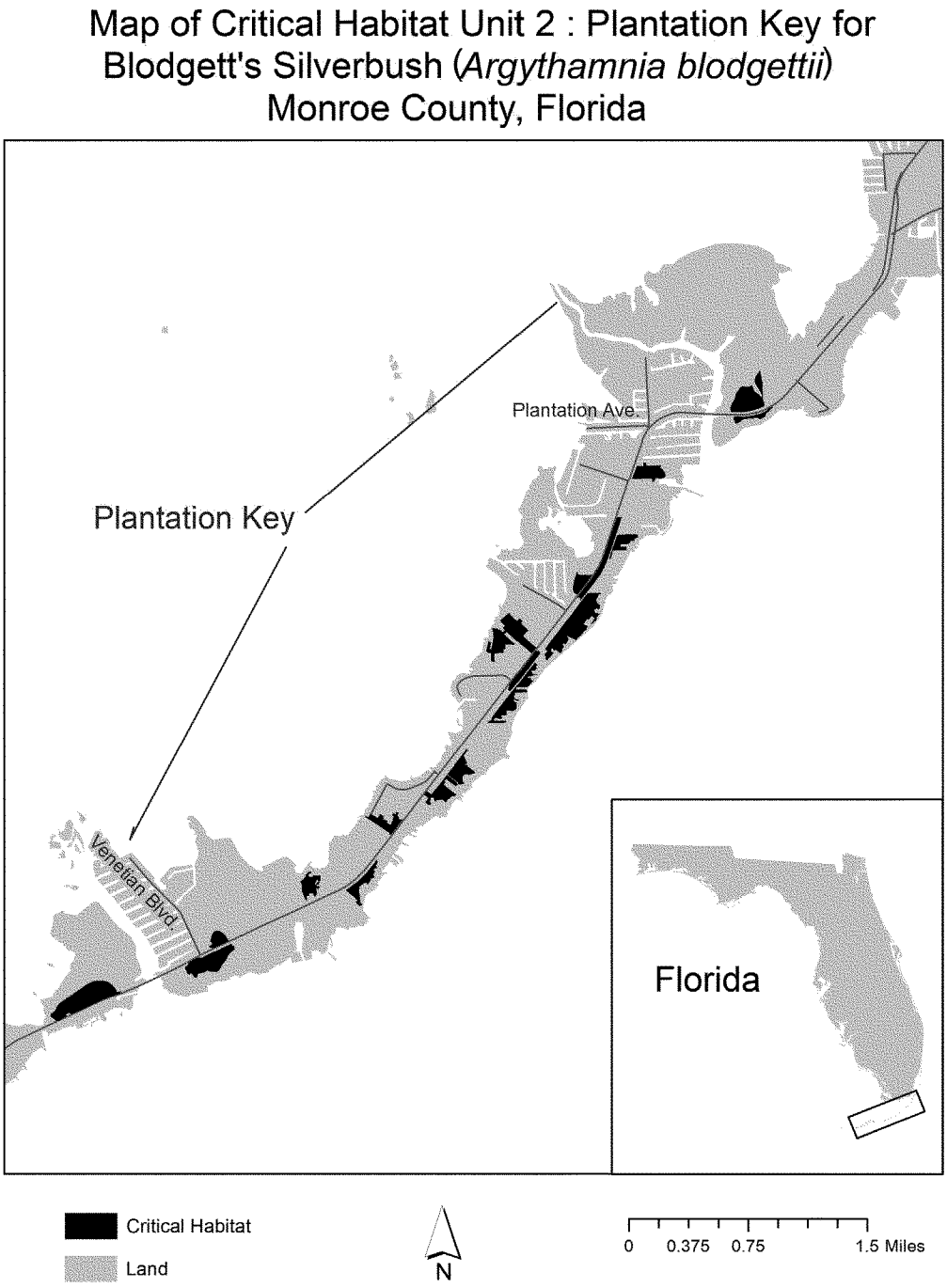


Figure 4 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (7)(ii)

(7) Unit 2: BS2—Plantation Key, Monroe County, Florida.

(i) This unit consists of 175 ac (71 ha). The unit originates on the north end of Plantation Key just south of Ocean Drive and continues intermittently until the south end of the island. The unit is bordered on the east by the Atlantic Ocean and on the west by Florida Bay.

(ii) Map of Unit 2 follows:

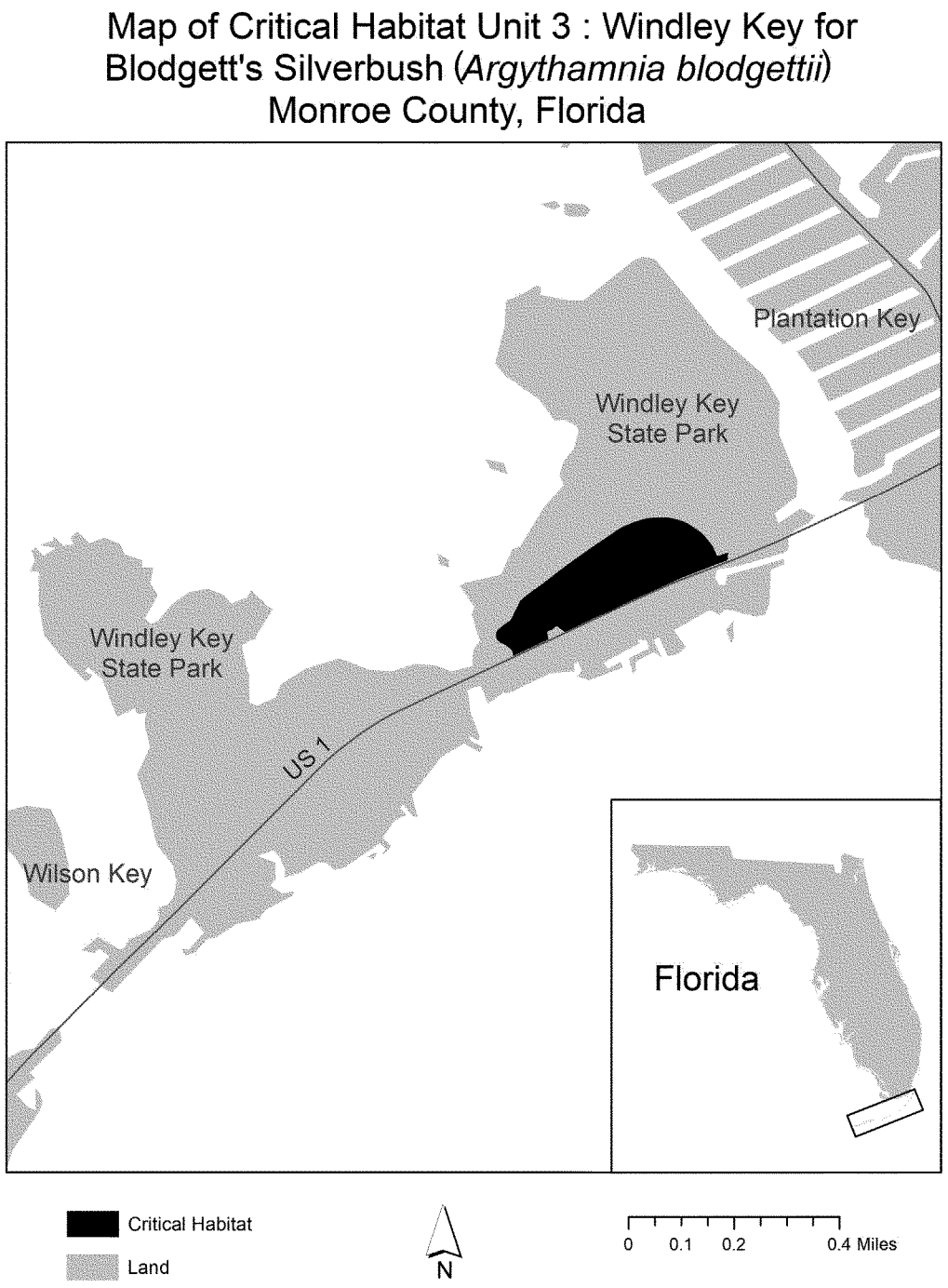


(8) Unit 3: BS3—Windley Key, Monroe County, Florida.

(i) This unit consists of 30 ac (12 ha). The unit is located on Windley Key on the north side of the Overseas Highway.

(ii) Map of Unit 3 follows:

Figure 5 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (8)(ii)

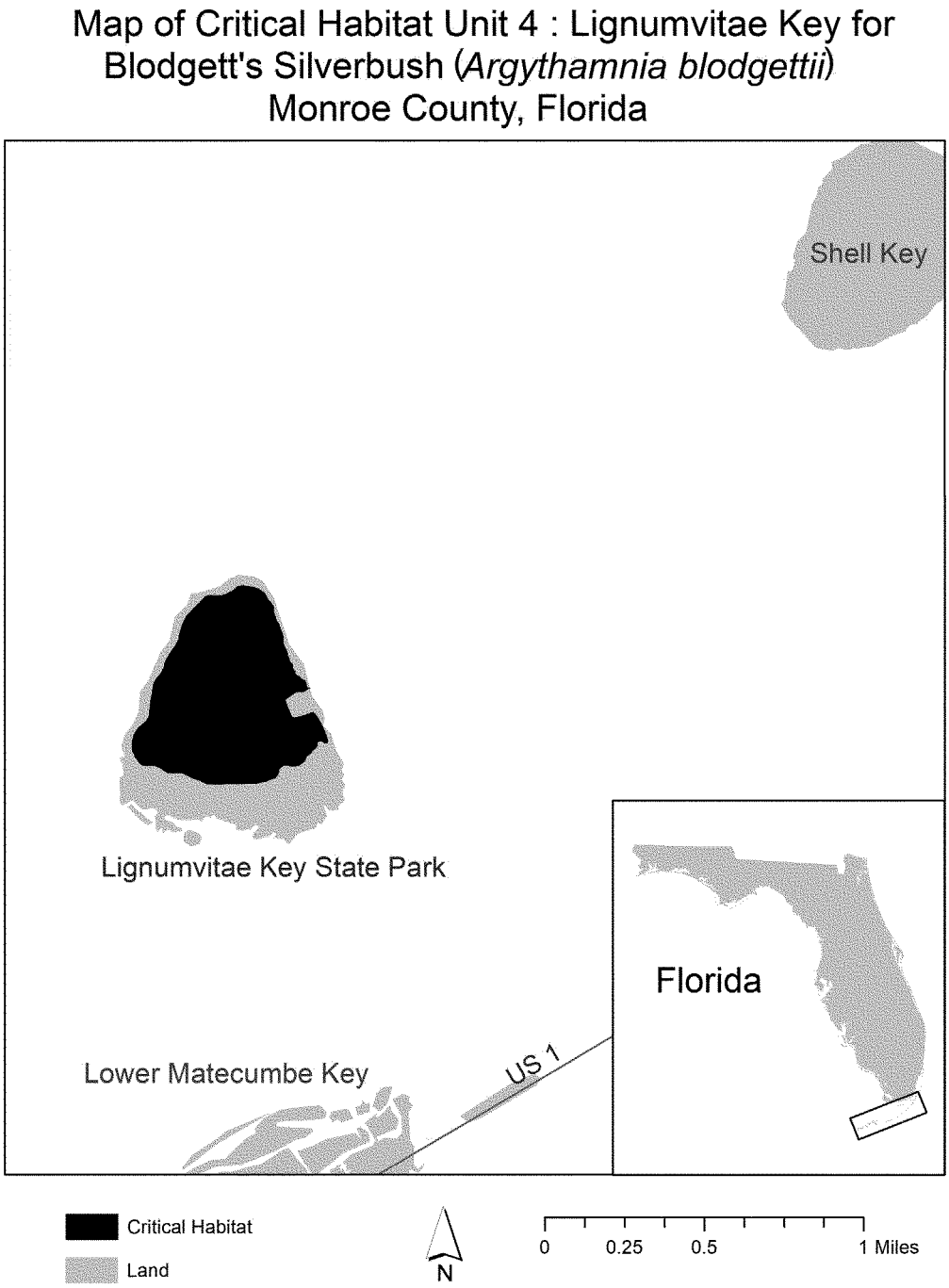


(9) Unit 4: BS4—Lignumvitae Key, Monroe County, Florida.

(i) This unit consists of 159 ac (64 ha). This unit includes the entire upland area of Lignumvitae Key.

(ii) Map of Unit 4 follows:

Figure 6 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (9)(ii)

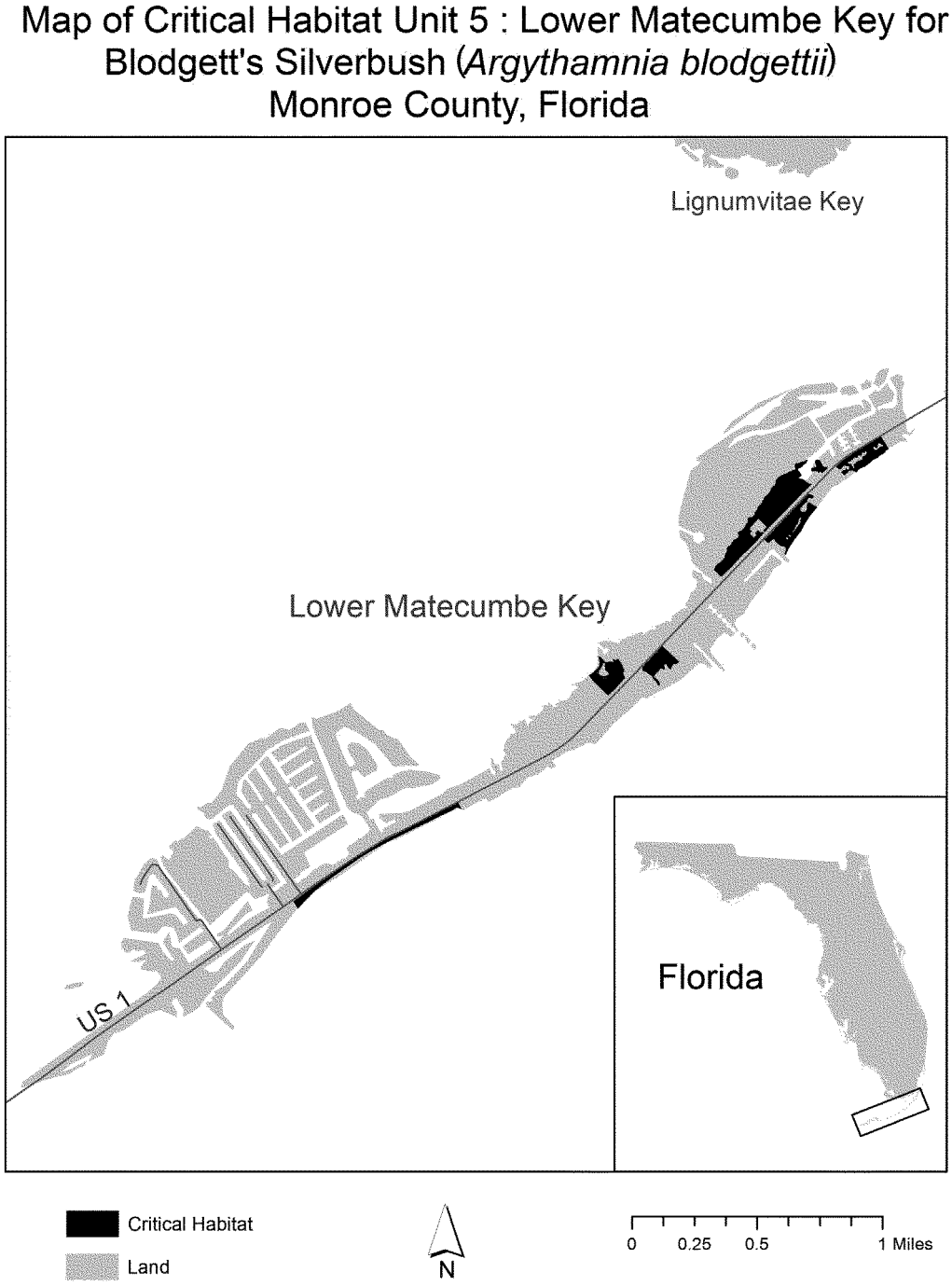


(10) Unit 5: BS5—Lower Matecumbe Key, Monroe County, Florida.

(i) This unit consists of 64 ac (26 ha). This unit extends from the east side of U.S. 1 from 0.14 mi (0.2 km) from the north edge of Lower Matecumbe Key, situated across U.S. 1 from Davis Lane and Tiki Lane. The unit continues on either side of U.S. 1 approximately 0.4 mi (0.6 km) from the north edge of Lower Matecumbe Key for approximately 0.6 mi (0.9 km).

(ii) Map of Unit 5 follows:

Figure 7 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (10)(ii)



(11) Unit 6: BS6—Marathon, Monroe County, Florida.

(i) This unit consists of 103 ac (42 ha). The unit consists of several areas along the Overseas Highway. Starting at Crawl Key to the north, proceeding southward encompassing hardwood hammock areas on Long Point Key, Fat Deer Key, and Vaca Key; and coastal berm on the south shore of Boot Key.

(ii) Map of Unit 6 follows:

Figure 8 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (11)(ii)

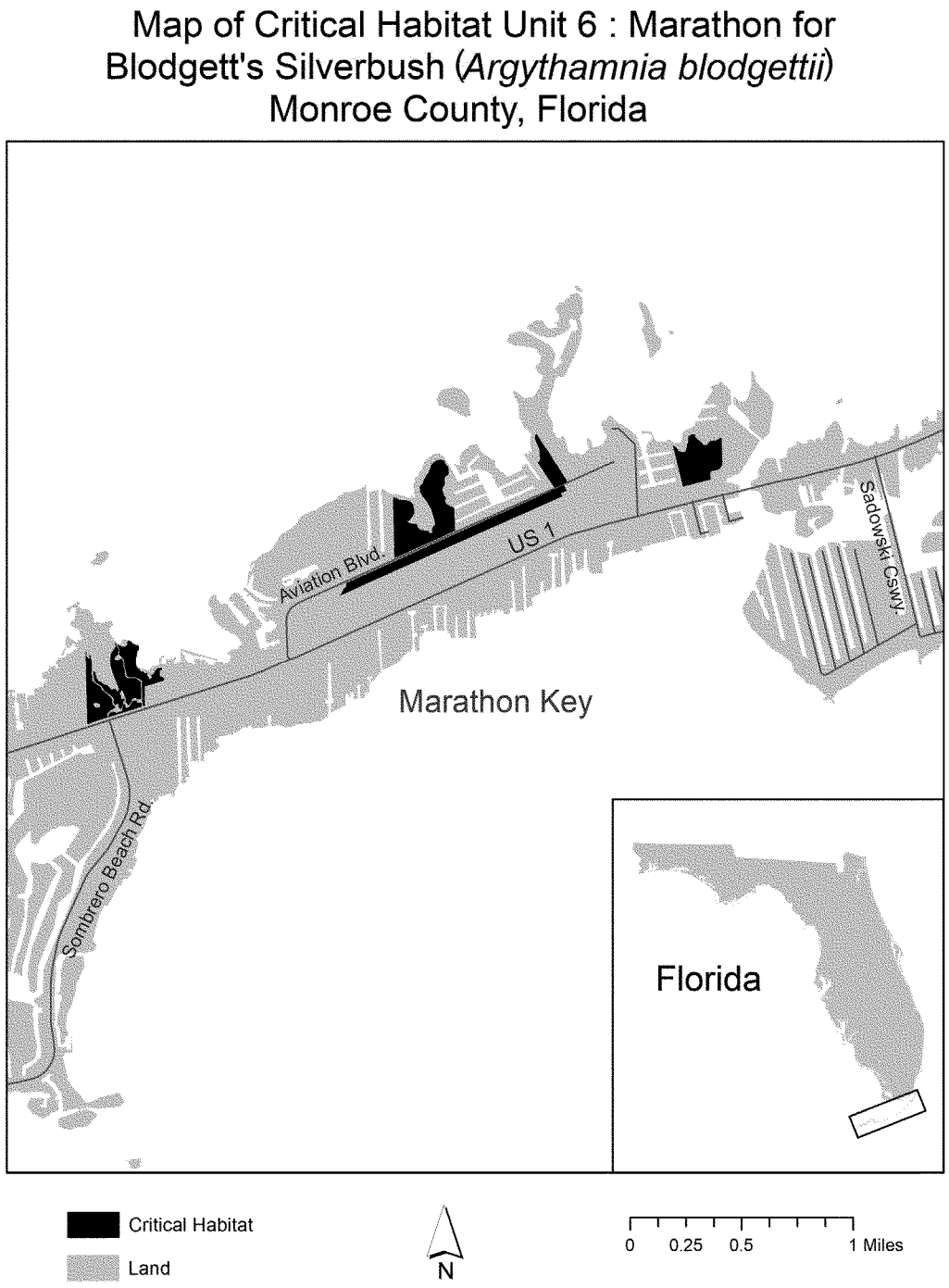


Figure 9 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (12)(ii)

(12) Unit 7: BS7—Big Pine Key, Monroe County, Florida.

(i) This unit consists of 1,867 ac (756 ha). This unit extends from near the northern tip of Big Pine Key to its southern shore, encompassing most of the undeveloped pine rocklands and rockland hammock habitat remaining on Big Pine Key.

(ii) Map of Unit 7 follows:

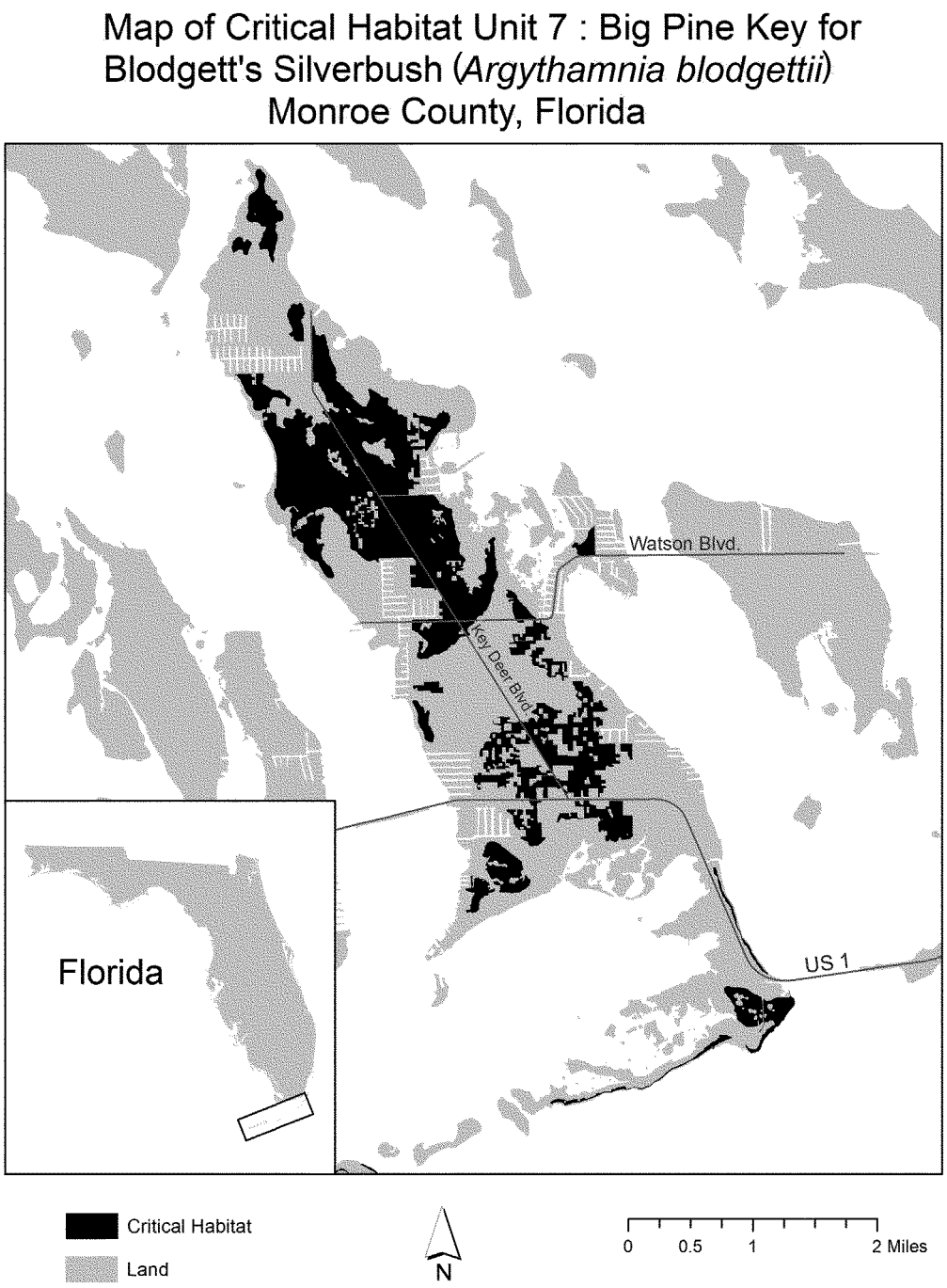
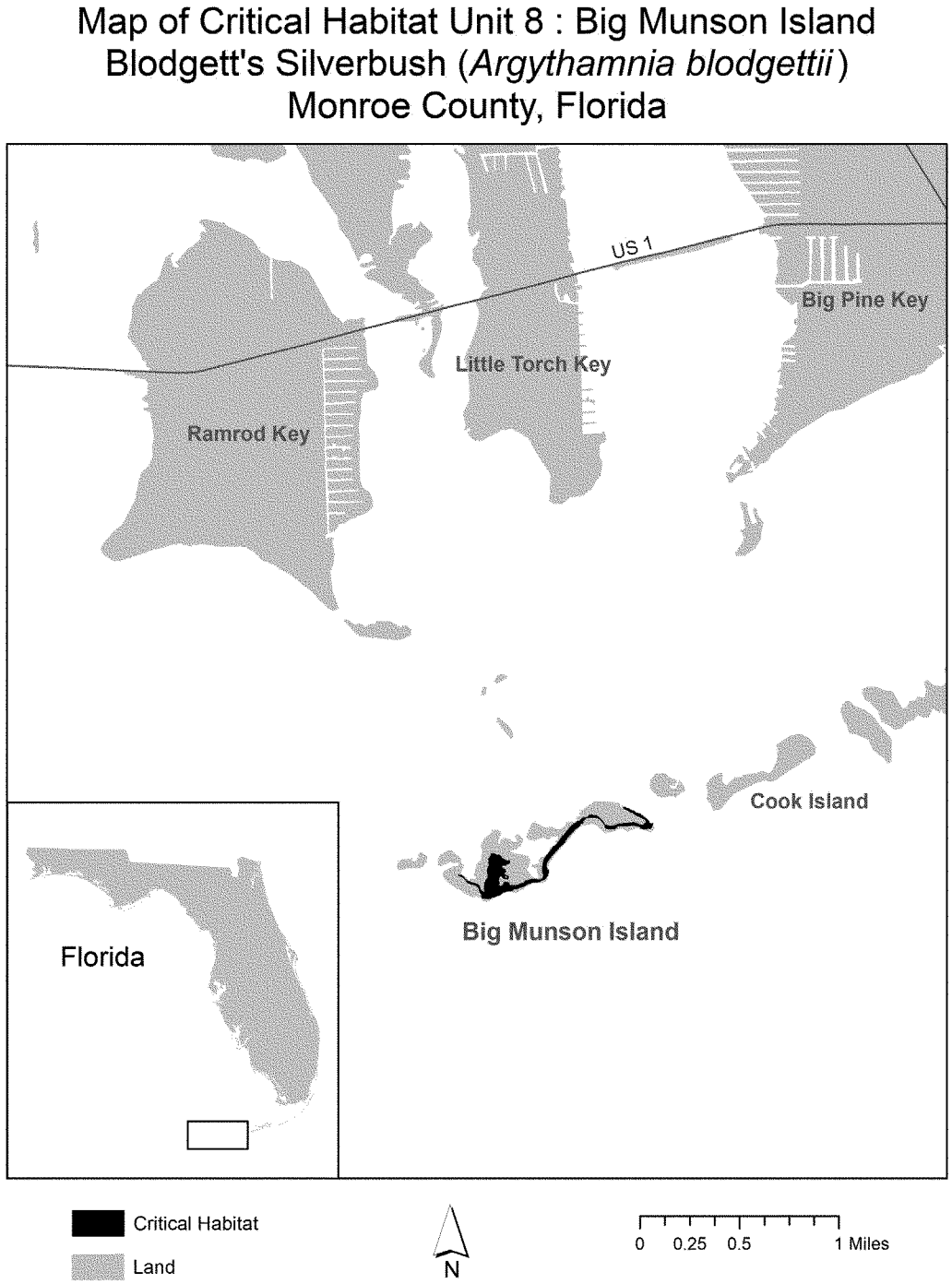


Figure 10 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (13)(ii)

(13) Unit 8: BS8—Big Munson Island, Monroe County, Florida.

(i) This unit consists of 28 ac (11 ha). The unit includes all coastal berm and rockland hammock habitat on the island.

(ii) Map of Unit 8 follows:



(14) Unit 9: BS9—U.S. Department of Agriculture, Subtropical Horticulture Research Station, and surrounding areas, Miami-Dade County, Florida.

(i) This unit consists of approximately 630 ac (255 ha). This unit is bordered on the north by SW 112 Street, on the south by the intersection of Old Cutler Road and Franjo Road (County Road (CR) 977), on the east by the Atlantic Ocean, and on the west by U.S. 1 (South Dixie Highway).

(ii) Map of Unit BS9 follows:

Figure 11 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (14)(ii)

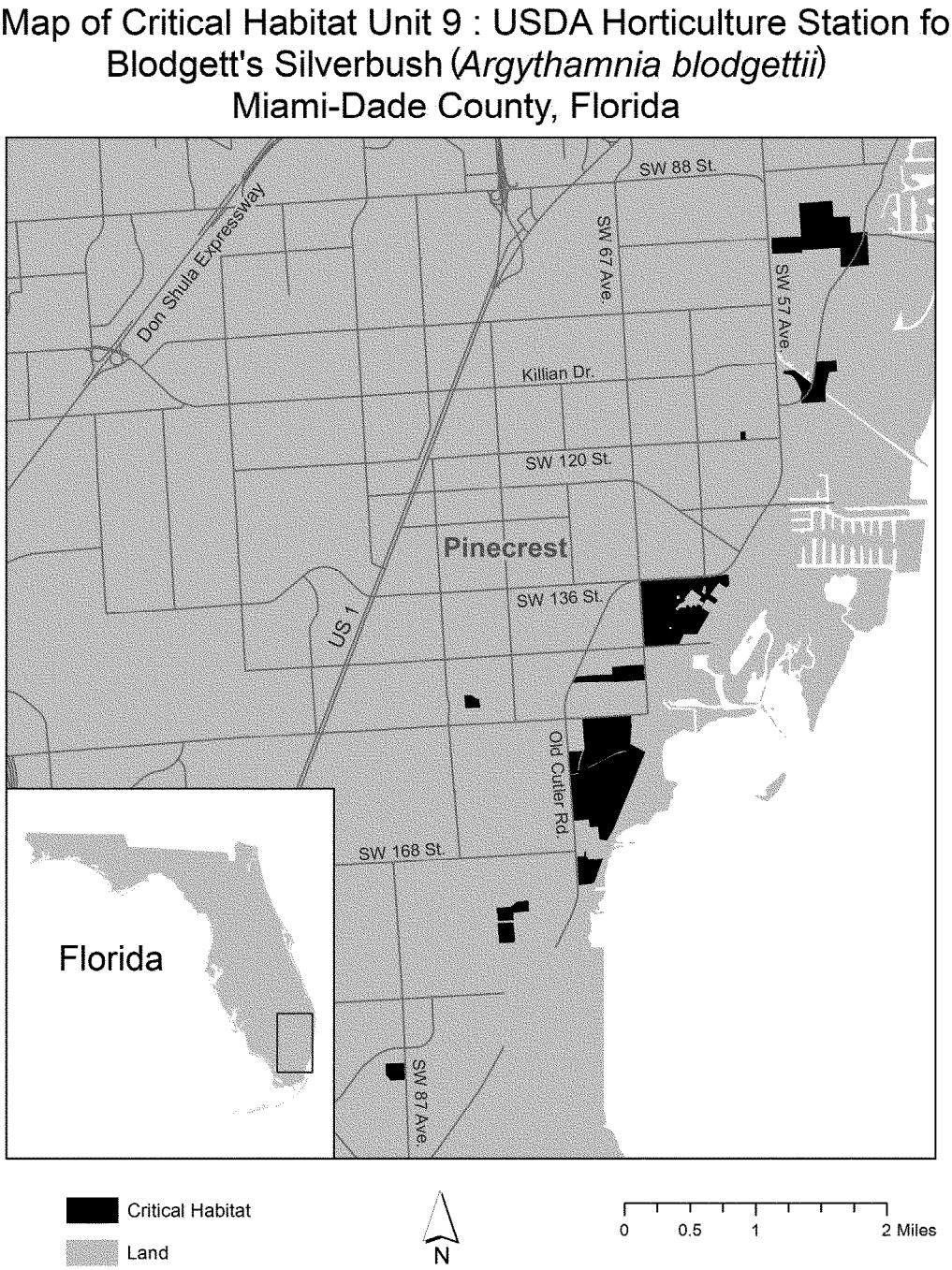
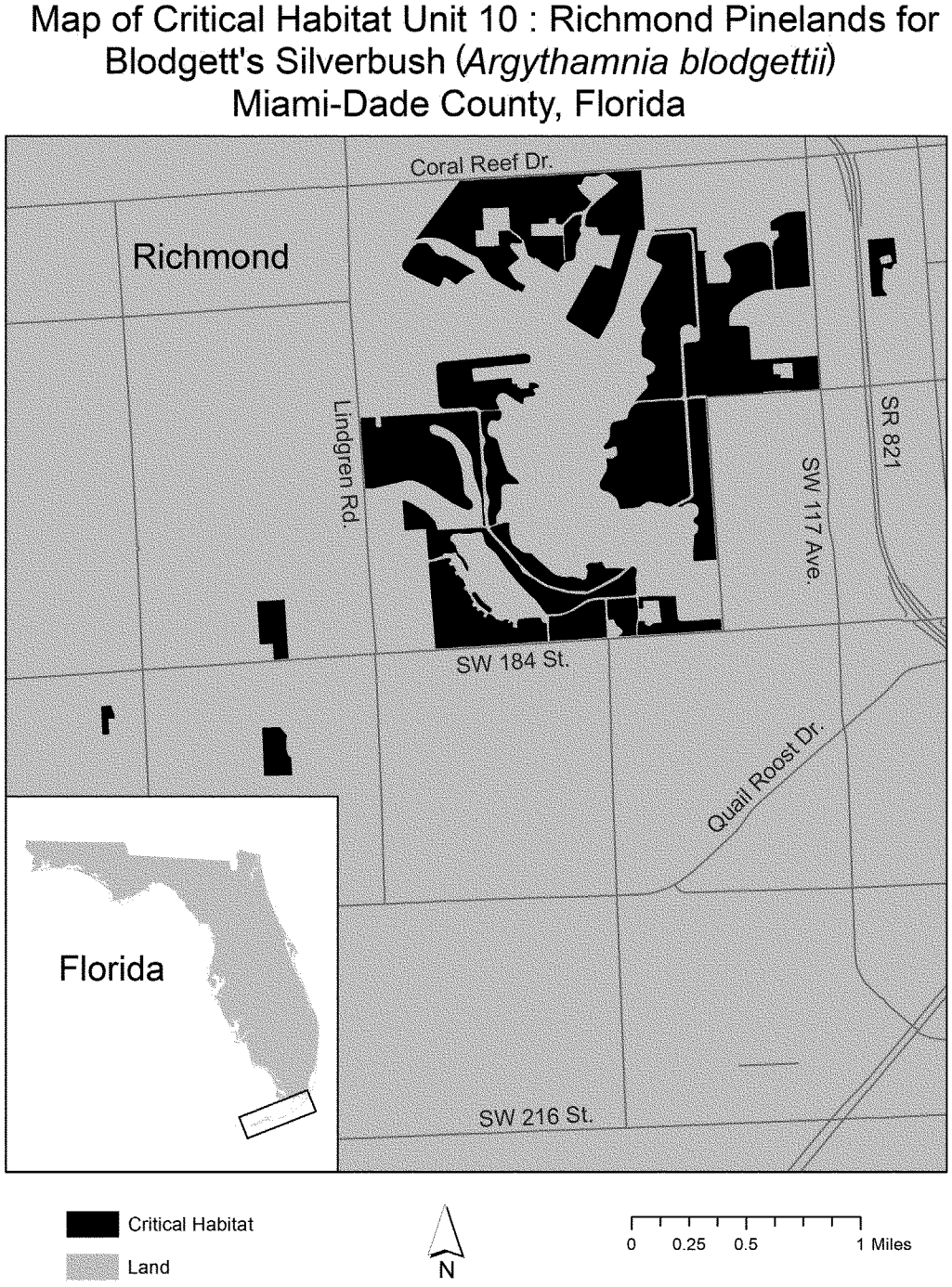


Figure 12 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (15)(ii)

(15) Unit 10: BS10—Richmond Pinelands and surrounding areas, Miami-Dade County, Florida.

(i) This unit consists of approximately 987 ac (399 ha). This unit is bordered on the north by SW 152 Street (Coral Reef Drive), on the south by SW 200 St (Quail Drive/SR 994), on the east by U.S. 1 (South Dixie Highway), and on the west by SW 177 Avenue (Krome Avenue).

(ii) Map of Unit 10 follows:



(16) Unit 11: BS11—Quail Roost Pineland and surrounding areas, Miami-Dade County, Florida.

(i) This unit consists of approximately 412 ac (167 ha). This unit is bordered on the north by SW 200 St (Quail Drive/SR 994), on the south by SW 248 Street, on the east by the Florida Turnpike, and on the west by SW 194 Avenue.

(ii) Map of Unit 11 follows:

Figure 13 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (16)(ii)

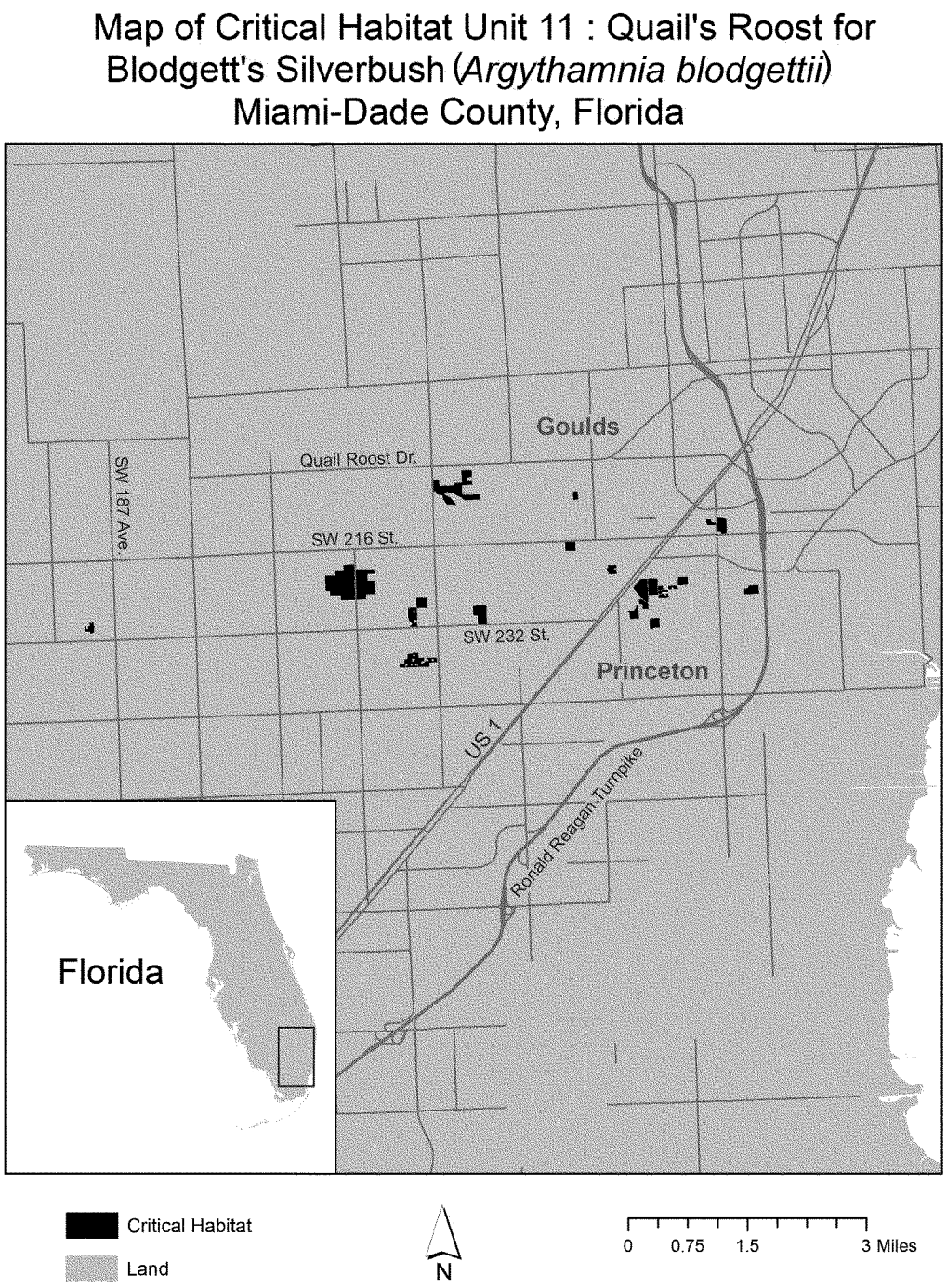
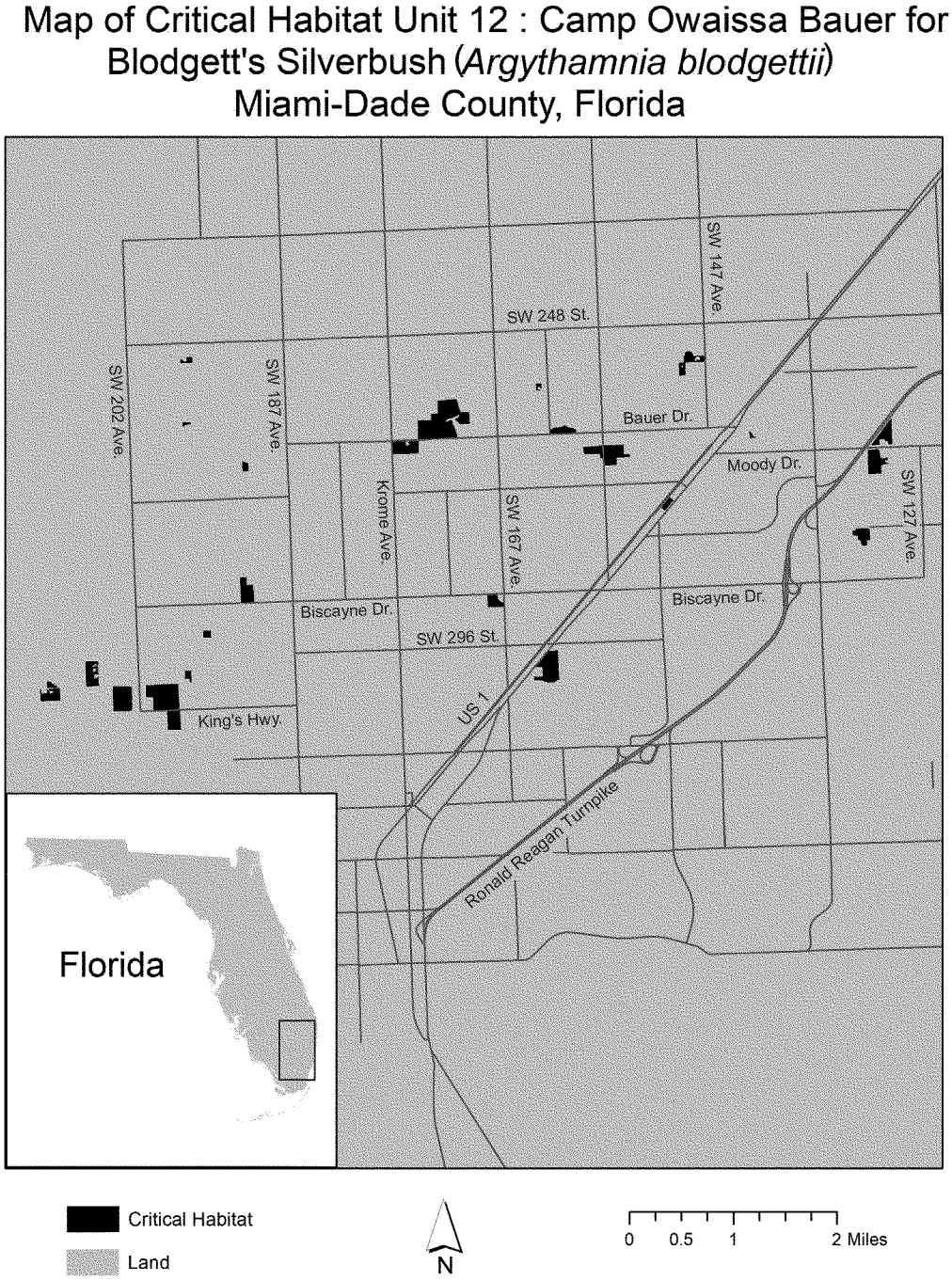


Figure 14 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (17)(ii)

(17) Unit 12: BS12—Camp Owaissa Bauer and surrounding areas, Miami-Dade County, Florida.

(i) This unit consists of approximately 392 ac (159 ha). This unit is bordered on the north by SW 248 Street, on the south by SW 312 Street, on the east by SW 112 Avenue, and on the west by SW 217 Avenue.

(ii) Map of Unit 12 follows:



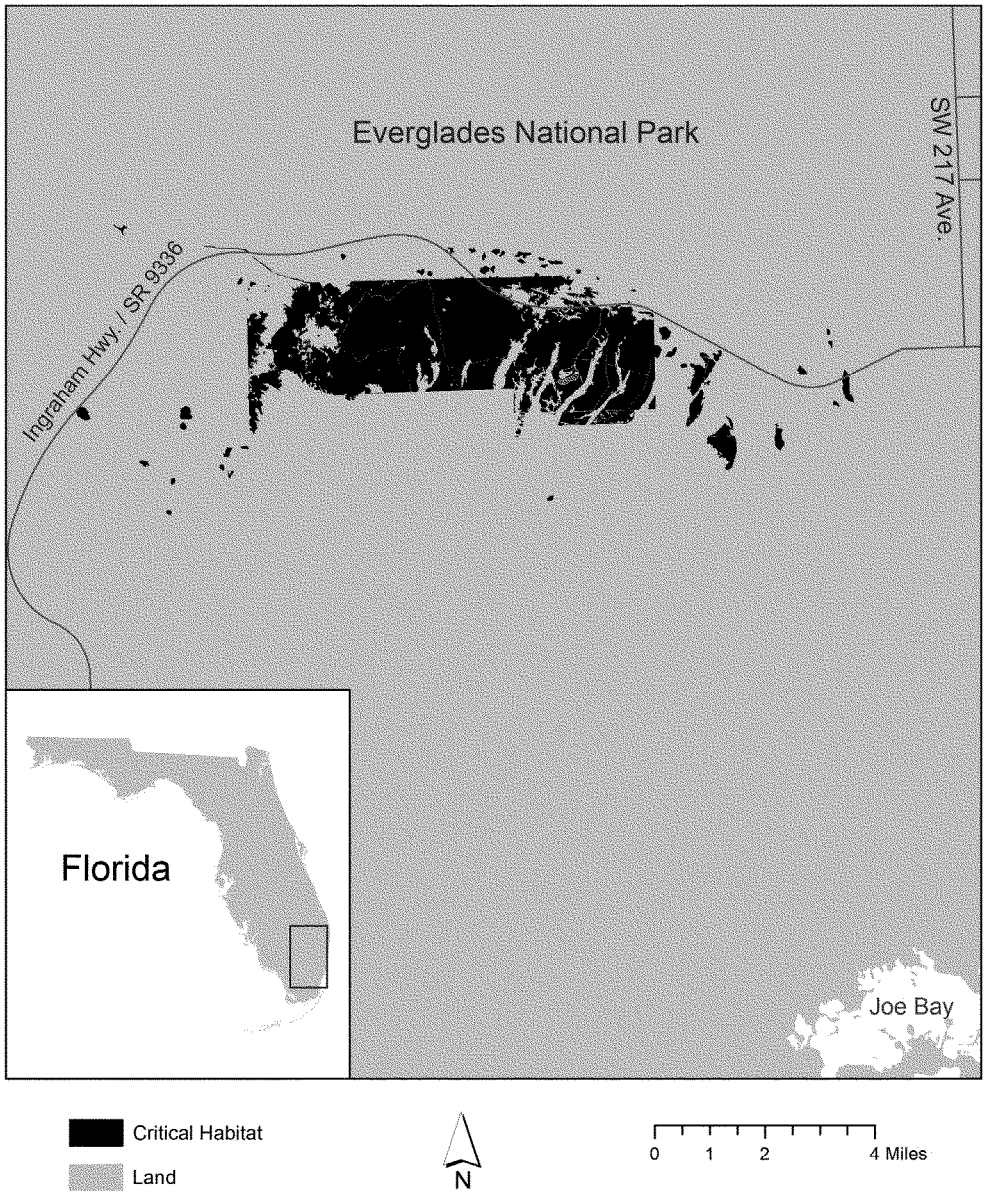
(18) Unit 13: BS13—Everglades National Park, Long Pine Key and surrounding areas, Miami-Dade County, Florida.

(i) This unit consists of approximately 8,728 ac (3,532 ha). This unit is located within the boundary of Everglades National Park.

(ii) Map of Unit 13 follows:

Figure 15 to *Argythamnia blodgettii* (Blodgett's silverbush) paragraph (18)(ii)

Map of Critical Habitat Unit 13 : Everglades National Park for Blodgett's Silverbush (*Argythamnia blodgettii*) Miami-Dade County, Florida



Family Euphorbiaceae: *Chamaesyce deltoidea* ssp. *serpyllum* (wedge spurge)

(1) Critical habitat is depicted for Monroe County, Florida, on the map below.

(2) Within these areas, the physical or biological features essential to the conservation of *Chamaesyce deltoidea* ssp. *serpyllum* consist of South Florida pine rockland habitat and adjacent disturbed areas that:

(i) Consist of calcareous limestone substrate (often exposed with little soil development) that provides nutritional requirements and suitable growing conditions (*e.g.,* pH, nutrients, anchoring, and drainage);

(ii) Are characterized by an open canopy of *Pinus elliottii* var. *densa* (South Florida slash pine) and understory with a high proportion of native pine rockland plant species to provide for sufficient sunlight to permit growth and flowering;

(iii) Are subjected to a monthly mean temperature characteristic of the subtropical humid classification in Miami-Dade County and tropical humid classification in Monroe County in every month of the year and short hydroperiods ranging of up to 60 days each year;

(iv) Are subjected to periodic natural (*e.g.,* fire) or nonnatural (*e.g.,* prescribed fire, mowing) disturbance regimes to maintain open canopy conditions; and

(v) Contain the presence of native pollinators for natural pollination and reproduction.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on [EFFECTIVE DATE OF FINAL RULE].

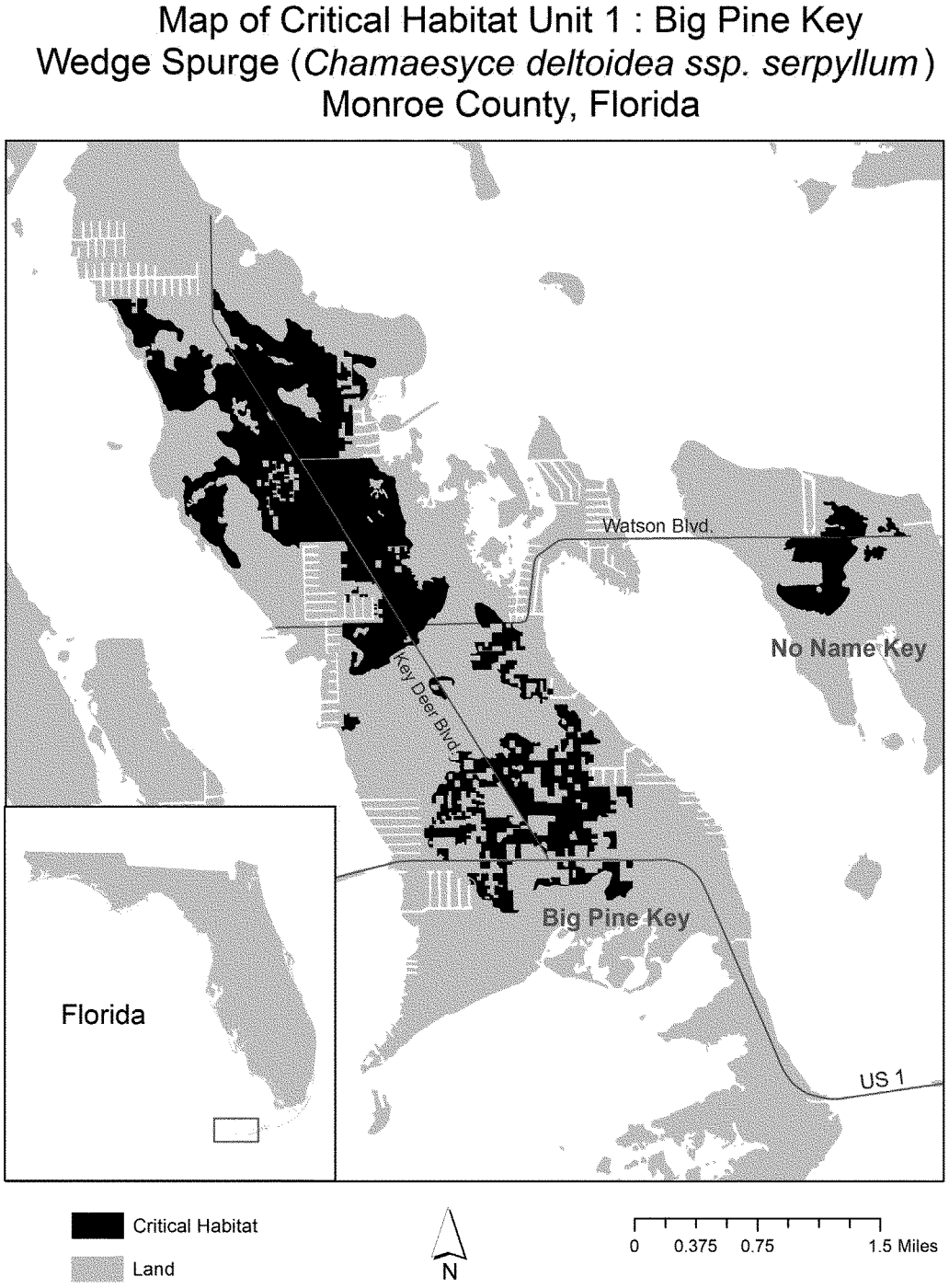
(4) Critical habitat map unit. Data layers defining the map unit were created using ESRI ArcGIS mapping software. The projection used was Albers Conical Equal Area (Florida Geographic Data Library), NAD 1983 HARN. The map in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. Shapefiles for the critical habitat unit are available to the public at the Service's internet site, *https://www.fws.gov/office/florida-ecological-services/library,* and a list of coordinates outlining the proposed Units are available at *https://www.regulations.gov* at Docket No. FWS–R4–ES–2022–0116, at *https://www.fws.gov/office/florida-ecological-services/library,* and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Unit 1: WS1—Big Pine Key, Monroe County, Florida.

(i) This unit consists of 1,379 ac (558 ha). The unit begins on northern Big Pine Key on the southern side of Gulf Boulevard, continues south on both sides of Key Deer Boulevard (CR 940) to the vicinity of Osprey Lane on the western side of CR 940 and Tea Lane to the east of CR 940; then resumes on both sides of CR 940 from Osprey Lane to south of Driftwood Lane; then resumes south of Osceola Street, between Fern Avenue to the west and Baba Lane to the east; then resumes north of Watson Boulevard in the vicinity of Avenue C; then continues south on both sides of Avenue C to South Street; then resumes on both sides of CR 940 south to U.S. 1 between Ships Way to the west and Sands Street to the east; then resumes south of U.S. 1 from Newfound Boulevard to the west and Deer Run Trail to the east; then resumes south of U.S. 1 from Palomino Horse Trail to the west and Industrial Road to the east.

(ii) Map of Unit 1 follows:

Figure 1 to *Chamaesyce deltoidea* ssp. *serpyllum* (wedge spurge) paragraph (5)(ii)



* * * * *

Family Fabaceae: *Chamaecrista lineata* var. *keyensis* (Big Pine partridge pea)

(1) Critical habitat units are depicted for Monroe County, Florida, on the maps below.

(2) Within these areas, the physical or biological features essential to the conservation of *Chamaecrista lineata* var. *keyensis* consist of South Florida pine rockland habitat and adjacent disturbed areas that:

(i) Consist of calcareous limestone substrate (often exposed with little soil development) that provides nutritional requirements and suitable growing conditions (*e.g.,* pH, nutrients, anchoring and drainage);

(ii) Are characterized by an open canopy of *Pinus elliottii* var. *densa* (South Florida slash pine) and understory with a high proportion of native pine rockland plant species to provide for sufficient sunlight to permit growth and flowering;

(iii) Are subjected to a monthly mean temperature characteristic of the subtropical humid classification in Miami-Dade County and tropical humid classification in Monroe County in every month of the year and short hydroperiods ranging of up to 60 days each year;

(iv) Are subjected to periodic natural (*e.g.,* fire) or nonnatural (*e.g.,* prescribed fire, mowing) disturbance regimes to maintain open canopy conditions; and

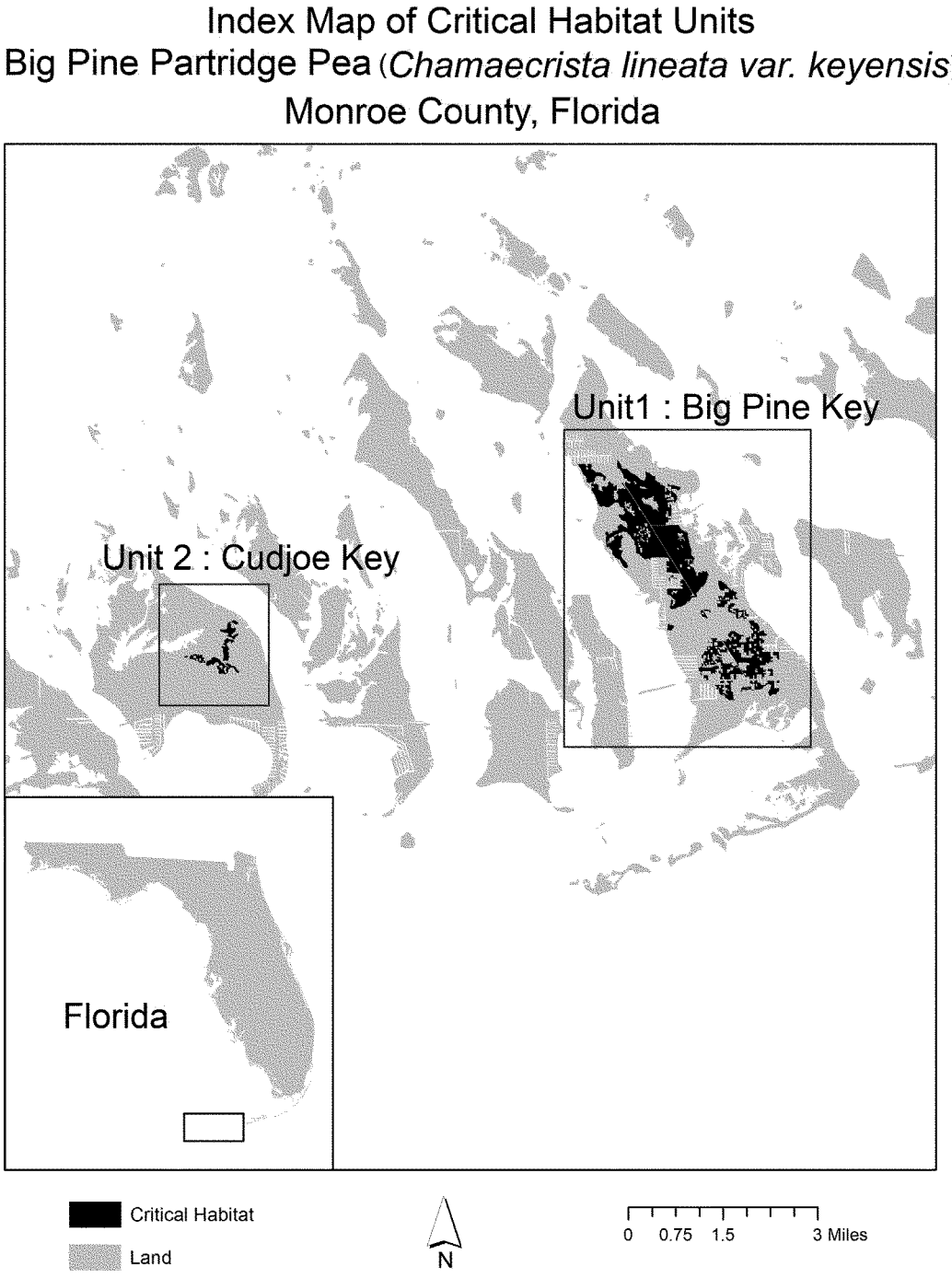
(v) Contain the presence of native pollinators for natural pollination and reproduction.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on [EFFECTIVE DATE OF FINAL RULE].

(4) Critical habitat map units. Data layers defining map units were created using ESRI ArcGIS mapping software. The projection used was Albers Conical Equal Area (Florida Geographic Data Library), NAD 1983 HARN. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. Shapefiles for the critical habitat units are available to the public at the Service's internet site, *https://www.fws.gov/office/florida-ecological-services/library,* and a list of coordinates outlining the units are available at *https://www.regulations.gov* at Docket No. FWS–R4–ES–2022–0116, at *https://www.fws.gov/office/florida-ecological-services/library,* and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Note: Index map of all critical habitat units for *Chamaecrista lineata* var. *keyensis* (Big Pine partridge pea) follows:

Figure 1 to *Chamaecrista lineata* var. *keyensis* (Big Pine partridge pea) paragraph (5)

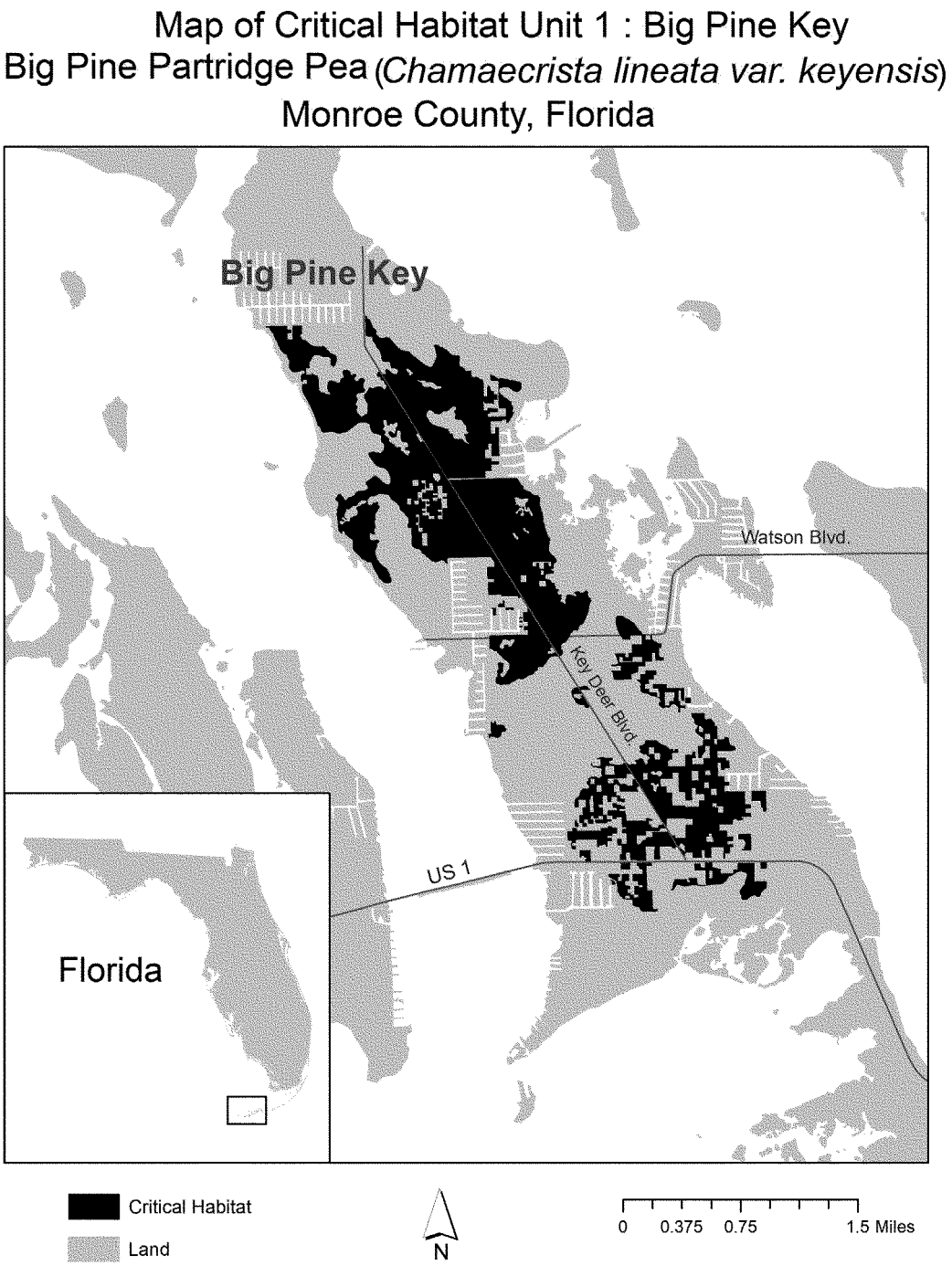


(6) Unit 1: BPP1—Big Pine Key, Monroe County, Florida.

(i) This unit consists of 1,379 ac (558 ha). The unit begins on northern Big Pine Key on the southern side of Gulf Boulevard, continues south on both sides of Key Deer Boulevard (CR 940) to the vicinity of Osprey Lane on the western side of CR 940 and Tea Lane to the east of CR 940; then resumes on both sides of CR 940 from Osprey Lane to south of Driftwood Lane; then resumes south of Osceola Street, between Fern Avenue to the west and Baba Lane to the east; then resumes north of Watson Boulevard in the vicinity of Avenue C; then continues south on both sides of Avenue C to South Street; then resumes on both sides of CR 940 south to U.S. 1 between Ships Way to the west and Sands Street to the east; then resumes south of U.S. 1 from Newfound Boulevard to the west and Deer Run Trail to the east; then resumes south of U.S. 1 from Palomino Horse Trail to the west and Industrial Road to the east.

(ii) Map of Unit 1 follows:

Figure 2 to *Chamaecrista lineata* var. *keyensis* (Big Pine partridge pea) paragraph (6)(ii)

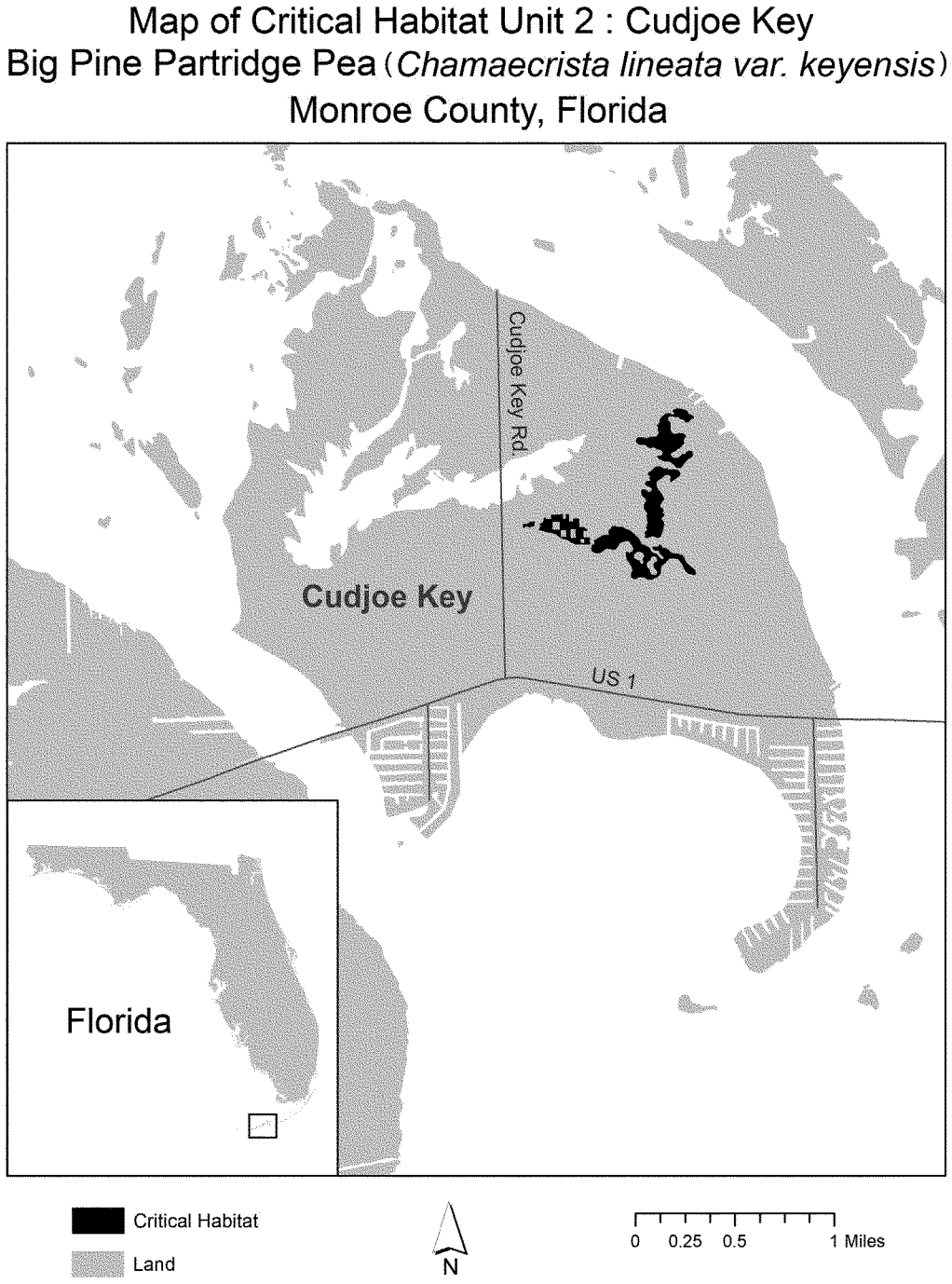


(7) Unit 2: BPP2—Cudjoe Key, Monroe County, Florida.

(i) This unit consists of 83 ac (33 ha). The unit is north of U.S. 1 and extends east from Blimp Avenue to Cutthroat Drive.

(ii) Map of Unit 2 follows:

Figure 3 to *Chamaecrista lineata* var. *keyensis* (Big Pine partridge pea) paragraph (7)(ii)



* * * * *

Family Linaceae: *Linum arenicola* (sand flax)

(1) Critical habitat units are depicted for Miami-Dade and Monroe Counties, Florida, on the maps below.

(2) Within these areas, the physical or biological features essential to the conservation of *Linum arenicola* consist of South Florida pine rockland habitat and adjacent disturbed areas that:

(i) Consist of calcareous limestone substrate (often exposed with little soil development) that provides nutritional requirements and suitable growing conditions (*e.g.,* pH, nutrients, anchoring, and drainage);

(ii) Are characterized by an open canopy of *Pinus elliottii* var. *densa* (South Florida slash pine) and understory with a high proportion of native pine rockland plant species to provide for sufficient sunlight to permit growth and flowering;

(iii) Are subjected to a monthly mean temperature characteristic of the subtropical humid classification in Miami-Dade County and tropical humid classification in Monroe County in

every month of the year and short hydroperiods ranging of up to 60 days each year;

(iv) Are subjected to periodic natural (*e.g.,* fire) or nonnatural (*e.g.,* prescribed fire, mowing) disturbance regimes to maintain open canopy conditions; and

(v) Contain the presence of native pollinators for natural pollination and reproduction.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on [EFFECTIVE DATE OF FINAL RULE].

(4) Critical habitat map units. Data layers defining map units were created using ESRI ArcGIS mapping software. The projection used was Albers Conical Equal Area (Florida Geographic Data Library), NAD 1983 HARN. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. Shapefiles for the critical habitat units are available to the public at the Service's internet site, *https://www.fws.gov/office/florida-ecological-services/library,* and a list of coordinates outlining the units are available at *https://www.regulations.gov* at Docket No. FWS–R4–ES–2022–0116, at *https://www.fws.gov/office/florida-ecological-services/library,* and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Note: Index maps of all critical habitat units for *Linum arenicola* (sand flax) follow:

Figure 1 to *Linum arenicola* (sand flax) paragraph (5)

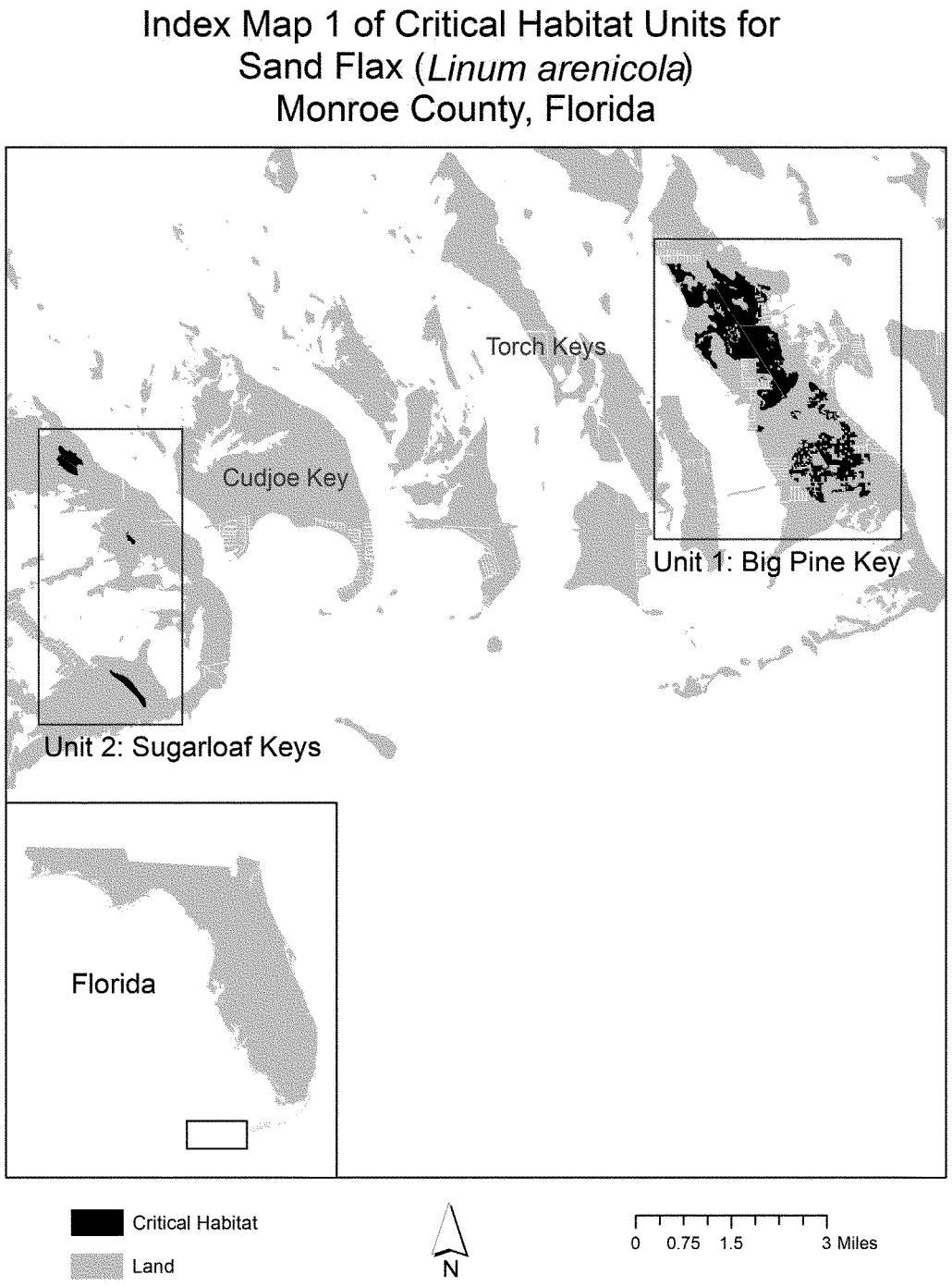
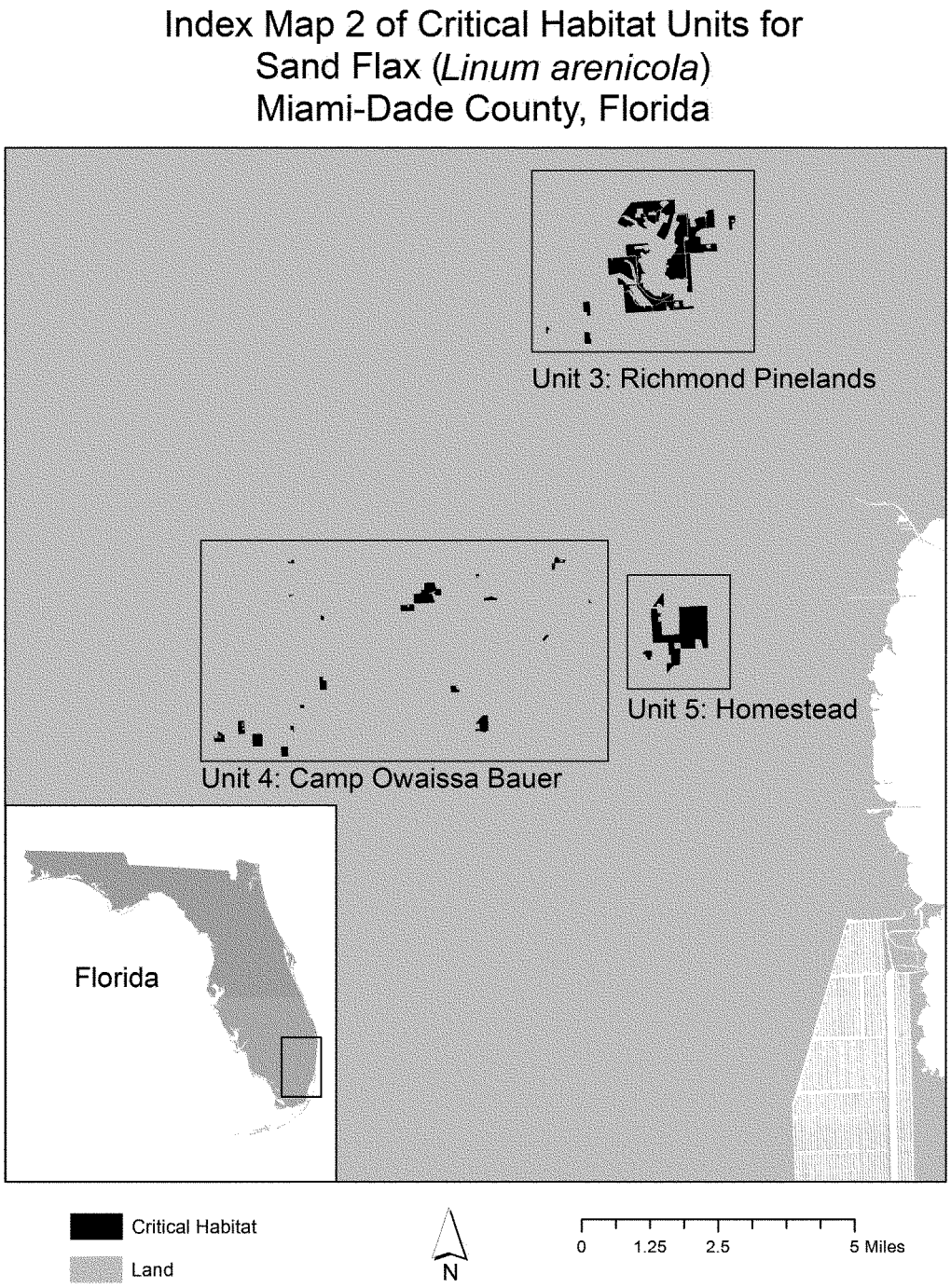


Figure 2 to *Linum arenicola* (sand flax) paragraph (5)



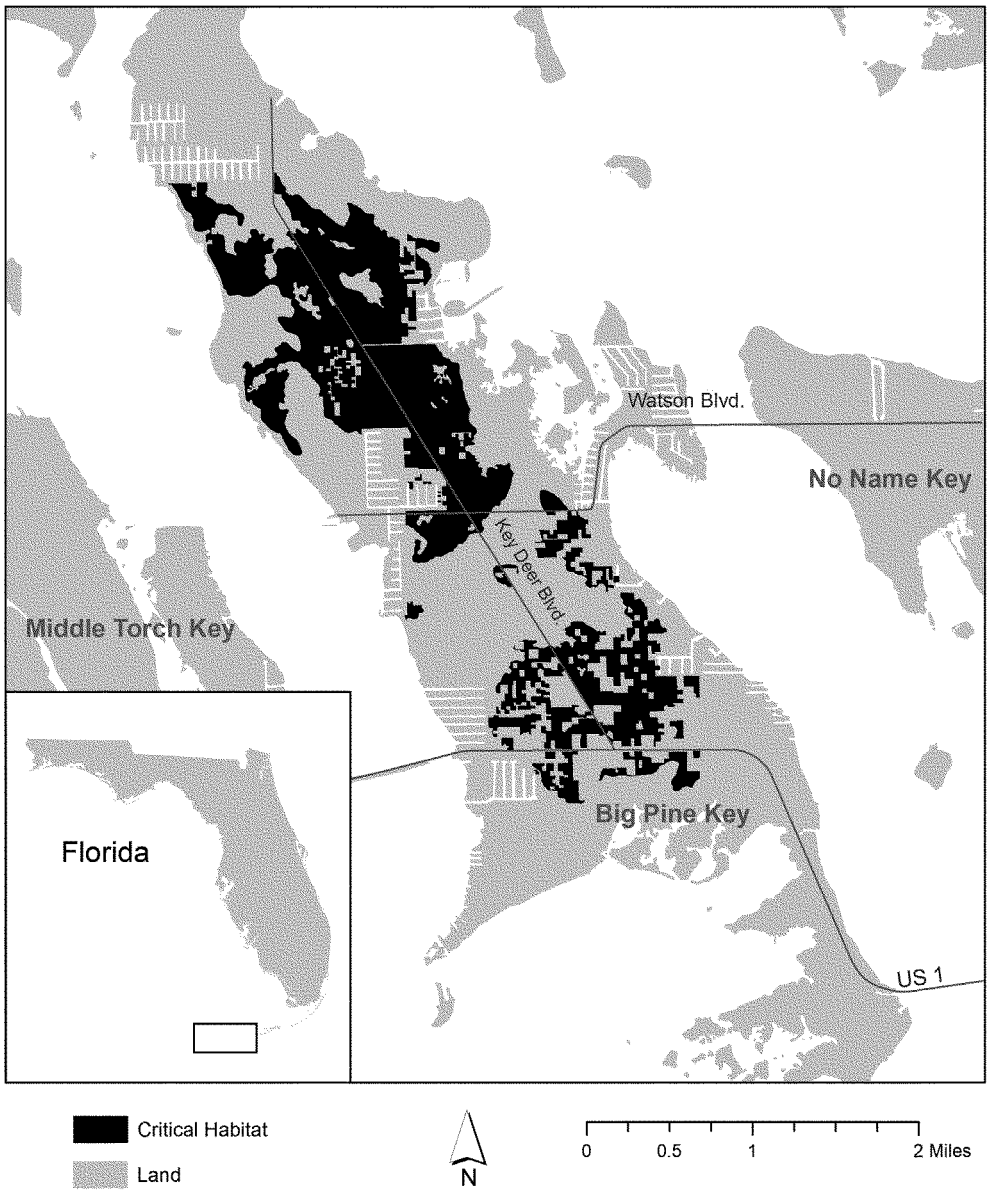
(6) Unit 1: SF1—Big Pine Key, Monroe County, Florida.

(i) This unit consists of 1,379 ac (558 ha). The unit begins on northern Big Pine Key on the southern side of Gulf Boulevard, continues south on both sides of Key Deer Boulevard (CR 940) to the vicinity of Osprey Lane on the western side of CR 940 and Tea Lane to the east of CR 940; then resumes on both sides of CR 940 from Osprey Lane to rest south of the vicinity of Driftwood Lane; then resumes south of Osceola Street, between Fern Avenue to the west and Baba Lane to the east; then resumes north of Watson Boulevard in the vicinity of Avenue C; then continues south on both sides of Avenue C to South Street; then resumes on both sides of CR 940 south to U.S. 1 between Ships Way to the west and Sands Street to the east; then resumes south of U.S. 1 from Newfound Boulevard to the west and Deer Run Trail to the east; then resumes south of U.S. 1 from Palomino Horse Trail to the west and Industrial Road to the east.

(ii) Map of Unit 1 follows:

Figure 3 to *Linum arenicola* (sand flax) paragraph (6)(ii)

Map of Critical Habitat Unit 1 : Big Pine Key
Sand Flax (*Linum arenicola*)
Monroe County, Florida



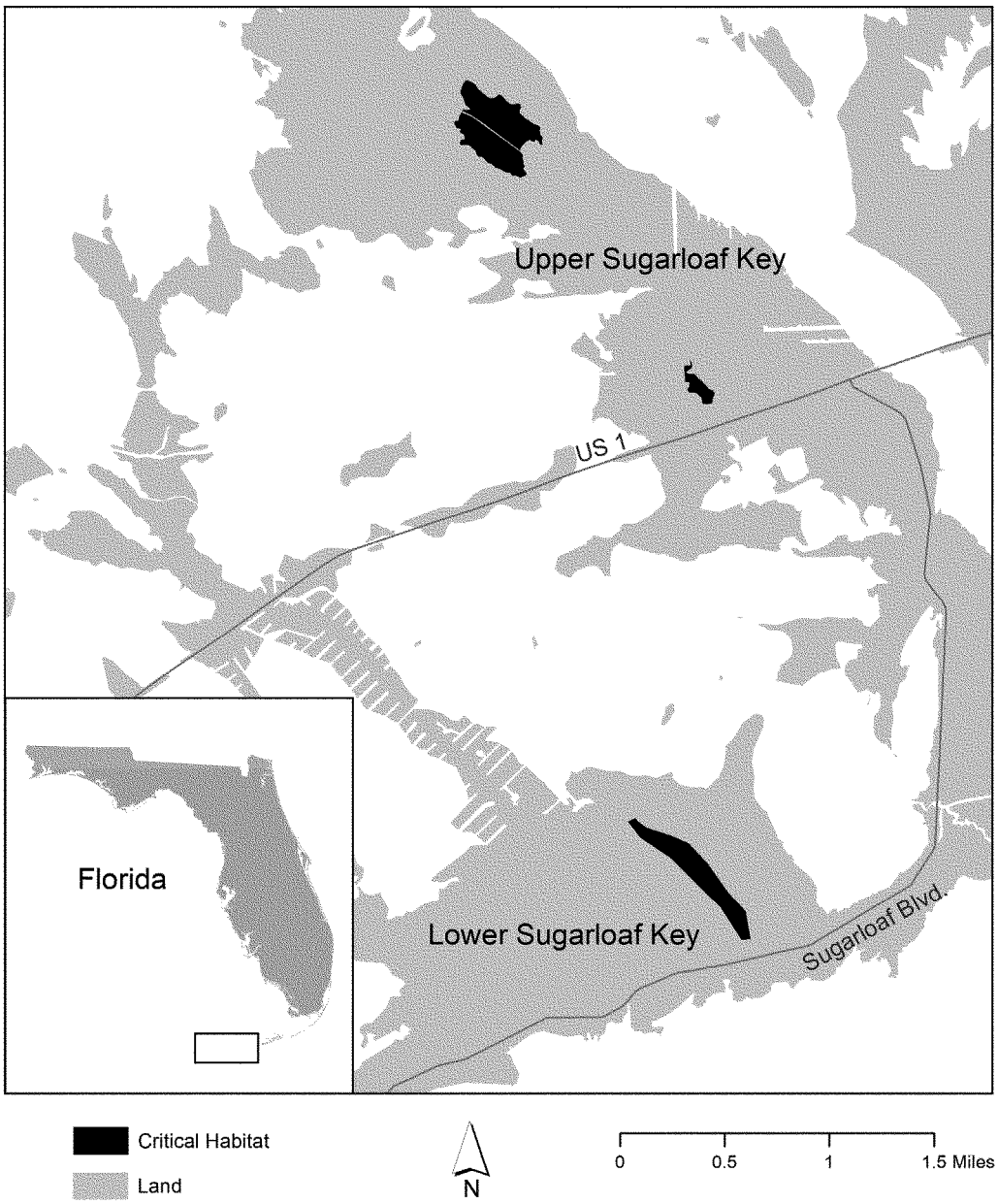
(7) Unit 2: SF2—Upper and Lower Sugarloaf Keys, Monroe County, Florida.

(i) This unit consists of 116 ac (47 ha). On Upper Sugarloaf Key, the unit is located north of U.S. 1, extending for approximately 0.5 mi (0.8 km) along both sides of Crane Boulevard, starting approximately 0.8 mi (1.3 km) from the intersection of Crane Road and Rosalind Road. A second area extends south from Pelico Road for approximately 0.2 mi (0.4 km). On Lower Sugarloaf Key, two disturbed roadside areas that support sand flax are along either side of Sugarloaf Boulevard and Square Circle, between Caymen Drive and County Road 939.

(ii) Map of Unit 2 follows:

Figure 4 to *Linum arenicola* (sand flax) paragraph (7)(ii)

Map of Critical Habitat Unit 2 : Upper and Lower Sugarloaf Keys
Sand Flax (*Linum arenicola*)
Monroe County, Florida



(8) Unit 3: SF3—Richmond Pinelands and Surrounding Areas, Miami-Dade County, Florida.

(i) This unit consists of approximately 987 ac (399 ha). This unit is bordered on the north by SW 152 Street (Coral Reef Drive), on the south by SW 200 St. (Quail Drive/SR 994), on the east by U.S. 1 (South Dixie Highway), and on the west by SW 177 Avenue (Krome Avenue).

(ii) Map of Unit 3 follows:

Figure 5 to *Linum arenicola* (sand flax) paragraph (8)(ii)

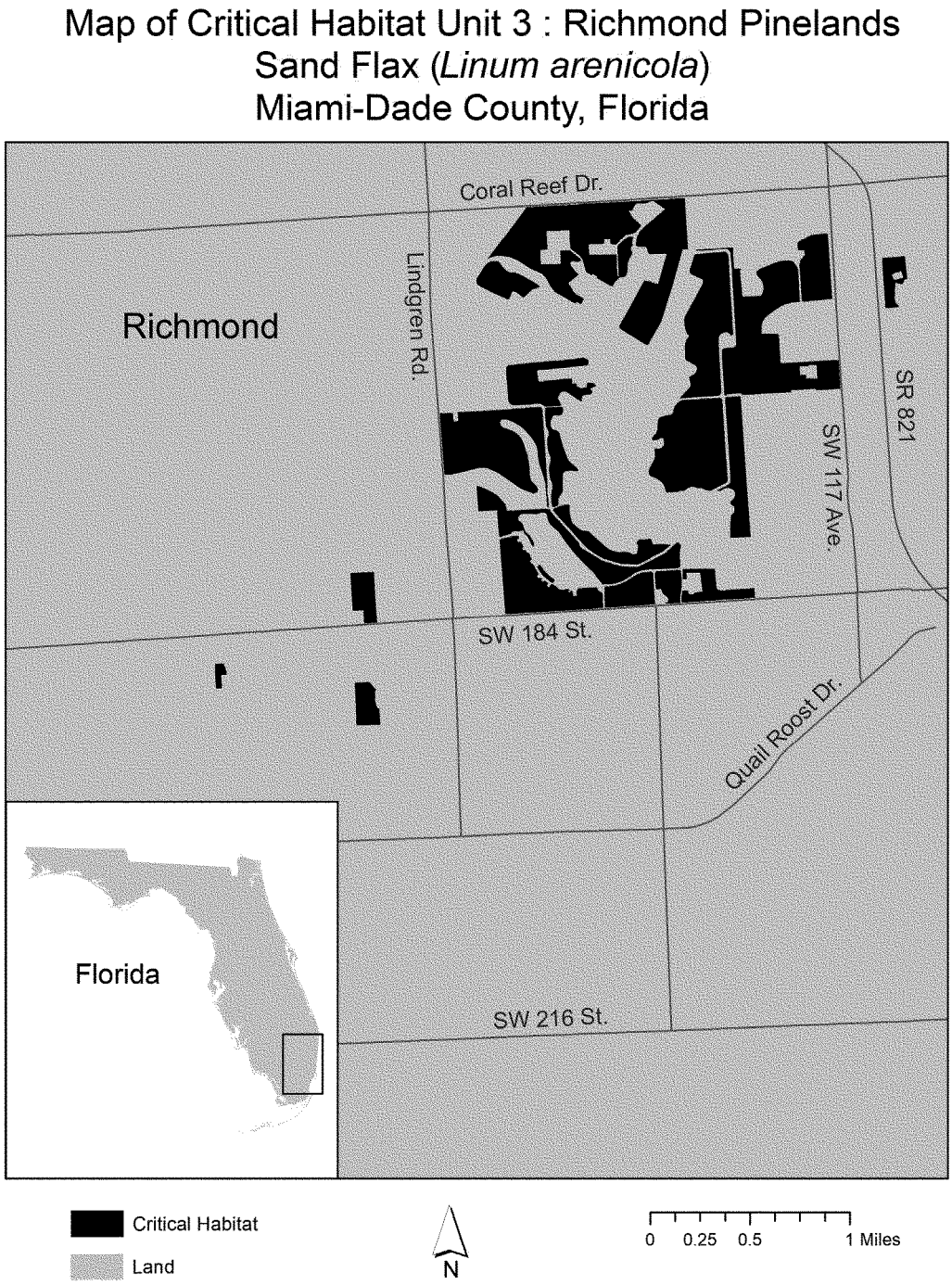
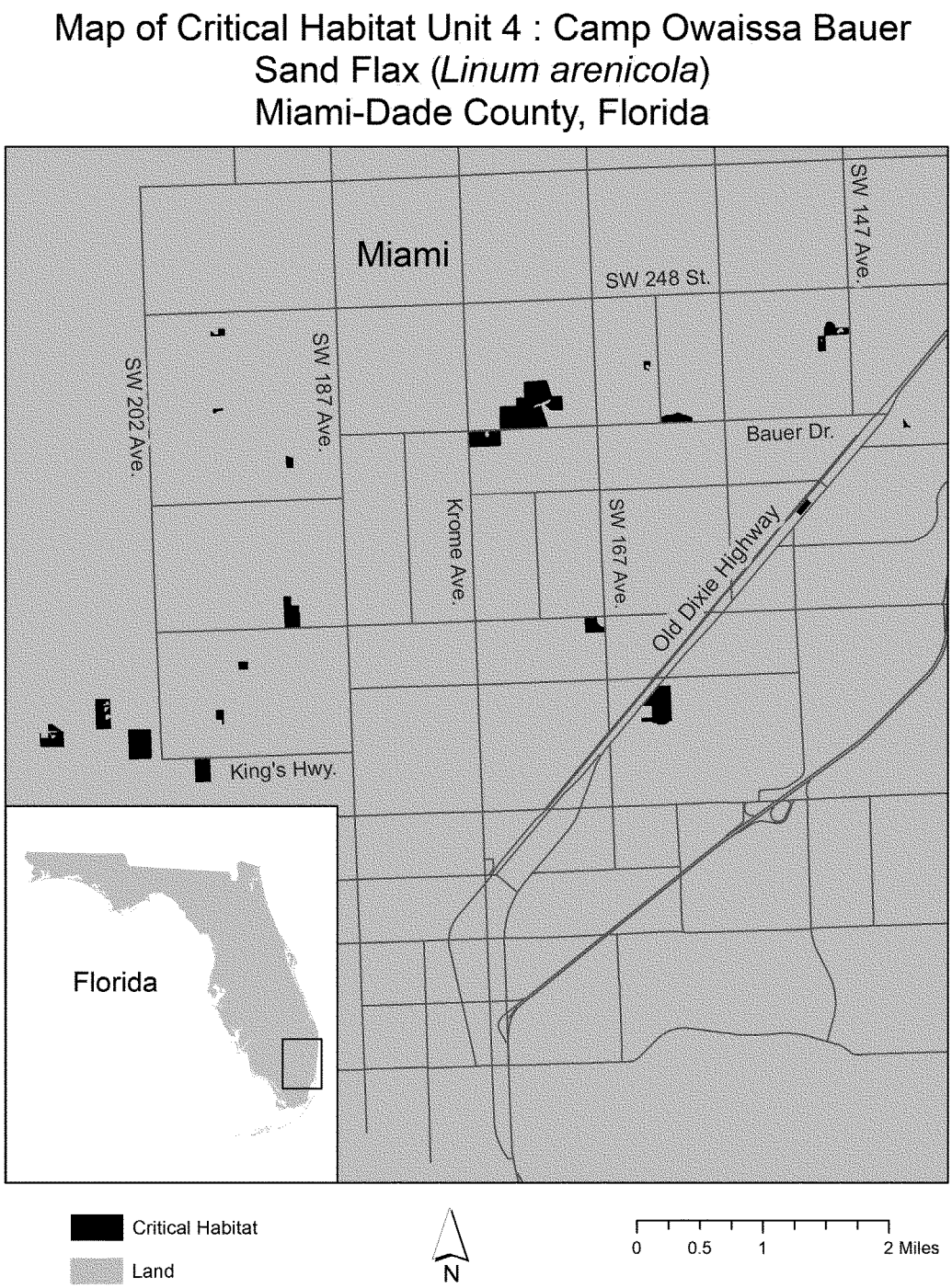


Figure 6 to *Linum arenicola* (sand flax) paragraph (9)(ii)

(9) Unit 4: SF4—Camp Owaissa Bauer and Surrounding Areas, Miami-Dade County, Florida.

(i) This unit consists of approximately 315 ac (128 ha). This unit is bordered on the north by SW 248 Street, on the south by SW 312 Street, on the east by SW 112 Avenue, and on the west by SW 217 Avenue.

(ii) Map of Unit 4 follows:



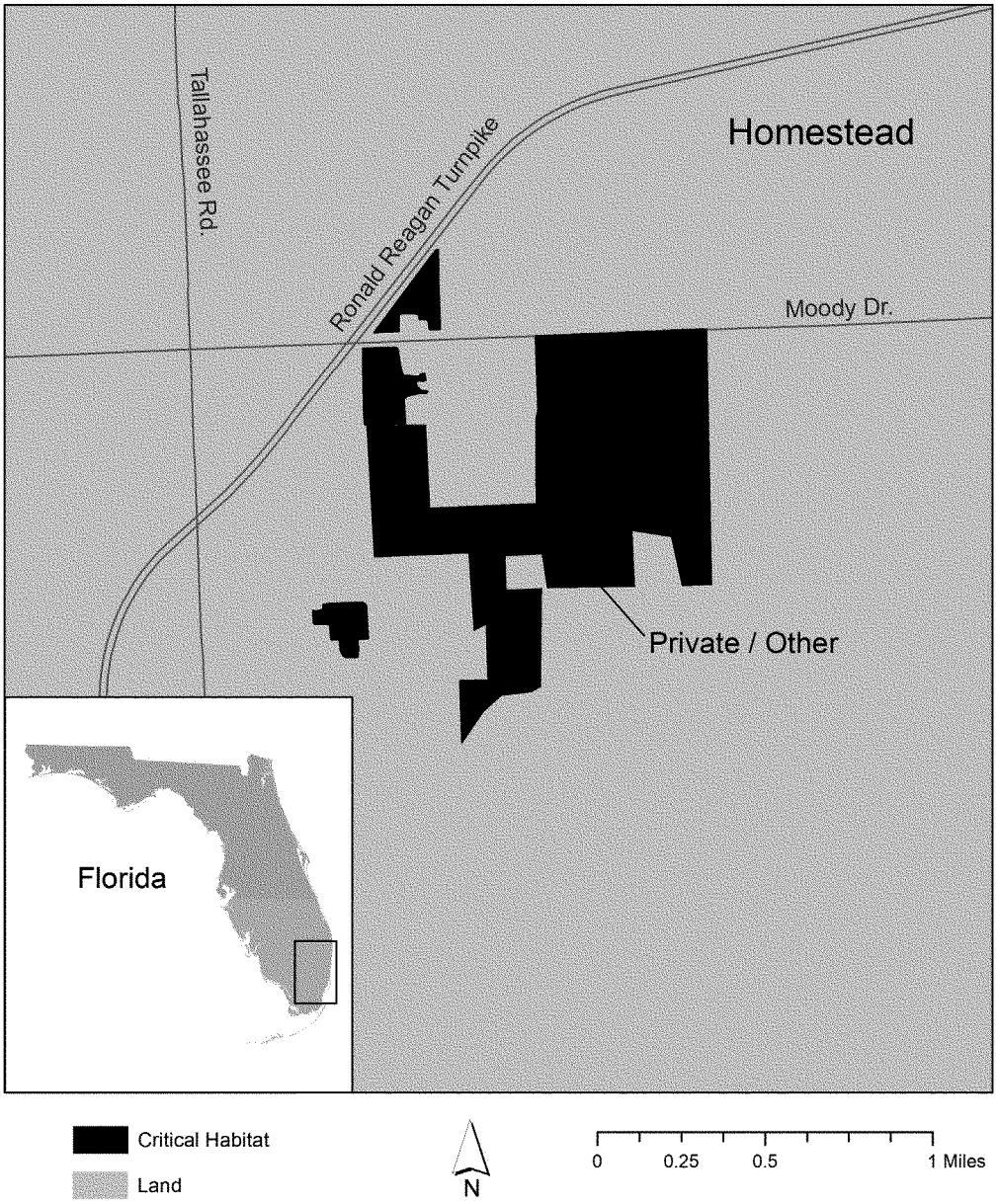
(10) Unit 5: SF5—Homestead and Surrounding Areas, Miami-Dade County, Florida.

(i) This unit consists of approximately 2,292 ac (928 ha). The unit closely follows the Homestead Air Reserve Base property line to the east of SW 137th Avenue and extends north to SW 288th Street, roughly along the Homestead Air Reserve Base boundary. North of SW 288th Street, the unit includes the large undeveloped area extending east from SW 278th Street to 1 mi (1.6 km) west of SW 112th Avenue and bounded to the north by SW 268th Street.

(ii) Map of Unit 5 follows:

Figure 7 to *Linum arenicola* (sand flax) paragraph (10)(ii)

Map of Critical Habitat Unit 5 : Homestead
Sand Flax (*Linum arenicola*)
Miami-Dade County, Florida



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Martha Williams,

Director, U.S. Fish and Wildlife Service.

[FR Doc. 2022–21587 Filed 10–13–22; 8:45 am]

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