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Public Hearings: Additional public hearings will be held in Florida in mid-April, 2010. The dates and locations of these hearings have yet to be confirmed. Relevant information pertaining to these hearings will be provided at the following Web site: <http://www.epa.gov/waterscience/standards/rules/florida/Information> on the public hearings will be available shortly after publication of this notice in the **Federal Register**. For further information, please contact Sharon Frey at 202-566-1480 or frey.sharon@epa.gov

FOR FURTHER INFORMATION CONTACT:

Danielle Salvaterra, U.S. EPA Headquarters, Office of Water, Mailcode: 4305T, 1200 Pennsylvania Avenue, NW., Washington, DC 20460; telephone number: 202-564-1649; fax number: 202-566-9981; e-mail address: salvaterra.danielle@epa.gov.

Dated: March 4, 2010.

Peter S. Silva,

Assistant Administrator for Water.

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[FWS- R4-ES-2010-0003]

[MO 92210-0-0009-B4]

[RIN 1018-AW55]

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for *Carex lutea* (Golden Sedge)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service, propose to designate critical habitat for the *Carex lutea* (golden sedge) under the Endangered Species Act of 1973, as amended. We propose to designate as critical habitat approximately 189 acres (76 hectares) in

8 units. The proposed critical habitat is located in Onslow and Pender Counties in North Carolina.

DATES: We will consider comments from all interested parties until May 10, 2010. We must receive requests for public hearings, in writing, at the address shown in the **FOR FURTHER INFORMATION CONTACT** section by April 26, 2010.

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

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments on Docket No. FWS-R4-ES-2010-0003.

- U.S. mail or hand-delivery: Public Comments Processing, Attn: FWS-R4-ES-2010-0003; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, Suite 222; Arlington, VA 22203.

We will not accept e-mail or faxes. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Public Comments section below for more information).

FOR FURTHER INFORMATION CONTACT: Pete Benjamin, Field Supervisor, U.S. Fish and Wildlife Service, Raleigh Fish and Wildlife Office, P.O. Box 33726, Raleigh, NC 27636-3726; telephone 919-856-4520; facsimile 919-856-4556. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:

Public Comments

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 government agencies, the scientific community, industry, or any other interested party 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 Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*), including whether there are threats to the species from human activity, the degree of which can be expected to increase due to the designation, and whether the benefit of designation would be outweighed by threats to the species caused by the designation, such that the designation of critical habitat is not prudent.

(2) Comments or information that may assist us in identifying or clarifying the

primary constituent elements for *Carex lutea*.

(3) Specific information on:

- The amount and distribution of *Carex lutea* habitat,
- What areas occupied at the time of listing and that contain features essential to the conservation of the species which may require special management considerations or protections we should include in the designation and why, and
- What areas not occupied at the time of listing are essential for the conservation of the species and why.

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

(5) Any probable economic, national security, or other relevant impacts of designating any area that may be included in the final designation. We are particularly interested in any impacts on small entities (e.g., small businesses or small governments) or families, and the benefits of including or excluding areas that exhibit these impacts.

(6) Whether any specific areas we are proposing as critical habitat 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.

(7) Information on any quantifiable economic costs or benefits of the proposed designation of critical habitat.

(8) Information on the projected and reasonably likely impacts of climate change on *Carex lutea*, and any special management needs or protections that may be needed in the critical habitat areas we are proposing.

(9) 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.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section. We will not accept comments sent by e-mail or fax or to an address not listed in the **ADDRESSES** section.

We will post your entire comment—including your personal identifying information—on <http://www.regulations.gov>. If your written comments provide 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.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <http://www.regulations.gov>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Raleigh Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Background

It is our intent to discuss only those topics directly relevant to the designation of critical habitat in this proposed rule. For more information on *Carex lutea*, refer to the final listing rule published in the **Federal Register** on January 23, 2002 (67 FR 3120).

Carex lutea is a perennial member of the sedge family (Cyperaceae). Fertile culms (stems) may reach 39 in (1 m) or more in height. The yellowish green leaves are grass-like, with those of the culm mostly basal and up to 11 in (28 cm) in length, while those of the vegetative shoots reach a length of 25.6 in (65 cm).

The species is endemic to Onslow and Pender Counties in the Black River section of the Coastal Plain Province of North Carolina. The North Carolina Natural Heritage Program (NCNHP) recognizes eight populations made up of 17 distinct locations or element occurrences. All of the locations occur within a 16- by 5-mile (26-by-8-kilometer) area, extending southwest from the community of Maple Hill.

Carex lutea generally occurs on fine sandy loam, loamy fine sands, and fine sands with a pH of 5.5 to 7.2, and with a mean of 6.7. These soils are moist to saturated to periodically inundated. *Carex lutea* occurs in the Pine Savanna (Very Wet Clay Variant) natural community type (Schafale 1994, p. 136). Community structure is characterized by an open to sparse canopy dominated by pond pine (*Pinus serotina*), and usually with some longleaf pine (*P. palustris*) and pond cypress (*Taxodium ascendens*).

Carex lutea is threatened by fire suppression; habitat alteration such as land conversion for residential, commercial, or industrial development; mining, drainage for silviculture and agriculture; highway expansion; and herbicide use along utility and highway rights-of-way.

Previous Federal Actions

Carex lutea was listed as endangered under the Act on January 23, 2002 (67 FR 3120). Designation of critical habitat had been found to be not prudent in the

proposed listing rule (64 FR 44470, August 16, 1999); however, following a reevaluation of information available for the proposal and new information that came in through the public comment period on the proposal, critical habitat designation was determined to be prudent in the final listing rule (67 FR 3120). However, the development of a designation was deferred due to budgetary and workload constraints.

On December 19, 2007, the Center for Biological Diversity filed a complaint for declaratory and injunctive relief challenging the Service's continuing failure to timely designate critical habitat for this species as well as three other plant species (*Center for Biological Diversity v. Kempthorne*, C-04-3240 JL (N. D. Cal.)). In a settlement agreement dated April 11, 2008, the Service agreed to submit for publication in the **Federal Register** a proposed designation of critical habitat, if prudent and determinable, on or before February 28, 2010, and a final determination by February 28, 2011.

Critical Habitat

Background

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.

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 under 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(a)(2) of the Act through the prohibition against Federal agencies carrying out, funding, or authorizing the destruction or adverse modification of critical habitat. Section 7(a)(2) requires consultation on Federal actions that may affect critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner seeks or requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) would apply, but even in the event of a destruction or adverse modification finding, the Federal action agency's and the landowner's obligation is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

To be considered for inclusion in a critical habitat designation, the habitat within the geographical area occupied by the species at the time it was listed must contain the physical and biological features essential to the conservation of the species. Areas supporting the essential physical or biological features are identified, to the extent known using the best scientific data available, as the habitat areas that provide essential life cycle needs of the species. Habitat within the geographical area occupied by the species at the time of listing that contains features essential to the conservation of the species meets the definition of critical habitat only if these features may require special management consideration or protection. Under the Act and regulations at 50 CFR 424.12, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed only when we determine that the best available scientific data demonstrate that the designation of those areas is 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 developed during the listing process for the species. Additional information sources may include 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, or other unpublished materials and expert opinion or personal knowledge.

Habitat is often dynamic, and species may move from one area to another over time. Climate change may lead to increased frequency and duration of severe storms and droughts (Golladay *et al.* 2004, p. 504; McLaughlin *et al.* 2002, p. 6074; Cook *et al.* 2004, p. 1015). According to the America's Longleaf Regional Working Group (2009, p. 19), the U.S. Department of Agriculture concluded that longleaf pine may extend its range northward, but will likely lose very little of its southern range. The Hadley Centre model suggests that savanna and grasslands may expand and replace southeastern pine forests at some sites in the coastal plain due to increased moisture stress (America's Longleaf Regional Working Group 2009, p. 19). While the effects of climate change on longleaf ecosystem plant communities have not been well studied, one report concluded that while longleaf pine might perform well with increased carbon dioxide, the herbaceous species may not compete as well (America's Longleaf Regional Working Group 2009, p. 19).

The information currently available on the effects of global climate change and increasing temperatures does not make sufficiently precise estimates of the location and magnitude of the effects. Nor are we currently aware of any climate change information specific to the habitat of *Carex lutea* that would indicate what areas may become important to the species in the future. Therefore, we are unable to determine what additional areas, if any, may be appropriate to include in the proposed

critical habitat for this species; however, we specifically request information from the public on the currently predicted effects of climate change on *Carex lutea* and its habitat. Additionally, we recognize that critical habitat designated at a particular point in time may not include all of the habitat areas 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 critical habitat area is unimportant or may not be required for recovery of the species.

Areas that are important to the conservation of the species, but are outside the critical habitat designation, will continue to be subject to conservation actions we implement under section 7(a)(1) of the Act. Areas that support populations are also subject to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available scientific information at the time of the agency action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), section 7 consultations, or other species conservation planning efforts if new information available at the time of these 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 designate critical habitat at the time the species is determined to be endangered or threatened. Our regulations at 50 CFR 424.12(a)(1) state that the designation of critical habitat is not prudent when one or both of the following situations exist: (1) The species is threatened by taking or other activity and the identification of critical habitat can be expected to increase the degree of threat to the species; or (2) the designation of critical habitat would not be beneficial to the species.

There is no documentation that *Carex lutea* is threatened by taking or other human activity such as collection. In the absence of finding that the designation of critical habitat would increase threats to the species, if there are any benefits to a critical habitat designation, then a

prudent finding is warranted. The potential benefits include: (1) Triggering consultation, under section 7 of the Act, in new areas for action in which there may be a Federal nexus where consultation would not otherwise occur because, for example, an area is or has become unoccupied or the occupancy is in question; (2) identifying the physical and biological features essential to the conservation of *Carex lutea* and focusing conservation activities on these essential features and the areas that support them; (3) providing educational benefits to State or county governments or private entities engaged in activities or long-range planning in areas essential to the conservation of the species; and (4) preventing people from causing inadvertent harm to the species. Conservation of *Carex lutea* and the essential features of the habitat will require habitat protection and restoration, which will be facilitated by knowledge of habitat locations and the physical and biological features of those habitats.

Therefore, since we have determined that the designation of critical habitat will not likely increase the degree of threat to the species and may provide some measure of benefit, we find that the designation of critical habitat for the *Carex lutea* is prudent.

Critical Habitat Determinability

As stated above, section 4(a)(3) of the Act requires the designation of critical habitat concurrently with the species' listing "to the maximum extent prudent and 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:

- (1) Information sufficient to perform required analyses of the impacts of the designation is lacking, or
- (2) The biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat.

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

We reviewed the available information pertaining to the biological needs of the *Carex lutea*, the historical distribution of the *Carex lutea*, and the habitat characteristics where the species currently occurs. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is determinable for the *Carex lutea*.

Methods

As required by section 4(b) of the Act, we used the best scientific and commercial data available in determining which areas within the geographical area occupied by the species at the time of listing contain the features essential to the conservation of the *Carex lutea* that may require special management considerations or protections, and which areas outside of the geographical area occupied at the time of listing are essential for the conservation of the species.

We reviewed the available information pertaining to historical and current distributions, life histories, and habitat requirements of this species. Our sources included peer-reviewed scientific publications; unpublished survey reports; unpublished field observations by Service, State, and other experienced biologists; notes and communications from qualified biologists or experts; and Service publications such as the final listing rule for *Carex lutea*.

Physical and Biological Features

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and our regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied at the time of listing to propose as critical habitat, we consider the physical and biological features essential to the conservation of the species which may require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

We consider the physical and biological features to be the primary constituent elements PCEs laid out in the appropriate quantity and spatial arrangement for the conservation of the species. We derive the PCEs from the biological needs of *Carex lutea* as described in the Background section of this proposed rule and in the final listing rule (67 FR 3120). The areas included in this proposed critical habitat rule for *Carex lutea* contain the appropriate soils and associated

vegetation, and adjacent areas necessary to maintain associated physical processes such as a suitable hydrological regime. The areas provide suitable habitat, water, minerals, and other physiological needs for reproduction and growth of *Carex lutea*.

Space for Individual and Population Growth and for Normal Behavior

Clonal Growth

Carex lutea is a caespitose, or clumping, perennial. New shoots develop from a central point, forming a tufted clump of vegetation that is genetically identical to the parent plant. The full extent to which a plant can expand has not been determined.

Therefore, based on the information above, we identify bare soil areas immediately adjacent to existing clumps of mature *Carex lutea* plants to allow room for expansion of the clump to be a PCE for this species.

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

Water

Although the specific water needs of the species are unknown, *Carex lutea* is found in wet to saturated to periodically inundated soils. The largest populations are found in the wet to saturated ecotones of savannas and hardwood forests. At a few sites, the plants are most abundant in wet to saturated soils adjacent to drainage ditches, and in the saturated to inundated ditches themselves. The occurrence of individuals in ditches is likely due to the wetter soils of the ditches, or the washing of seeds into the ditches from adjacent habitat or both. Sometimes *Carex lutea* occurs in very wet soil in areas of savanna habitat characterized by an open to absent canopy, suggesting that its abundance in the savanna-wet hardwood ecotone is strongly influenced by hydrologic conditions as well as by edaphic (influenced by factors inherent in the soil rather than by climatic factors) or light conditions or both. The annual average precipitation in Wilmington, NC, (approximately 25 miles (40 kilometers) south-southwest of the epicenter of *Carex lutea*) is 54.3 inches (138 centimeters). (<http://www.weatherpages.com/variety/precip.html>).

Light

Most *Carex lutea* plants occur in the partially tree-shaded ecotone between savannas and hardwood swamps, with scattered shrubs and a moderate to dense herb layer. The savanna/

hardwood swamp ecotone is subject to frequent fires, which favor an herbaceous ground layer and suppress shrub dominance. There is evidence that increased shading and shrub competition from fire suppression has resulted in the reduction in the number of individuals observed.

Soil

Carex lutea occurs on a wide variety of mapped soil types, including fine sands (Baymeade, Mandarin, and Pactolus), loamy sands (Stallings), loamy fine sands (Foreston and Grifton), fine sandy loams (Torhunta and Woodington), and loams (Muckalee). The soils are formed from marine sediments and have a range of permeability (from rapid to moderately rapid) and drainage class (from well drained to very poorly drained). Soil tests at the type site (The Neck Savanna) indicate that microsites not supporting *Carex lutea* regularly test at lower pH levels than those supporting *Carex lutea*, with values at inhabited sites ranging from a pH of 5.5 to 7.2, with a mean of 6.7 (Glover 1994, p. 7). This finding may indicate a preference to soils with a high base saturation or low aluminum saturation or both. The extent of the soils with these chemical characteristics is usually limited within the Coastal Plain and, therefore, are normally not mapped as separate soil map units due to the scale of mapping.

Temperature

The outer southeastern coastal plain of North Carolina experiences hot and humid subtropical summers and cool temperate winters with subfreezing periods. Persistent snow accumulation is rare. The average crop growing season (daily minimum temperature higher than 32 degrees Fahrenheit (0 degrees Celsius)) for Onslow County is 162 days (Barnhill 1992, p. 99) and for Pender County is 185 days (Barnhill 1990, p. 105). We have no information about the tolerance of *Carex lutea* to temperature extremes.

Therefore, based on the information above, we identify wet to completely saturated loamy fine sands, fine sands, fine sandy loams, and loamy sands soils with a pH of 5.5 to 7.2, in sunny to partially tree-shaded areas or ecotones between savannas and hardwood forests to be a PCE for this species.

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

The reproductive biology of *Carex lutea* is unknown; however, due to the observation of ample mature seed production, we can confidently surmise that *Carex lutea* reproduces both

sexually, involving gravity and wind-dispersed pollen, as well as vegetatively (LeBlond 1996, p. 19). Perigynia (a special bract that encloses the achene of a *Carex* species) are dispersed when rigid fertile culms fall to the ground, thereby depositing the fruits on the substrate adjacent to, but at some distance from, the maternal parent (LeBlond 1996, p. 19). Seeds have been observed in ditches adjacent to colonies, indicating dispersal by precipitation sheet flow. Animals may also be seed dispersers; the perigynia beaks are minutely serrulate (minutely serrated), perhaps for attachment to fur (LeBlond 1996, p. 19). Survival rates of individual plants are unknown. Based on observation of the larger known populations, it appears that *Carex lutea* is a successful colonizer of suitable newly disturbed areas (LeBlond 1996, p. 19).

Therefore, based on the information above, we identify areas of bare soil immediately adjacent [within 12 inches (30 cm)] to mature *Carex lutea* plants where seeds may fall and germinate to be a PCE for this species.

Habitats Protected from Disturbance or Representative of the Historic, Geographical, and Ecological Distributions of the Species

The area supporting the *Carex lutea* populations is located in the Black River section of the Coastal Plain Province, and within the Northeast Cape Fear River watershed. The land surface is characterized by large areas of broad, level flatlands and shallow stream basins. The broad flatlands support longleaf pine forests, pond pine woodlands, shrub swamp pocosins, pine plantations, and cropland. The geology is characterized by unconsolidated sand overlying layers of clayey sand and weakly consolidated marine shell deposits (coquina limestone). These sediments were deposited and reshaped during several cycles of coastal emergence and submergence from the Cretaceous period to the present (LeBlond *et al.* 1994, p. 159).

More specifically, *Carex lutea* occurs in the Very Wet Clay Variant of the Pine Savanna community (Schafale 1994, p. 136) or its ecotones. Community structure is characterized by an open to sparse canopy dominated by pond pine (*Pinus serotina*), and usually with some longleaf pine (*Pinus palustris*) and pond cypress (*Taxodium ascendens*). The shrub layer typically is sparse to patchy, with wax myrtle (*Morella carolinensis*), ti-ti (*Cyrtilla racemiflora*), Ink berry (*Ilex glabra*), myrtle dahoon (*Ilex myrtifolia*), and black highbush blueberry

(*Vaccinium fuscatum*) prominent. Juvenile red maple (*Acer rubrum* var. *trilobum*) and swamp tupelo (*Nyssa biflora*) are often present. The herb layer is dense, and dominated by combinations of *Ctenium aromaticum* (toothache grass), Carolina dropseed (*Sporobolus pinetorum*), and several *Rhynchospora* taxa [e.g., globe beaksedge (*R. globularis* var. *pinetorum*), sandswamp whitetop (*R. latifolia*), and Thorne's beakrush (*R. thornei*)]. National vegetation type classification places this natural community in the *Pinus palustris* - *Pinus serotina* / *Sporobolus pinetorum* - *Ctenium aromaticum* - *Eriocaulon decangulare* var. *decangulare* (Tenangle pipewort) Woodland association of the *Pinus palustris* - *Pinus* (*P. elliotii*, *P. serotina*) Saturated Woodland Alliance (NatureServe 2010). This association is equivalent to the Pine Savanna (Very Wet Clay Variant), a natural community type with fewer than 10 occurrences globally (Schafale 1994, p. 136). The Pine Savanna Very Wet Clay Variant is known only from the Maple Hill area near the Onslow/Pender County line and north and west of Holly Shelter Game Land, and from the Old Dock area of the Waccamaw River watershed along the Brunswick/Columbus County line.

Therefore, based on the information above, we identify areas containing the natural plant community that would be identified as the Pine Savanna (Very Wet Clay Variant) according to methodology used in Schafale (1994, p. 136) to be a PCE for this species. The structure of this community is characterized by an open to sparse canopy dominated by pond pine, and usually with some longleaf pine and pond cypress.

Based on the above needs and our current knowledge of the life history, biology, and ecology of the species and the habitat requirements for sustaining the essential life history functions of the species, we have determined that the PCEs for *Carex lutea* is Pine Savanna (Very Wet Clay Variant) natural plant community or ecotones that contain:

1. Moist to completely saturated loamy fine sands, fine sands, fine sandy loams, and loamy sands soils with a pH of 5.5 to 7.2;
2. Open to relatively open canopy that allows full to part sun to penetrate to the herbaceous layer between savannas and hardwood forests; and
3. Areas of bare soil immediately adjacent [within 12 inches (30 cm)] to mature *Carex lutea* plants where seeds may fall and germinate or existing plants may expand in size.

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 physical and biological features that are essential to the conservation of the species and whether those features may require special management considerations or protection.

As stated in the final listing rule, threats to *Carex lutea* include habitat alteration; conversion of its limited habitat for residential, commercial, or industrial development; mining; drainage activities associated with silviculture and agriculture; suppression of fire; highway expansion; and herbicide use along utility and highway rights-of-way (67 FR 3120). Through our review of the existing data on *Carex lutea*, we conclude that the threats listed in the final listing rule continue to impact this species and its essential physical and biological features.

The destruction of habitat or conversion of habitat for residential, commercial, or industrial development can change the topography, soils, and general character of the site, making it uninhabitable for *Carex lutea*. These activities can remove the PCEs by removing soil (by grading) and changing *Carex lutea* habitat to developed land, which is unsuitable for the species.

Drainage activities associated with silviculture and agriculture may alter the hydrology, which can change the groundwater levels and the amount of moisture in the soil, creating conditions under which *Carex lutea* may not be able to survive. Further, removal of existing vegetation or the planting of trees for silviculture may change the existing conditions such that *Carex lutea* plants no longer receive optimal amounts of sunlight.

The close proximity of roadways and power line corridors to populations of *Carex lutea* may affect the species. Herbicide treatment to maintain vegetation in rights-of-ways has the potential to kill non-target plant species such as *Carex lutea*. Highway expansion may change the local topography and affect water runoff making the site drier or wetter than is optimal for *Carex lutea*.

Mining has been documented in close proximity to one *Carex lutea* population. Mining activities may alter many aspects of *Carex lutea* habitat. Heavy equipment can compact or remove the appropriate soils. The grading of areas adjacent to *Carex lutea* habitat can change the hydrology of those areas and make them more

susceptible to invasion by nonnative plant species.

Regular fire in areas where *Carex lutea* occurs helps to maintain the open savanna habitat that is conducive to *Carex lutea* growth. Fire reduces competition and allows seeds to germinate in open, bare soil areas. Fire suppression in areas where *Carex lutea* occurs may result in the growth of shrubs and trees that will eventually shade out herbaceous species such as *Carex lutea*.

All of these activities may in turn lead to the disruption of the growth and reproduction of *Carex lutea*.

In summary, we find that the areas we are proposing as critical habitat contain the features essential to the conservation of *Carex lutea*, and that these features may require special management considerations or protection. Special management considerations or protection may be required to eliminate, or reduce to negligible level, the threats affecting each unit or subunit and to preserve and maintain the essential features that the proposed critical habitat units and subunits provide to *Carex lutea*. Additional discussions of threats facing individual sites are provided in the individual unit and subunit descriptions.

The designation of critical habitat does not imply that lands outside of critical habitat may not play an important role in the conservation of *Carex lutea*. In the future, and with changed circumstances, these lands may become essential to the conservation of *Carex lutea*. Activities with a Federal nexus that may affect areas outside of critical habitat, such as development, agricultural activities, and road construction, are still subject to review under section 7 of the Act if they may affect *Carex lutea* because Federal agencies must consider both effects to the plant and effects to critical habitat independently. The prohibitions of section 9 of the Act applicable to *Carex lutea* under 50 CFR 17.61 also continue to apply both inside and outside of designated critical habitat.

Criteria Used To Identify Critical Habitat

As required by section 4(b) of the Act, we used the best scientific and commercial data available in determining areas within the geographical area occupied at the time of listing that contain the physical and biological features essential to the conservation of *Carex lutea*, and areas outside of the geographical area occupied at the time of listing that are essential for the conservation of *Carex lutea*. In order to determine which sites

were occupied at the time of listing, we used the NCNHP database of rare species (NCNHP 2009). If an element occurrence (EO) record or site was first observed after the species was listed (effective on February 22, 2002), then we considered that those sites were unknown at the time of listing. Five subunits had first observed dates after February 22, 2002. However, given what we know about the biology of this species and the habitats where it occurs, those five subunits were likely occupied at the time the species was listed. The occurrence at Watkins Savannah (O'Berry Tract C) (EO 5.19) was found during surveys for *Carex lutea* in 2006. The two sites on Ashes Creek at the Southwest Ridge Savanna (EO 11) were found during surveys for *Carex lutea* in 2002, just 3 months after the species was listed. In 2007, surveys for *Carex lutea* at the McLean Savanna yielded two new subpopulations of *Carex lutea* (EOs 24.22 and 24.23). *Carex lutea* was already known from a site nearby, and all three of these subpopulations are now considered to be part of one population. To the best of our knowledge, these areas had not been surveyed for *Carex lutea* previously, and we have no reason to believe that the plant was imported or had dispersed into these areas from other areas after *Carex lutea* was listed in 2002. Based on the biology of this species and its limited ability for the seeds to move and colonize new areas, the occurrences identified since listing likely were in existence for many years prior to listing and were only recently detected due to increased awareness of this species.

We have also reviewed available information that pertains to the habitat requirements of this species including NCNHP data, the original species description (LeBlond *et al* 1994, pp. 159-160), the status survey (LeBlond 1996, pp. 11-13), the Service's draft Recovery Plan and the 5-Year Review, regional Geographic Information System (GIS) coverages, survey reports, and other relevant information.

The only criterion that we used to identify proposed critical habitat was that the areas are currently occupied by *Carex lutea*. These areas occur on rare or unique habitat (the Very Wet Clay Variant of the Pine Savanna community, remnant savannas, or ecotones thereof) within the species' range and contain all of the PCEs identified as necessary for the conservation of the species. Since so few populations are known to exist, they are all important to the long-term survival and recovery of the species. Eight units (19 subunits) are proposed for designation based on sufficient quantity and arrangement of the PCEs

being present to support *Carex lutea's* life processes.

When determining proposed critical habitat boundaries, we made every effort to avoid including developed areas, such as lands covered by buildings, roads, and other structures, because such lands lack PCEs for *Carex lutea*. 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 and biological features in the adjacent critical habitat.

To the best of our knowledge, there are no unoccupied areas that contain one or more of the PCEs for *Carex lutea*. All of the areas proposed as critical habitat for *Carex lutea* are currently occupied by the species and contain the PCEs. All of the areas proposed as critical habitat are also within the known historical range of the species. Therefore, we are not proposing to designate any areas outside the geographical area occupied by the species at the time of listing. We believe that the occupied areas are sufficient for the conservation of the species.

Proposed Critical Habitat Designation

We are proposing 8 units (19 subunits) totaling approximately 189 acres (ac) (75.6 hectares (ha)) as critical habitat for *Carex lutea*. The areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for *Carex lutea*. The eight areas we propose as critical habitat are: (1) Unit 1: Watkins Savannah, (2) Unit 2: Haws Run Mitigation Site, (3) Unit 3: Maple Hill School Road Savanna, (4) Unit 4: Southwest Ridge Savanna, (5) Unit 5: Sandy Run Savannas, (6) Unit 6: The Neck Savanna, (7) Unit 7: Shaken Creek Savanna, and (8) Unit 8: McLean Savanna. All units are now occupied by *Carex lutea*, but five subunits in three units were unknown at the time of listing. However, based on the biology of this species and its limited ability for the seeds to move and colonize new areas, the occurrences identified since listing likely were in existence for many years prior to listing and were only

recently detected due to increased awareness of this species. Therefore, we are considering them to be occupied at the time of listing. Table 1 identifies the occupancy status for each subunit.

TABLE 1. OCCUPANCY OF *Carex lutea* BY PROPOSED CRITICAL HABITAT UNITS.

Unit	Subunit	Occupied at Time of Listing?	Currently Occupied?
1	A	Yes	Yes
1	B	Yes	Yes
1	C	Yes	Yes
2	Not applicable (N/A)	Yes	Yes
3	N/A	Yes	Yes
4	A	Yes	Yes
4	B	Yes	Yes
5	A	Yes	Yes
5	B	Yes	Yes
5	C	Yes	Yes
5	D	Yes	Yes
5	E	Yes	Yes
6	A	Yes	Yes
6	B	Yes	Yes
6	C	Yes	Yes
7	A	Yes	Yes
7	B	Yes	Yes
7	C	Yes	Yes
8	A	Yes	Yes
8	B	Yes	Yes
8	C	Yes	Yes

Table 2 includes the name, ownership information, and size of each unit and subunit we are proposing as critical habitat.

TABLE 2. OWNERSHIP OF PROPOSED CRITICAL HABITAT UNITS FOR *Carex lutea*.

[Area estimates reflect all land within critical habitat unit boundaries.]

Unit	Subunit	Name	Land Ownership by Type	Size of Unit Acres	Size of Unit Hectares
1	A	Watkins Savanna, O'Berry, Tract A	NCDPR	1.2	0.5
1	B	Watkins Savanna, Unnamed Tract	Private, NCDPR	2.0	0.8
1	C	Watkins Savanna, O'Berry, Tract C	NCDPR	0.6	0.2
2	N/A	Haws Run Mitigation Site	NCDOT	27.1	11.0
3	N/A	Maple Hill School Road, Savanna	Private	27.7	11.2
4	A	Southwest Ridge Savanna, Ashes Creek, <i>Carex lutea</i> Survey Site, Southwest of Ashes Creek	NCWRC with Progress Energy, ROW	2.3	0.9

TABLE 2. OWNERSHIP OF PROPOSED CRITICAL HABITAT UNITS FOR *Carex lutea*.—Continued

[Area estimates reflect all land within critical habitat unit boundaries.]

Unit	Subunit	Name	Land Ownership by Type	Size of Unit Acres	Size of Unit Hectares
4	B	Southwest Ridge Savanna, Ashes Creek, <i>Carex lutea</i> Survey Site, Northeast of Ashes Creek	NCWRC with Progress Energy, ROW	1.0	0.4
5	A	Sandy Run Savannas	NCDPR with Progress Energy, ROW	2.6	1.1
5	B	Sandy Run Savannas	NCDPR	4.3	1.7
5	C	Sandy Run Savannas	NCDPR	0.3	0.1
5	D	Sandy Run Savannas	NCDPR	0.3	0.1
5	E	Sandy Run Swamp	NCDPR with Progress Energy, ROW	13.1	5.3
6	A	The Neck Savanna	NCDPR	3.6	1.5
6	B	The Neck Savanna, Thorne's Beaksedge Road	Private	0.7	0.3
6	C	The Neck Savanna, former Sandy Run Savanna	Private with Powerline ROW	0.1	0.1
7	A	Shaken Creek Savanna, East Population, East of Patterson Road	TNC	6.9	2.8
7	B	Shaken Creek Savanna, West Population, East of Patterson Road	TNC	24.7	10.0
7	C	Shaken Creek Savanna, West Population	TNC	26.1	10.6
8	A	McLean Savanna	TNC	42.3	17.1
8	B	McLean Savanna	Private	0.5	0.2
8	C	McLean Savanna	TNC, Private	1.6	0.6
Total*				189.0	76.5

*Note: Area sizes may not sum due to rounding.

We present brief descriptions of each unit, and reasons why they meet the definition of critical habitat for *Carex lutea*, below

Unit 1: Watkins Savanna, Pender County, North Carolina

Unit 1 consists of 3.8 ac (1.5 ha) and includes three subunits in Pender County, NC. It contains all of the PCEs for *Carex lutea*. This critical habitat unit includes habitat for *Carex lutea* that is under private and State ownership. This unit contains three element occurrences, two of which were known at the time of listing. The subunits contain all of the PCEs identified for *Carex lutea*; however, they are all very fire suppressed and have been altered by timber management. The NC Division of Parks and Recreation (NCDPR) is currently negotiating with the NCNHP

to designate this site as a Dedicated Nature Preserve.

Subunit A (EO 5.12) consists of 1.2 ac (0.5 ha) and was known to be occupied at the time of listing. It is owned by NCDPR and is managed as part of the Sandy Run Savannas State Natural Area.

Subunit B (EO 5.13) consists of 2.0 ac (0.8 ha) and was known to be occupied at the time of listing. It is owned by private entities and NCDPR. NCDPR plans to manage their portion of the subunit as part of the Sandy Run Savannas State Natural Area.

Subunit C (EO 5.19) consists of 0.6 ac (0.2 ha) and was not known to be occupied at the time of listing. This *Carex lutea* site was discovered in 2006; however, based on the habitat conditions at this site and the biology of the species, we believe that this site was occupied in 2002, when the species was listed. It is in conservation ownership

by NCDPR and is managed as part of the Sandy Run Savannas State Natural Area.

Unit 2: Haws Run Mitigation Site, Onslow County, North Carolina

Unit 2 (EO 7) consists of 27.1 ac (11.0 ha) in Onslow County, NC. This critical habitat unit includes habitat for *Carex lutea* and was occupied at the time of listing. It is owned by the NC Department of Transportation and is managed by the NC Ecosystem Enhancement Program. This site was purchased as mitigation for wetland impacts from nearby transportation projects. Although the site is somewhat fire suppressed and has been altered by timber management, it contains all of the PCEs identified for *Carex lutea*. The land managers conducted a prescribed fire in the vicinity of the *Carex lutea* plants during the summer of 2009 and will continue restoration efforts there.

The population at this site appears to be stable and not vulnerable to extirpation. Managers are considering designating this site as a Dedicated Nature Preserve by the NCNHP.

Unit 3: Maple Hill School Road Savanna, Pender County, North Carolina

Unit 3 (EO 10) consists of 27.7 ac (11.2 ha) in Pender County, NC. This site is privately owned and has not been revisited since it was discovered in 1998. It was occupied at the time of listing. Although three clumps of *Carex lutea* were discovered here in 1998, the full extent of the population is unknown and the habitat is vulnerable to land use changes.

Unit 4: Southwest Ridge Savanna, Pender County, North Carolina

Unit 4 (EO 11) consists of 3.3 ac (1.3 ha) in two subunits in Pender County, NC. This unit is owned by NC Wildlife Resources Commission and is managed for conservation purposes. These two subpopulations were discovered in May 2002, shortly after the species was listed as endangered (effective on February 2002). Because the species is nearly impossible to identify unless it is flowering and plants less than 3 months old would not be expected to flower in May, it seems reasonable to assume that the plants discovered in May 2002 were present prior to the 2002 growing season and that the site was occupied at the time of listing. The *Carex lutea* plants occur in a power line right-of-way easement that is managed by Progress Energy. The utility company entered into a Registry Agreement with the NCNHP and agreed not to use herbicides or mow during critical *Carex lutea* growth periods. This population is relatively small in size compared to some of the other populations, but appears to be stable. The subunits contain all of the PCEs identified for *Carex lutea*.

Subunit A is 2.3 ac (0.9 ha) in size and is located southwest of Ashes Creek.

Subunit B is 1.0 ac (0.48 ha) in size and is located northeast of Ashes Creek.

Unit 5: Sandy Run Savannas, Onslow County, North Carolina

Unit 5 consists of 20.6 ac (8.3 ha) in Onslow County, NC, and is divided into five subunits. This critical habitat unit is owned by NCDPR and managed as part of the Sandy Run Savannas State Natural Area. All five *Carex lutea* sites were known at the time of listing. This unit is a remnant pine savanna, and the subunits contain all of the PCEs identified for *Carex lutea*; however, the

subunits are all fire suppressed and have been altered by timber management including bedding and ditching. The NCDPR is currently negotiating the designation of a Dedicated Nature Preserve with the NCNHP.

Subunit A (EO 15.3) consists of 2.6 ac (1.1 ha) and occurs on the east side of NC 50. Progress Energy has a transmission line right-of-way through this subunit and has entered into a Registry Agreement with the NCNHP in which they have agreed not to use herbicides or mow during critical *Carex lutea* growth periods.

Subunit B (EO 15.4) consists of 4.3 ac (1.7 ha) and occurs contiguous to and along the north side of a private sand road through the property.

Subunit C (EO 15.4) consists of 0.3 ac (0.1 ha) and occurs along the south side of a private sand road through the property and on the west side of a small stream swamp. The plants are growing in an old, wet road bed.

Subunit D (EO 15.4) consists of 0.3 ac (0.1 ha) and occurs along the south side of a private sand road through the property and on the east side of a small stream swamp. The *Carex lutea* plants are growing in a roadside ditch.

Subunit E (EO 15.14) consists of 13.1 ac (5.3 ha) and occurs contiguous to and on the west side of NC 50. Progress Energy has a transmission line right-of-way through this subunit and has entered into a Registry Agreement with the NCNHP in which they have agreed not to use herbicides or mow during critical *Carex lutea* growth periods.

Unit 6: The Neck Savanna, Pender County, North Carolina

Unit 6 consists of 4.4 ac (1.8 ha) in Pender County, NC, and is divided into three subunits. This critical habitat unit includes habitat for *Carex lutea* that is under private and State ownership. This unit contains three element occurrences, two of which were known at the time of listing. The subunits contain all of the PCEs identified for *Carex lutea*; however, they are all very fire suppressed and have been altered by timber management. The NCDPR is currently negotiating the designation of a Dedicated Nature Preserve with the NCNHP. Privately owned portions of this property are threatened by fire suppression, timber harvesting, and herbicide use. Drainage ditches impact the hydrology of the soils in this area.

Subunit A (EO 18.1) consists of 3.6 ac (1.5 ha) and was known to be occupied at the time of listing. It is owned by NCDPR and private entities, some of which will become part of the Sandy Run Savannas State Natural Area.

Subunit B (EO 18.16) consists of 0.7 ac (0.3 ha) and is privately owned. It is currently threatened by fire suppression, but the managers are hopeful that they will be able to burn this tract within the next year or two.

Subunit C (EO 18.17) consists of 0.1 ac (0.1 ha), is privately owned, and occurs in a small power-line corridor along a roadside. It is vulnerable to woody growth and herbicide use in the power line. There has been little management of the site with prescribed fire due to difficult land ownership patterns.

Unit 7: Shaken Creek Savanna, Pender County, North Carolina

Unit 7 consists of 57.7 ac (23.4 ha) in Pender County, NC, and is divided into three subunits. This critical habitat unit includes habitat for *Carex lutea* that is under private ownership. This area is owned by TNC and managed by a private hunt club. This unit contains three element occurrences, all of which were known at the time of listing. This savanna complex contains the highest quality natural habitat and the largest population of *Carex lutea* known. With continued fire management, this site should remain stable. It contains all of the PCEs identified for *Carex lutea*.

Subunit A (EO 21.8) consists of 6.9 ac (2.8 ha) and is east of Patterson Road.

Subunit B (EO 21.8) consists of 24.7 ac (10.0 ha) and is west of Patterson Road.

Subunit C (EO 21.20) consists of 26.1 ac (10.6 ha) and lies south of Bear Garden Road.

Unit 8: McLean Savanna, Pender County, North Carolina

Unit 8 consists of 44.4 ac (17.7 ha) and includes three subunits in Pender County, NC. This site is known as McLean Savanna or McLean Family Farms and has been kept open for hunting through the use of prescribed burning. *Carex lutea* occurs over an extensive area, and it is one of the larger populations known. Each of the three subunits contains all of the PCEs identified for *Carex lutea*.

Subunit A (EO 24.9) is 42.3 ac (17.1 ha) in size and is owned by TNC. *Carex lutea* occupied this area at the time of listing.

Subunit B (EO 24.22) is 0.5 ac (0.2 ha) in size and is privately owned. This *Carex lutea* population was discovered in June 2007, after the species was listed; however, based on what we know about the biology of the species, we believe that this site was occupied at the time of listing.

Subunit C (EO 24.23) is 1.6 ac (0.6 ha) in size and is owned by both private

entities and TNC. This *Carex lutea* population was also discovered in June 2007, after the species was listed; based on what we know about the biology of the species, we believe that this site was occupied at the time of listing.

Because the savannas on the McLean Family Farms have been managed by fire for many years to facilitate hunting, and one subpopulation (Subunit A) has been known on this property since 1997, it is reasonable to believe that these other subpopulations (Subunits B and C) have also occurred there for many years and were just undetected because those areas had not been surveyed specifically for *Carex lutea* until 2007.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Decisions by the Fifth and Ninth Circuits Courts of Appeals have invalidated our definition of “destruction or adverse modification” (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service*, 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the PCEs to be functionally established) to serve its intended conservation role for the species.

Section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. We may issue a formal conference report if requested by a Federal agency. Formal conference reports on proposed critical habitat contain an opinion that is prepared according to 50 CFR 402.14, as if critical habitat were designated. We may adopt the formal conference report as the biological opinion when the critical

habitat is designated, if no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)). The conservation recommendations in a conference report or opinion are strictly advisory.

If we list a species or designate critical habitat, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or to destroy or adversely modify its critical habitat. 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. As a result of this consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

- A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or
- 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 or destroy or adversely modify critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. We define “reasonable and prudent alternatives” at 50 CFR 402.02 as alternative actions identified during consultation that:

- Can be implemented in a manner consistent with the intended purpose of the action,
- Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,
- Are economically and technologically feasible, and
- Would, in the Director’s opinion, avoid jeopardizing the continued existence of the listed species or 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 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or

control over the action (or the agency’s discretionary involvement or control is authorized by law). Consequently, Federal agencies may sometimes need to request reinitiating of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Federal activities that may affect *Carex lutea* or its designated critical habitat require section 7 consultation under the Act. Activities on State, Tribal, local, or private lands requiring 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 under section 10 of the Act or involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency)) are subject to the section 7 consultation process. 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 permitted, do not require section 7 consultations.

Application of the “Adverse Modification” Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species, or would retain its current ability for the essential features to be functionally established. Activities that may destroy or adversely modify critical habitat are those that alter the essential features to an extent that appreciably reduces the conservation value of critical habitat for *Carex lutea*.

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 destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that, when carried out, funded, or authorized by a Federal agency, may affect critical habitat and therefore should result in consultation for *Carex lutea* include, but are not limited to:

- Actions that would alter the hydrology associated with *Carex lutea* habitat or the savannas where this species occurs. Such activities could include, but are not limited to,

water impoundment, stream channelization, water diversion, water withdrawal and development activities. These activities could alter the biological and physical features that provide the appropriate habitat for *Carex lutea* by altering or eliminating moisture regimes that this species may rely on for seed dispersal and germination and for control of competing species; by reducing or increasing the availability of groundwater, which may result in a shift of habitat type to a community unsuitable for *Carex lutea* (shrub- or tree-dominated habitat, which would inhibit exposure to needed sunlight); or by causing increased erosion that could remove soils appropriate for *Carex lutea* growth.

- Activities that remove soils appropriate for *Carex lutea* growth, such as plowing, grading, or ditch cleaning, or activities that change the characteristics of soils so that *Carex lutea* growth is impeded, such as soil compaction due to silvicultural practices, vehicular access along power line rights-of-ways or roadway expansion or maintenance. These activities may adversely affect critical habitat.

Exemptions

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

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (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:

- An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;
- A statement of goals and priorities;
- A detailed description of management actions to be implemented to provide for these ecological needs; and
- A monitoring and adaptive management plan.

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)) now provides: "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 (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation."

There are no Department of Defense lands with a completed INRMP within the proposed critical habitat designation. As such, we are not exempting any lands owned or managed by the Department of Defense from this designation of critical habitat for *Carex lutea*.

Exclusions

Application of Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary must designate or 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 critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the legislative history is clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

Under section 4(b)(2) of the Act, we may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we must identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and determine whether the benefits of exclusion outweigh the benefits of inclusion. If based on this analysis, we determine that the benefits of exclusion outweigh the benefits of

inclusion, we can exclude the area only if such exclusion would not result in the extinction of the species.

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 are preparing an analysis of the probable economic impacts of the proposed critical habitat designation and related factors.

We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic analysis will be available for downloading from the Internet at the *Federal eRulemaking Portal*: <http://www.regulations.gov>, or by contacting the Raleigh Fish and Wildlife Office directly (see **FOR FURTHER INFORMATION CONTACT** section). During the development of a final designation, we will consider economic impacts, public comments, and other new information, and as an outcome of our analysis of this information, we may exclude areas from the final critical habitat designation under section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19.

National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense where a national security impact might exist. In preparing this proposal, we have determined that the lands within the proposed designation of critical habitat for *Carex lutea* are not owned or managed by the Department of Defense, and therefore, we anticipate no impact to national security. There are no areas proposed for exclusion based on impacts on national security.

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. We consider a number of factors including whether the landowners have developed any conservation plans or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any Tribal issues, and consider the government-to-government relationship of the United States with Tribal entities. We also consider any social impacts that might occur because of the designation.

In preparing this proposed rule, we have determined that there are currently no conservation plans or other management plans for *Carex lutea*, and the proposed designation does not include any Tribal lands or trust resources. We anticipate no impact to Tribal lands, partnerships, or HCPs or other management plans from this proposed critical habitat designation. There are no areas proposed for exclusion from this proposed designation based on other relevant impacts.

Notwithstanding these decisions, as stated under the **Public Comments** section above, we request specific comments on whether any specific areas proposed for designation for *Carex lutea* should be excluded under section 4(b)(2) of the Act from the final designation.

Peer Review

In accordance with our joint policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of such review is to ensure that our proposed actions are based on scientifically sound data, assumptions, and analyses. We will invite these peer reviewers to comment, during the public comment period, on the specific assumptions and conclusions regarding the proposed designation of critical habitat.

We will consider all comments and information received during the comment period on this proposed rule during preparation of a final rulemaking. Accordingly, the final decision may differ from this proposal.

Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. Requests for public hearings must be made in writing within 45 days of the publication of this proposal (see **DATES** and **ADDRESSES** sections). We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings in the **Federal Register** and local newspapers at least 15 days before the first hearing.

Required Determinations

Regulatory Planning and Review—Executive Order 12866

The Office of Management and Budget (OMB) has determined that this rule is not significant and has not reviewed this proposed rule under Executive Order 12866 (E.O. 12866). OMB bases

its determination upon the following four criteria:

(a) Whether the rule will have an annual effect of \$100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(b) Whether the rule will create inconsistencies with other Federal agencies' actions.

(c) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

(d) Whether the rule raises novel legal or policy issues.

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 (SBREFA) of 1996), whenever an agency must 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 (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 RFA to require Federal agencies to provide a statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

At this time, we lack the specific information necessary to provide an adequate factual basis for determining the potential incremental regulatory effects of the designation of critical habitat for the *Carex lutea* to either develop the required RFA finding or provide the necessary certification statement that the designation will not have a significant impact on a substantial number of small business entities. On the basis of the development of our proposal, we have identified certain sectors and activities that may potentially be affected by a designation of critical habitat for the *Carex lutea*. These sectors include industrial development, mining, drainage for silviculture and agriculture, highway expansion and herbicide use along utility and highway rights-of-way. We recognize that not all of these sectors may qualify as small business entities. However, while recognizing that these sectors and activities may be affected by this designation, we are

collecting information and initiating our analysis to determine (1) which of these sectors or activities are or involve small business entities, and (2) what extent the effects are related to the *Carex lutea* being listed as an endangered species under the Act (baseline effects) or whether the effects are attributable to the designation of critical habitat (incremental). We believe that the potential incremental effects resulting from a designation will be small. As a consequence, following an initial evaluation of the information available to us, we do not believe that there will be a significant impact on a substantial number of small business entities resulting from this designation of critical habitat for *Carex lutea*. However, we will be conducting a thorough analysis to determine if this may in fact be the case. As such, we are requesting any specific economic information related to small business entities that may be affected by this designation and how the designation may impact their business. Therefore, we defer our RFA finding on this proposal designation until completion of the draft economic analysis prepared under section 4(b)(2) of the Act and E.O. 12866.

As discussed above, this draft economic analysis will provide the required factual basis for the RFA finding. Upon completion of the draft economic analysis, we will announce availability of the draft economic analysis of the proposed designation in the **Federal Register** and reopen the public comment period for the proposed designation. We will include with this announcement, as appropriate, an initial regulatory flexibility analysis or a certification that the rule will not have a significant economic impact on a substantial number of small entities accompanied by the factual basis for that determination. We have concluded that deferring the RFA finding until completion of the draft economic analysis is necessary to meet the purposes and requirements of the RFA. Deferring the RFA finding in this manner will ensure that we make a sufficiently informed determination based on adequate economic information and provide the necessary opportunity for public comment.

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 findings:

(a) This 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 jeopardize the continued existence of the species, or 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.

(b) We do not believe that this rule would significantly or uniquely affect small governments. The lands being proposed for critical habitat designation are owned by private individuals, The Nature Conservancy and the State of North Carolina (Division of Parks and Recreation, Department of Transportation and Wildlife Resources Commission). None of these government entities fit the definition of “small governmental jurisdiction.” Therefore, a Small Government Agency Plan is not required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

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 *Carex lutea* in a takings implications assessment. The takings implications assessment concludes that this designation of critical habitat for *Carex lutea* 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 rule does not have significant Federalism effects. A Federalism assessment 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 in North Carolina. The critical habitat 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 essential features themselves are specifically identified. While making this definition and identification does not alter where and what federally sponsored activities may occur, it may assist local governments in long-range planning (rather than having them 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) 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 E.O. 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does 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. This proposed rule uses standard property descriptions and identifies the PCEs within the designated areas to assist the public in understanding the habitat needs of the *Carex lutea*.

Paperwork Reduction Act of 1995

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (NEPA)

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 as defined by NEPA (42 U.S.C. 4321 *et seq.*) in connection with designating critical habitat under 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), cert. denied 516 U.S. 1042 (1996)).

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:

- (a) Be logically organized;
- (b) Use the active voice to address readers directly;

- (c) Use clear language rather than jargon;
- (d) Be divided into short sections and sentences; and
- (e) 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 the **ADDRESSES** section. 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.

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), E.O. 13175, and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. 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. We have determined that there are no tribal lands occupied at the time of listing that contain the features essential for the conservation, and no tribal lands that are essential for the conservation, of *Carex lutea*. Therefore, we have not proposed designation of critical habitat for *Carex lutea* on tribal lands.

Energy Supply, Distribution, or Use

On May 18, 2001, the President issued an Executive Order (E.O. 13211; Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) on regulations that significantly affect energy supply, distribution, and use. E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. A total of 19.1 ac (7.8 ha) of critical habitat occur in electrical distribution lines. It is believed that the regular disturbance prevents the natural succession of woody species and serves to keep the habitat open, similar to the role that fire plays in the species' more natural savanna habitat. Critical habitat will include approximately 2,500 linear feet (762 meters) of power lines. However, we do not expect it to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required. We will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

References Cited

A complete list of references cited in this rulemaking is available on the Internet at <http://www.regulations.gov> and upon request from the Field Supervisor, Raleigh Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Author(s)

The primary authors of this package are the staff members of the Raleigh Fish and Wildlife Office.

List of Subjects in 50 CFR Part 17

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

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—[AMENDED]

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

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

2. In § 17.12(h), revise the entry for "*Carex lutea*" under "Flowering Plants" in the List of Endangered and Threatened Plants to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *
(h) * * *

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
*	*	*	*	*	*	*	*
<i>Carex lutea</i>	Golden Sedge	NC	Cyperacea	E	721	17.96(a)	NA
*	*	*	*	*	*	*	*

3. In § 17.96(a), add an entry for "*Carex lutea* (golden sedge)," in alphabetical order under the family Cyperacea, to read as follows:

§ 17.96 Critical habitat—plants.

(a) Flowering plants

* * * * *

Family Cyperacea: *Carex lutea* (golden sedge)

(1) Critical habitat units are depicted for Onslow and Pender Counties, NC, on the maps below.

(2) The primary constituent elements (PCEs) of critical habitat for the *Carex lutea* is Pine Savanna (Very Wet Clay Variant) natural plant community or ecotones that contain:

(i) Moist to completely saturated loamy fine sands, fine sands, fine sandy loams, and loamy sands soils with a pH between 5.5 and 7.2.

(ii) Open to relatively open canopy that allows full to part sun to penetrate to the herbaceous layer between savannas and hardwood forests.

(iii) Areas of bare soil immediately adjacent (within 12 inches (30 centimeters)) to mature *Carex lutea*

plants where seeds may fall and germinate or existing plants may expand in size.

(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 the effective date of this rule.

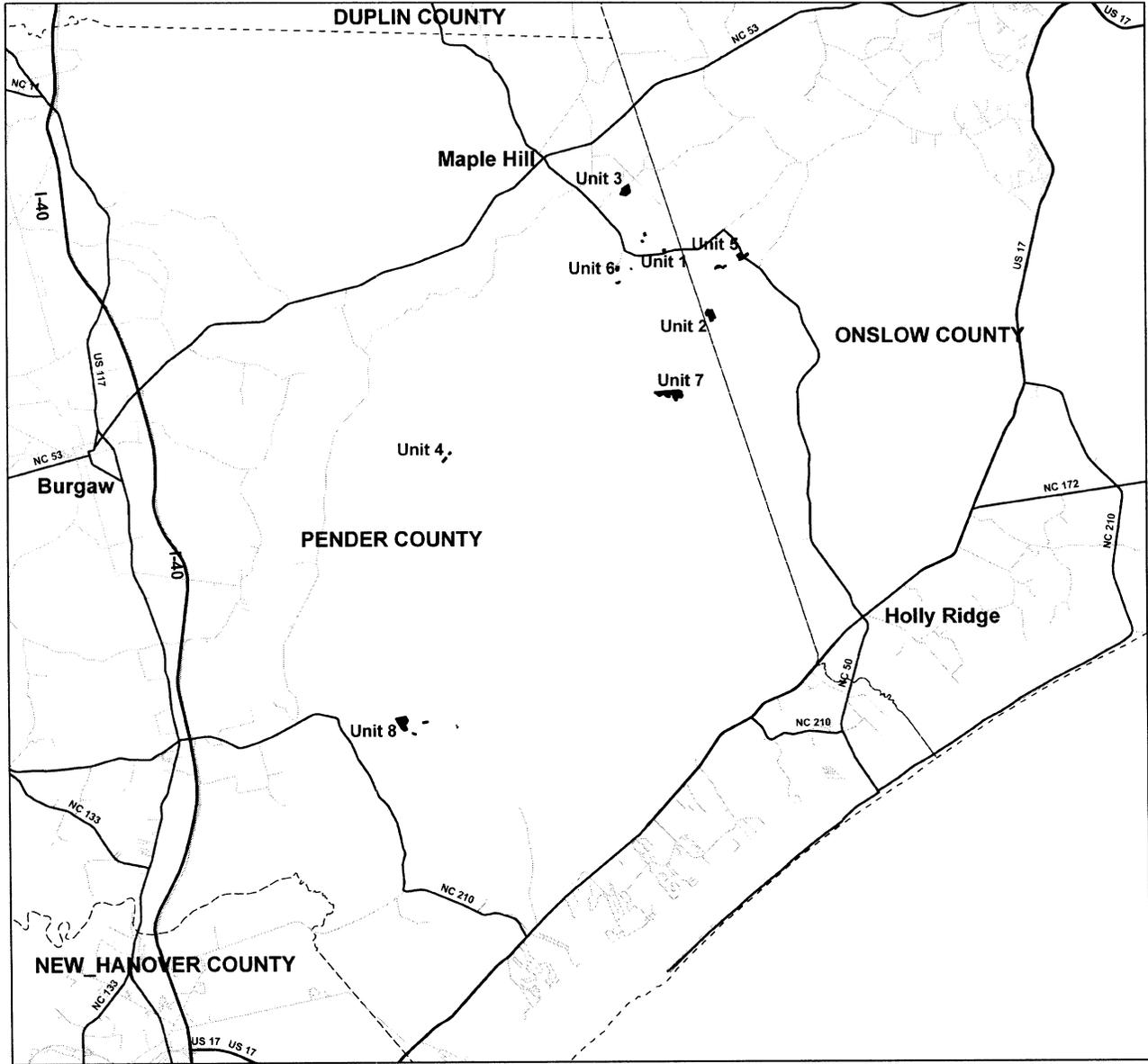
(4) *Critical habitat map units*. Data layers defining map units were created using a base of aerial photographs (USDA National Agriculture Imagery Program; NAIP 2008). Critical habitat units were then mapped using Universal

Transverse Mercator (UTM) zone 18 North American Datum (NAD) 1983 coordinates. These coordinates establish the vertices and endpoints of the boundaries of the units and subunits.

(5) *Note*: Index Map (Map 1) follows:

BILLING CODE 4310-55-S

Index Map
 Critical Habitat for *Carex lutea* (golden sedge), Pender and Onslow Counties, North Carolina



Legend

- interstate_highway
- Proposed Critical Habitat
- US and State Highways
- Secondary Roads
- County boundary

N

Miles

0 1.5 3 6

Kilometers

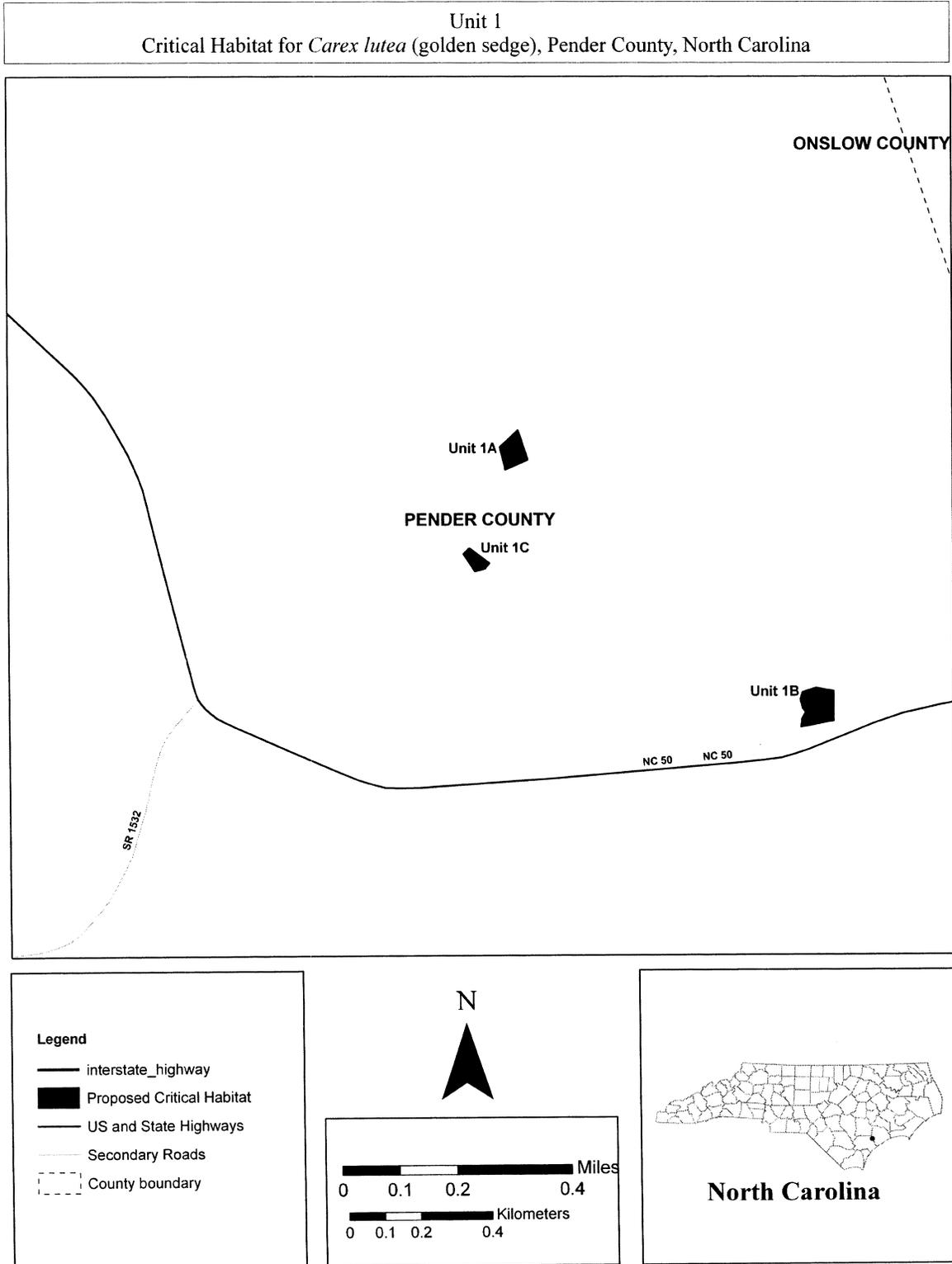
0 2.5 5 10

North Carolina

(6) Unit 1: Watkins Savanna, Pender County, NC.
(i) Subunit 1A
[Reserved for textual description of Subunit 1A]

(ii) Subunit 1B
[Reserved for textual description of Subunit 1B]
(iii) Subunit 1C

[Reserved for textual description of Subunit 1C]
(iv) Map of Unit 1 (Watkins Savanna) follows:

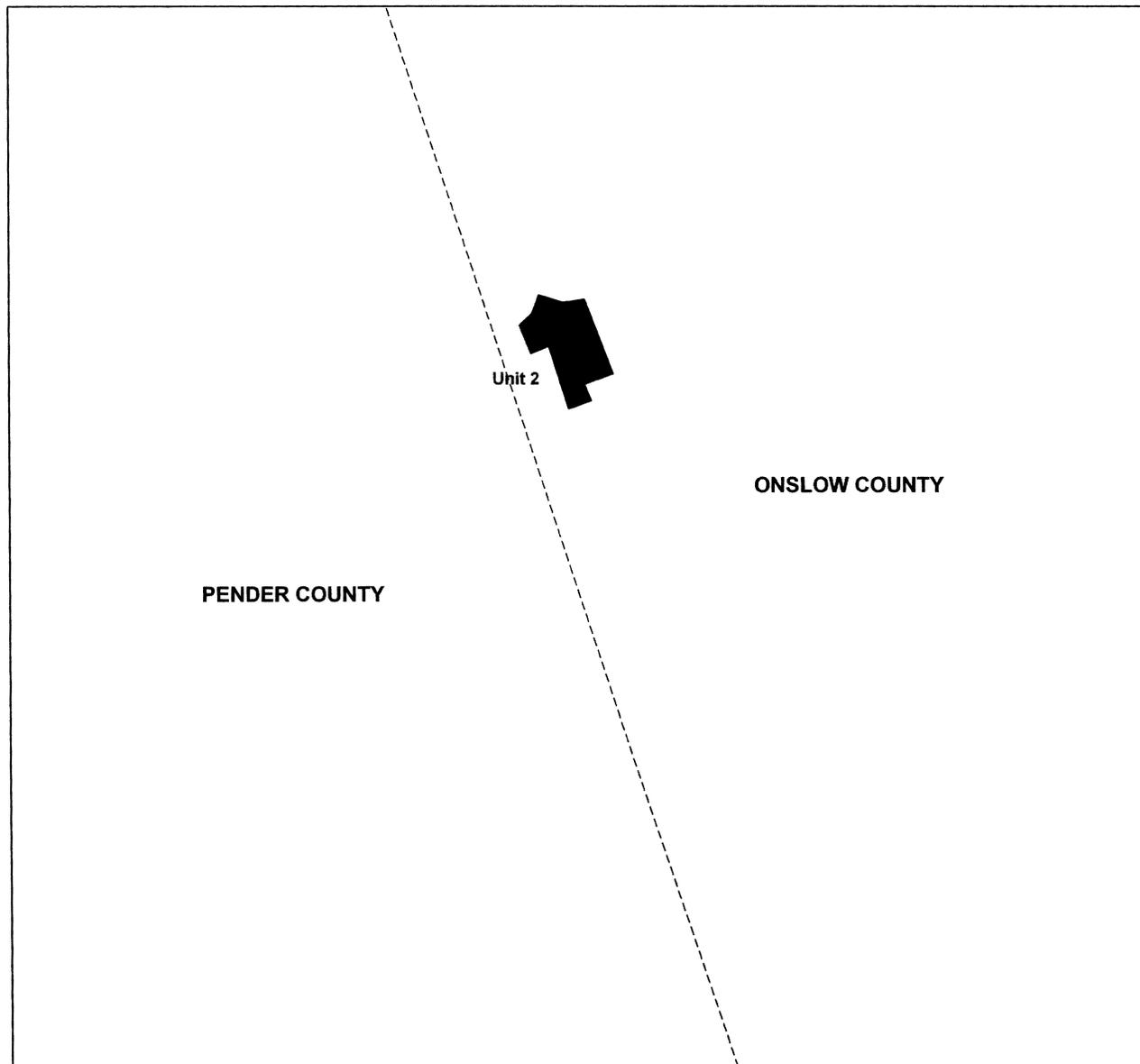


(7) Unit 2: Haws Run Mitigation Site, Onslow County, NC.

(i) [Reserved for textual description of Unit 2]

(ii) Map of Unit 2 (Haws Run Mitigation Site) follows:

Unit 2
Critical Habitat for *Carex lutea* (golden sedge), Onslow County, North Carolina



Legend

- interstate_highway
- Proposed Critical Habitat
- US and State Highways
- ⋯ Secondary Roads
- - - County boundary

N

0 0.15 0.3 0.6 Miles

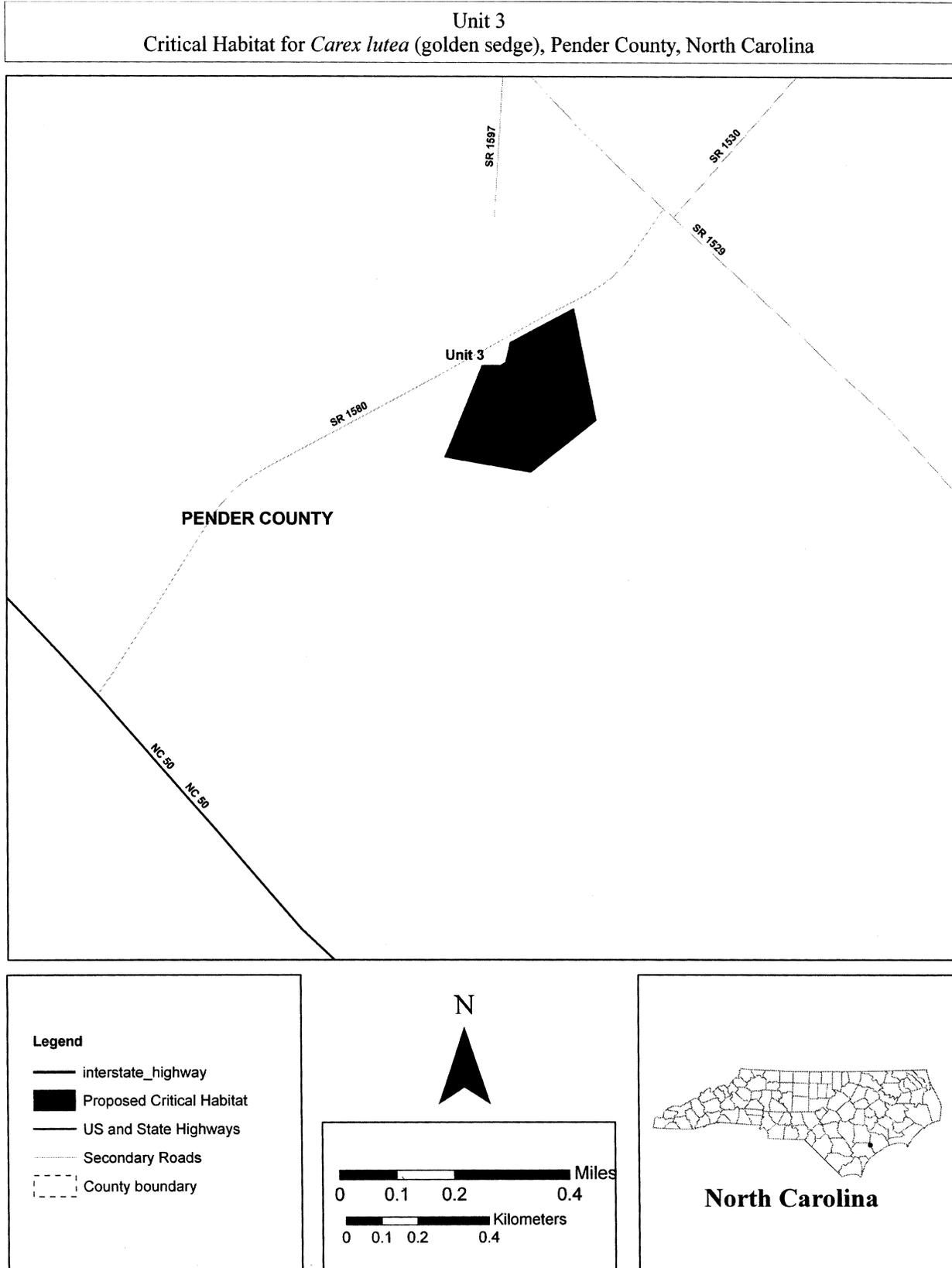
0 0.15 0.3 0.6 Kilometers

North Carolina

(8) Unit 3: Maple Hill School Road
Savanna, Pender County, NC.

(i) [Reserved for textual description of
Unit 3]

(ii) Map of Unit 3 (Maple Hill School
Road Savanna) follows:



(9) Unit 4: Southwest Ridge Savanna,
Pender County, NC.

[Reserved for textual description of
Subunit 4A]

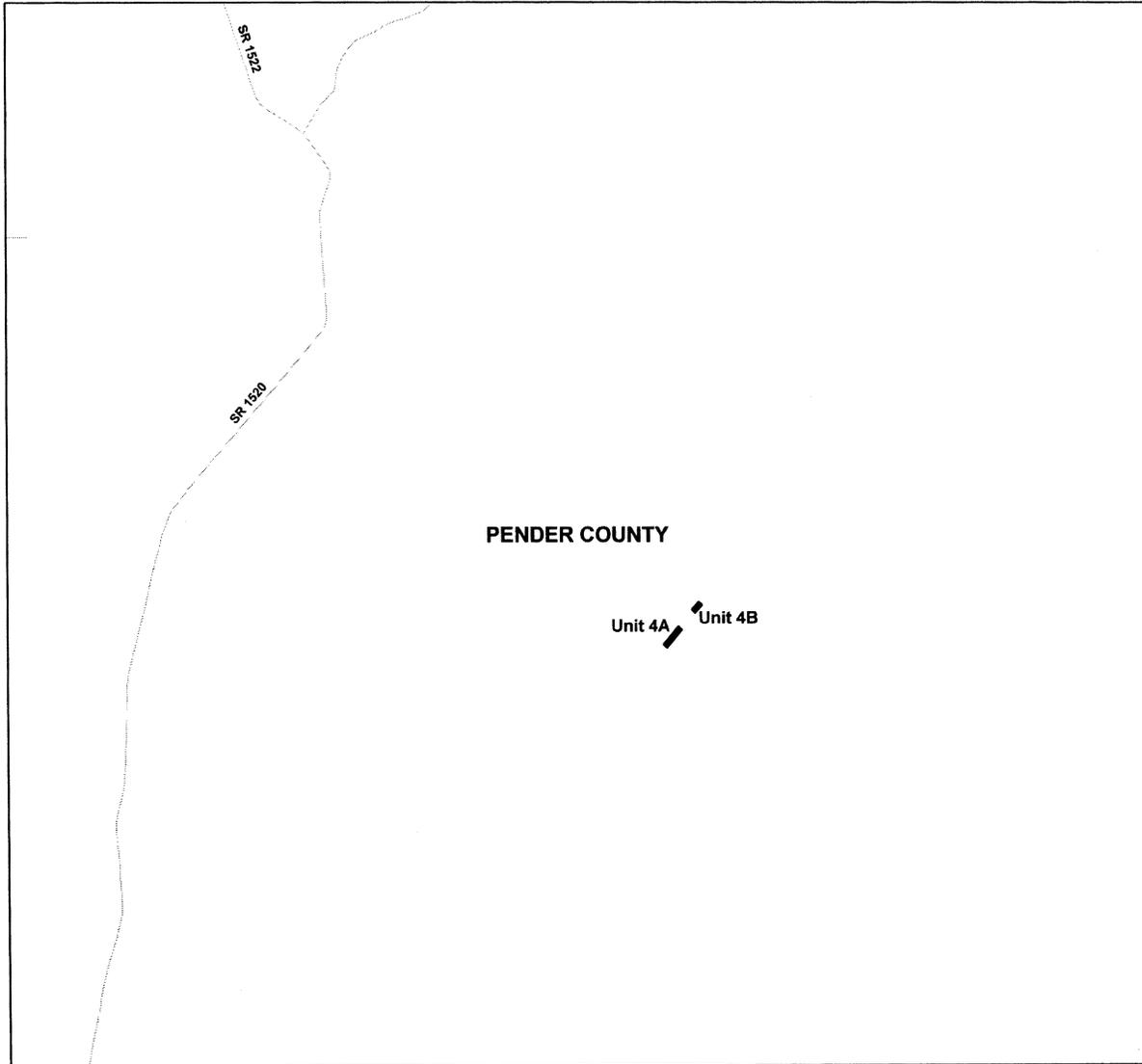
[Reserved for textual description of
Subunit 4B]

(i) Subunit 4A

(ii) Subunit 4B

(iii) Map of Unit 4 (Southwest Ridge
Savanna) follows:

Unit 4
Critical Habitat for *Carex lutea* (golden sedge), Pender County, North Carolina



Legend

- interstate_highway
- Proposed Critical Habitat
- US and State Highways
- Secondary Roads
- County boundary

N

Miles

Kilometers

North Carolina

(10) Unit 5: Sandy Run Savannas, Onslow County, NC.

(i) Subunit 5A

[Reserved for textual description of Subunit 5A]

(ii) Subunit 5B

[Reserved for textual description of Subunit 5B]

(iii) Subunit 5C

[Reserved for textual description of Subunit 5C]

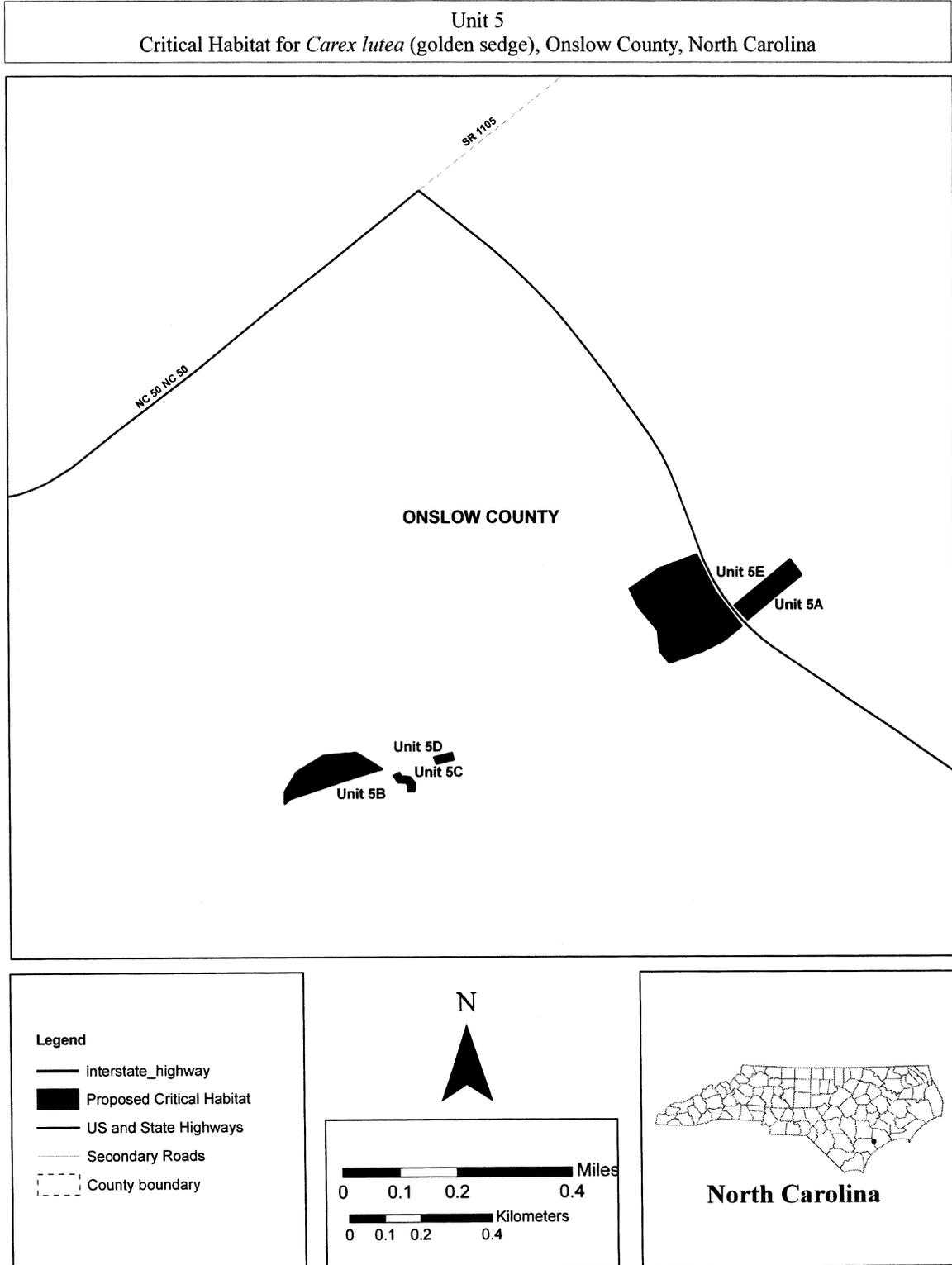
(iv) Subunit 5D

[Reserved for textual description of Subunit 5D]

(v) Subunit 5E

[Reserved for textual description of Subunit 5E]

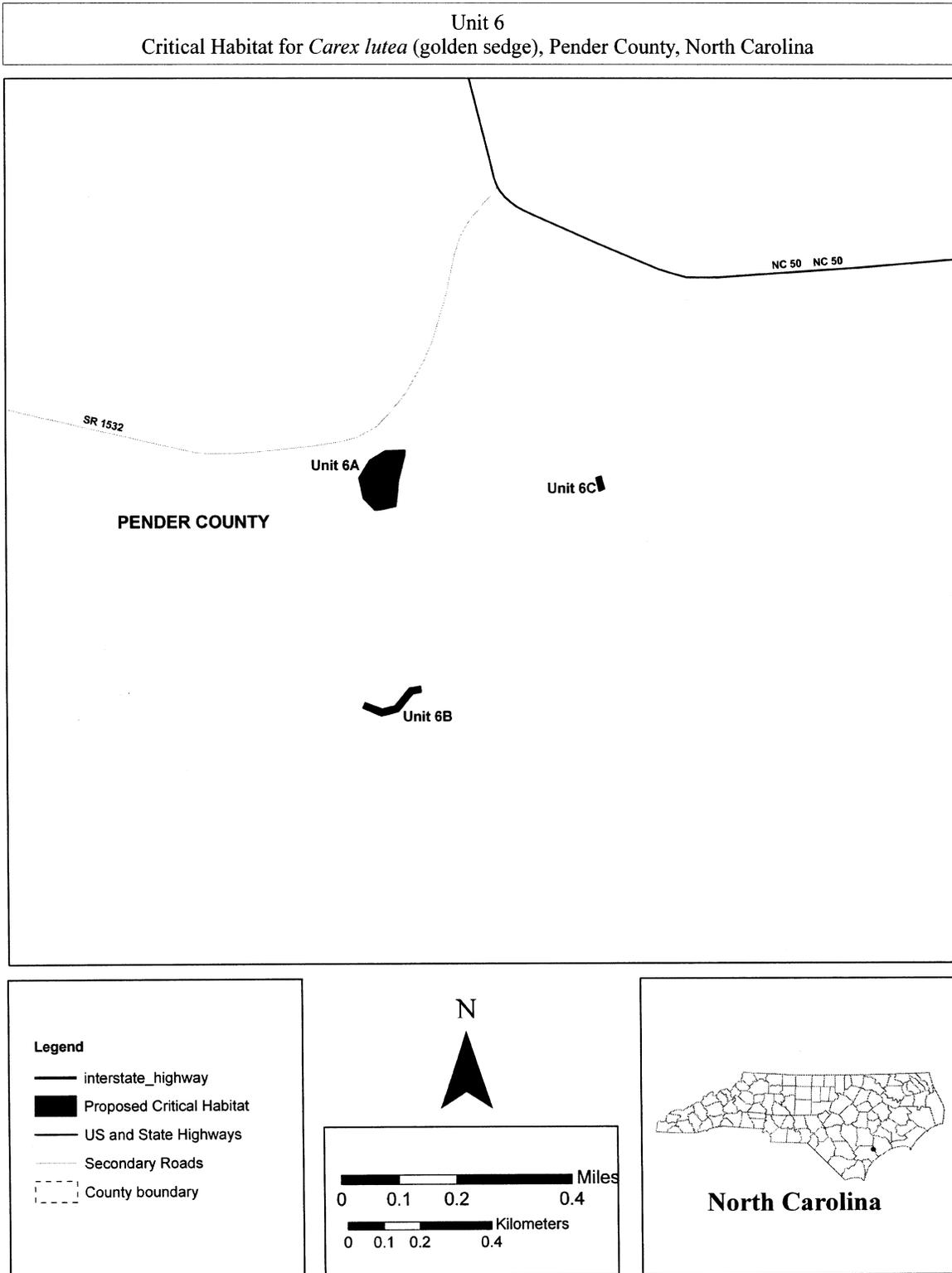
(vi) Map of Unit 5 (Sandy Run Savannas) follows:



(11) Unit 6: The Neck Savanna,
Pender County, NC.
(i) Subunit 6A
[Reserved for textual description of
Subunit 6A]

(ii) Subunit 6B
[Reserved for textual description of
Subunit 6B]
(iii) Subunit 6C

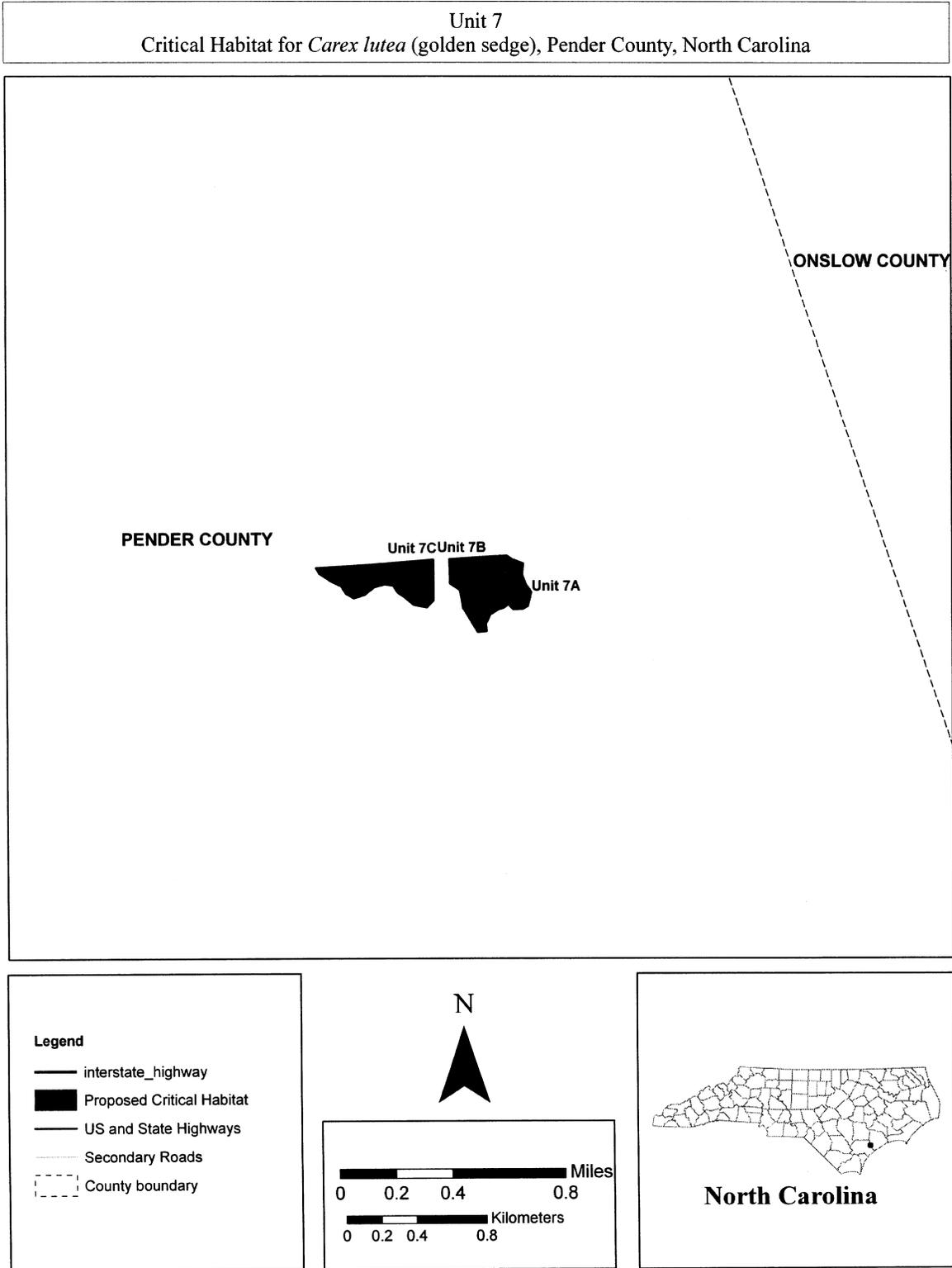
[Reserved for textual description of
Subunit 6C]
(iv) Map of Unit 6 (The Neck
Savannas) follows:



(12) Unit 7: Shaken Creek Savanna, Pender County, NC.
(i) Subunit 7A
[Reserved for textual description of Subunit 7A]

(ii) Subunit 7B
[Reserved for textual description of Subunit 7B]
(iii) Subunit 7C

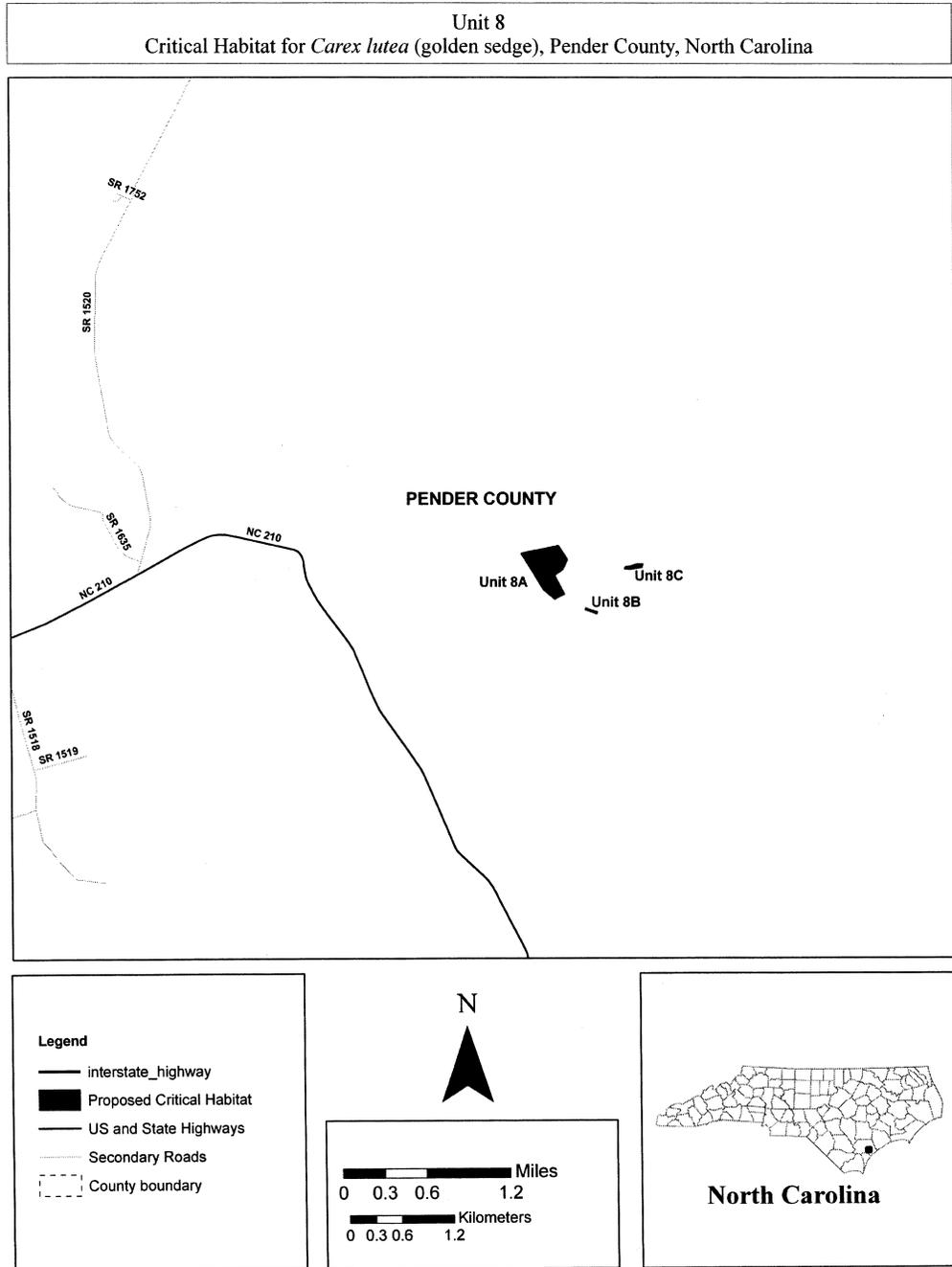
[Reserved for textual description of Subunit 7C]
(iv) Map of Unit 7 (Shaken Creek Savanna) follows:



(13) Unit 8: McLean Savanna, Pender County, NC.
(i) Subunit 8A
[Reserved for textual description of Subunit 8A]

(ii) Subunit 8B
[Reserved for textual description of Subunit 8B]
(iii) Subunit 8C

[Reserved for textual description of Subunit 8C]
(iv) Map of Unit 8 (McLean Savanna) follows:



* * * * *

Dated: February 24, 2010.
Will Shafroth,
Acting Assistant Secretary for Fish and Wildlife and Parks.
[FR Doc. 2010-4653 Filed 3-9-10; 8:45 am]
BILLING CODE 4310-55-C