Natural Heritage Advisory Committee

North Carolina Natural Heritage Program

November 20, 2026

DNCR North Carolina Department of Natural & Cultural Resources

NORTH CAROLINA Natural Heritage Program

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North Carolina Natural Heritage Program

Recommendations for Dedication and Registry

Submitted to the Natural Heritage Advisory Committee

November 20, 2026

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Dedicated Nature Preserve

- Agreement is attached to the land
- Agreement cannot be rescinded by the owner
- Requires approval of Council of State and Governor
- Specific management rules

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Dedication zones

Primary Area: contains rare species populations, rare communities, and/or high-quality examples of common communities.

Primary (Restoration) Area: contains elements as above, but requires some form of active management to restore. If timber management is allowed, it is with a specific time-limited objective (e.g., removal of off-site canopy species). Part of the Primary Area.

Primary (Special Management) Area: retains some natural features (e.g., rare species populations), but is maintained for other purposes (e.g., utility right-of-way).

Buffer Area: contributes to the ecological function of the Primary Area, but does not qualify as Primary.

State Land Dedicated Nature Preserve

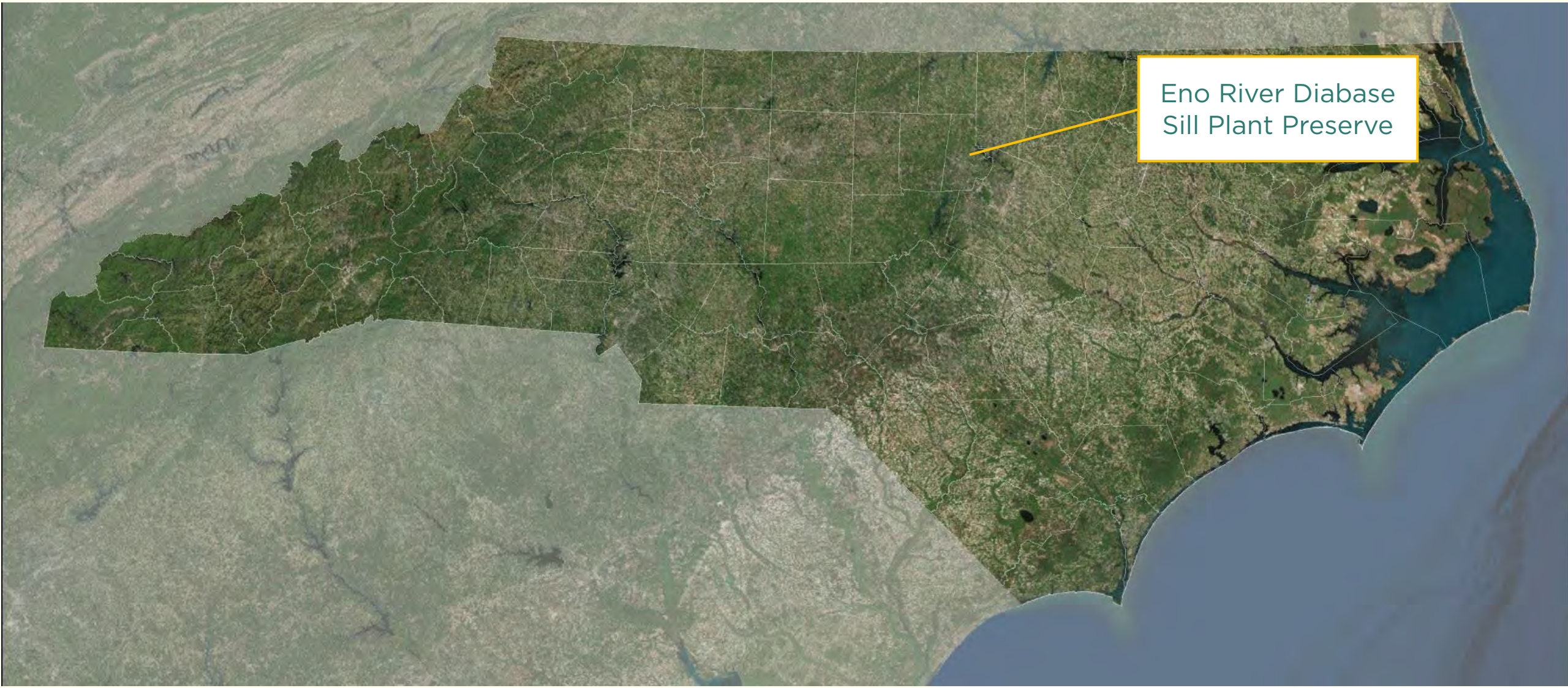
- Dedication of qualifying portions is required when lands are acquired with NC Land and Water Fund grants.
  - Preserve design is scaled to parcel level.

- Dedication is done by Letter of Allocation

Aquatic Standards for State Land Dedication

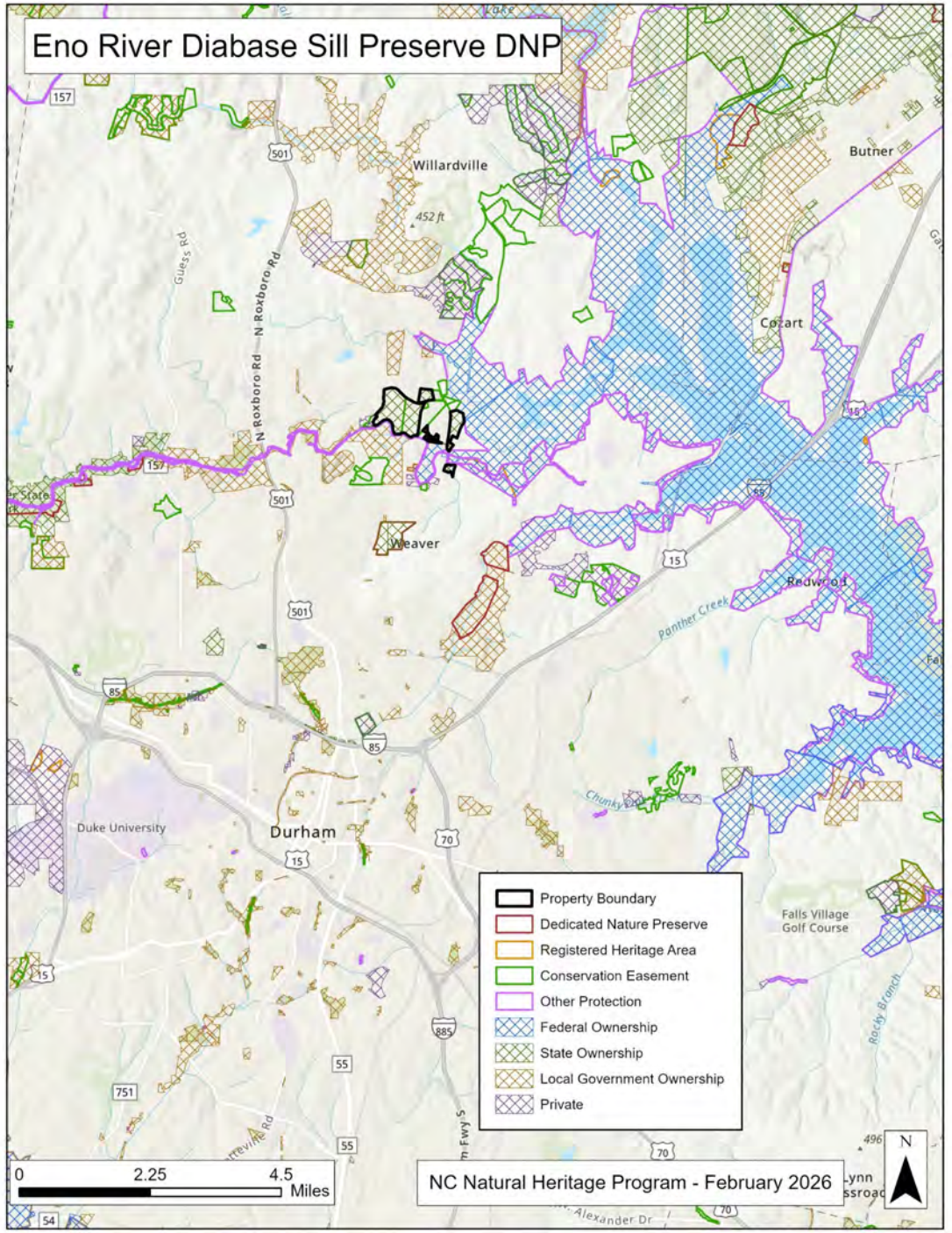
- 100 ft riparian zone on all perennial streams
  - Minimum standard
- 300 ft riparian zones along perennial streams with NHP Aquatic Habitat
  - If Aquatic Habitat has federally listed species, add 200 ft riparian zone on all perennial tributary streams to the Aquatic Habitat
  - If Aquatic Habitat does not have federally listed species, add 100 ft riparian zones on all perennial tributary streams
- NHP maintains a dataset with these parameters
  - Updated annually
  - Based on National Hydrography Dataset (NHD) maintained by USGS and NC Stream Mapping Project

Eno River Diabase Sill Plant Preserve DNP



Durham County

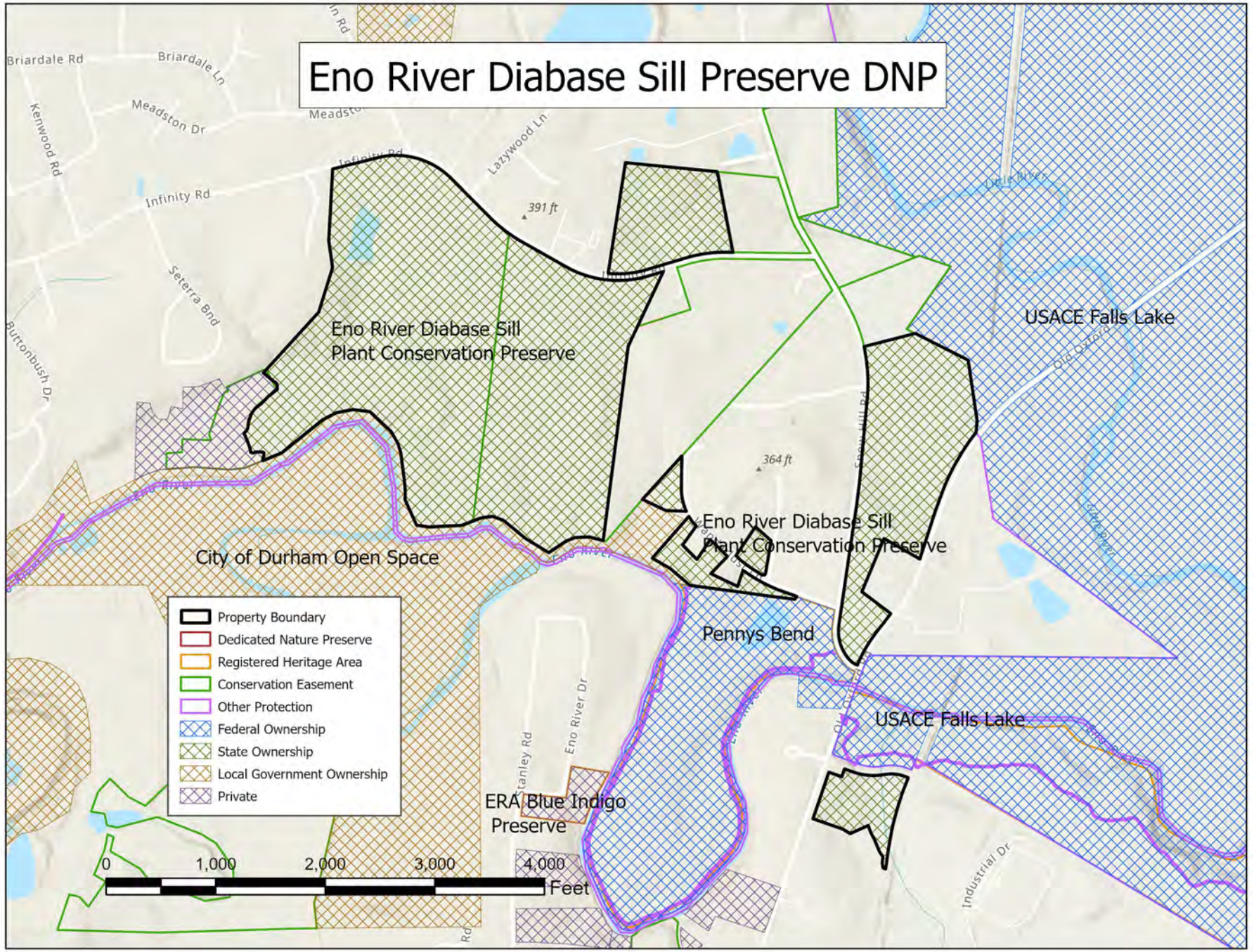
Shakori, Lumbee, Catawba, Occaneechi, Cheraw



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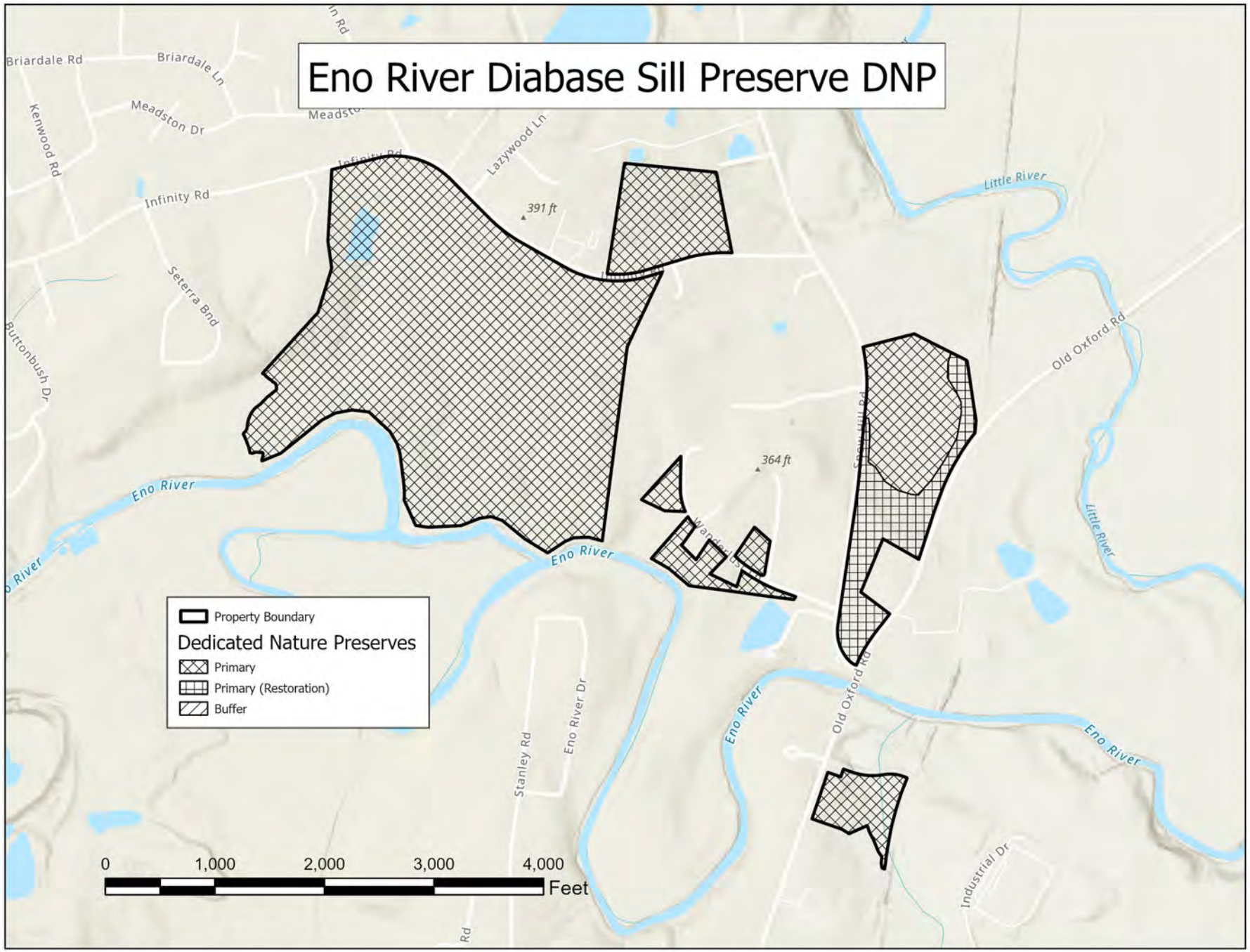
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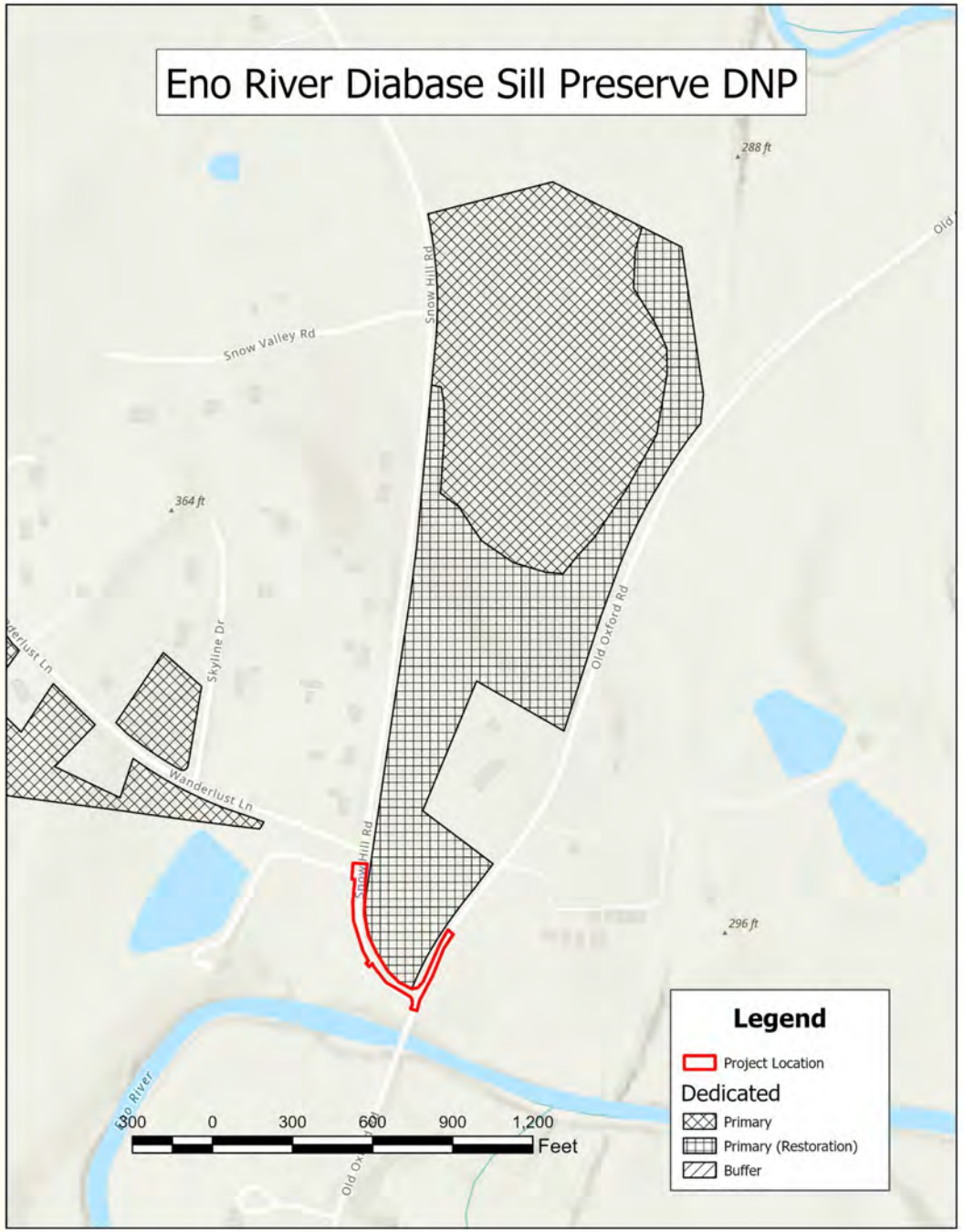
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Eno River Diabase Sill Plant Conservation Preserve Dedicated Nature Preserve STIP No. HE -0007D

- Add a left turn lane and signals to Snow Hill and Old Oxford Roads intersection, Durham County
- Request to amend the dedication for right of way and construction easements



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Eno River Diabase Sill Plant Conservation Preserve
Dedicated Nature Preserve

- Acquisition of nature preserve was funded by NC Land and Water Fund Grant (NHTF #200409402 Harrelson)
  - Dedication of qualifying portions was a grant condition

- Natural Heritage Advisory Committee reviewed preliminary information about proposed project at February 2026 meeting
  - Followed 9 January 2026 meeting with NCDOT, NCNHP, NCPCP, and NCLWF to discuss the project, which had been narrowed to the extent possible
  - Understanding is that some impact to dedicated area is unavoidable

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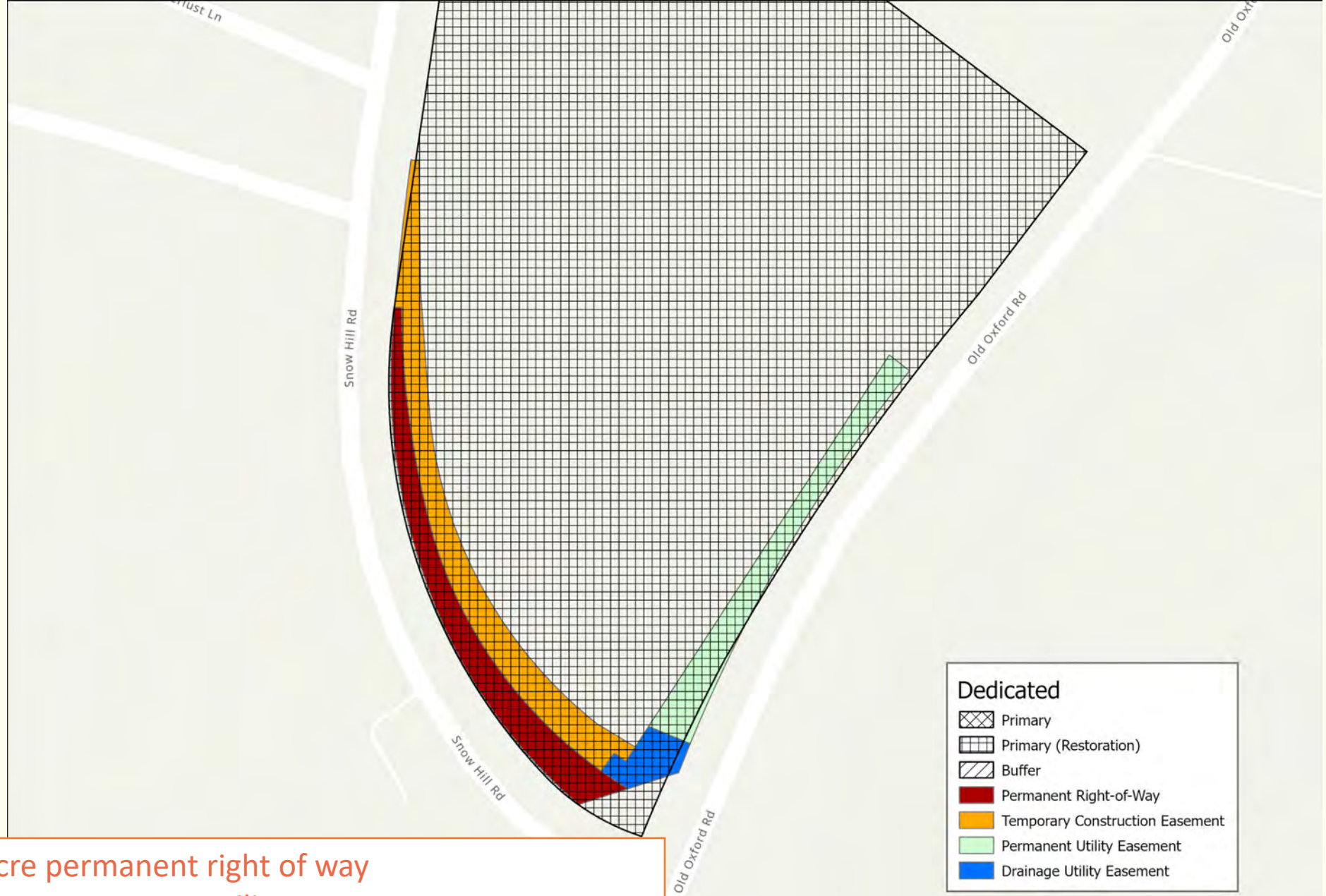
Natural Heritage resources intersecting with HE-0007D Eno River Diabase Sill Preserve DNP

Scientific Name	Common Name	Rank	NC Status	US Status
Baptisia aberrans	Prairie Blue Wild Indigo	S2G2	Endangered	
Liatris squarrulosa	Earle's Blazing-star	S2G4	Significantly Rare	
Parthenium auriculatum	Glade Wild Quinine	S3G3	Significantly Rare	

Additional rare species in the immediate area include:

- Smooth Coneflower (*Echinacea laevigata*), Federally and State Threatened
- Hoary Puccoon (*Lithospermum canescens*), State Threatened
- Prairie Dock (*Silphium terebinthinaceum*), Significantly Rare

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- 0.142 acre permanent right of way
- 0.117 acre permanent utility easement
- 0.032 acre drainage and utility easement
- 0.176 acre temporary construction easement

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Eno River Diabase Sill Plant Preserve Easement Request

- 0.142 acre permanent right of way (ROW)
- 0.117 acre permanent utility easement (PUE)
- 0.032 acre drainage and utility easement (DUE)
- 0.176 acre temporary construction easement (TCE)

- 0.467 total easement request
  - 0.291 acres permanent total area removed

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Discussion at February 2026 Natural Heritage Advisory Committee

Potential mitigation measures recommended to achieve net overall conservation benefit may include:

- temporary relocation of plants, to be held by NCBG off-site and replanted after the project (would require funding to NCBG, translocation during dormant seasons)
- 3:1 land exchange for nearby parcel with similar habitat along the Eno River (several parcels nearby are currently for sale along Old Oxford Road with river frontage)
- remediation of ground to natural conditions, including:
  - natural topography
  - removal of invasive species
  - revegetation with native plants
  - replacement of native soil where possible (if soil needs to be temporarily moved for drainage, hold it on-site in “buffer” area and then replace where possible / no replacement soil from off-site to fill holes and ditches)
  - understanding that PCP will continue to manage the nature preserve with prescribed fire in the future (after project completion)

- NCDOT requested amendment to Articles of Dedication on 5 August 2026.
  - Right of Way and easement acquisition anticipated to start fall 2026
  - Project construction timeline is uncertain
  - Proposed financial compensation at 1:1
  - NCDOT will implement applicable standard BMPs during construction
  - No mention of rare plant populations in amendment request

- Based on the public interest served by improvements to the intersection to safely handle increased traffic, and that the new use of the acres for permanent right-of-way, drainage and utility easements would not be consistent with public purposes served by the dedication, amendment would be required to remove a portion of the dedication.

NCDOT submitted revised amendment request on 24 September 2026

- Many of the mitigation measures discussed at February 2026 NHAC meeting are included in the request
- In the following three slides, the changes in the 24 September revised request are noted in orange text

Impacts – avoidance and minimization

- Reduced lane widths (from 12 to 11 feet)
- Reduced shoulder widths (from 8 to 3 feet)
- Elimination of erosion control sediment basin (which would have resulted in greater temporary disturbance)
- Reconfiguration of erosion control clean water diversion from 30 feet to 15 foot nominal



Baptisia aberrans by Johnny Randall



Parthenium auriculatum by Scott Pohlman



Liatris squarrulosa by Scott Pohlman

Compensation

- Proposed financial compensation at ~~1:1~~ 3:1
- Payment for Protected Plant Species Transplantation
  - NCDOT will provide one payment to NC Plant Conservation Program (PCP) if, after surveys, PCP has determined there are protected species within the DNP that will be impacted by this project. This payment will offset costs incurred by PCP for the temporary relocation of species they manage within the preserve that are listed on the NC Protected Plant List or rare, threatened, or endangered plants (as tracked by the Natural Heritage Program.
  - The payment will also include costs associated with plants to be held by a qualified organization, such as the North Carolina Botanical Garden (NCBG), off-site until replanted by PCP after the completion of the project.
  - If plants exist within the area of impact, funding to PCP would offset estimated costs associated with any temporary relocation, storage during construction and replanting efforts. Advanced coordination between NCDOT, PCP, NCNHP and NCBG will be necessary to ensure the transplant occurs during the dormant season.

Best Management Practices

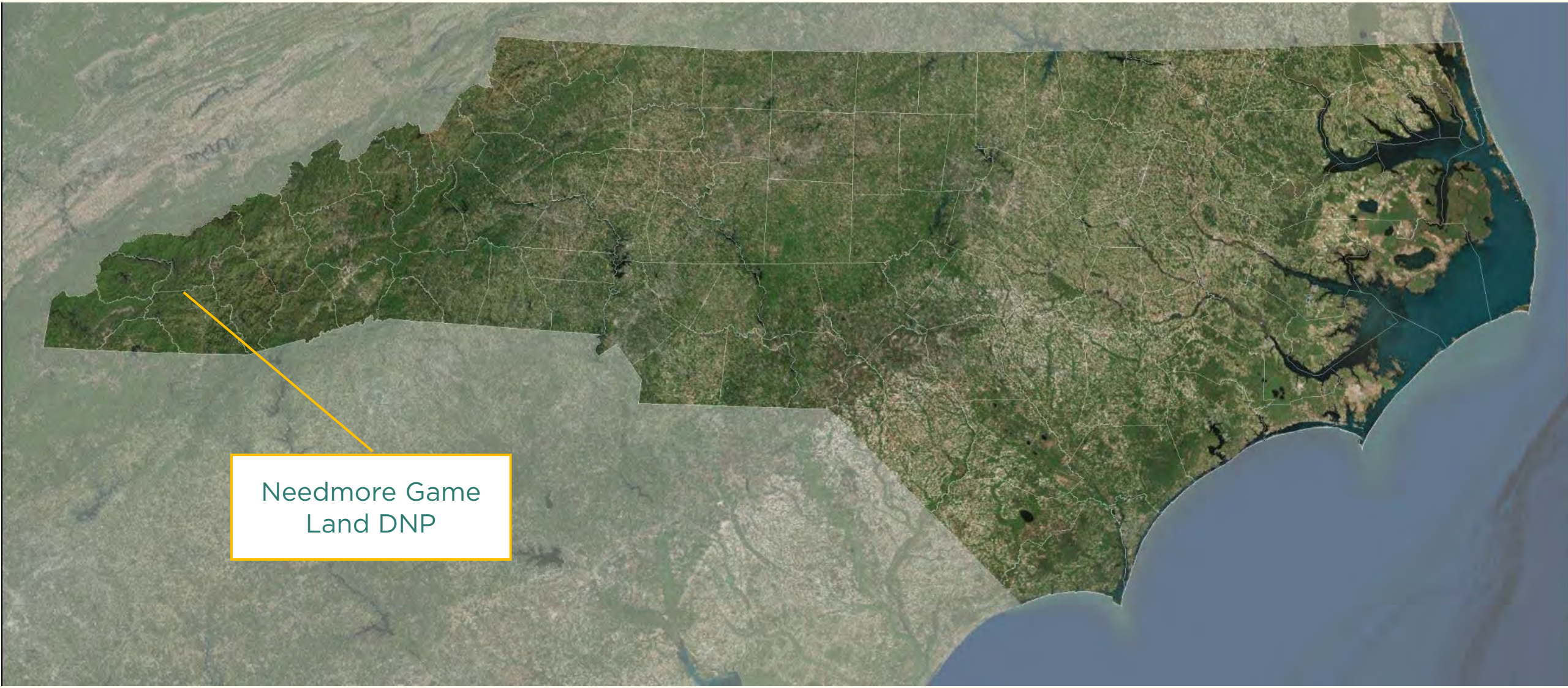
- NCDOT will implement applicable standard BMPs during construction
- Remediation of the Ground To Natural Conditions, including:
  - Natural topography
  - Revegetation with native grass seed mix (species to receive prior approval from PCP); and,
  - Replacement of the native soil where possible (no replacement soil from off-site).
- NCDOT will make efforts to avoid introducing invasive species.

Needmore Game Land Dedicated Nature Preserve



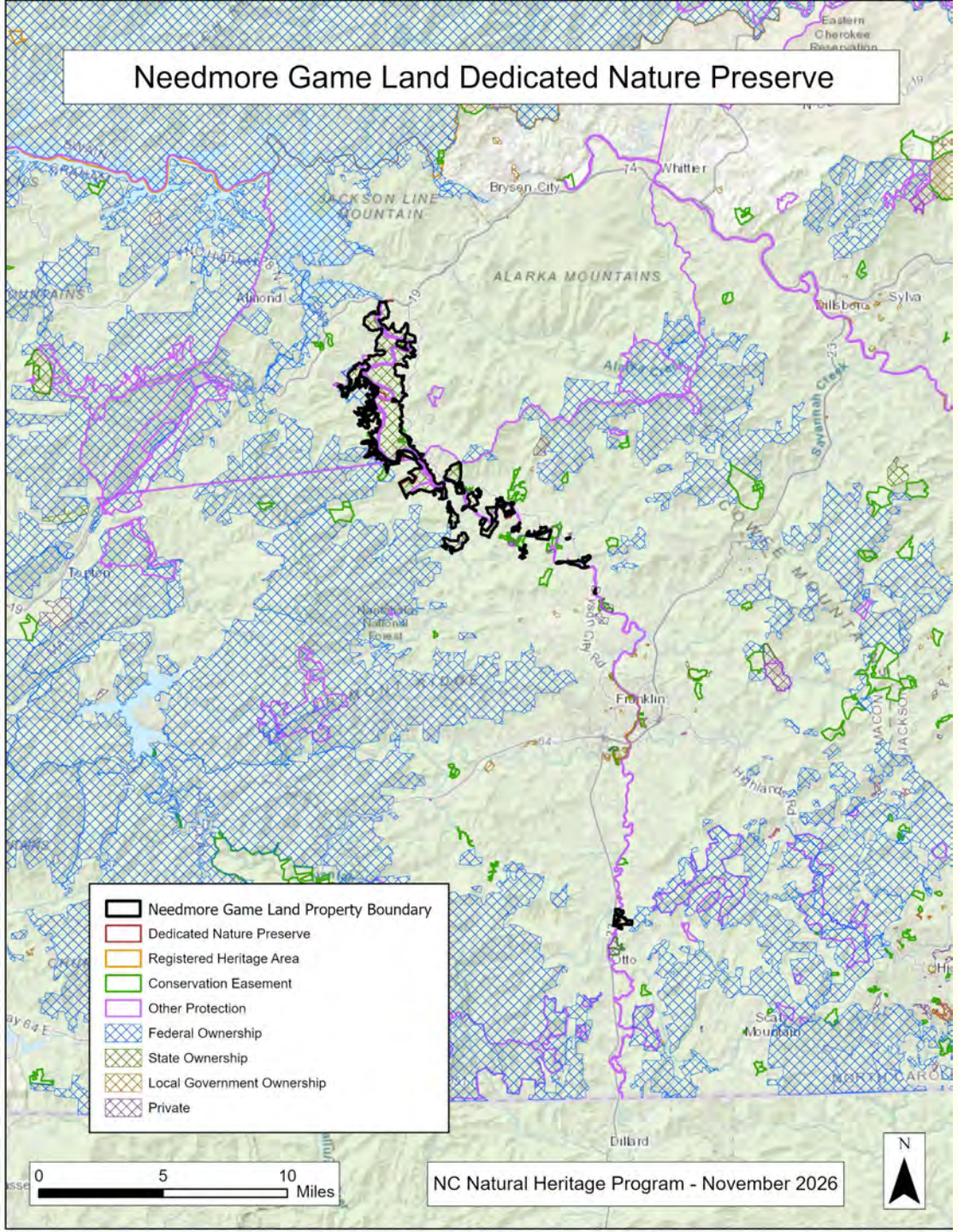
Photo courtesy of NC Land and Water Fund Presentation to Board

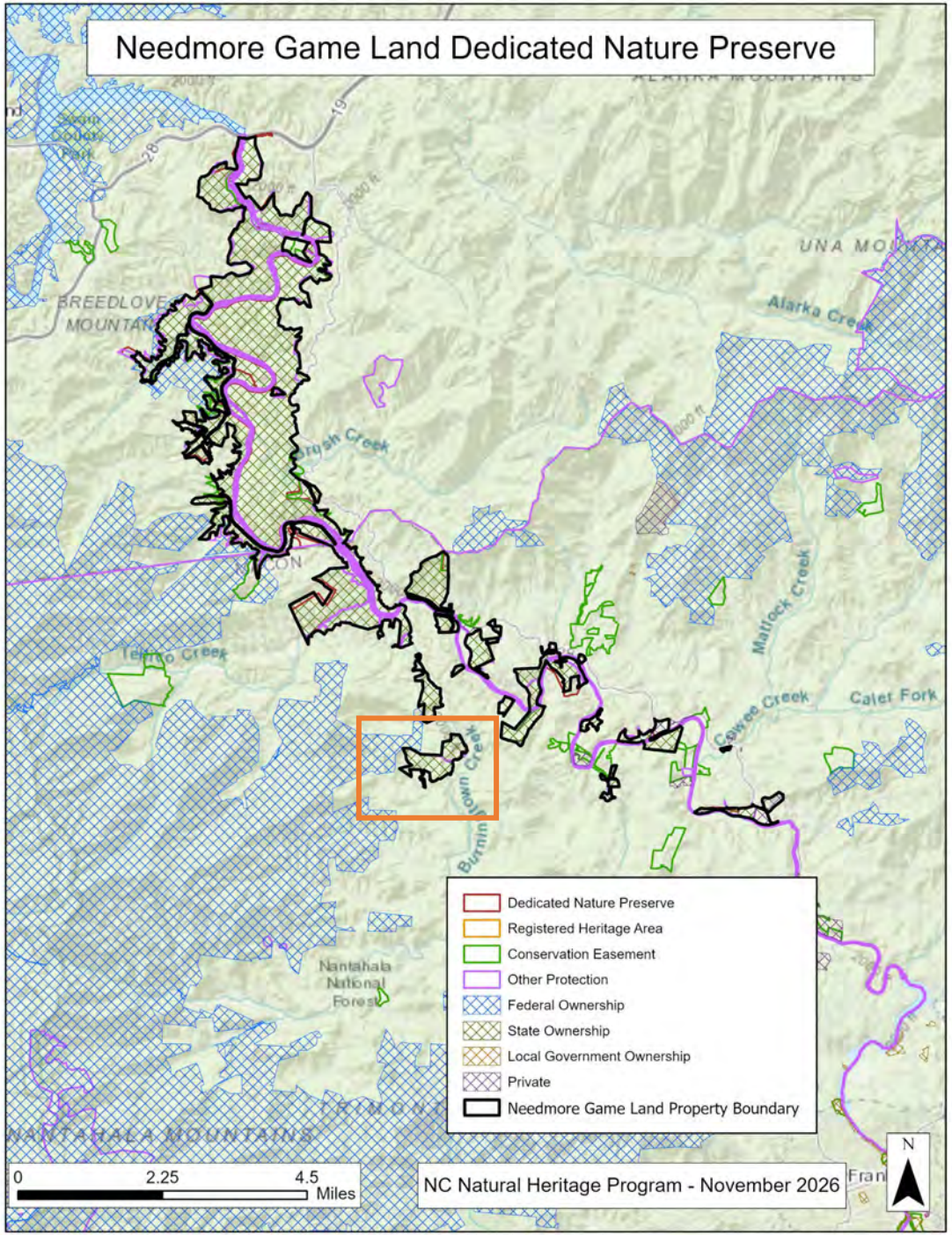
Needmore Game Land Dedicated Nature Preserve



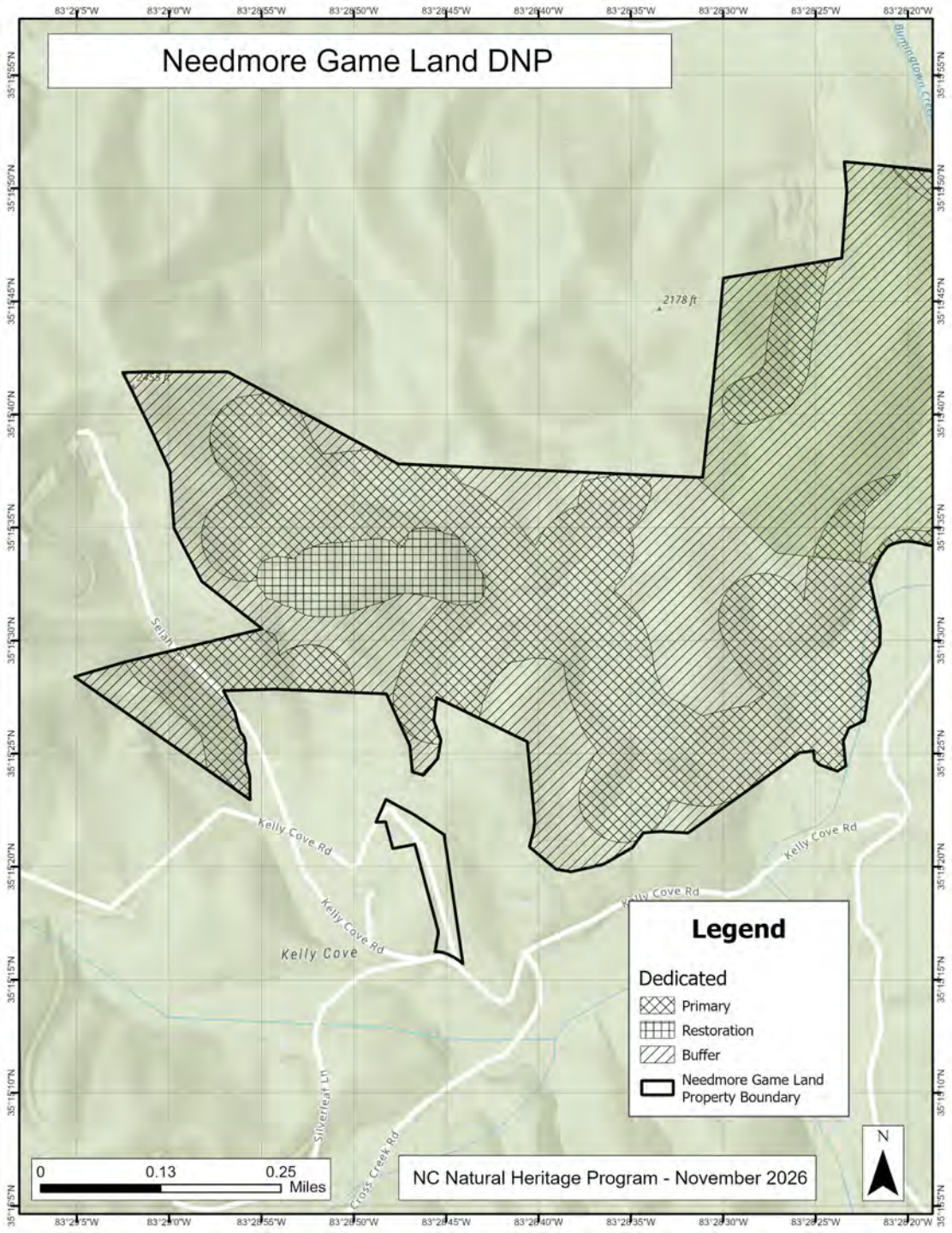
Macon County

Mikisuki-Hitchiti, Cherokee


Needmore Game Land Dedicated Nature Preserve
Needmore Game Land Property Boundary
Dedicated Nature Preserve
Registered Heritage Area
Conservation Easement
Other Protection
Federal Ownership
State Ownership
Local Government Ownership
Private
0
5
10
Miles
NC Natural Heritage Program - November 2026
N
Brysen City
Whittier
Almond
Franklin
Otto
Dillard
Sylva
Tuckasegee
Highlands
Scaly Mountain
ALARKA MOUNTAINS
JACKSON LINE MOUNTAIN
CROWE MOUNTAIN
Eastern Cherokee Reservation


Needmore Game Land Dedicated Nature Preserve
Dedicated Nature Preserve
Registered Heritage Area
Conservation Easement
Other Protection
Federal Ownership
State Ownership
Local Government Ownership
Private
Needmore Game Land Property Boundary
0
2.25
4.5
Miles
NC Natural Heritage Program - November 2026
N
Alarka Creek
Tellico Creek
Calet Fork
Nantahala National Forest
NANTAHALA MOUNTAINS


Needmore Game Land DNP
83°29'5"W
83°29'0"W
83°28'55"W
83°28'50"W
83°28'45"W
83°28'40"W
83°28'35"W
83°28'30"W
83°28'25"W
83°28'20"W
35°15'55"N
35°15'50"N
35°15'45"N
35°15'40"N
35°15'35"N
35°15'30"N
35°15'25"N
35°15'20"N
35°15'15"N
35°15'10"N
35°15'5"N
Property Added to Dedication
0
0.13
0.25
Miles
NC Natural Heritage Program - November 2026
N


Needmore Game Land DNP
2178 ft
2458 ft
Kelly Cove Rd
Kelly Cove Rd
Kelly Cove Rd
Kelly Cove Rd
Kelly Cove
Silverleaf Ln
Cross Creek Rd
Legend
Dedicated
Primary
Restoration
Buffer
Needmore Game Land Property Boundary
0
0.13
0.25
Miles
N
NC Natural Heritage Program - November 2026

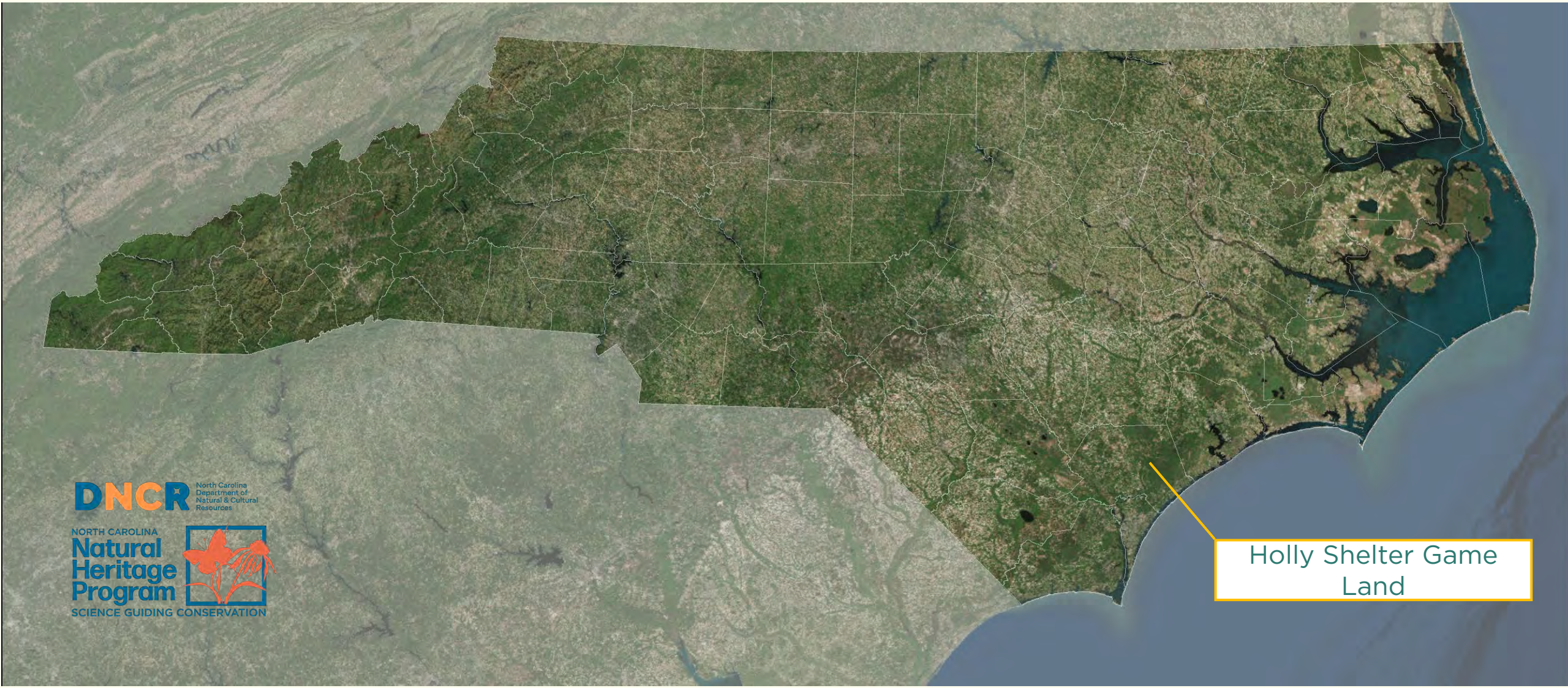
Amendment to add tract and fulfill terms of NCLWF grant agreement 2022-041 (Kelly Cove)

- Adds 97 acres to DNP
  - 64 acres Primary, including 6 acres Restoration
  - 33 acres Buffer
- Total DNP 4,581 acres:
  - Primary Area 2,422 acres, including 6 acres Restoration
  - Buffer Area 2,159 acres

Element Occurrences include:

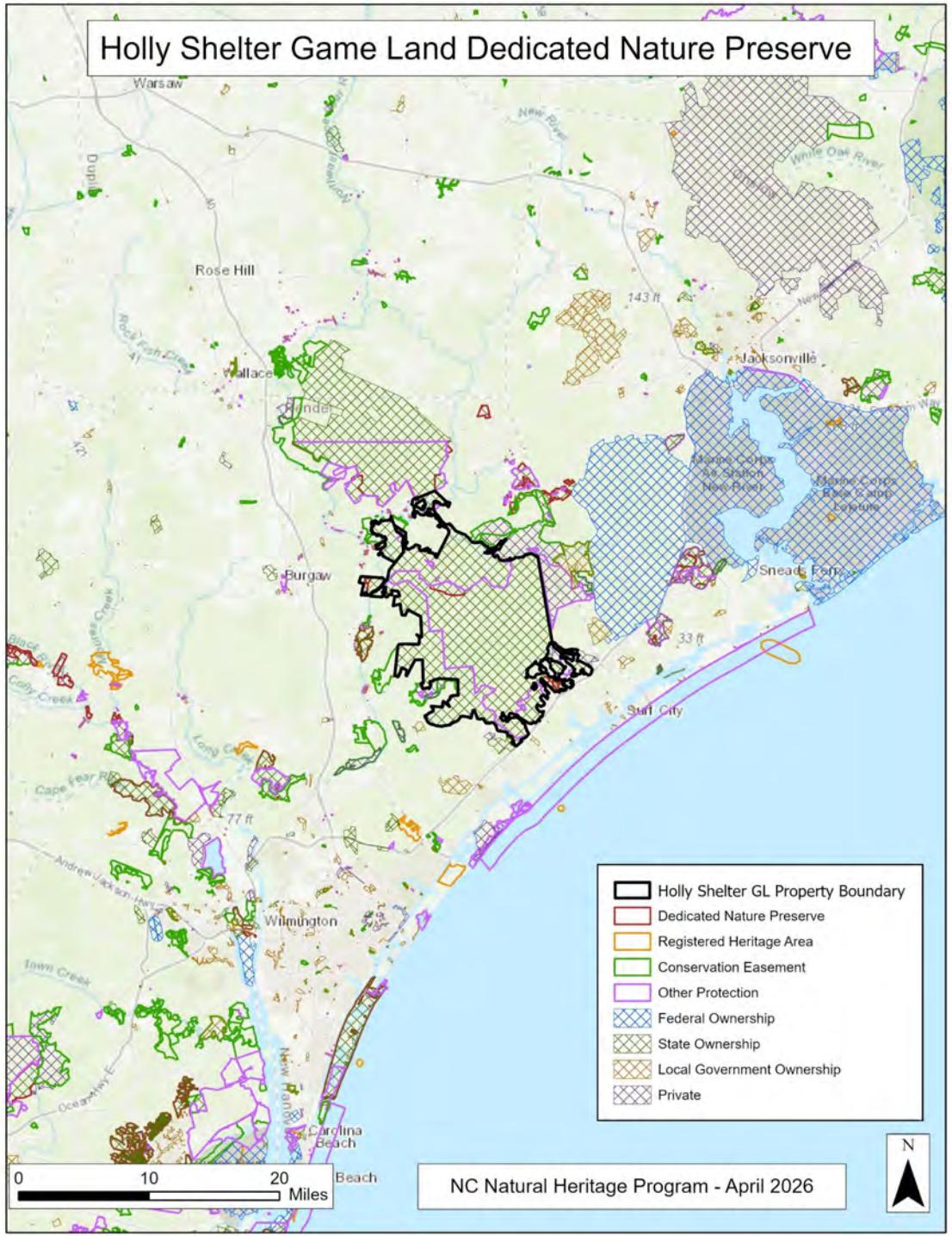
  - Montane Oak--Hickory Forest (Low Dry Subtype) – S2/G2
- Riparian zones along Little Tennessee River Aquatic Habitat -- R1/C1
  - Element Occurrences in this stretch include:
    - Appalachian Elktoe (Alasmidonta raveneliana) – S1G1
    - Spotfin Chub (Erimonax monachus) – S1G2
    - Sicklefin Redhorse (Moxostoma ugidatli) – S2G1
    - Smoky Dace (Clinostomus sp. 1) – S2G5
    - Eastern Hellbender (Cryptobranchus alleganiensis alleganiensis) – S3G2
    - Little Tennessee Crayfish (Cambarus georgiae) – S2G3

Holly Shelter Game Land Dedicated Nature Preserve (pending review)



Pender County

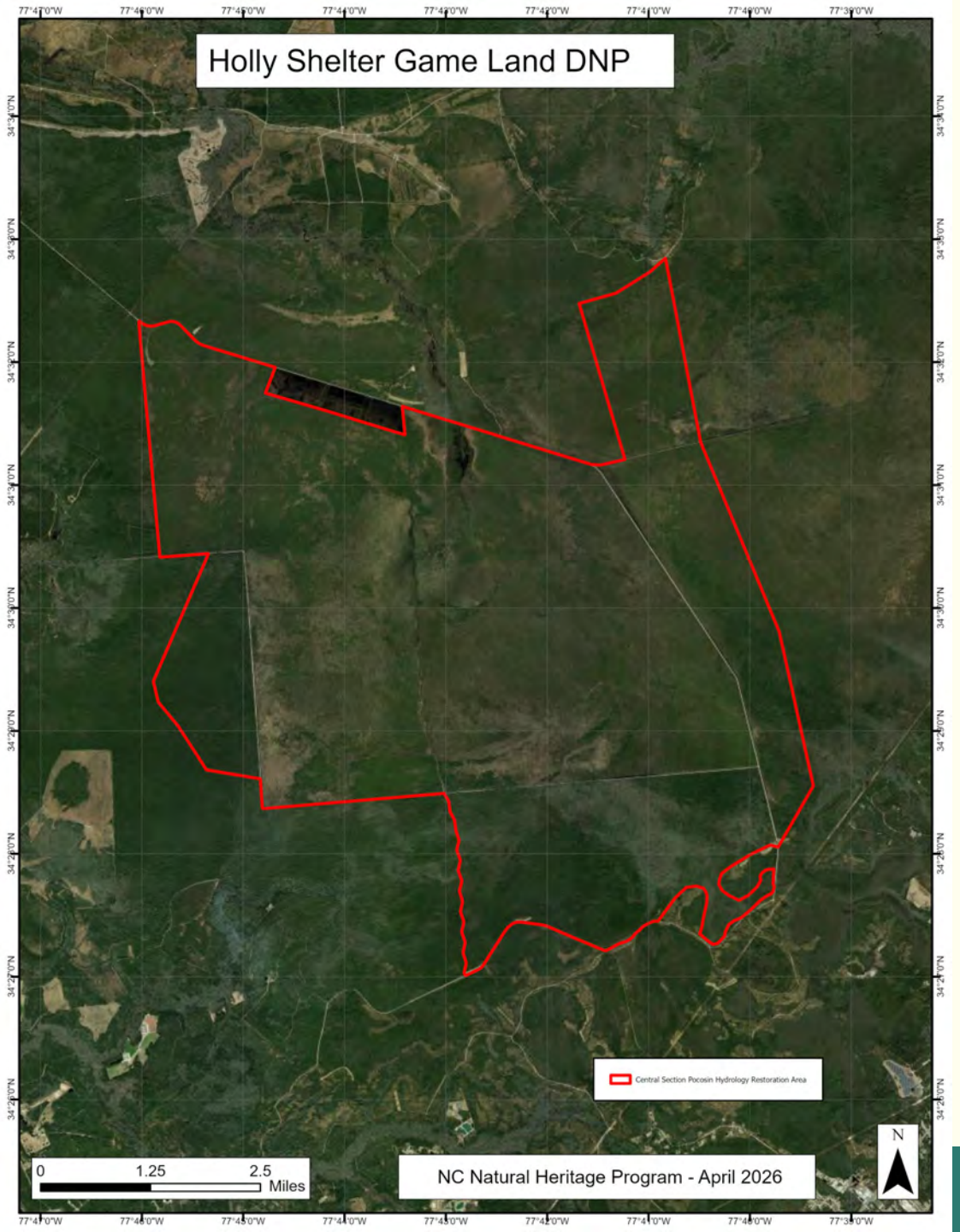
Lumbee, Manu (Catawba), Waccamaw, Coree



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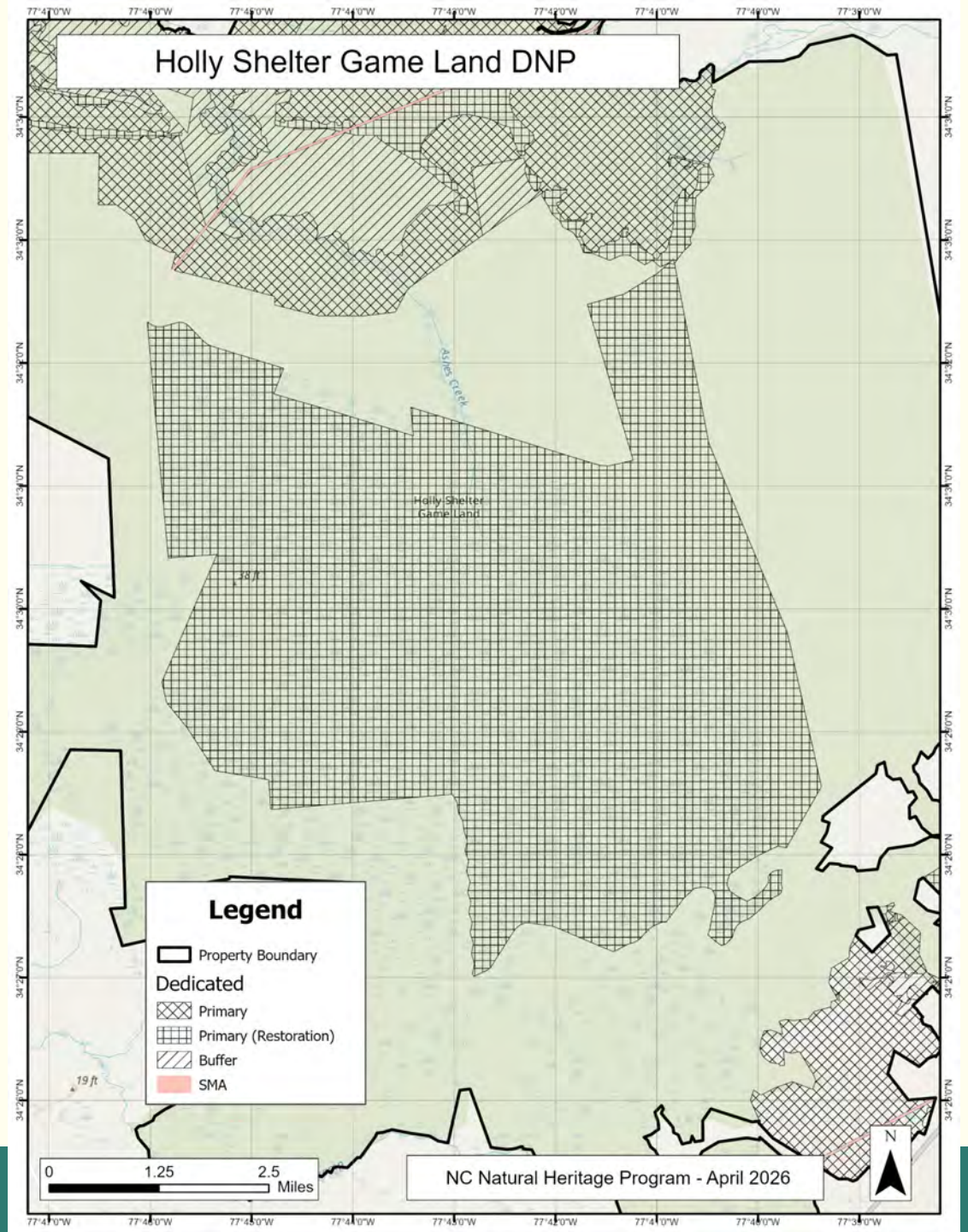


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Map reviewed at May 2026 Meeting



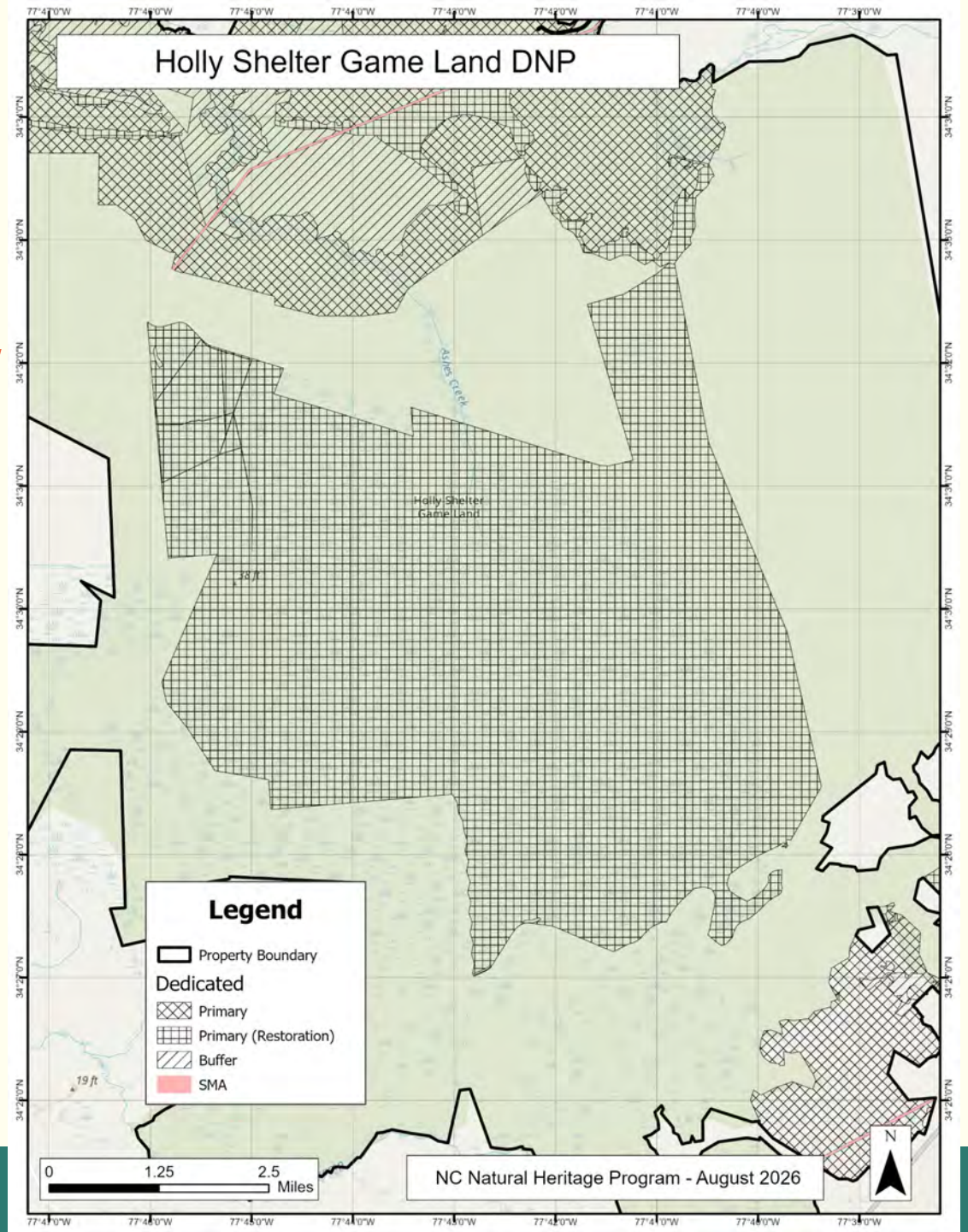
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Updated Map

- *20 acres excluded*



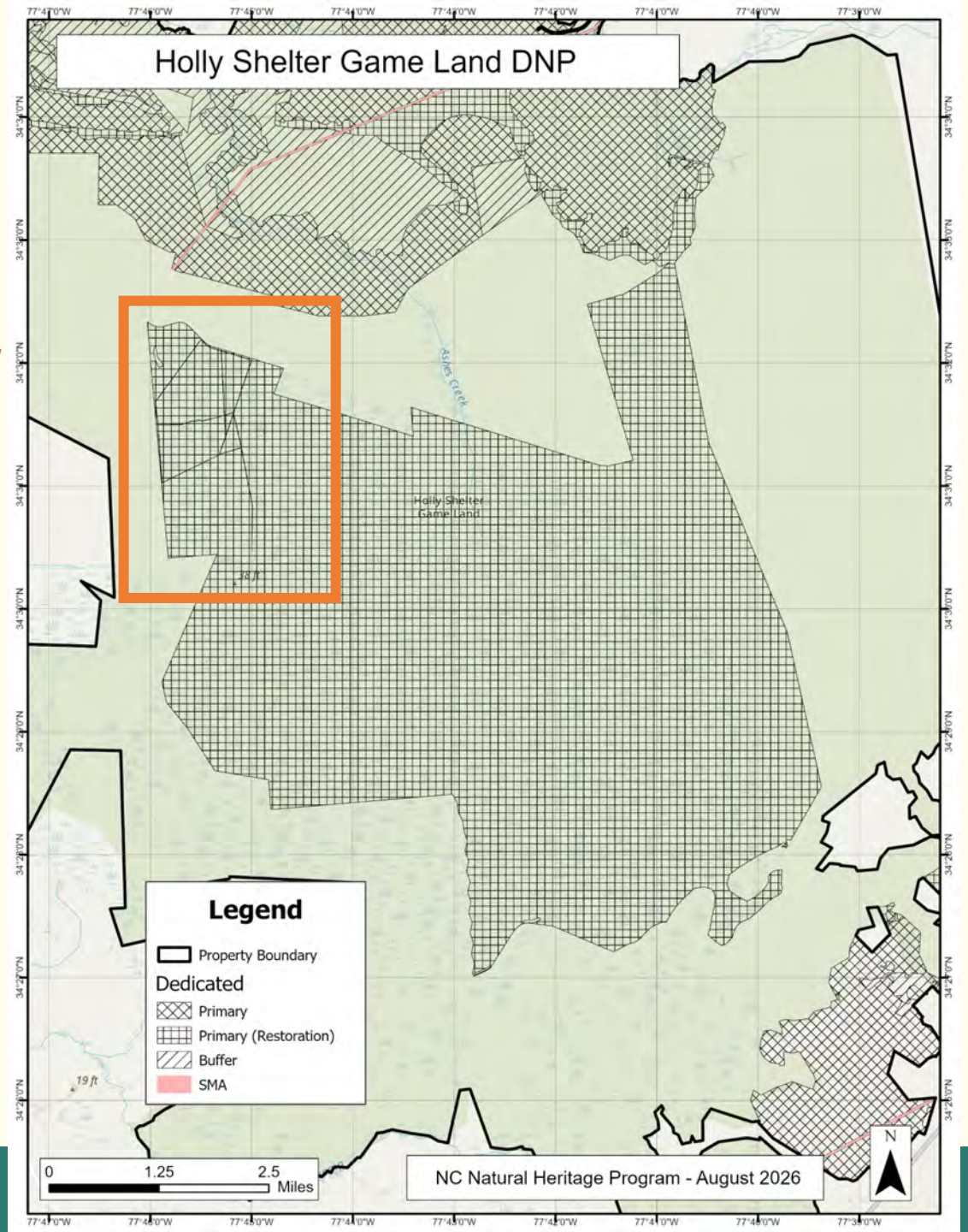
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Updated Map

- *20 acres excluded*



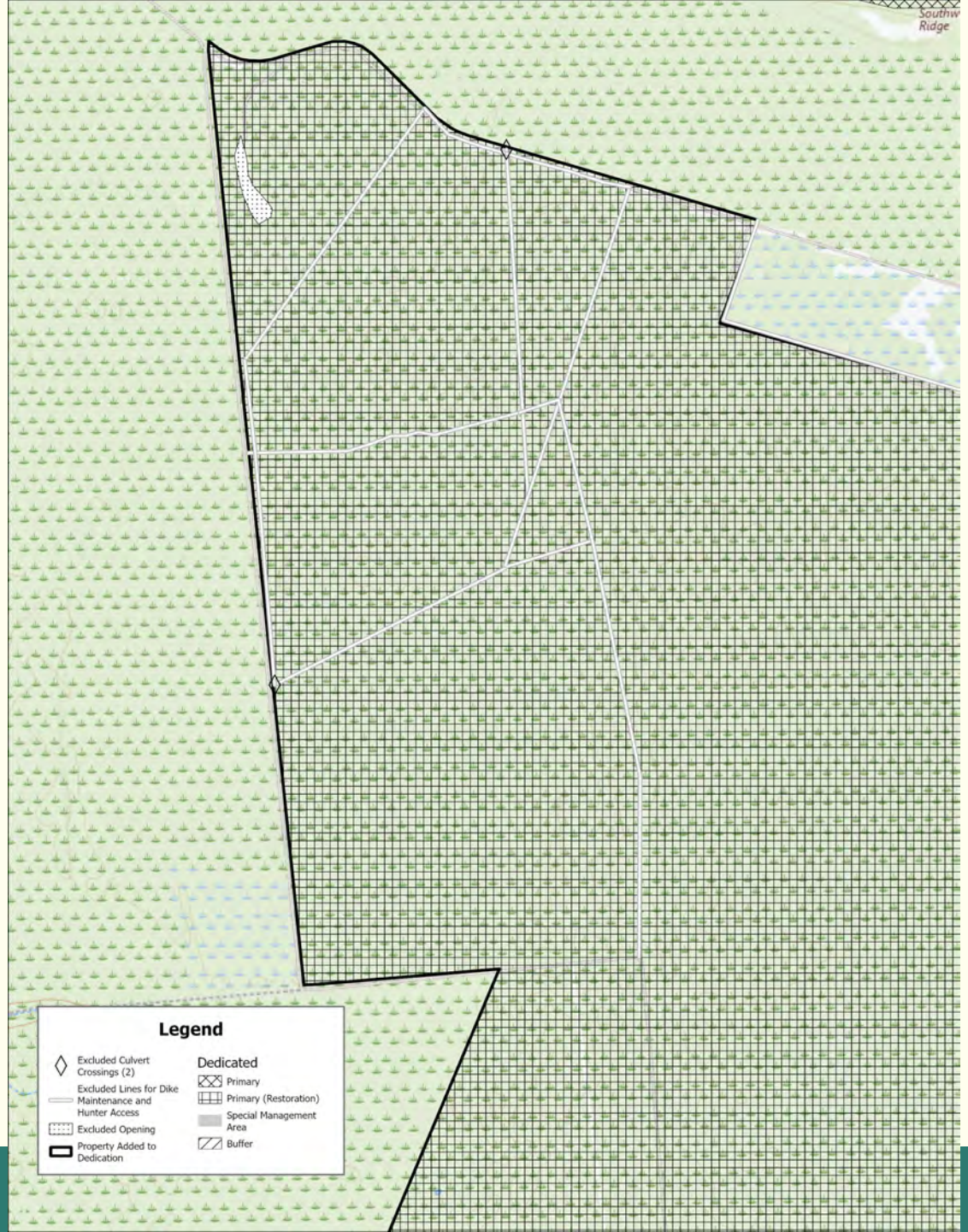
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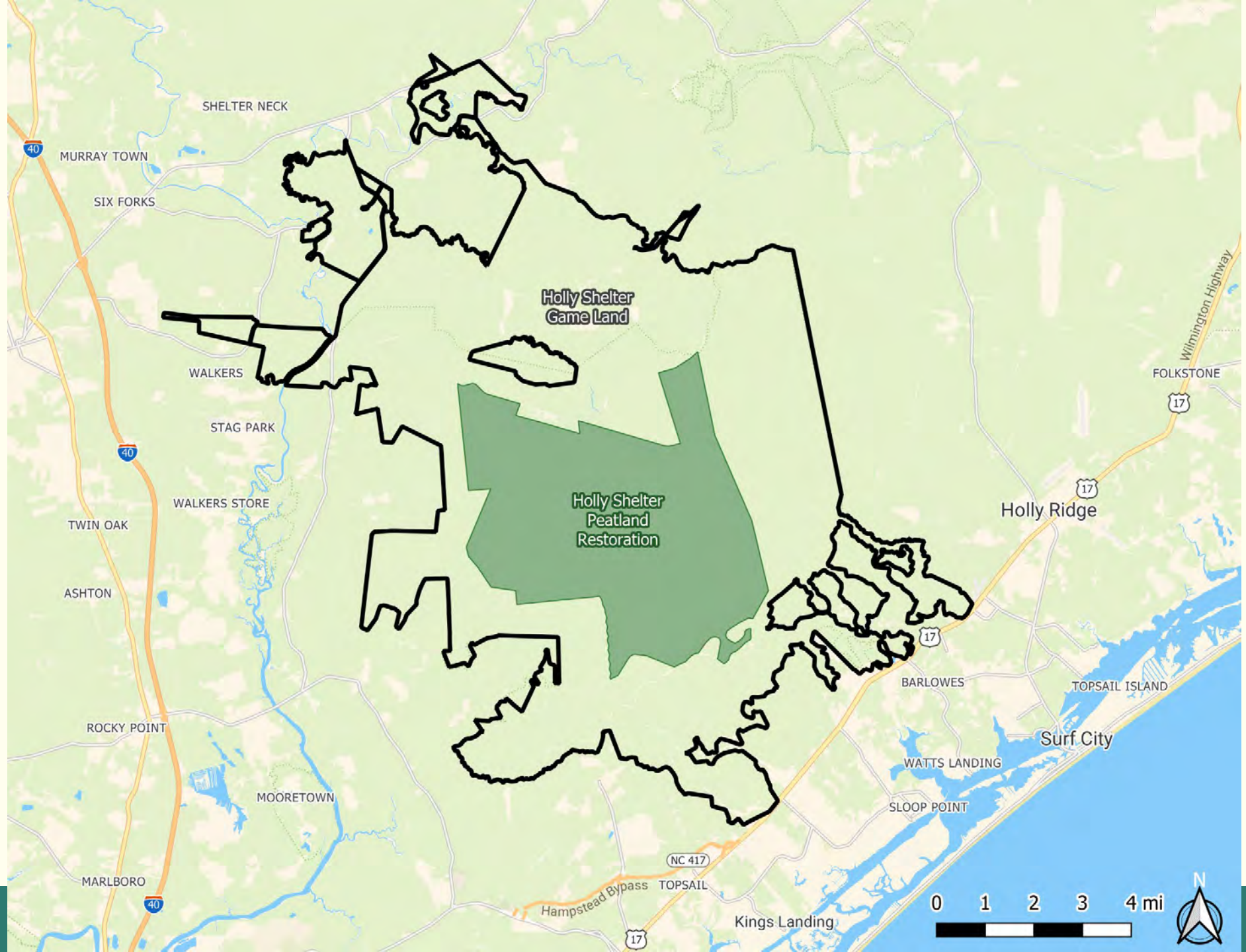
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Detail of Excluded Areas

- *11-acre opening*
- *Roller-chopped lines for fire suppression and hunter access*
  - *~30,000 linear feet*





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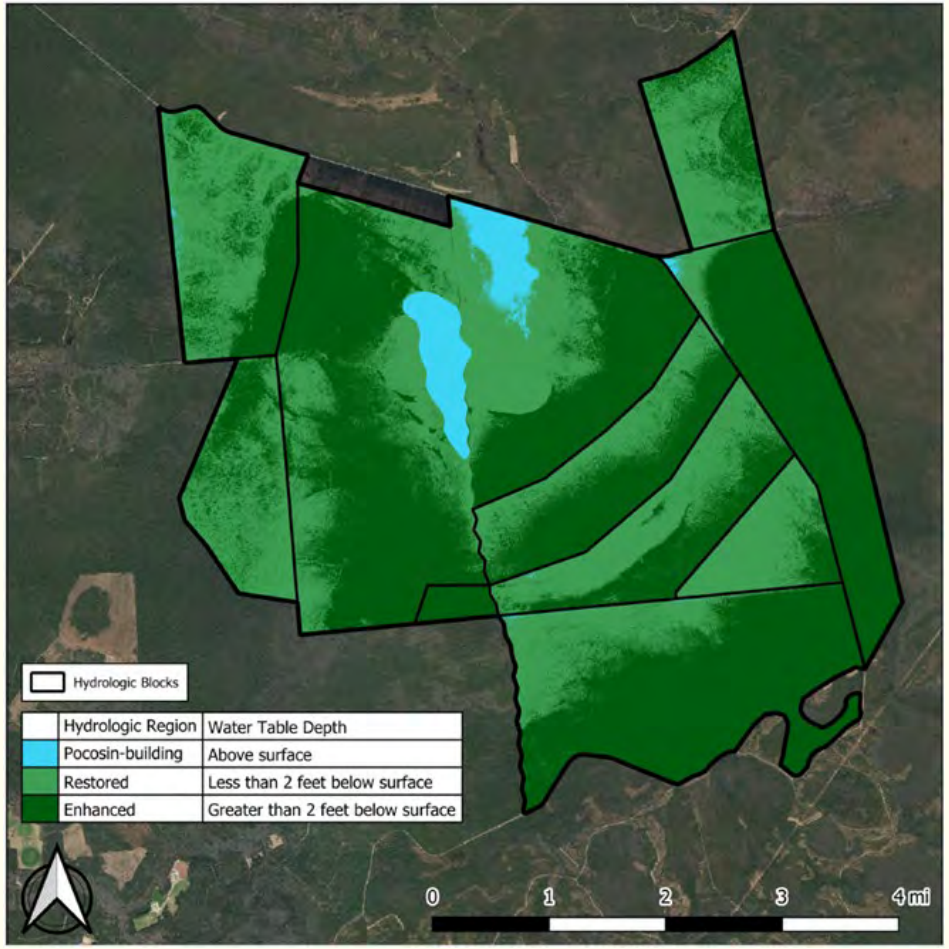
Holly Shelter Game Land Dedicated Nature Preserve (pending review)

Amendment to add tract associated with Climate Pollution Reduction Grant

- Adds 15,780 ~~15,800~~ acres to DNP, all Primary (Restoration)
- Total DNP 32,742 ~~32,761~~ acres:
  - Primary Area 26,352 ~~26,371~~ acres
    - Including 16,775 ~~16,795~~ acres Primary (Restoration)
  - Buffer Area 6,390 acres
- These acre figures are updated since May 2026 NHAC review
- Revised Articles of Dedication clarifying management plan expectations

- Amendment associated with funding for Holly Shelter Peatland Restoration Project
  - 25-year Memorandum of Understanding for following the Hydrologic Restoration Plan

- Portions of Holly Shelter Game Land and Vicinity natural area – R1/C1



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Registry

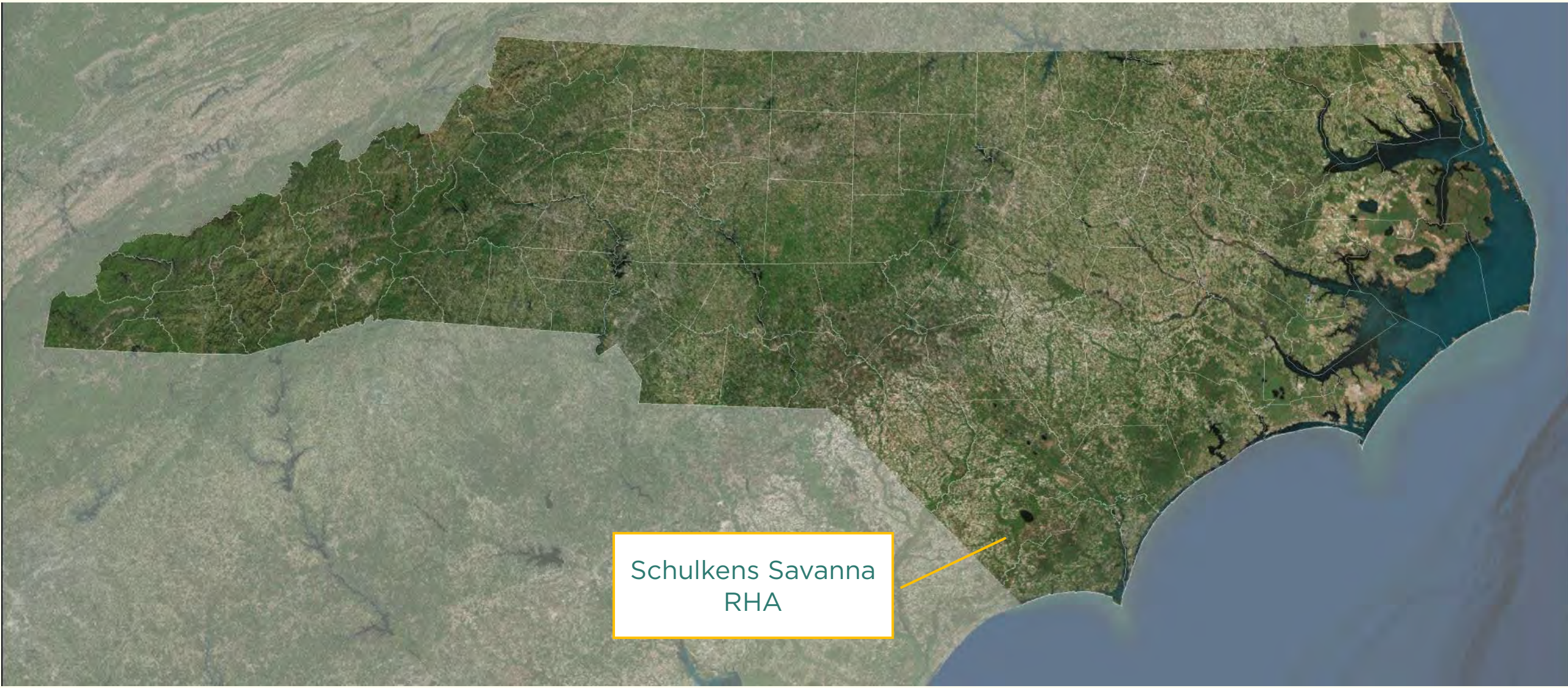
- Recognizes a natural area for its natural heritage resource values
- Voluntary agreement to protect and manage the natural area
- Agreement between Secretary and landowner
  - Can be rescinded by either party
- Management recommendations provided by NHP

Schulkens Savanna Registered Heritage Area



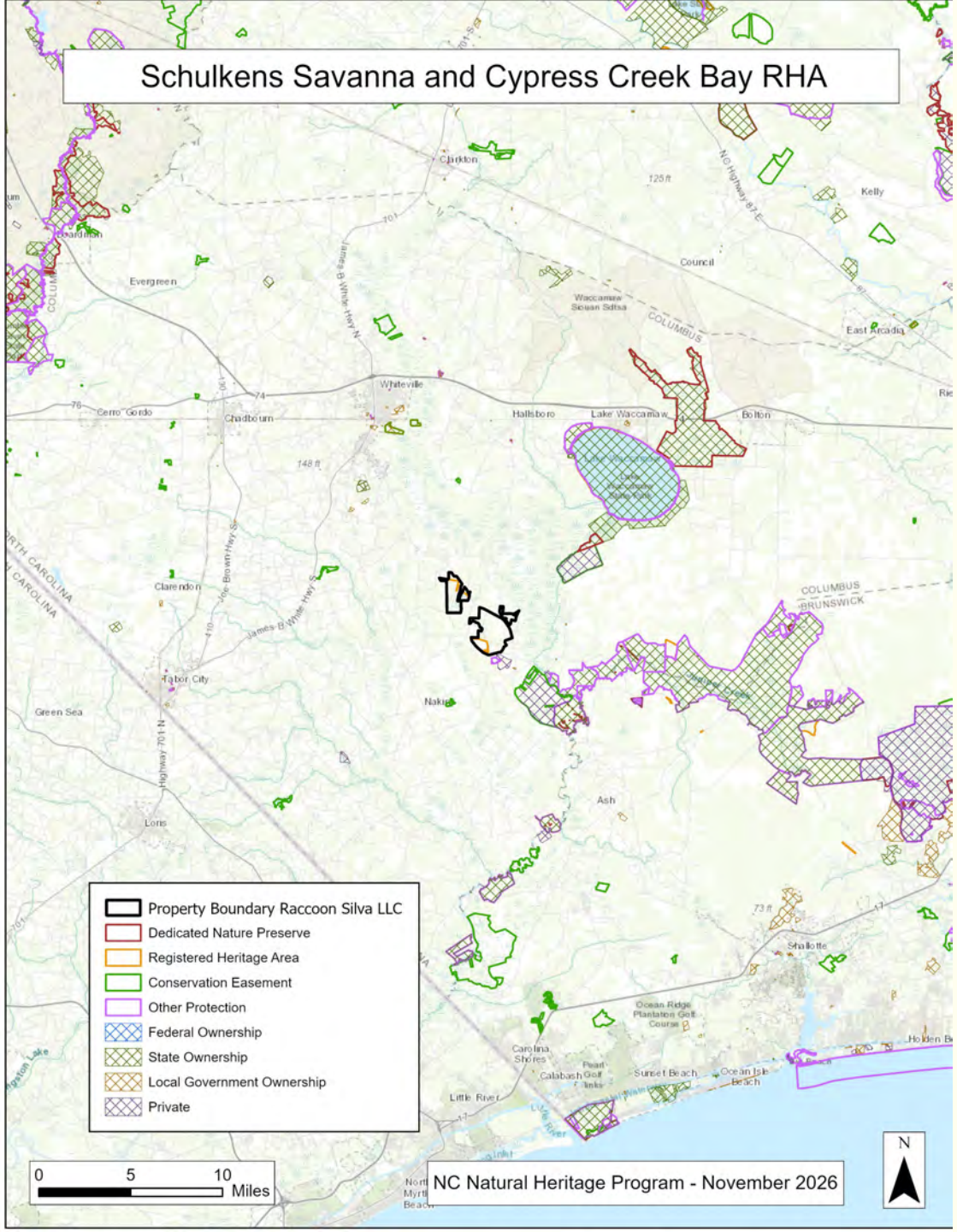
Jess Schaner conducting Wire-leaf Dropseed (*Sporobolus teretifolius*) survey at Schulkens Savanna, 18 June 2021

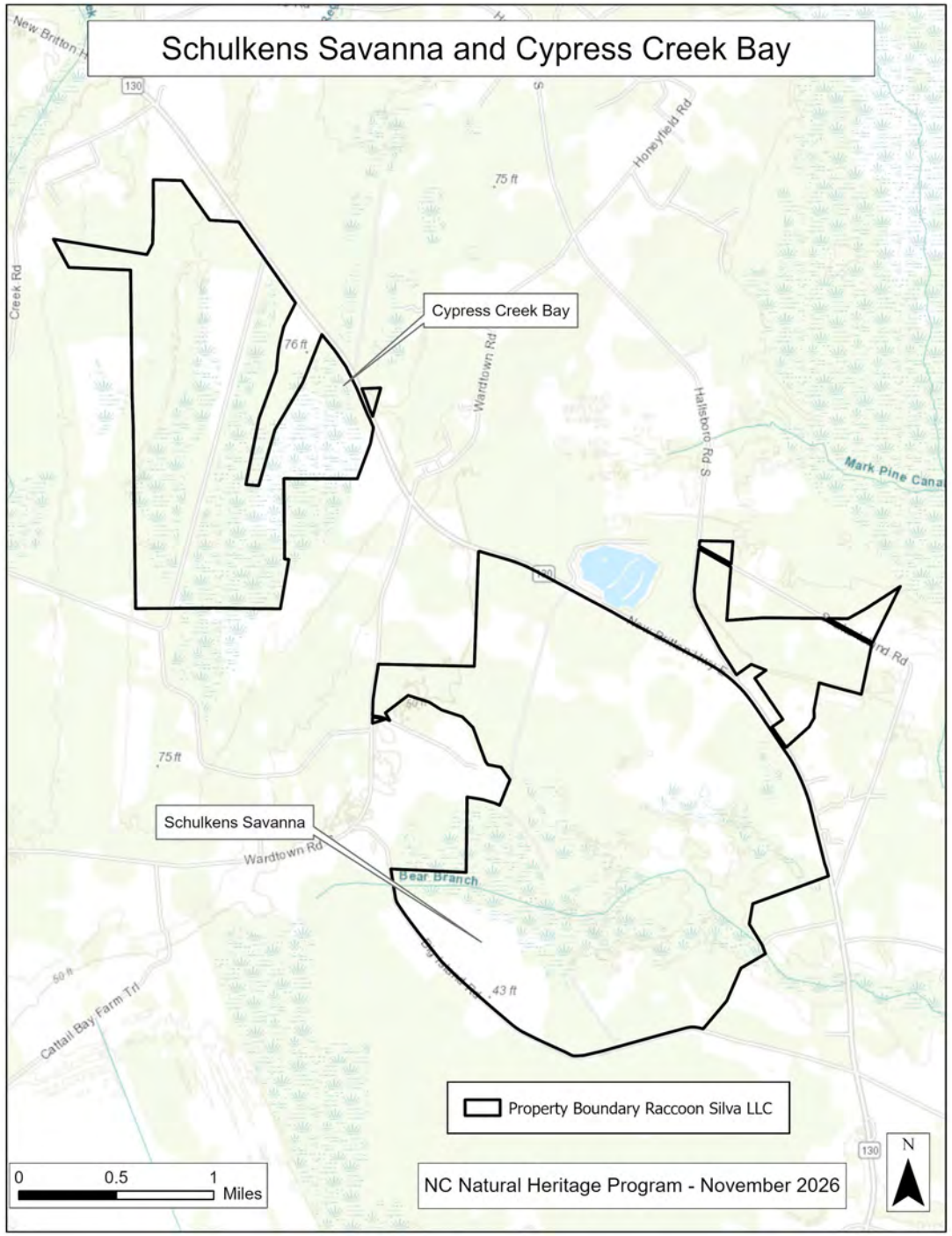
Schulkens Savanna Registered Heritage Area



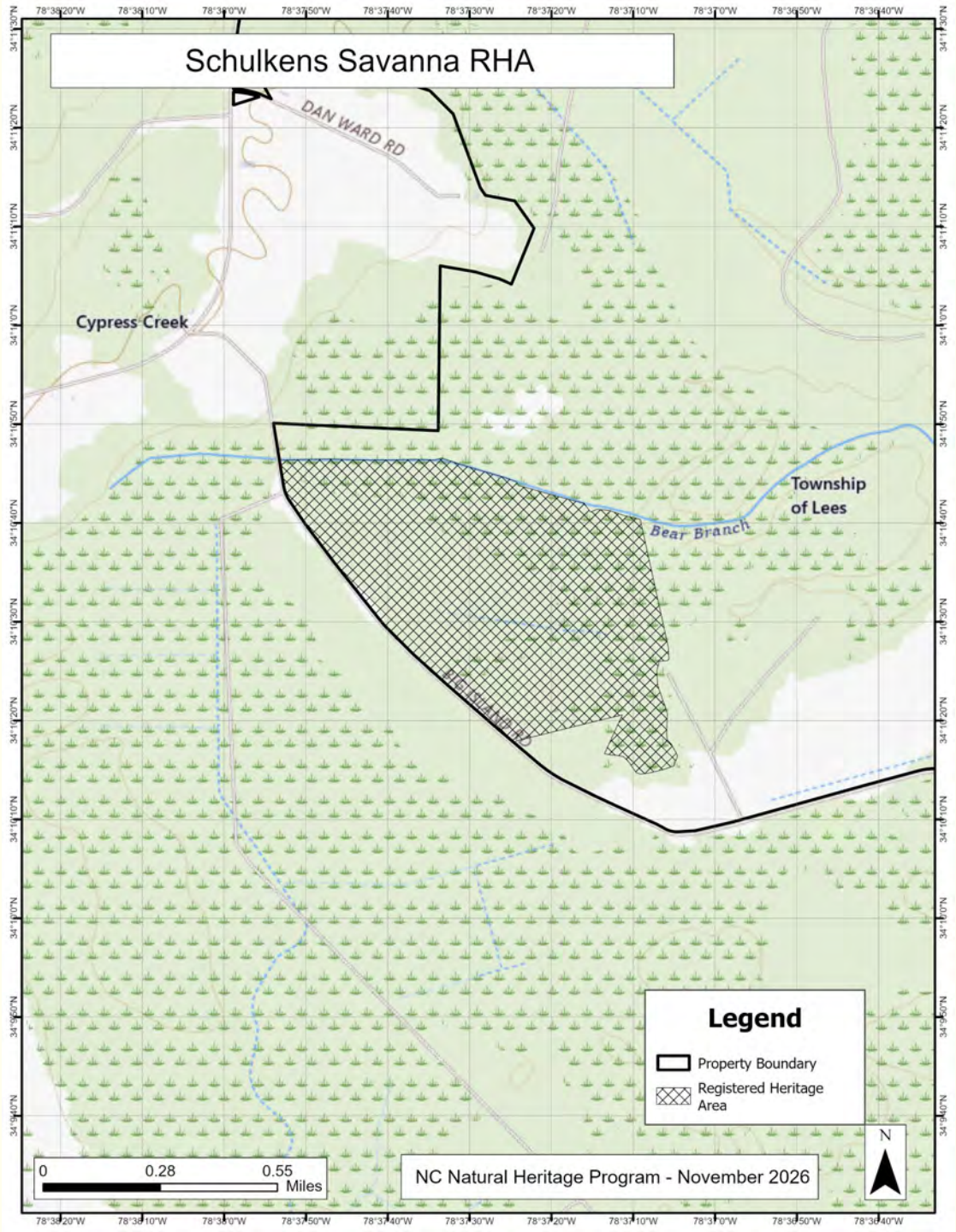
Columbus County

Cape Fear, Lumbee


Schulkens Savanna and Cypress Creek Bay RHA
Property Boundary Raccoon Silva LLC
Dedicated Nature Preserve
Registered Heritage Area
Conservation Easement
Other Protection
Federal Ownership
State Ownership
Local Government Ownership
Private
0 5 10 Miles
NC Natural Heritage Program - November 2026
N
Clarkton
Kelly
Council
Evergreen
Whiteville
Cerro Gordo
Chadbourn
Hallsboro
Lake Waccamaw
Bolton
East Arcadia
Clarendon
Tabor City
Green Sea
Naki
Ash
Loris
Shallotte
Carolina Shores
Calabash
Sunset Beach
Ocean Isle Beach
Little River
COLUMBUS
BRUNSWICK
James B White Hwy N
James B White Hwy S
Joe Brown Hwy S
Highway 701 N
NC Highway 87 E


Schulkens Savanna and Cypress Creek Bay
Cypress Creek Bay
Schulkens Savanna
Property Boundary Raccoon Silva LLC
0 0.5 1 Miles
NC Natural Heritage Program - November 2026
N
Honeyfield Rd
Wardtown Rd
Hallsboro Rd S
Bear Branch
Cattail Bay Farm Trl
Creek Rd
75 ft
76 ft
43 ft
130


Schulkens Savanna RHA
78°38'20"W
78°38'10"W
78°38'0"W
78°37'50"W
78°37'40"W
78°37'30"W
78°37'20"W
78°37'10"W
78°37'0"W
78°36'50"W
78°36'40"W
34°11'30"N
34°11'20"N
34°11'10"N
34°11'0"N
34°10'50"N
34°10'40"N
34°10'30"N
34°10'20"N
34°10'10"N
34°10'0"N
34°9'50"N
34°9'40"N
Property Boundary Raccoon Silva LLC
0
0.28
0.55
Miles
NC Natural Heritage Program - November 2026
N


Schulkens Savanna RHA
DAN WARD RD
Cypress Creek
Township of Lees
Bear Branch
BIG BRANCH RD
Legend
Property Boundary
Registered Heritage Area
0
0.28
0.55
Miles
N
NC Natural Heritage Program - November 2026

Restoration opportunities are abundant at fire-suppressed Schulkens Savanna
-- Photo from 18 June 2021



Schulkens Savanna Registered Heritage Area

Voluntary Registry Agreement
178 acres

Protects much of Schulkens Savanna natural area – R1/C2

Element Occurrences include:

- Very Wet Loamy Pine Savanna – S1/G1
- Carolina grass-of-Parnassus (Parnassia caroliniana) – S2/G3
- Hooded pitcher plant (Sarracenia minor var. minor) – S1/G4
- Wire-leaf dropseed (Sporobolus teretifolius) – S1/G2
- Venus flytrap (Dionaea muscipula) - S2/G2



Venus flytrap (Dionaea muscipula) at Schulkens Savanna, 18 June 2021

- Pineland plantain (Plantago sparsiflora) – S1/G3 and many others not seen since 1994

Cypress Creek Bay Registered Heritage Area

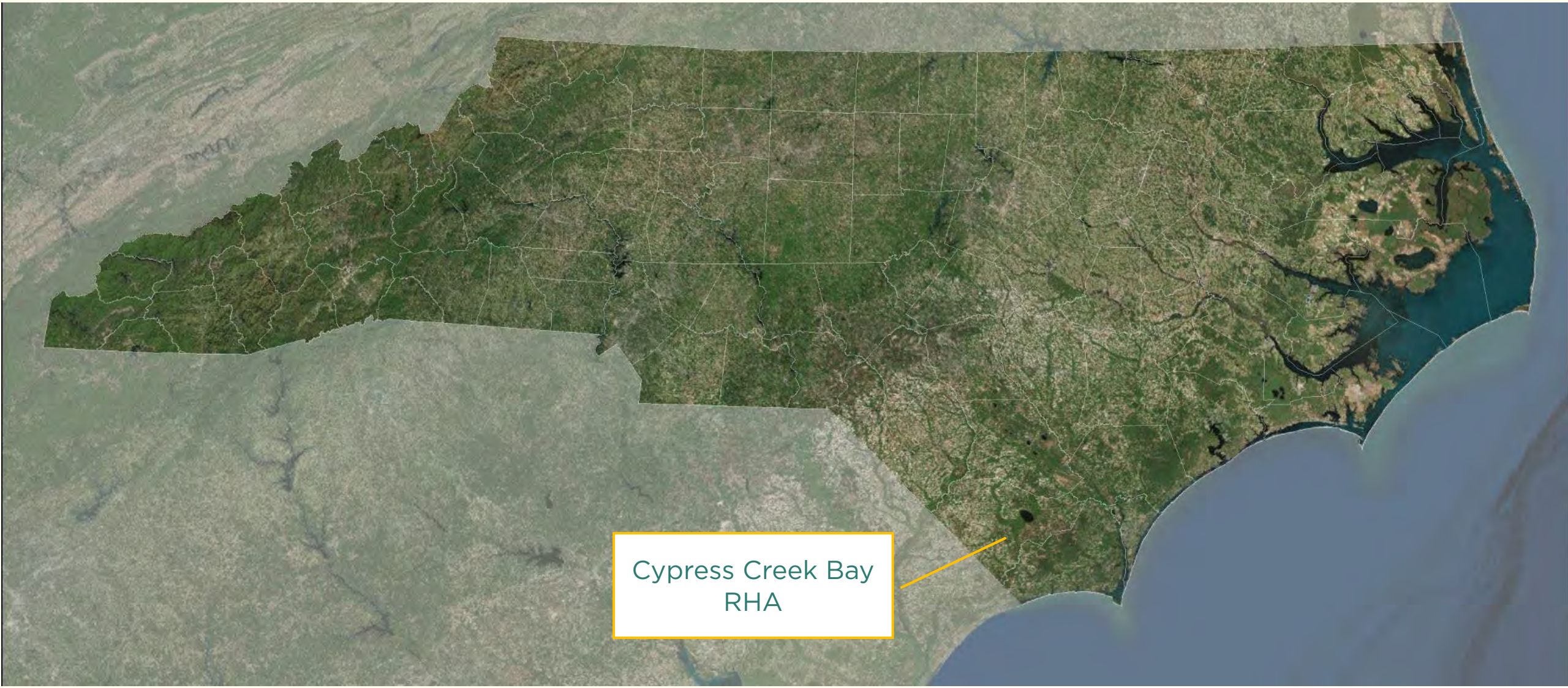


Hooded Pitcherplant (Sarracenia minor var minor), Cypress Creek Bay 17 June 2015, Scott Pohlman



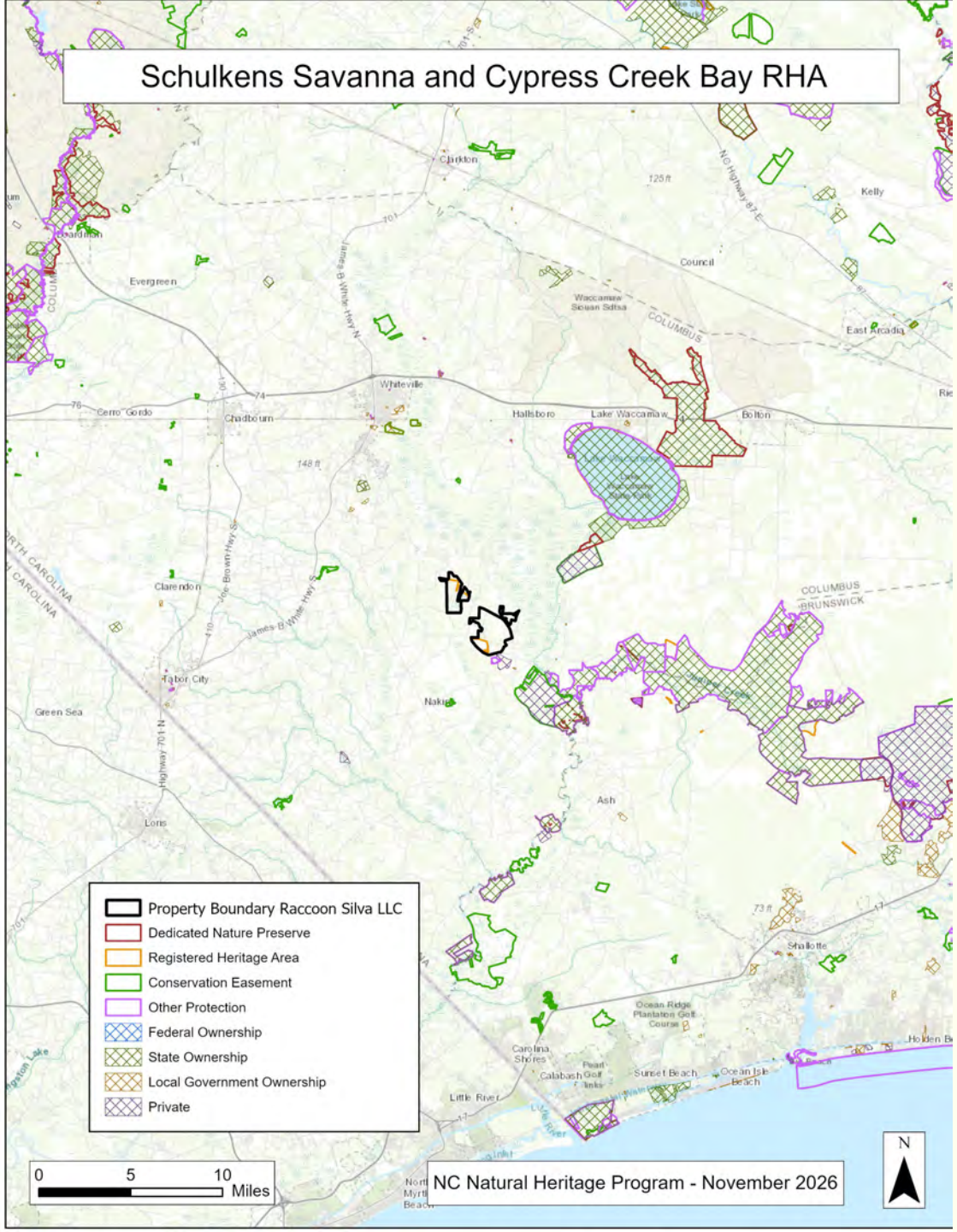
Threadleaf Sundew (Drosera filiformis), Cypress Creek Bay, 30 April 2015, Scott Pohlman

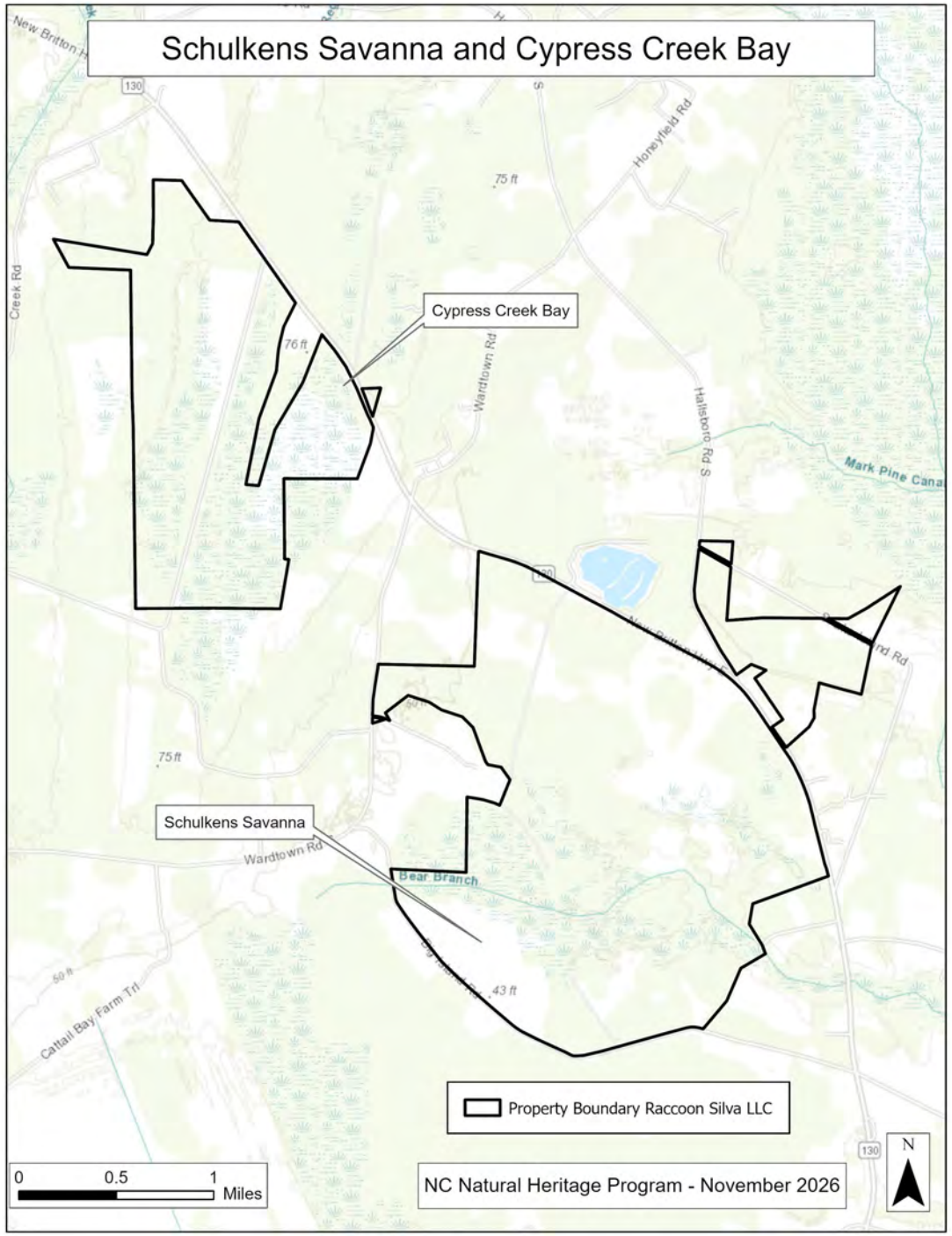
Cypress Creek Bay Registered Heritage Area

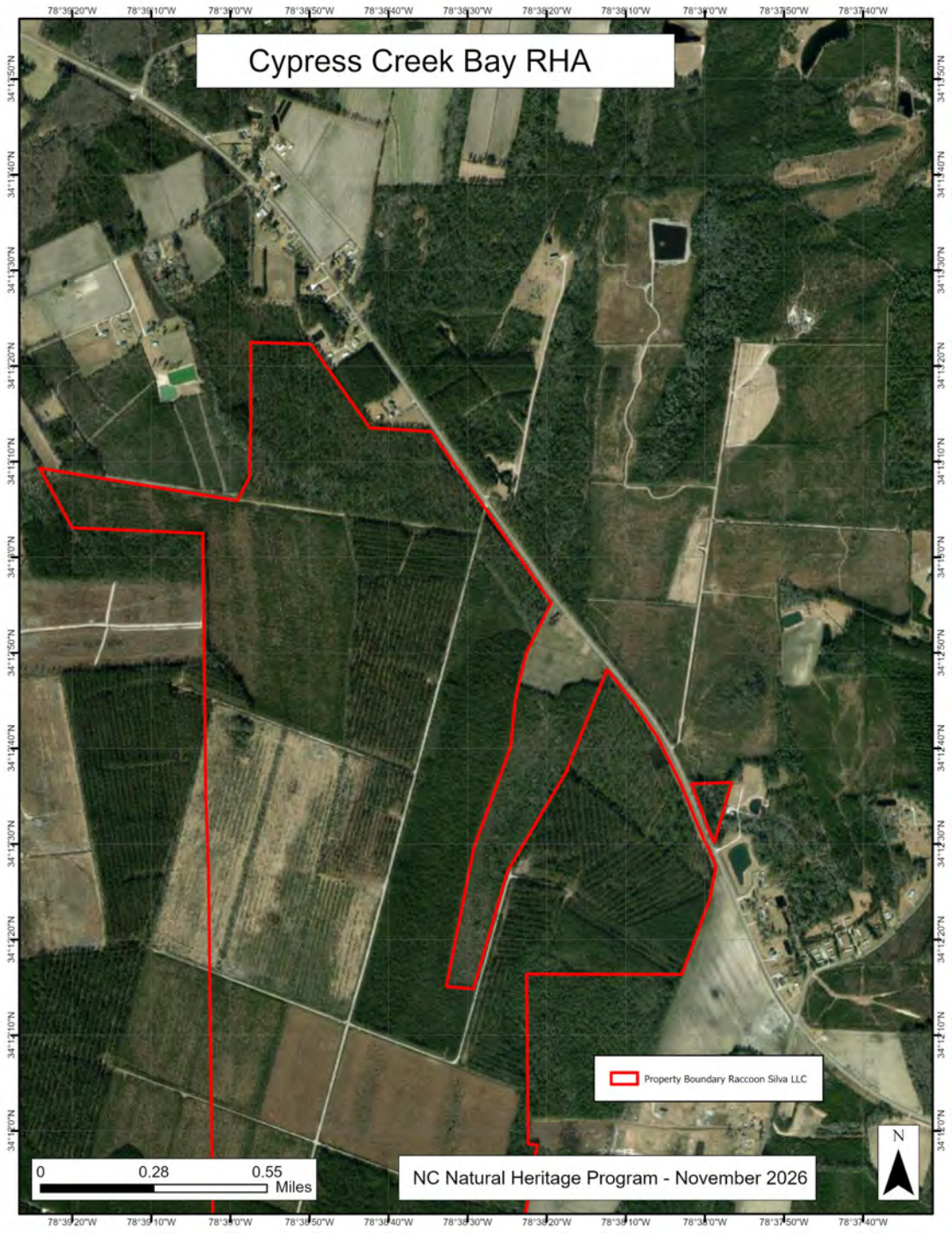


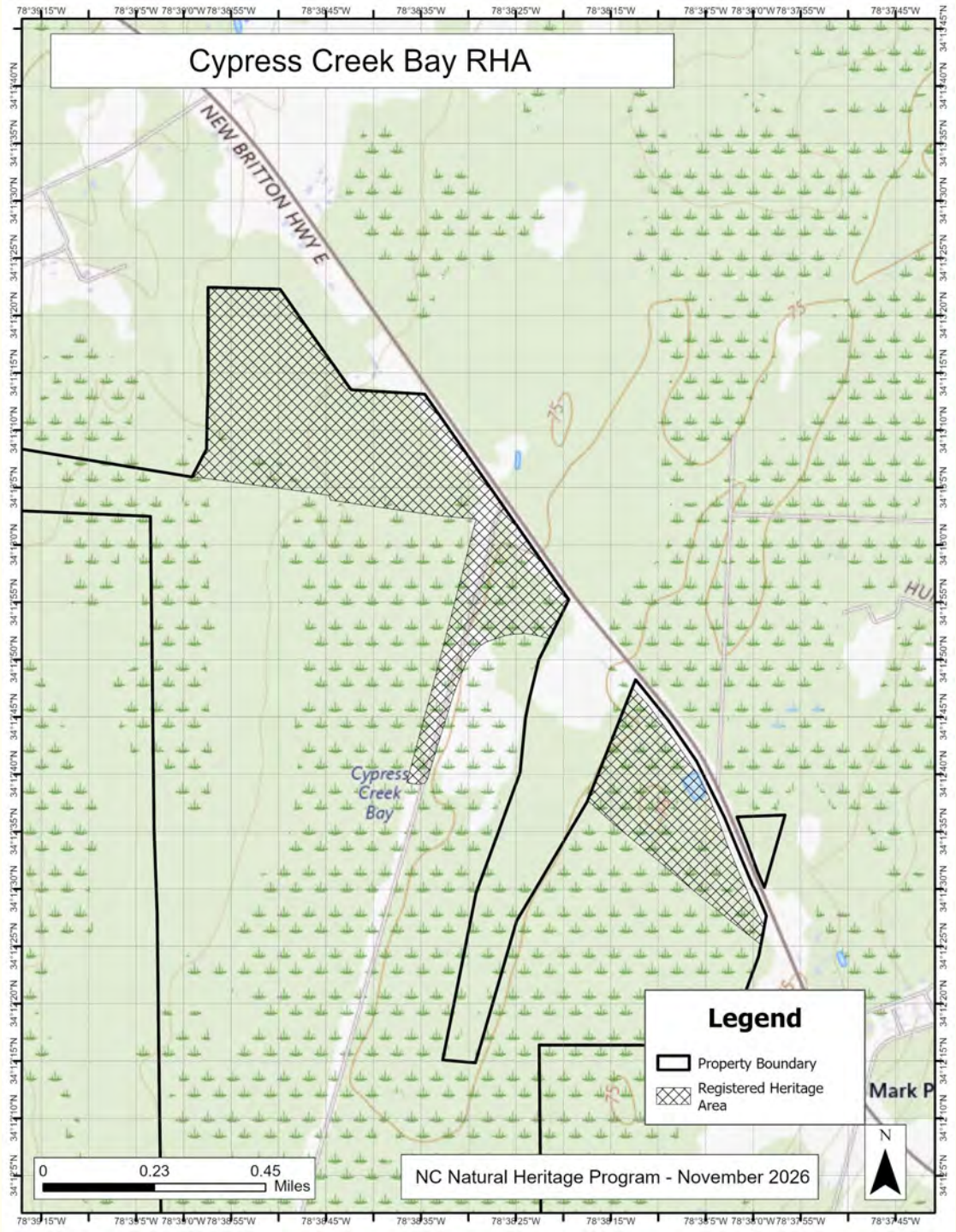
Columbus County

Cape Fear, Lumbee


Schulkens Savanna and Cypress Creek Bay RHA
Property Boundary Raccoon Silva LLC
Dedicated Nature Preserve
Registered Heritage Area
Conservation Easement
Other Protection
Federal Ownership
State Ownership
Local Government Ownership
Private
0 5 10 Miles
NC Natural Heritage Program - November 2026
N
Clarkton
Kelly
Council
Evergreen
Whiteville
Cerro Gordo
Chadbourn
Hallsboro
Lake Waccamaw
Bolton
East Arcadia
Clarendon
Tabor City
Green Sea
Naki
Ash
Loris
Shallotte
Carolina Shores
Calabash
Sunset Beach
Ocean Isle Beach
Little River
COLUMBUS
BRUNSWICK
James B White Hwy N
James B White Hwy S
Joe Brown Hwy S
Highway 701 N
NC Highway 87 E


Schulkens Savanna and Cypress Creek Bay
Cypress Creek Bay
Schulkens Savanna
Property Boundary Raccoon Silva LLC
0 0.5 1 Miles
NC Natural Heritage Program - November 2026
N
Honeyfield Rd
Wardtown Rd
Hallsboro Rd S
Bear Branch
Cattail Bay Farm Trl
Creek Rd
75 ft
76 ft
43 ft
130


Cypress Creek Bay RHA
78°39'20"W
78°39'10"W
78°39'0"W
78°38'50"W
78°38'40"W
78°38'30"W
78°38'20"W
78°38'10"W
78°38'0"W
78°37'50"W
78°37'40"W
34°11'50"N
34°11'40"N
34°11'30"N
34°11'20"N
34°11'10"N
34°11'0"N
34°10'50"N
34°10'40"N
34°10'30"N
34°10'20"N
34°10'10"N
34°10'0"N
Property Boundary Raccoon Silva LLC
0
0.28
0.55
Miles
NC Natural Heritage Program - November 2026
N


Cypress Creek Bay RHA
NEW BRITTON HWY E
Cypress Creek Bay
Legend
Property Boundary
Registered Heritage Area
0
0.23
0.45
Miles
N
NC Natural Heritage Program - November 2026

Cypress Creek Bay Registered Heritage Area

Voluntary Registry Agreement

125 acres

Protects much of Cypress Creek Bay natural area – R2/C3

Element Occurrences include:

- Threadleaf sundew (Drosera flliformis var filiformis) – S2/G4
- Hooded pitcher plant (Sarracenia Minor var minor) – S1/G4
- Venus flytrap (Dionaea muscipula) – S2/G2

Several species not seen since 1994 or before, including:

- Savanna indigo-bush (Amorpha confusa) – S2/G2
- Carolina grass-of-Parnassus (Parnassia caroliniana) – S2/G3
- Red-cockaded Woodpecker (Leuconotopicus borealis) – S2/G3
- Hooker's Milkwort (Senega hookeri) – S2/G3