

Natural Heritage Advisory Committee

North Carolina Natural Heritage Program

February 5, 2026

North Carolina Natural Heritage Program

Recommendations for Dedication and Registry and Proposed Project Review

Submitted to the Natural Heritage Advisory Committee
February 5, 2026



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- Agreement cannot be rescinded by the owner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

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 within these areas, it is with a specific time-limited objective (e.g., removal of off-site canopy species). Part of the Primary Area.

Special Management Area: a zone which retains some natural features (e.g., rare species population(s)), but is maintained for other purposes (e.g., transmission line right-of-way).

Buffer Area: areas within a tract which contribute to the ecological function of the Primary Area, but which do not qualify as Primary.

NHP Project Review Policy

Amendments to boundary – Changes to the spatial boundary of an agreement.

1. Amendments to accommodate public works projects (i.e. roads, bridges, sewer and water lines or associated infrastructure) may be approved at staff level without review by the Natural Heritage Advisory Committee if the following conditions are met:

a. The amendment would affect less than 1 acre or 5% of the Preserve, whichever is smaller.

AND

b. The project would not impact a natural heritage element occurrence.

Eno River Diabase Sill Plant Preserve Dedicated Nature Preserve



Eno River Diabase Sill Plant Preserve - Harrelson Tract
At left is Hoary Puccoon (*Lithospermum canescens*)

Eno River Diabase Sill Plant Preserve DNP



Durham County

Shakori, Lumbee, Catawba, Occaneechi, Cheraw

Preliminary information about a proposed project at Snow Hill Road and Old Oxford Road (not an action item)

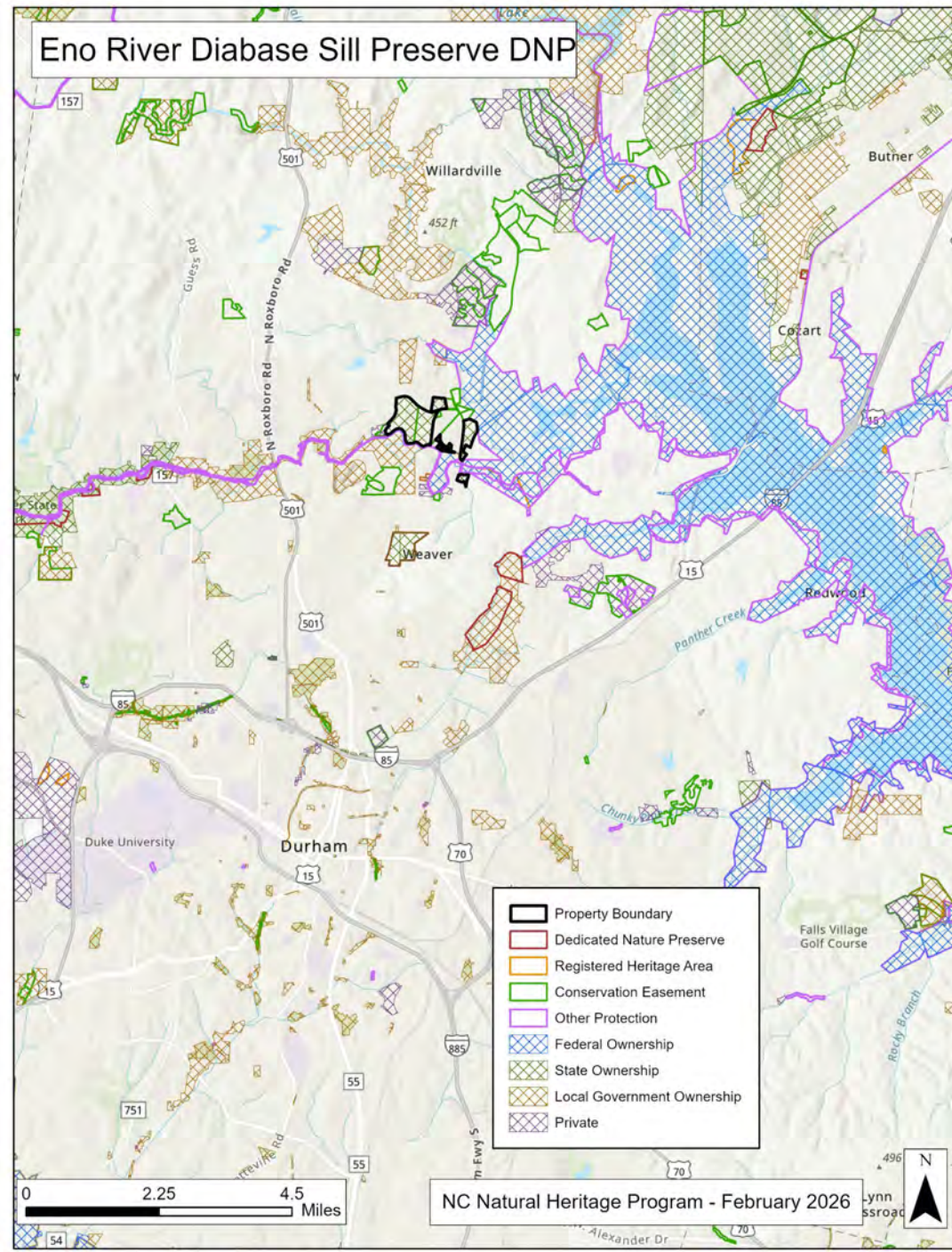
- This is an opportunity for the Committee to ask questions of DOT and PCP, and share early concerns.
- More information may be shared and a resolution may be requested at a future meeting.

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

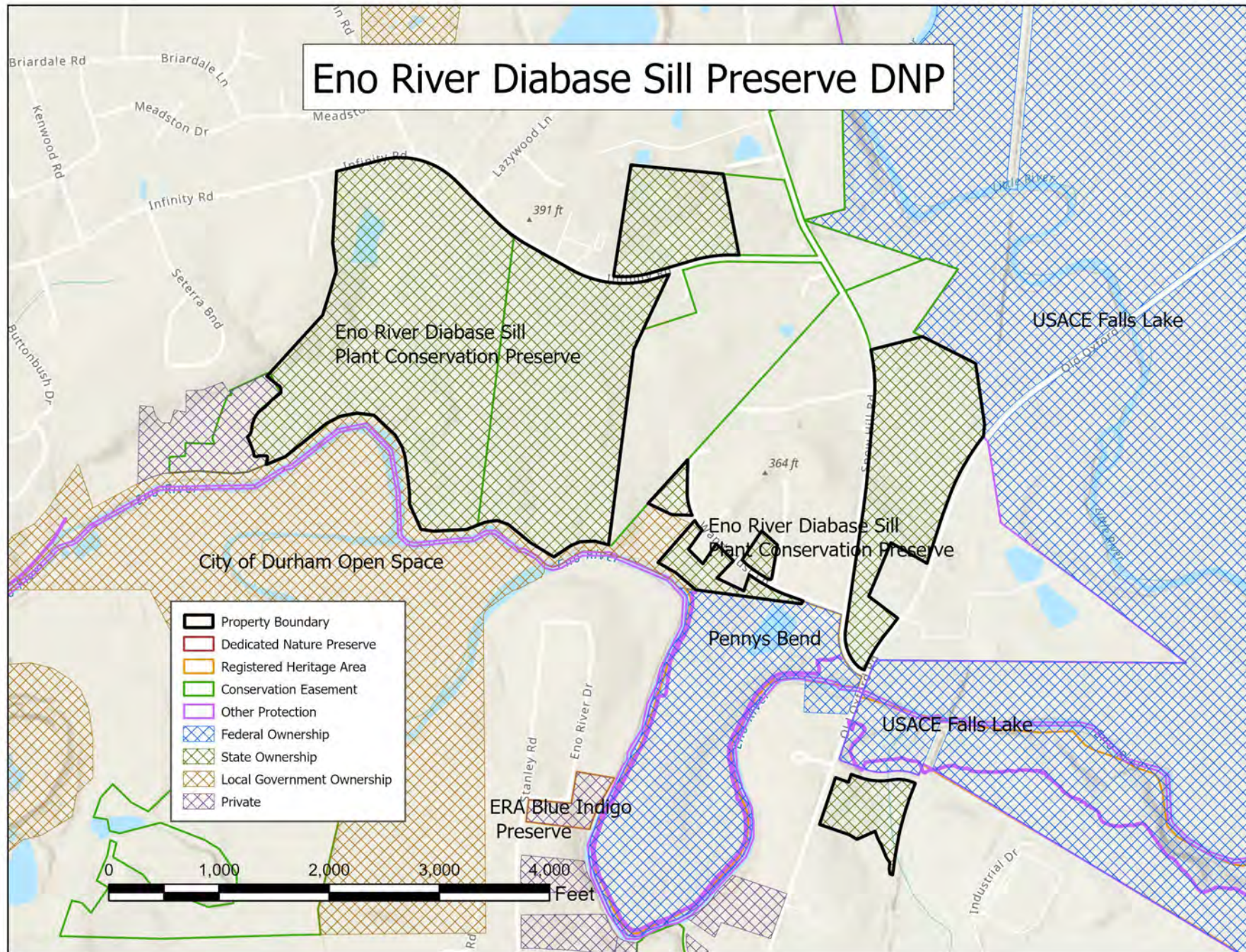
- Add a left turn lane and signals to Snow Hill and Old Oxford Roads intersection, Durham County



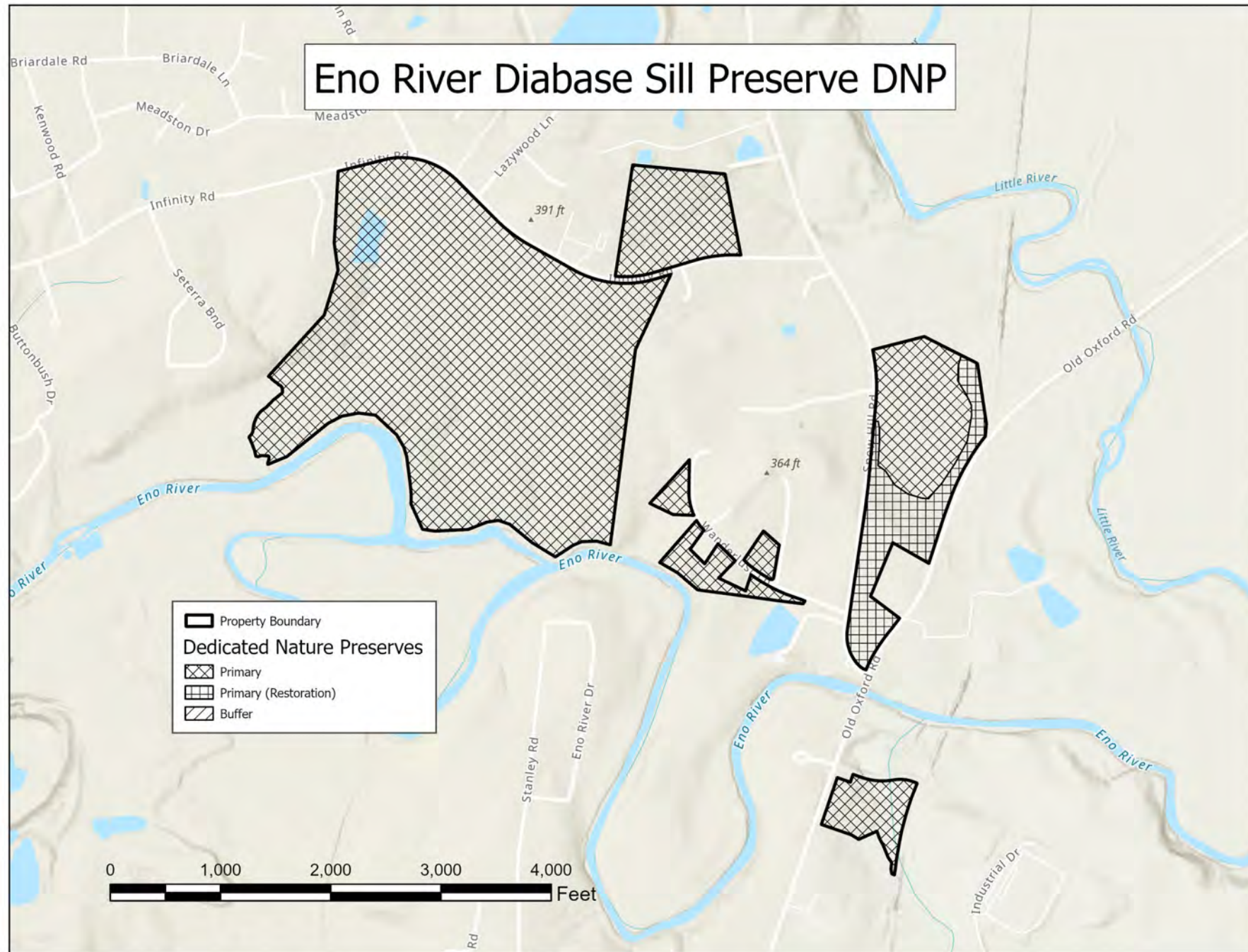
Eno River Diabase Sill Preserve DNP



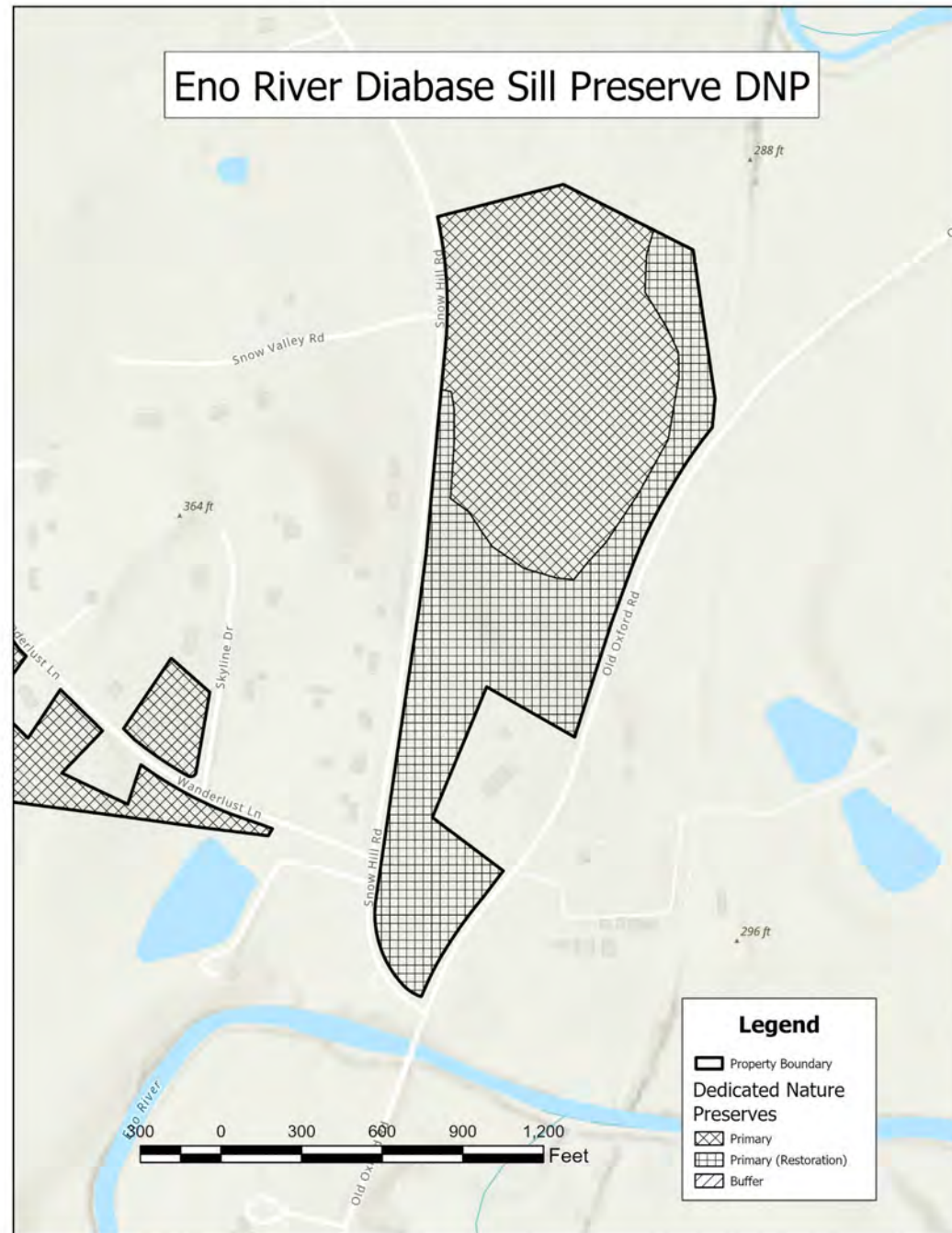
Eno River Diabase Sill Preserve DNP



Eno River Diabase Sill Preserve DNP



Eno River Diabase Sill Preserve DNP

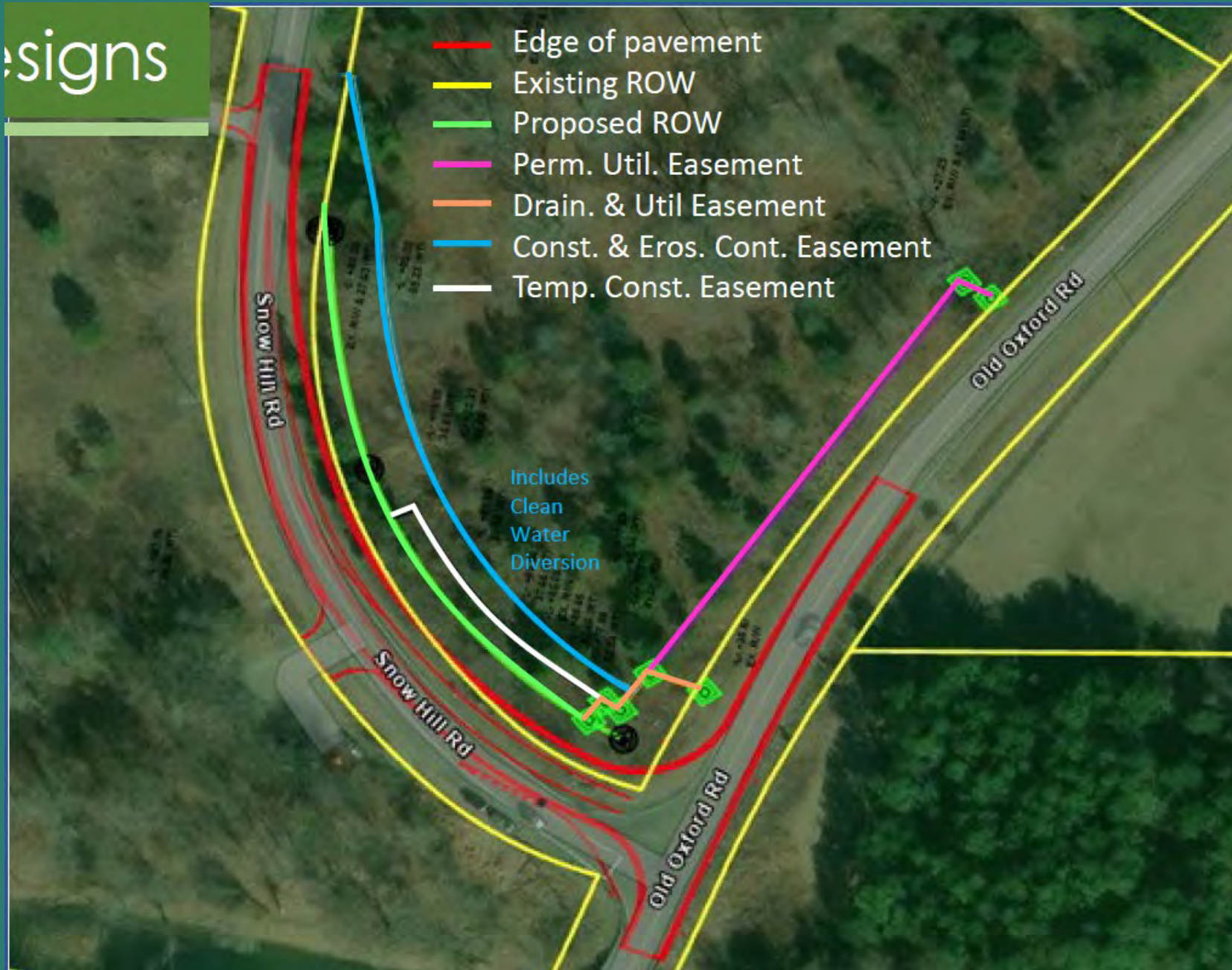


Eno River Diabase Sill Plant Conservation Preserve

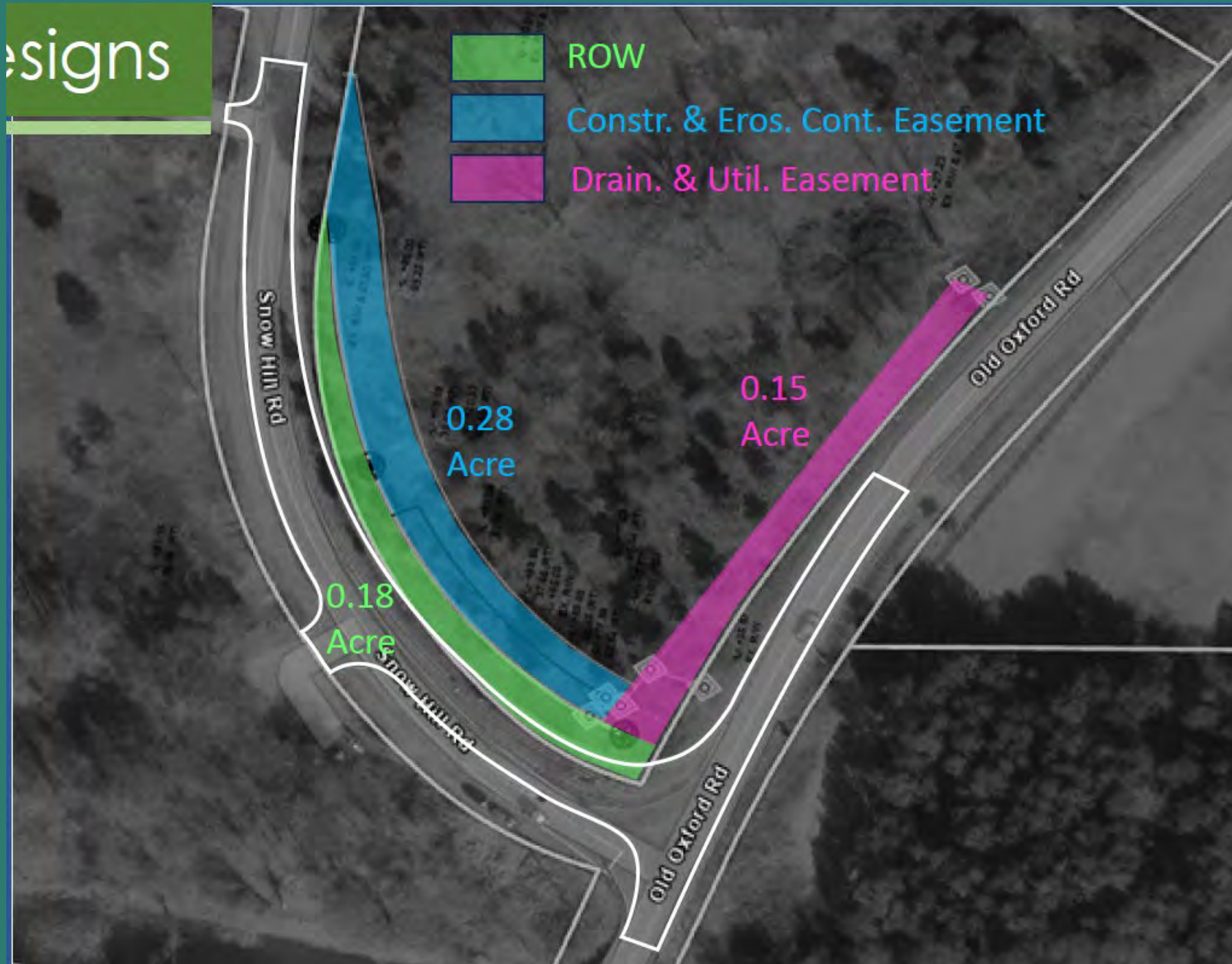
Dedicated Nature Preserve

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

esigns



esigns



Eno River Diabase Sill Plant Preserve

Potential dedicated area impacted

No pending request for amendment

- 0.18 acre permanent right of way
- 0.15 acre permanent drainage and utility easement
- 0.28 acre temporary drainage easement for construction and erosion control
- 0.33 acres permanent total area removed

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

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

- Early in DOT process.
 - There is not yet a written request for amendment to the dedication.
- 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.
- NHP staff participated in 9 January 2026 state stakeholder meeting for the proposed project, which also included staff from NCDOT, Plant Conservation Program and NC Land and Water Fund. NCDOT communicated that the project has been narrowed to the extent possible (i.e. avoiding and minimizing impacts).

Potential mitigation measures 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:
 - o natural topography
 - o removal of invasive species
 - o revegetation with native plants
 - o 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)
 - o understanding that PCP will continue to manage the nature preserve with prescribed fire in the future (after project completion)

State land dedications

- Dedication of qualifying portions required when lands were acquired with NC Land and Water Fund grants.
 - Preserve design 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

Gull Rock Game Land Dedicated Nature Preserve



Marsh at Gull Rock Game Land, Spencer Bay Photo Courtesy of Katherine Culatta

Gull Rock Game Land Dedicated Nature Preserve

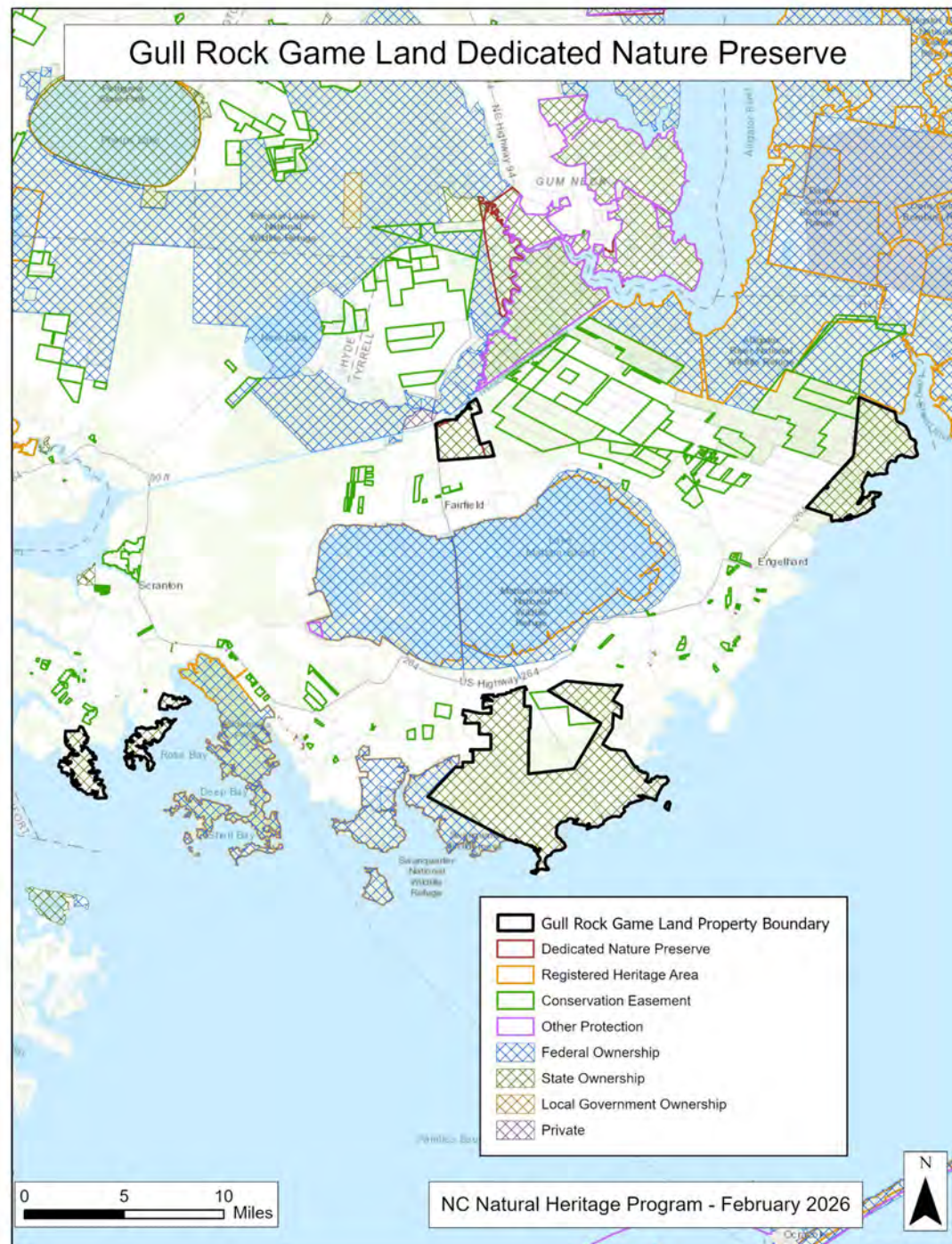


Gull Rock
Game Land

Hyde County

Mattamuskeet, Lumbee, Hatteras

Gull Rock Game Land Dedicated Nature Preserve



Gull Rock Game Land DNP

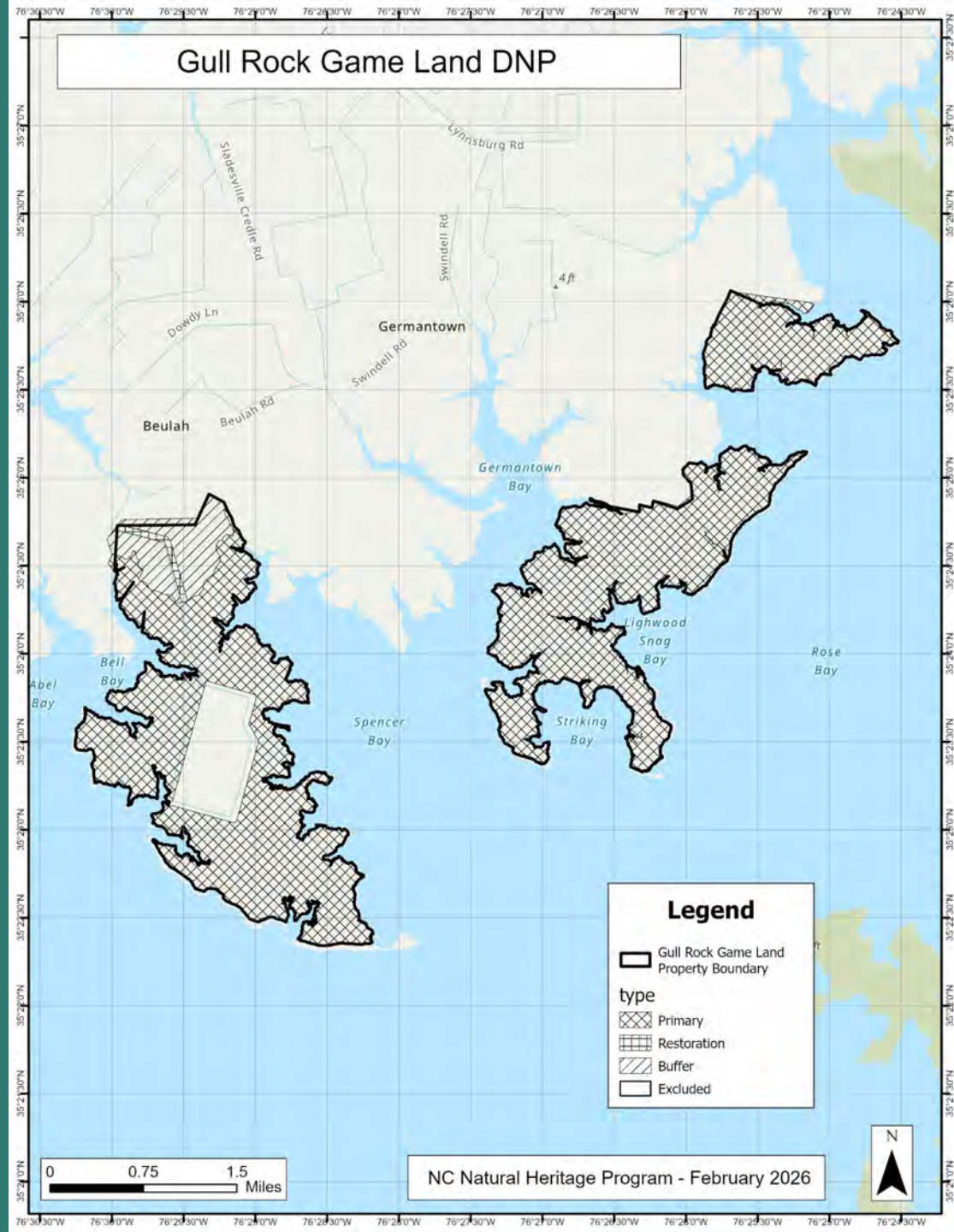


2022-060

0 0.75 1.5 Miles

NC Natural Heritage Program - February 2026





Gull Rock Game Land DNP

Amendment to add tract and fulfill terms of NCLWF grant agreement 2022-060 (Spencer Bay)

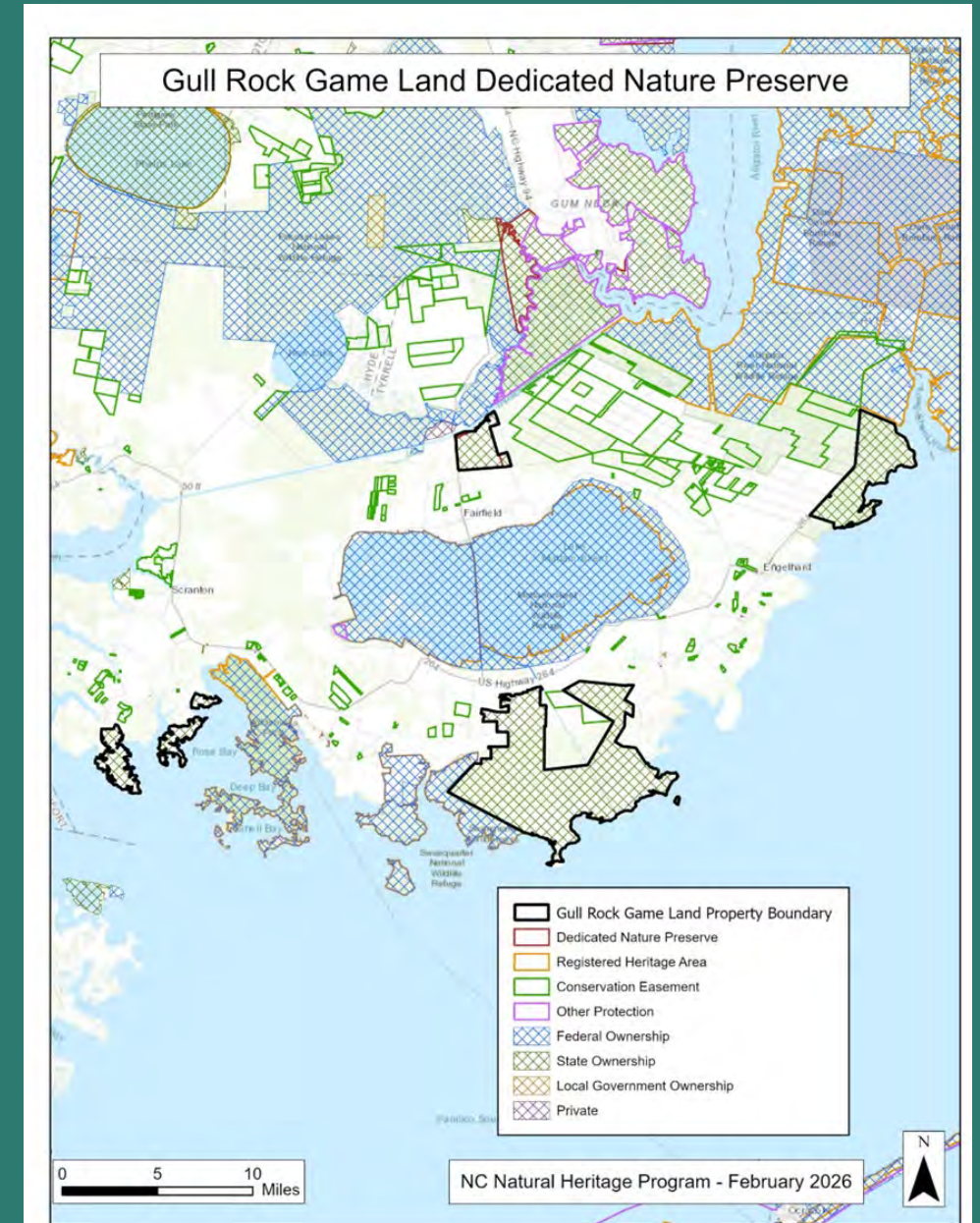
- Adds 2,736 acres to DNP
 - 2,554 acres Primary, including 18 acres Restoration
 - 182 acres Buffer
- Total DNP 10,420 acres:
 - Primary Area 7,308 acres, including 18 acres Restoration
 - Buffer Area 3,112 acres

Element Occurrences include:

- Brackish Marsh (Needlerush Subtype) – S5/G5
 - Brackish Marsh (Salt Meadow Cordgrass Subtype) – S4/GNR
 - Little-spike Spikerush (*Eleocharis parvula*) – S1/G5
 - Bald Eagle (*Haliaeetus leucocephalus*) – S3/G5
 - Marsh Hammock – S2/G3
-
- Protections portions of Swanquarter/Gull Rock Wetlands natural area – R2/C1
-
- Separate potential amendment to the dedication allowing non-emergency pumping of water onto the Alligator River segment of the preserve

Gull Rock Game Land DNP

- Request for temporary construction easement and permanent easement, Alligator River segment
- Burrus Canal Project, associated with Lake Mattamuskeet Watershed Restoration Plan



Burrus Canal Project

- Proposes to redirect drainage water from Lake Mattamuskeet
 - Pumping water into Burrus Canal to flow northward, then pumping it over the dike into the portion of Burrus Canal on Gull Rock Game Land Dedicated Nature Preserve
 - The water would then move north to the Intracoastal Waterway through swamps and marshes on the game land

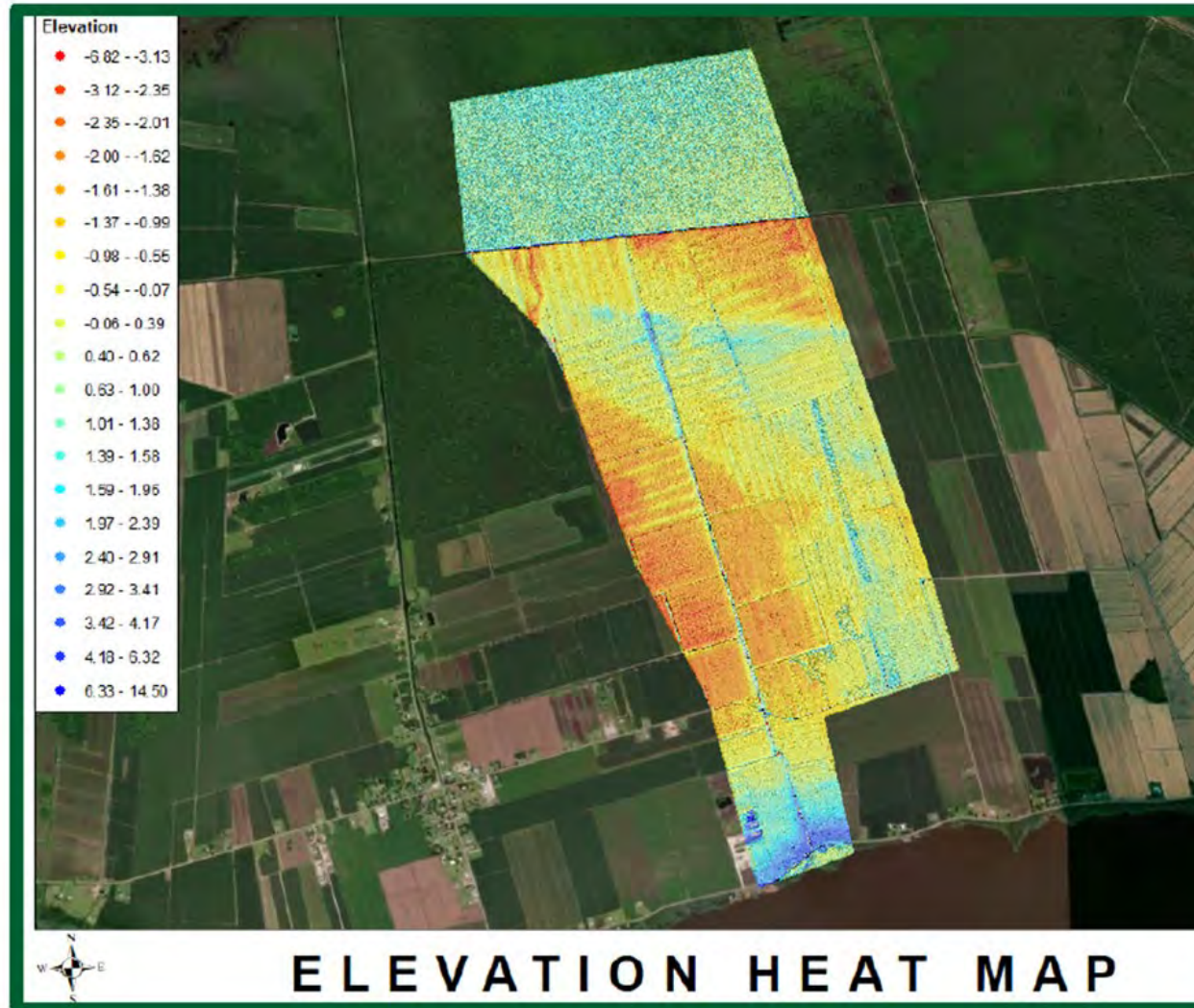
Gull Rock Game Land



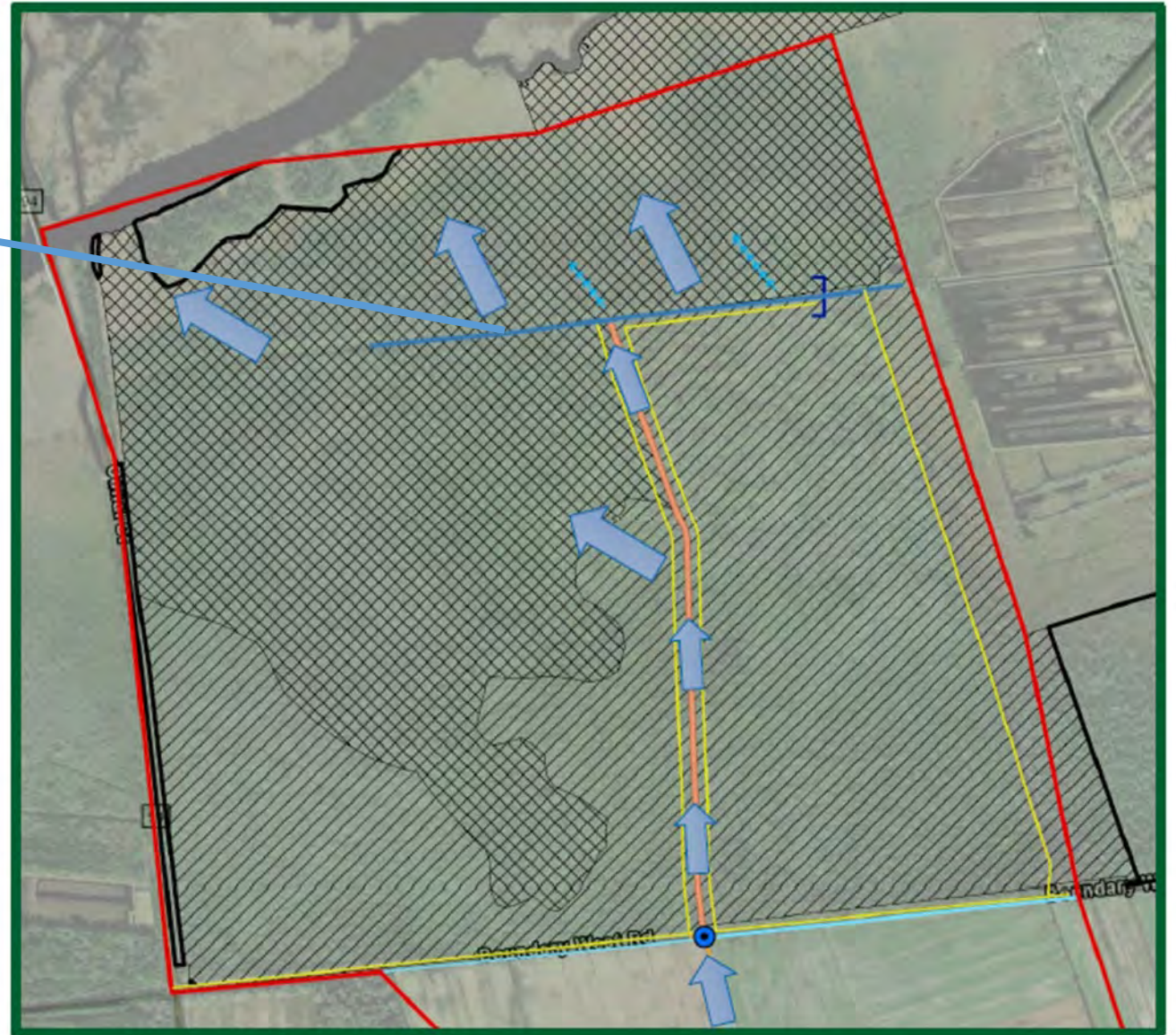
0 1,500 3,000 Feet

AERIAL IMAGERY
BURUS CANAL PROJECT

Burrus Canal Project



Revised proposal would add structures within the northern road to allow more drainage through it northward, while having less water flow westward.



Cross-hatching is Dedicated Primary Area, single hatching is Buffer Area

- Initial dedication of the property allowed emergency pumping of water onto the game land, to “be used only in the event of extreme rainfall, such as a named storm.”
- WRC received easement requests to implement the project, including for non-emergency pumping of water:
 - The NC Coastal Federation requests a temporary construction easement
 - Fairfield Drainage District #7 requests a permanent easement to maintain the canals, dikes, and infrastructure, and, additionally, to pump water across Commission property

- NHP agrees that more natural water regime/sheet flow of fresh water northward to the marshes would help mitigate the impact of salt coming in via Intracoastal Waterway canal
- Carries risk of damage by excess water or excess nutrients

- Predicated on the maintenance of the structures installed along northern road that make it beneficial and more natural, new language allowing non-emergency pumping would be consistent with dedication, with language that the NC Natural Heritage Program or the NC Wildlife Resources Commission may require that pumping cease if it is determined by either party that such action is necessary to safeguard environmental resource values in the preserve or if pumping additional water becomes inconsistent with the purposes of the dedication.
- Recommendations for inclusion of “triggers” to indicate if the pumping is causing damage to forest in the Primary Area
- Any easement would be subordinate to Articles of Dedication

Revised Dedication language to allow non-emergency pumping

A location for an emergency pumping station for the Hyde Drainage District, discharging onto the Game Land within the preserve Buffer Area, has been requested. The location has previously had significant hydrological alteration, and is shown in Exhibit B Alligator River Segment map. If constructed, the pumping station will be operated according to a written plan ("Plan") ~~and will be used only in the event of extreme rainfall, such as a named storm.~~ To the extent practicable, efforts will be made to locate the intake for the pumping station so as to avoid known sources of contamination. Wildlife Resources Commission, or their assigns, shall install and maintain sufficient modifications to the roads to allow water added by pumping a more natural and diffuse flow northward and westward where appropriate. The Wildlife Resources Commission, or their assigns, shall be responsible for drafting the Plan and the Plan shall be subject to final approval of the NC Natural Heritage Program before finalizing or modification The NC Natural Heritage Program or the NC Wildlife Resources Commission may require that pumping schedules be modified or pumping cease if it is determined by either party that such action is necessary because of undue stress to the preserve or to safeguard environmental resource values in the preserve, or based on other criteria as may be deemed appropriate to NHP.

Sandy Mush Game Land DNP



Rugged terrain of Sandy Mush Game Land, photo courtesy of David Siripoonsup

Sandy Mush Game Land DNP

Sandy Mush Game
Land DNP



Buncombe and Madison Counties

Cherokee, Yuchi, Miccosukee

Sandy Mush Game Land Dedicated Nature Preserve

This map illustrates the Sandy Mush Game Land Dedicated Nature Preserve and its surrounding areas. The map includes a legend, a scale bar, and a north arrow.

Legend:

- Sandy Mush GL Property Boundary (Black outline)
- Dedicated Nature Preserve (Red outline)
- Registered Heritage Area (Orange outline)
- Conservation Easement (Green outline)
- Other Protection (Purple outline)
- Federal Ownership (Blue cross-hatch pattern)
- State Ownership (Yellow cross-hatch pattern)
- Local Government Ownership (Brown cross-hatch pattern)
- Private (Grey cross-hatch pattern)

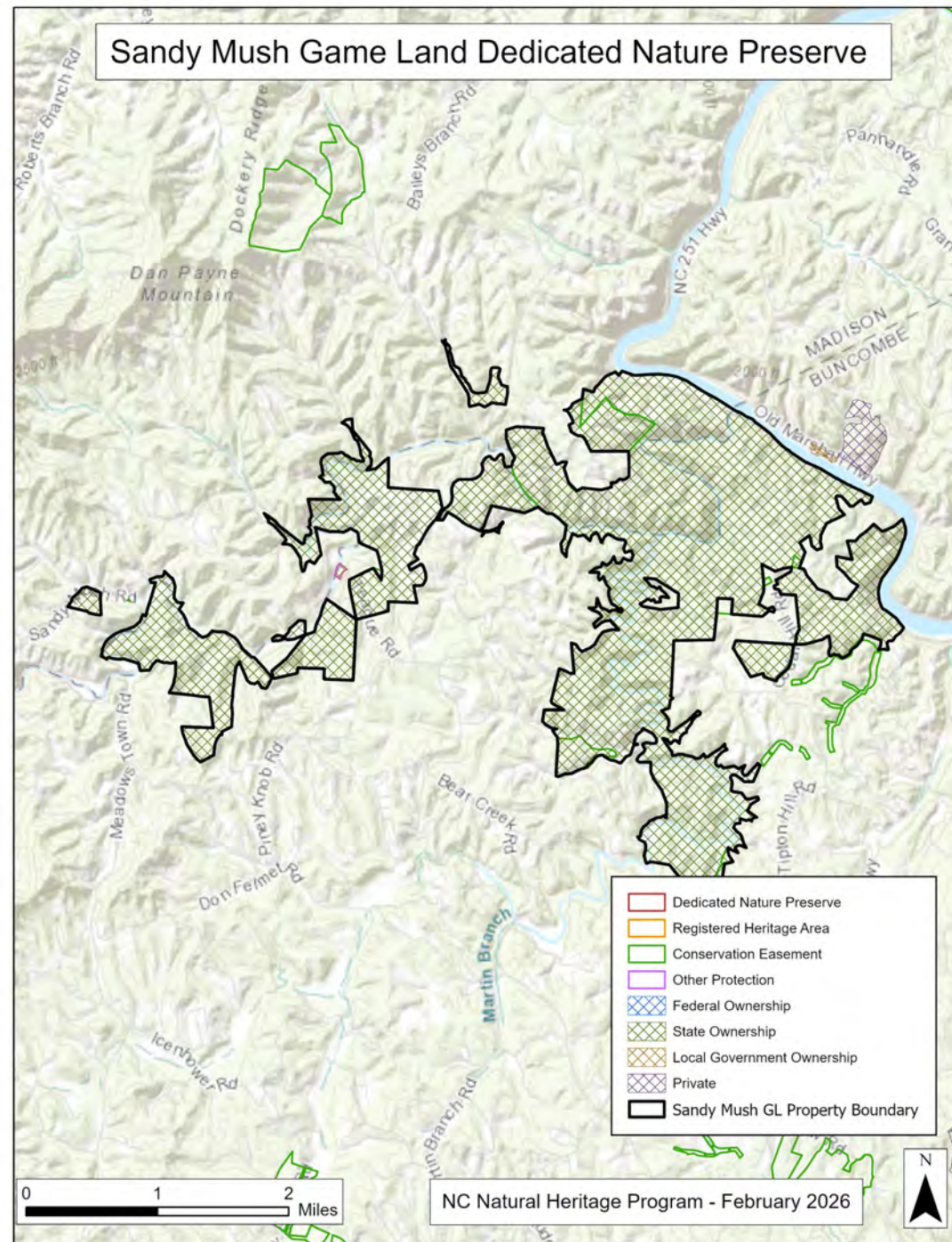
Scale: 0 to 10 Miles

NC Natural Heritage Program - November 2025

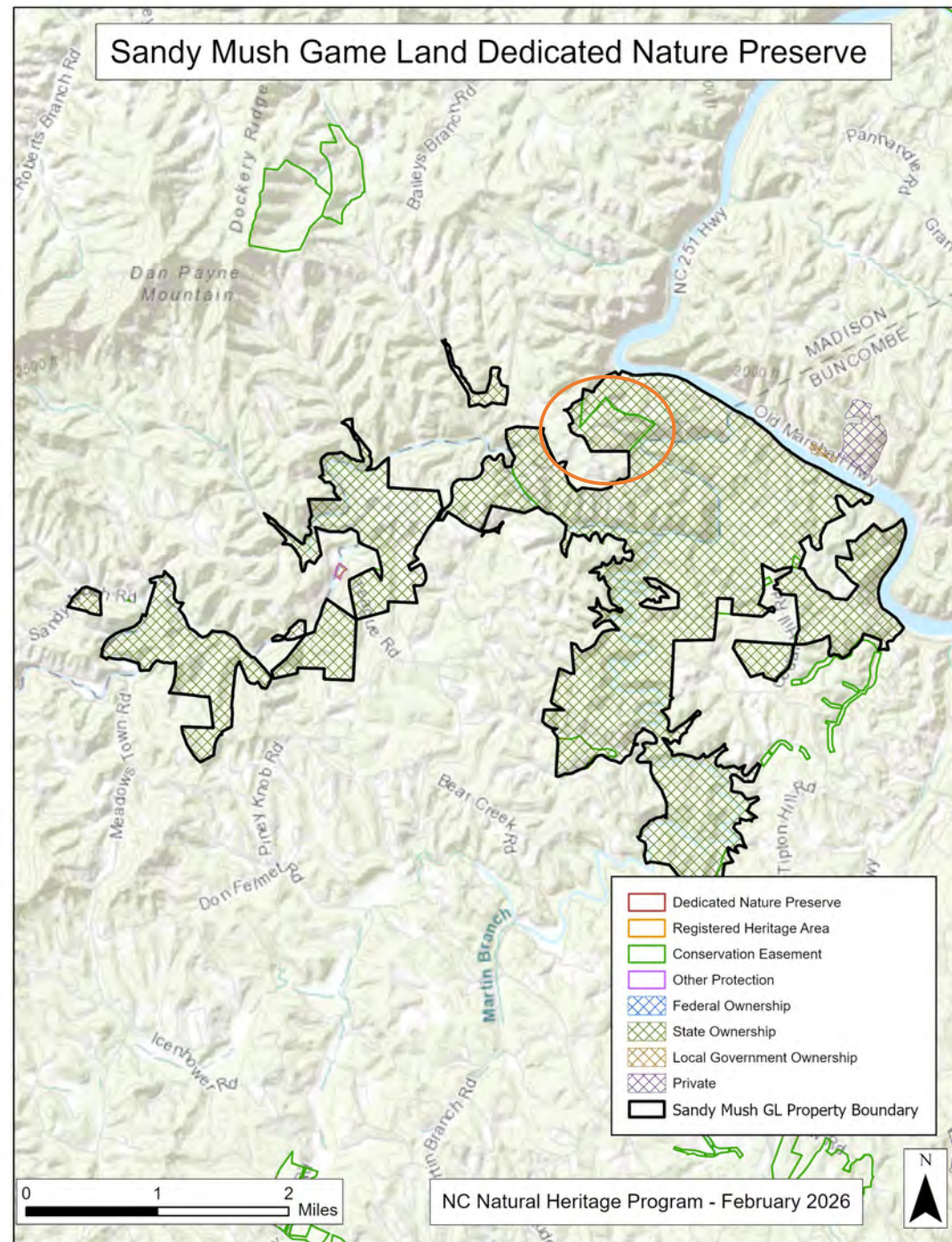
The map shows the Sandy Mush Game Land (GL) property boundary in black. The Dedicated Nature Preserve is outlined in red. Other areas with various protection designations are outlined in green, purple, orange, and brown. The map also shows ownership patterns: Federal (blue cross-hatch), State (yellow cross-hatch), Local Government (brown cross-hatch), and Private (grey cross-hatch). The map includes labels for various locations such as Mars Hill, Marshall, Leicester, Weaverville, Woodfin, Asheville, Canton, and Lake Leno. The map also shows the US 55-70 Hwy and the Madison River.

NC Natural Heritage Program - November 2025

Sandy Mush Game Land Dedicated Nature Preserve

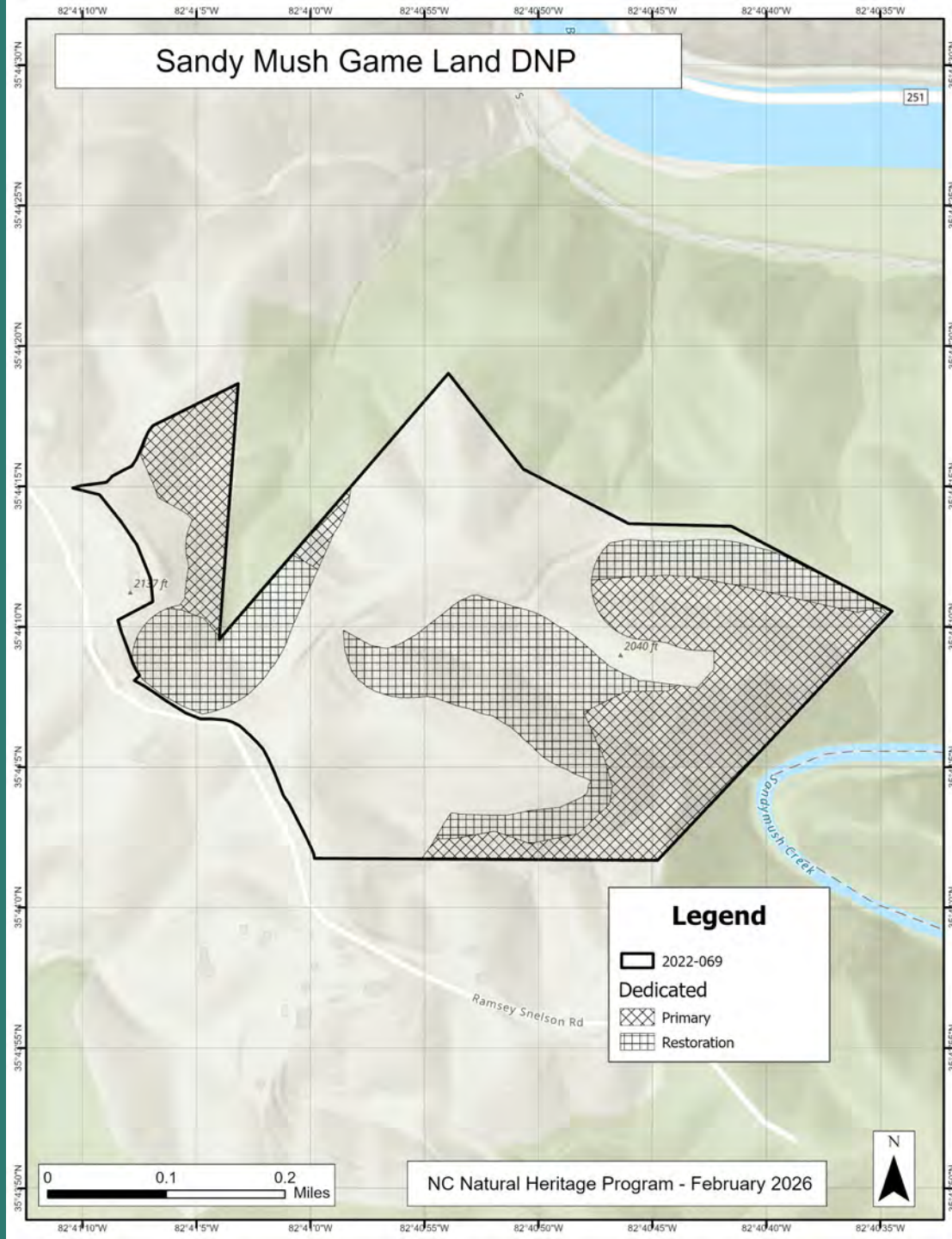


Sandy Mush Game Land Dedicated Nature Preserve



Sandy Mush Game Land DNP





Sandy Mush Game Land Dedicated Nature Preserve

- Initial Dedication to fulfill terms of NCLWF grant agreement 2022-069
- 35 acres
 - All Primary, including 16 acres Restoration
- Element Occurrences include:
 - Moss Pink (*Phlox subulata*) – S1/G5
 - Piratebush (*Buckleya distichophylla*) – S2/G3
 - American Barberry (*Berberis canadensis*) – S2/G3
 - Prostrate Blue Violet (*Viola walteri*) -- S1/G5
 - Low Elevation Basic Glade (Montane Subtype) – S2/G2
 - Rich Cove Forest (Montane Intermediate Subtype) – S4/G4
- Riparian zones along tributary streams draining to Lower French Broad River
Aquatic Habitat -- R1/C1
- Portions of Sandymush Creek/Turkey Creek Gorge natural area -- R2/C2

Uwharrie Game Land DNP



Photo courtesy of NCLWF Application Powerpoint #2021-070

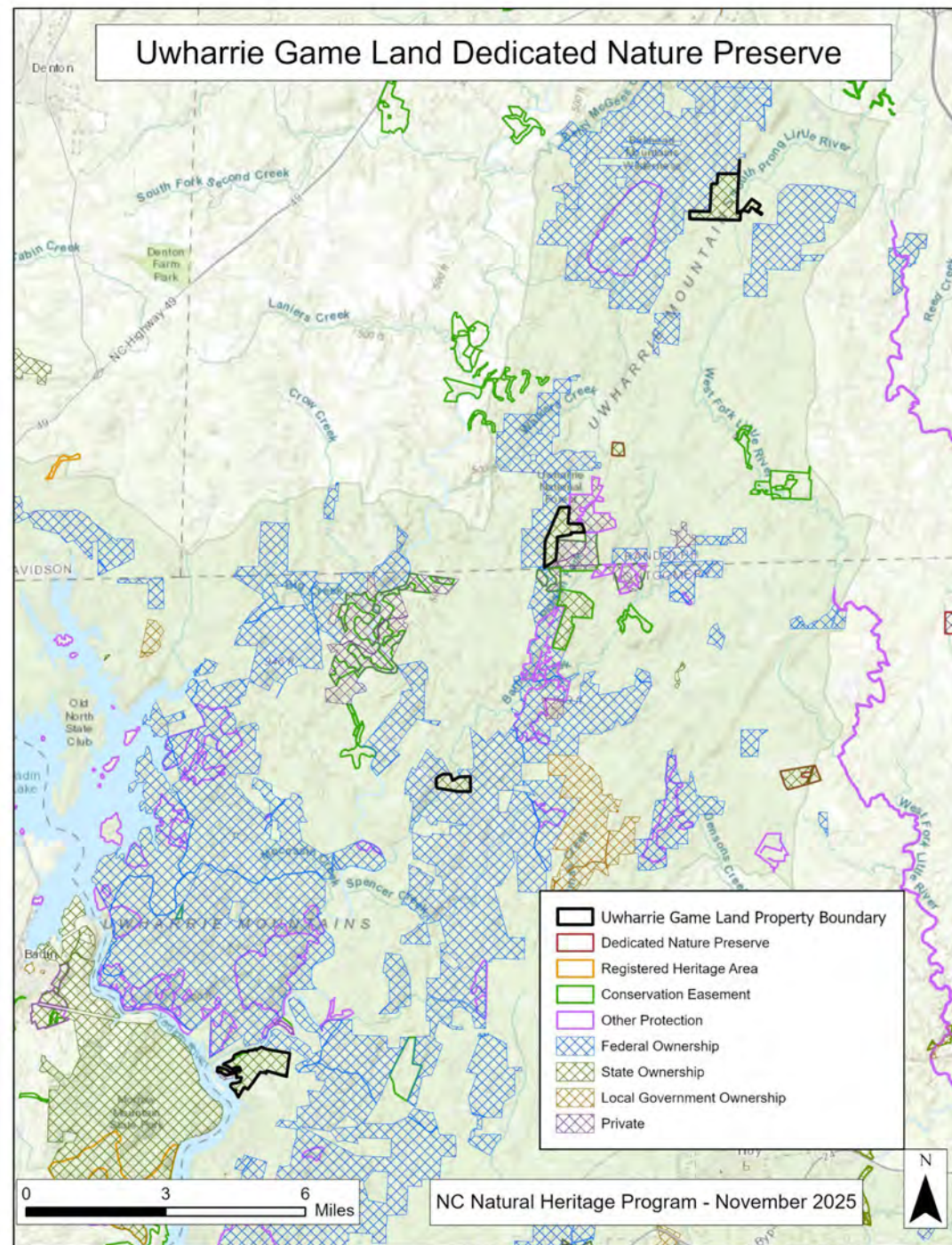
Uwharrie Game Land Dedicated Nature Preserve



Montgomery County

Lumbee, Manu (Catawba), Cheraw

Uwharrie Game Land Dedicated Nature Preserve



[illegible]

0 3 6 Miles

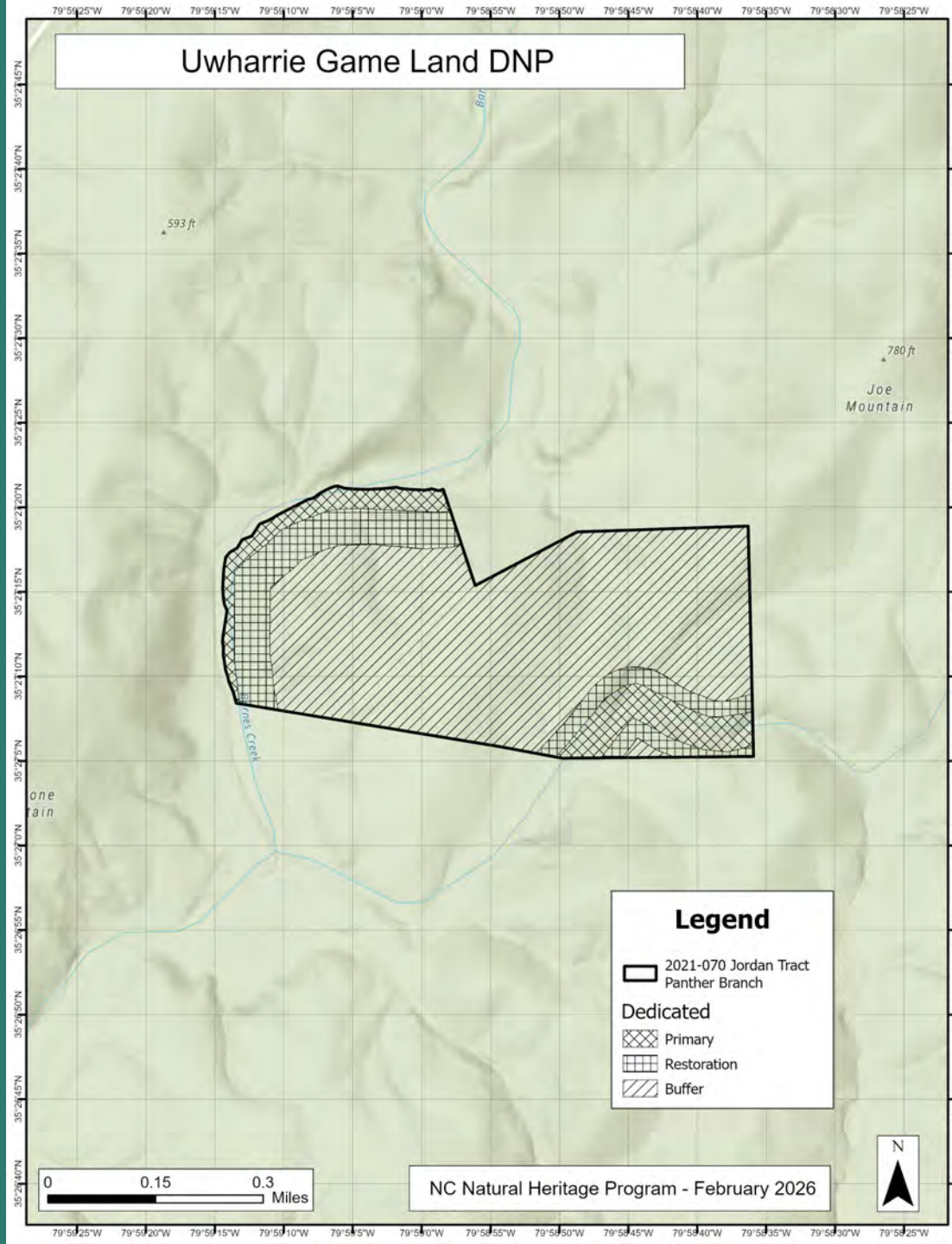
Uwharrie Game Land DNP

2021-070 Jordan Tract Panther Branch

0 0.15 0.3
Miles

NC Natural Heritage Program - February 2026





Uwharrie Game Land Dedicated Nature Preserve

Amendment to add tract and fulfills terms of NCLWF grant agreement (NCLWF #2021-070)

- Adds 93 acres to DNP
 - 26 acres Primary, including 15 acres Restoration
 - 67 acres Buffer
- Total DNP 560 acres:
 - Primary Area 482 acres
 - Buffer Area 78 acres
- Riparian zones along tributary streams draining to Barnes Creek/Poison Fork Aquatic Habitat -
- R1/C3
- Element occurrences include:
 - Uwharrie Elktoe (*Alasmodonta uwharriensis*) S1/G1
 - Solstice Creekmussel (*Ligodonta obscura*) S1/G1
 - Carolina Creekshell (*Sagittunio vauhanianus*) S3/G2
 - Notched Rainbow (*Venustaconcha constricta*) S3/G3
 - Eastern Creekshell (*Villosa delumbis*) S4/G4

Goose Creek Game Land Dedicated Nature Preserve



Bate Tract Estuarine Beach - Photo courtesy Katherine Culatta

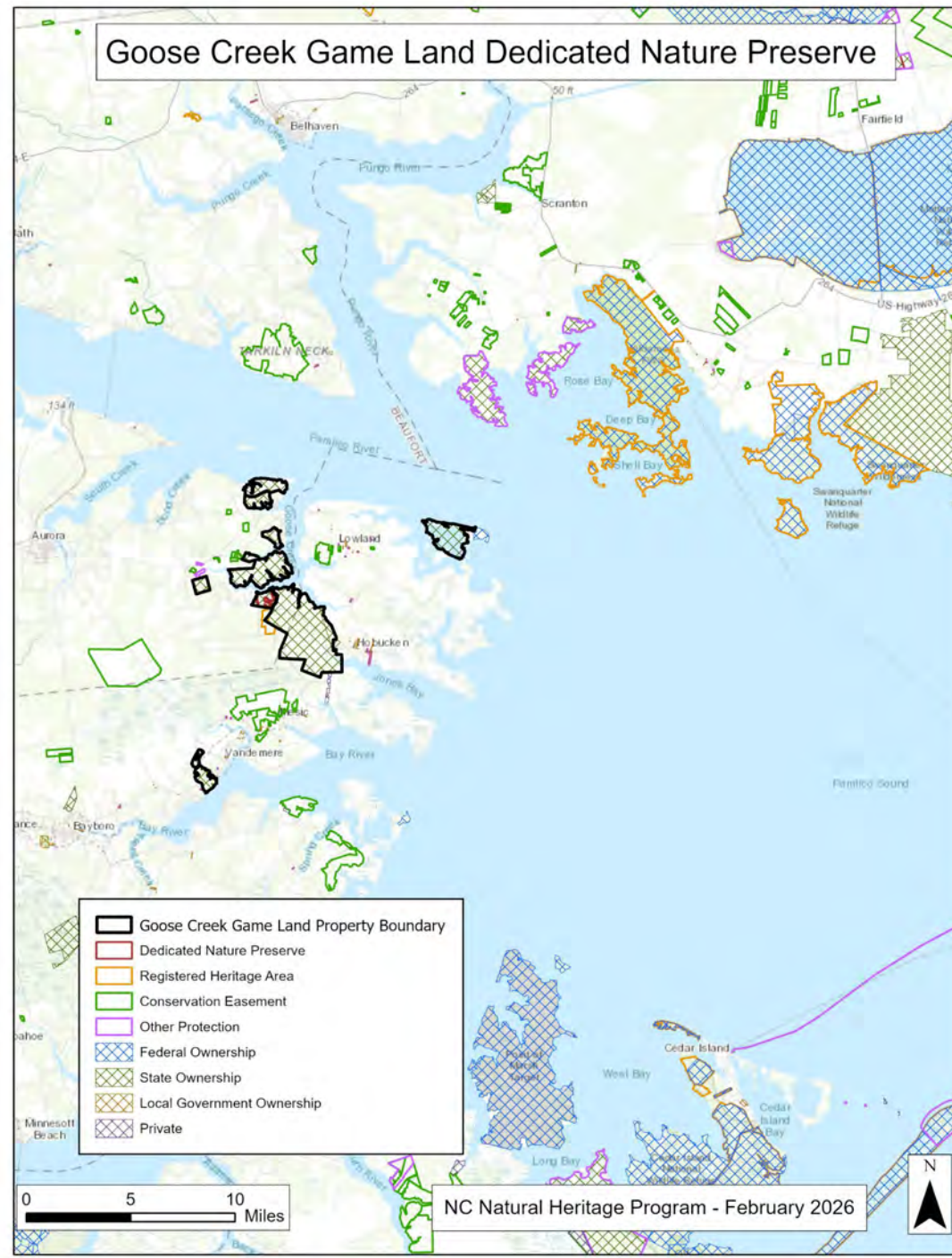
Goose Creek Game Land DNP



Beaufort and Pamlico Counties

Lumbee, Pamlico

Goose Creek Game Land Dedicated Nature Preserve



Goose Creek Game Land DNP

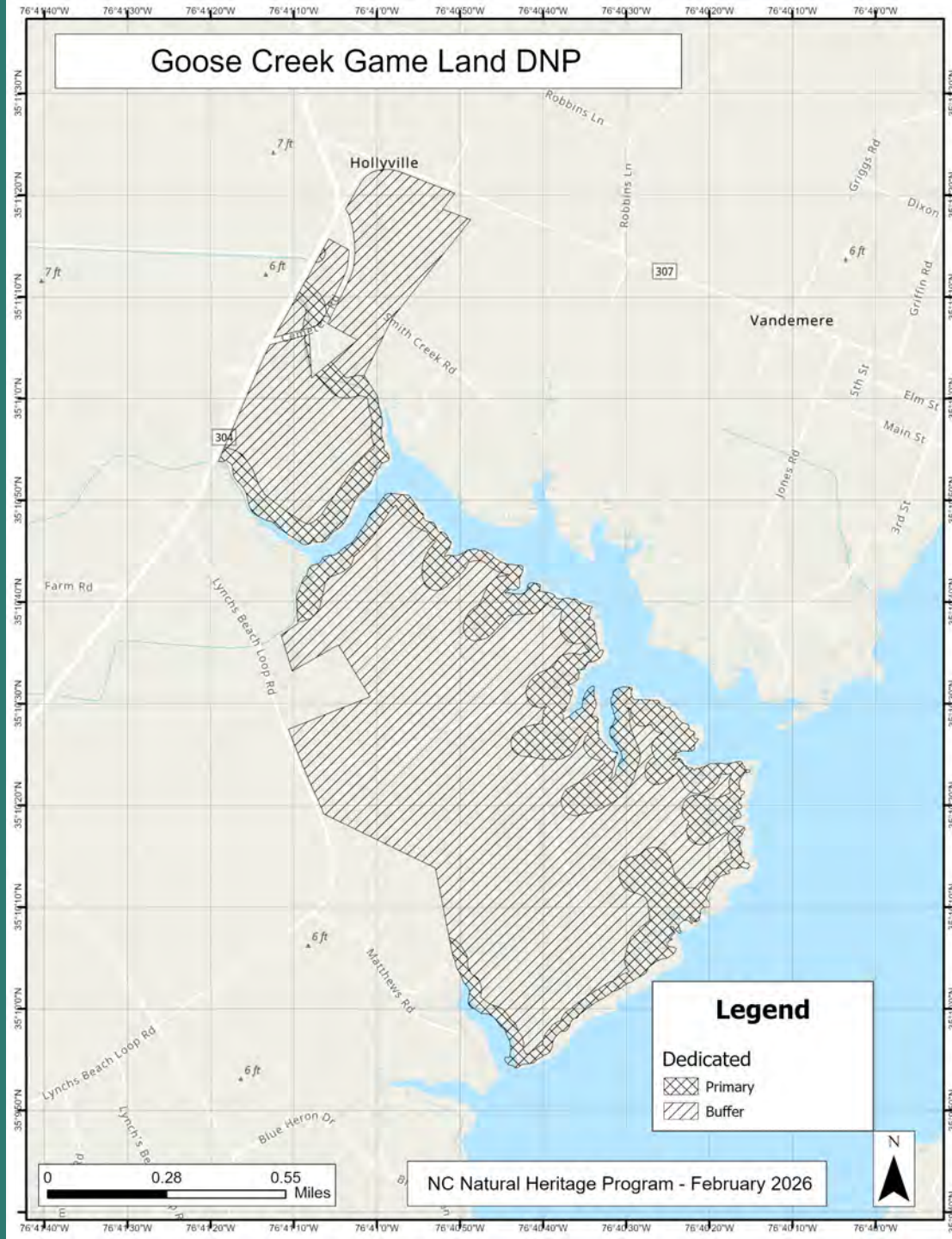


2022-054 Spencer Bay

0 0.28 0.55
Miles

NC Natural Heritage Program - February 2026





Goose Creek Game Land Dedicated Nature Preserve

Amendment to add tract and fulfill terms of NCLWF grant agreement (NCLWF #2022-054)

- Adds 408 acres
 - 100 acres Primary
 - 308 acres Buffer
- Element Occurrences include:
 - Terrell Grass (*Elymus halophilus*) – S1/T4
 - Estuarine Beach – S2/G2

Chowan Swamp Game Land Dedicated Nature Preserve



Chowan Swamp Game Land 2023 dedication inventory – Photos by Scott Pohlman

Chowan Swamp Game Land DNP

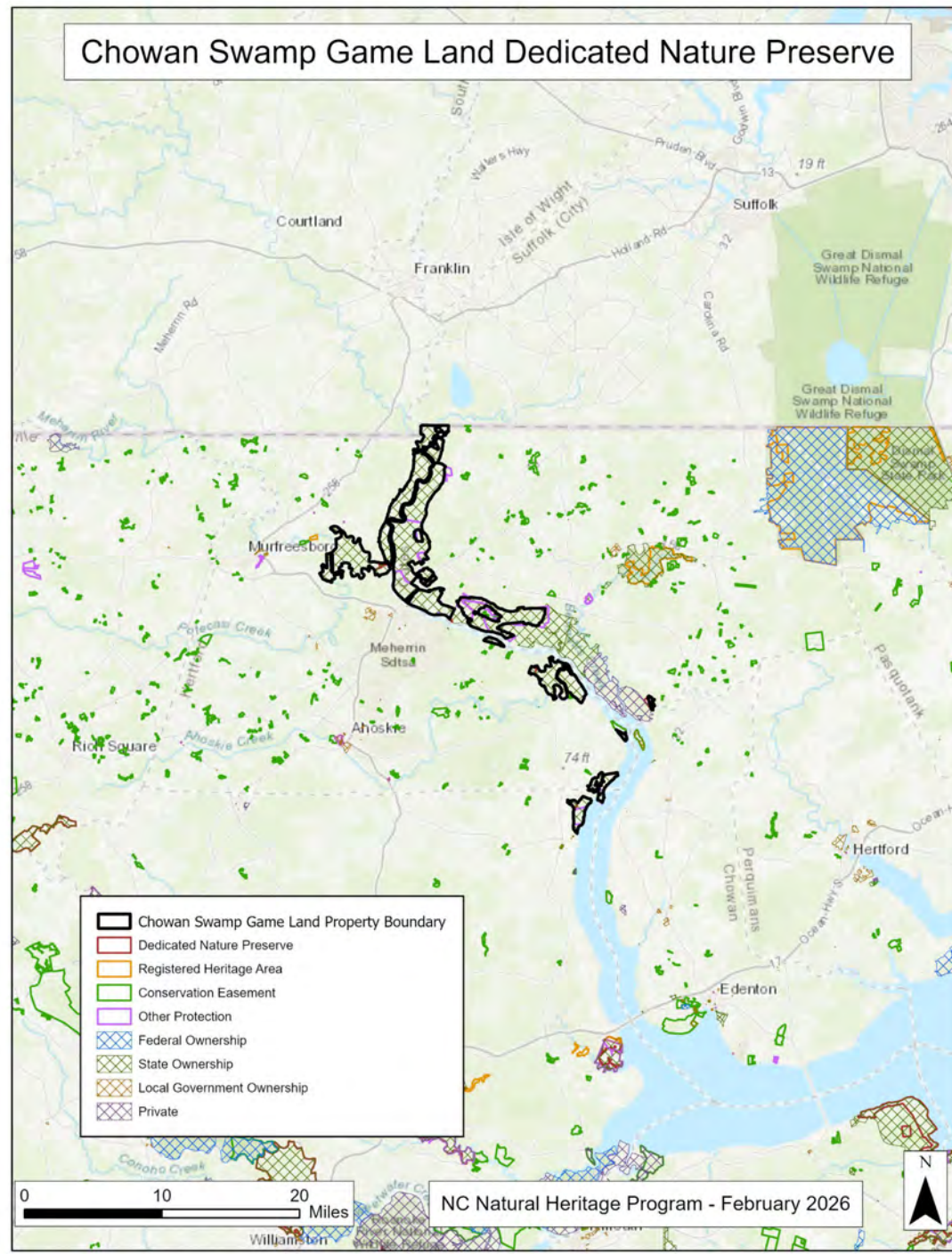


Chowan Swamp
Game Land

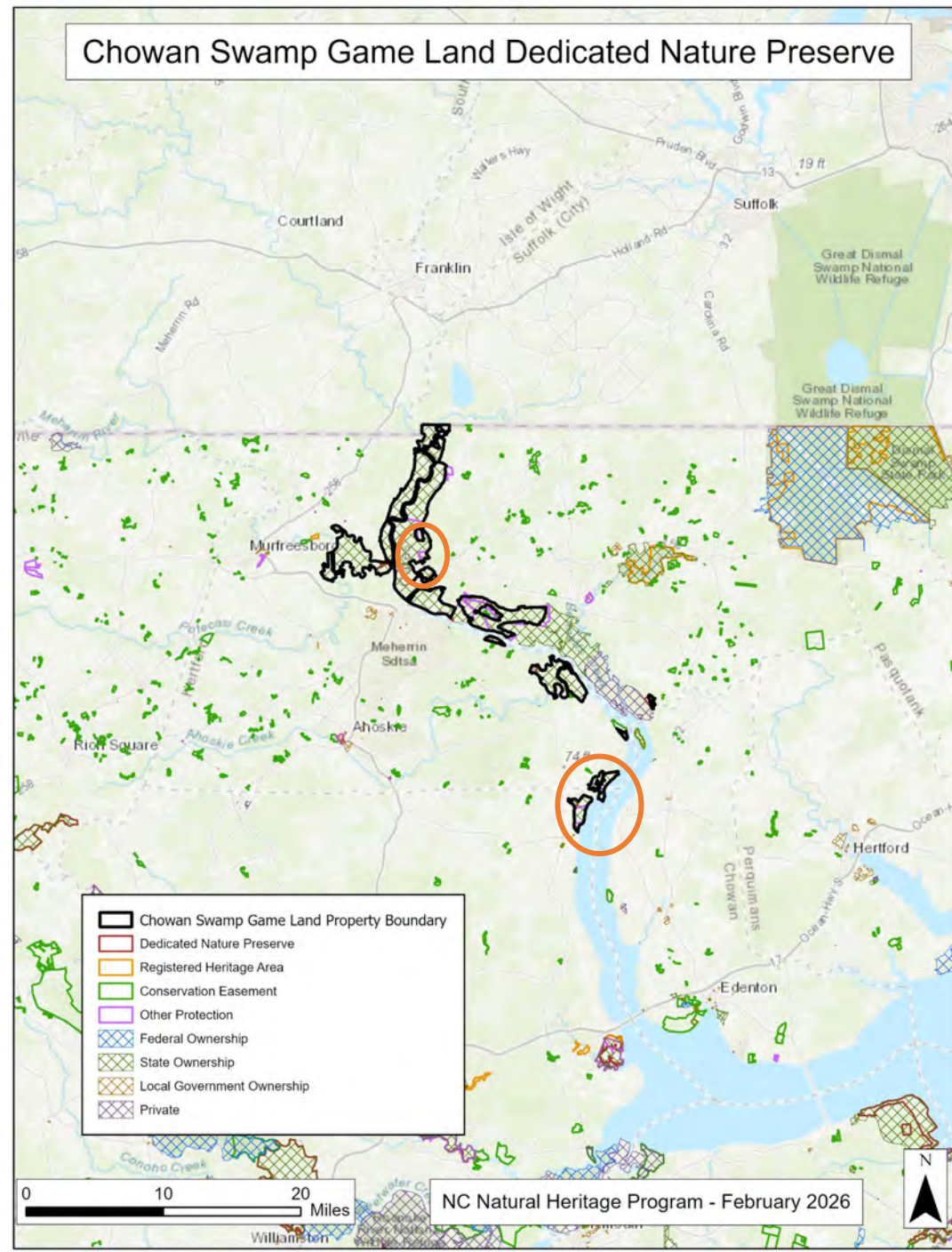
Hertford, Gates, Bertie Counties

Chowanoke, Lumbee

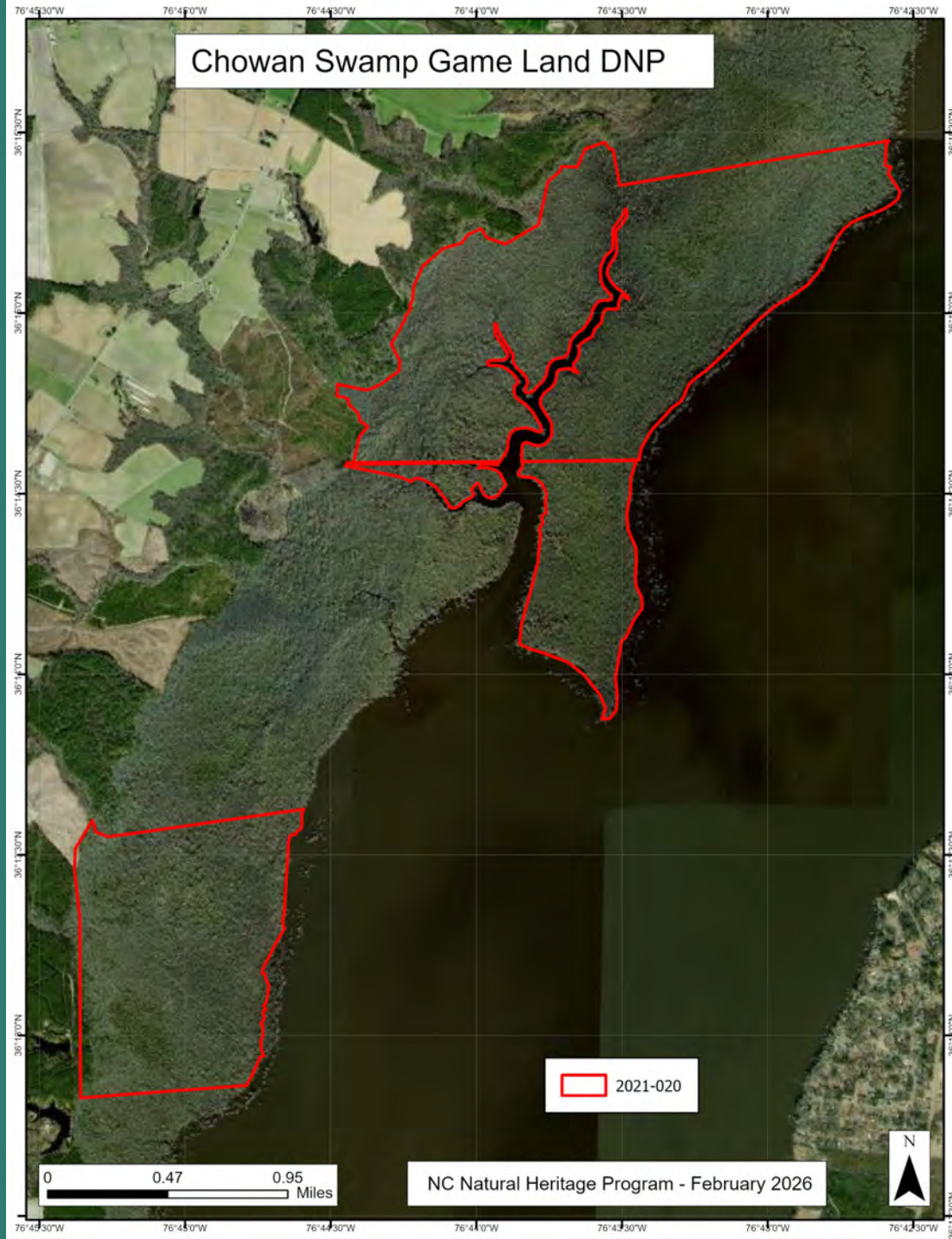
Chowan Swamp Game Land Dedicated Nature Preserve

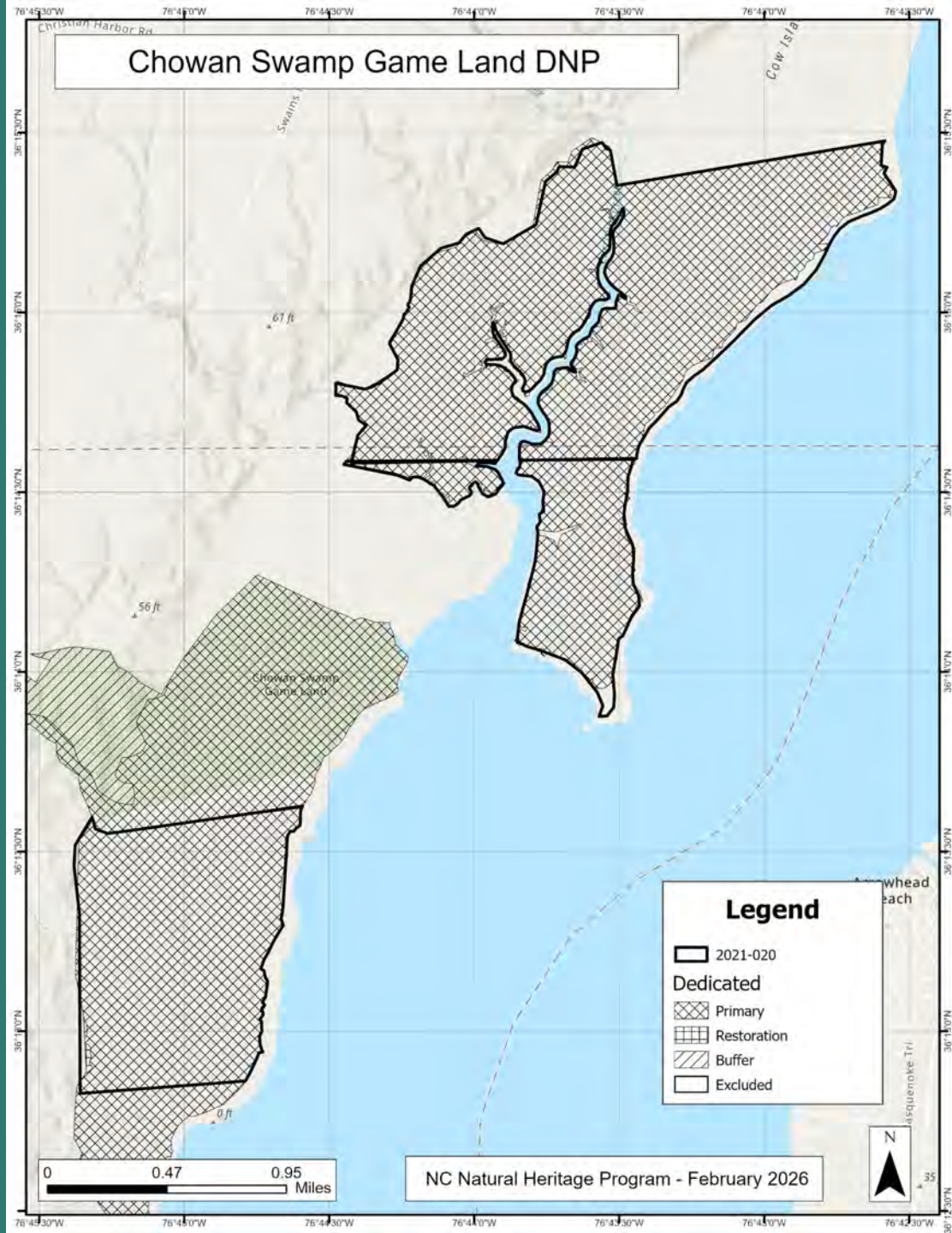


Chowan Swamp Game Land Dedicated Nature Preserve

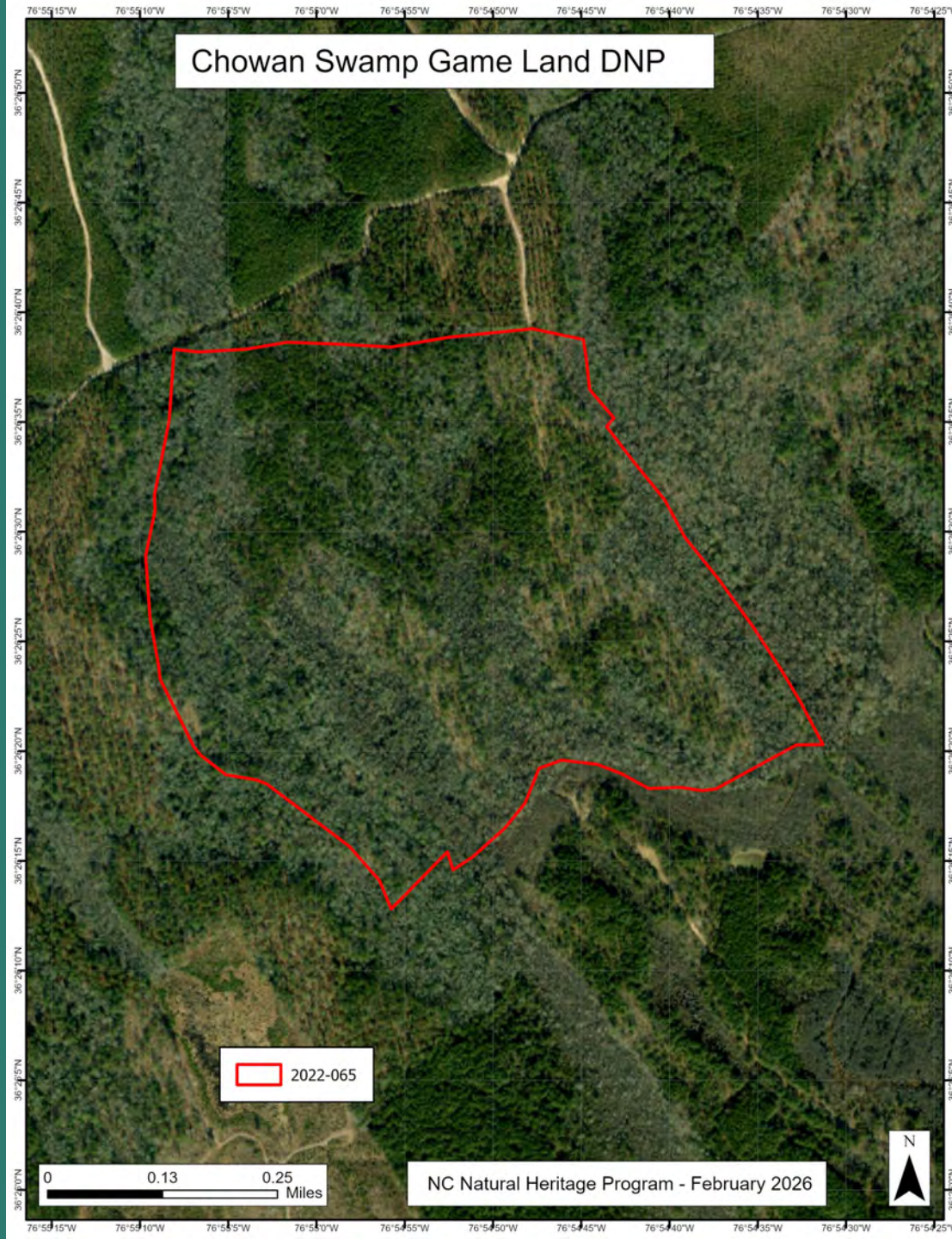


Chowan Swamp Game Land DNP

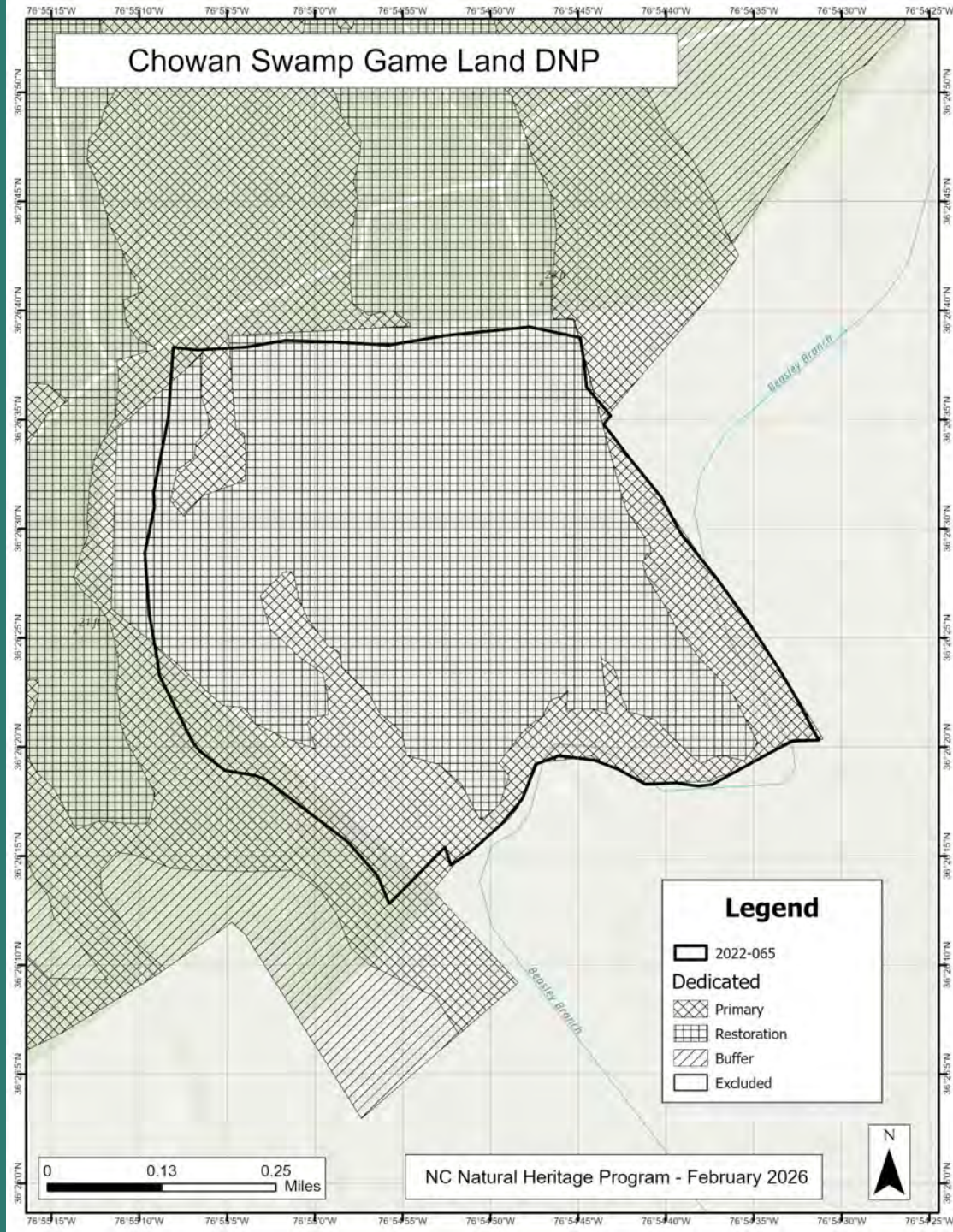




Chowan Swamp Game Land DNP



Chowan Swamp Game Land DNP



Chowan Swamp Game Land Dedicated Nature Preserve

Amendment to add tracts and fulfill terms of NCLWF grant agreements 2021-020 and 2022-065

- Adds 1,210 acres to DNP (includes significant boundary corrections)
 - 1,210 acres Primary, including 90 acres Restoration
- Total DNP 22,738 acres:
 - Primary Area 16,250 acres
 - Buffer Area 6,488 acres
- Element occurrences include:
 - Coastal Plain Small Stream Swamp S4/G4
 - Mesic Mixed Hardwood Forest (Coastal Plain Subtype) S3/G4
 - Tidal Swamp (Cypress--Gum Subtype) S3/G3
- Protects portions of Chowan Sand Banks (R1/C3) and Colerain/Cow Island Swamp and Slopes natural area (R4/C4)
- Riparian zones/floodplains along Chowan River Aquatic Habitat -- R2/C3
 - Element occurrences include:
 - Northern Lance (*Elliptio fisheriana*) S3/G4
 - Eastern Lampmussel (*Lampsilis radiata*) S3/G5
 - Eastern Pondmussel (*Sagittunio nasutus*) S2/G3

Lake Waccamaw State Park Dedicated Nature Preserve



Lake Waccamaw State Park Campbell property photo courtesy Nathan Shepard

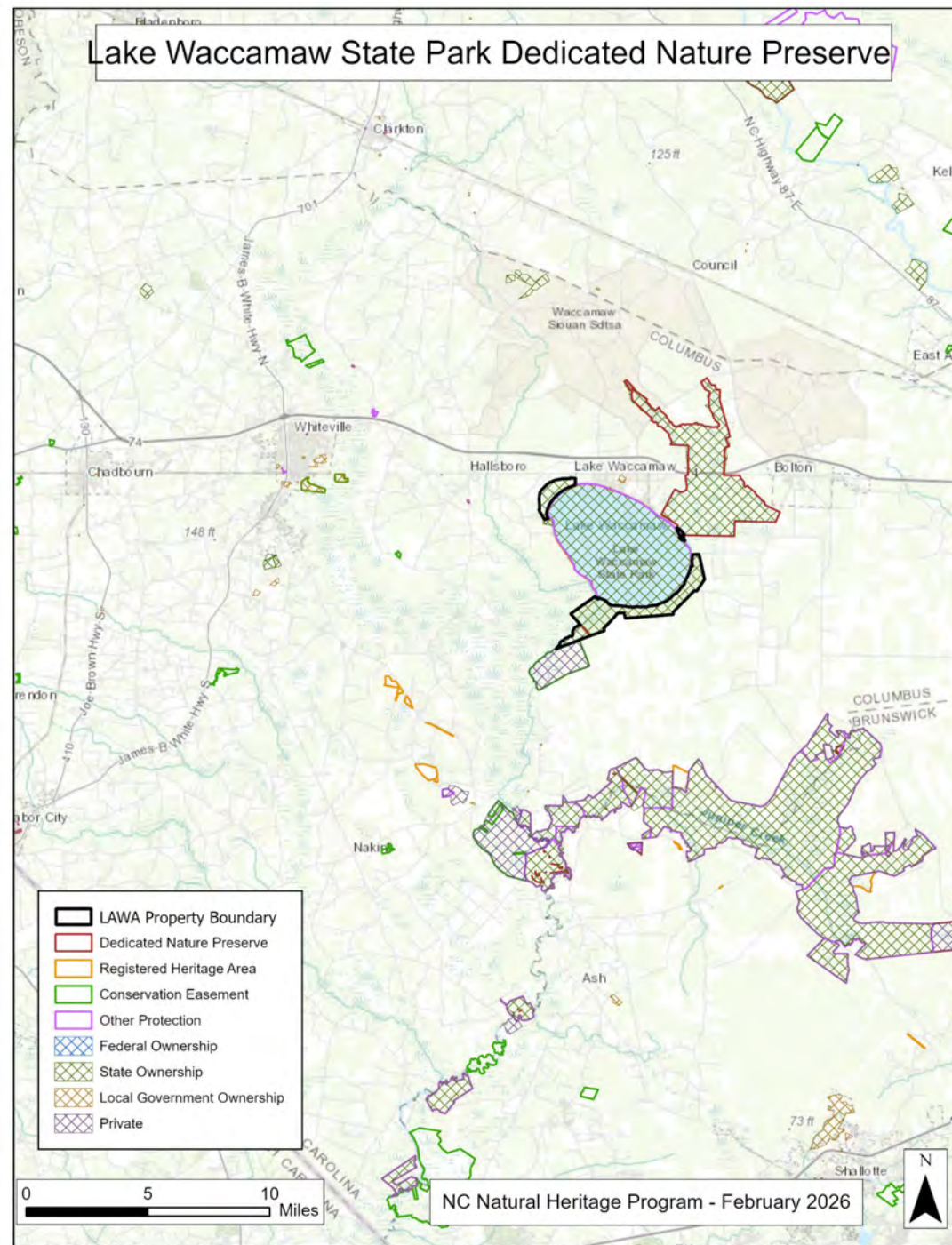
Lake Waccamaw State Park DNP



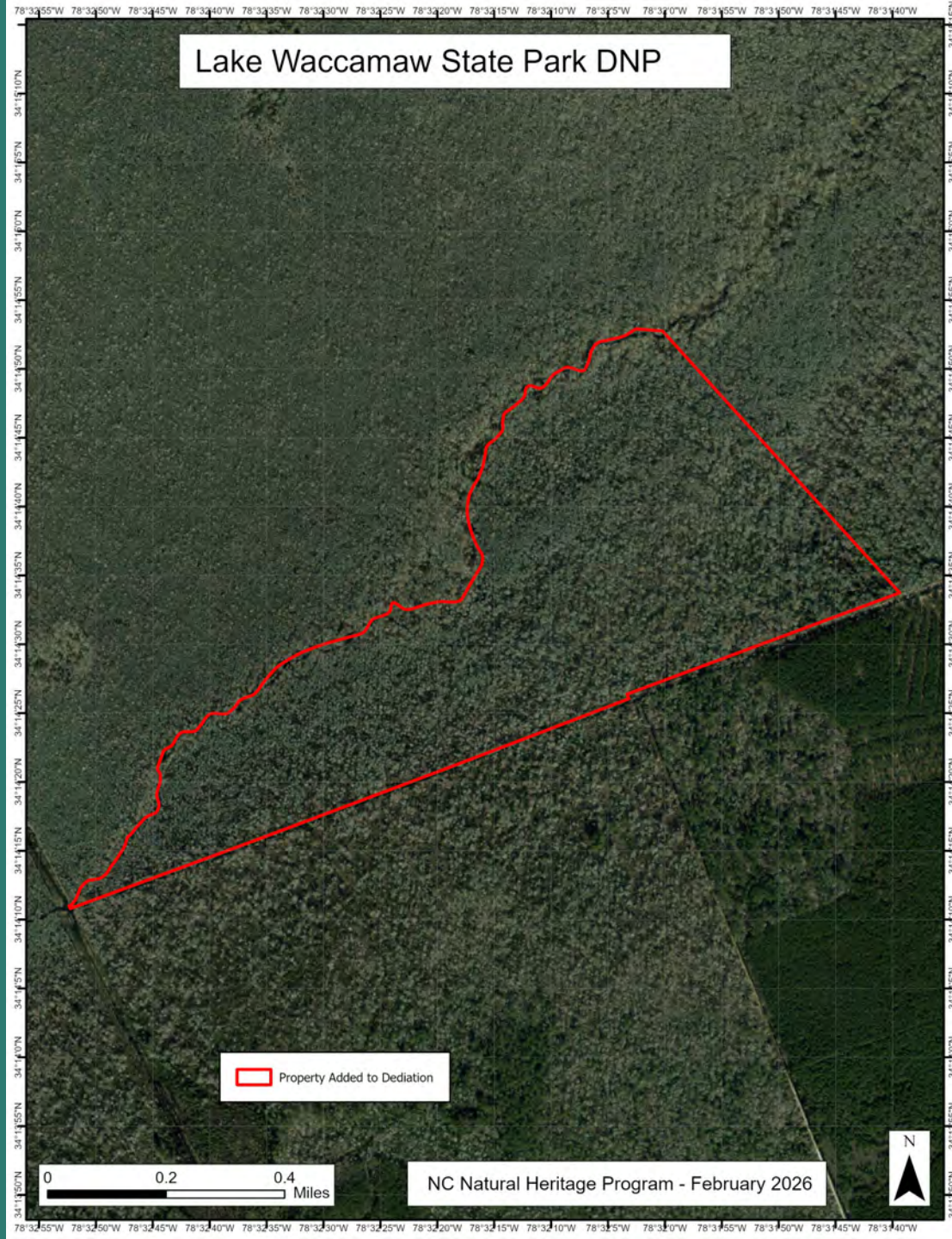
Columbus County

Waccamaw, Cape Fear, Catawba, Lumbee

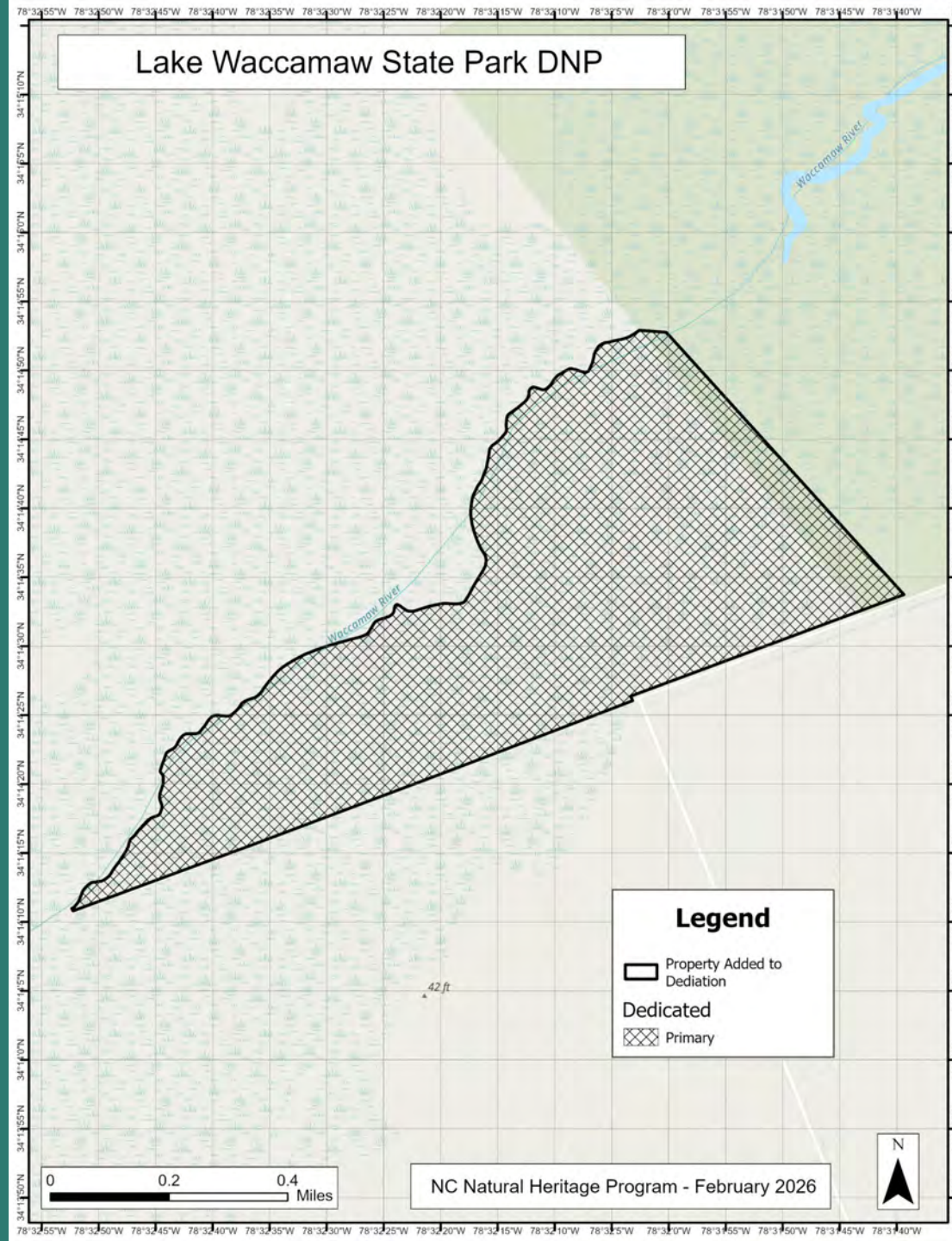
Lake Waccamaw State Park Dedicated Nature Preserve



Lake Waccamaw State Park DNP



Lake Waccamaw State Park DNP



Lake Waccamaw State Park DNP

Amendment to add tract and fulfill terms of NCLWF grant agreement 2015-063

- Adds 199 acres to DNP acres, all Primary
- Total DNP 641 acres, all Primary

Element Occurrences include:

- Blackwater Bottomland Hardwoods (Swamp Transition Subtype) – S3/G4
- Blackwater Levee/Bar Forest- S2/G2
- Cypress--Gum Swamp (Intermediate Subtype)- S3/G4
- Protects portions of Upper Waccamaw River Swamp natural area – R1/C2
- Riparian zones/floodplains along Waccamaw River Aquatic Habitat -- R1/C1
 - Element occurrences include:
 - Black-banded sunfish (*Enneacanthus chaetodon*) S3/G3
 - Waccamaw Darter (*Etheostoma perlongum*) S1/G1
 - Eastern Lampmussel (*Lampsilis radiata*) S3/G5
 - Waccamaw White Miller (*Nectopsyche waccamawensis*) S1/G1
 - Broadtail Madtom (*Noturus* sp. 2) S1/G2
- Request for future paddling access: “Additionally, an access for non-motorized boats may be considered along the Waccamaw River at a future date. Planning for this access will involve consultation with the NC Natural Heritage Program.”

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

Pocosin Lakes National Wildlife Refuge

Registered Heritage Area



Burned Pond Pine Woodland Pocosin Lakes NWR, Photo Courtesy of Mike Schafale

Pocosin Lakes National Wildlife Refuge RHA

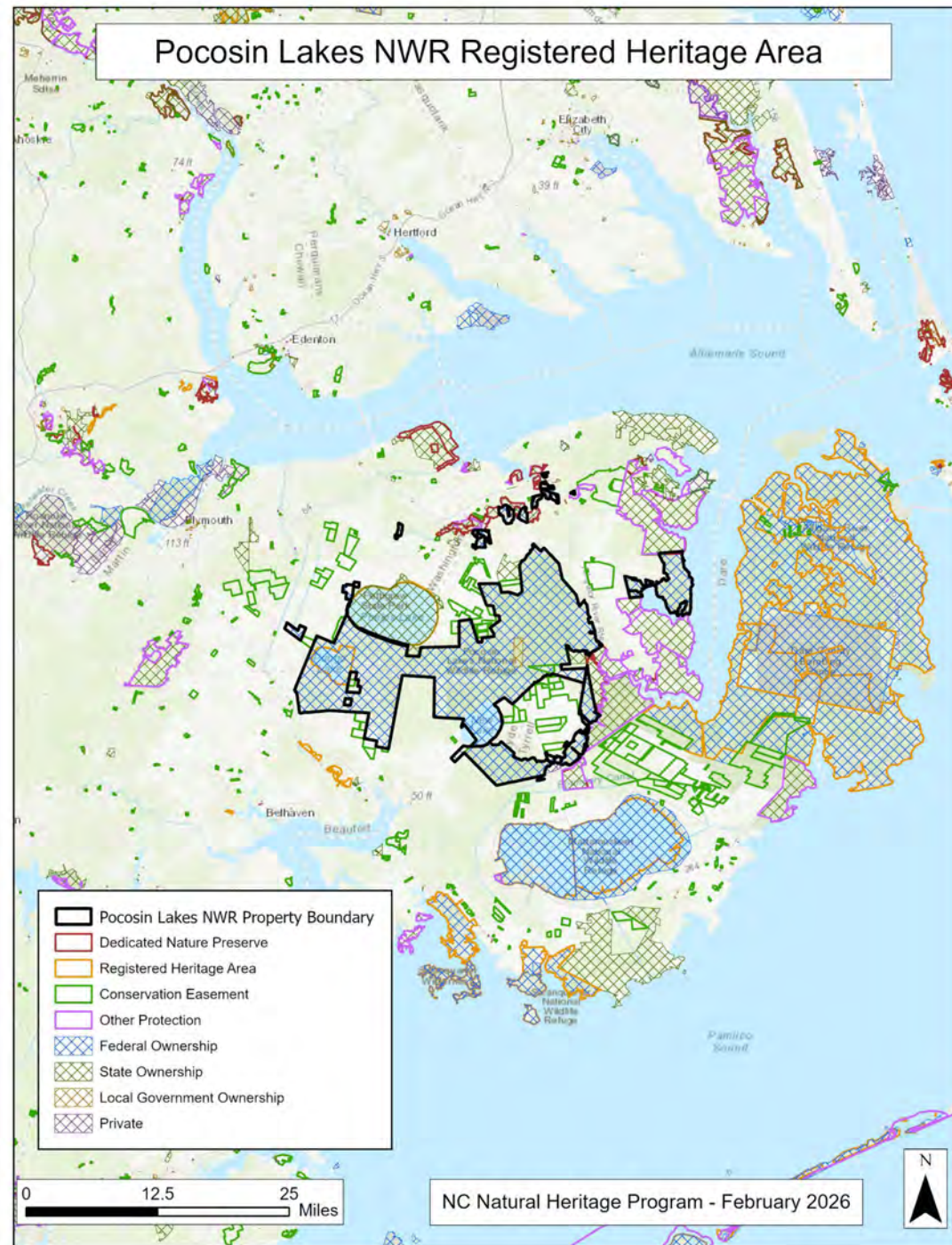


Pocosin Lakes
National Wildlife
Refuge

Washington, Tyrrell, and Hyde Counties

Secoatan, Lumbee

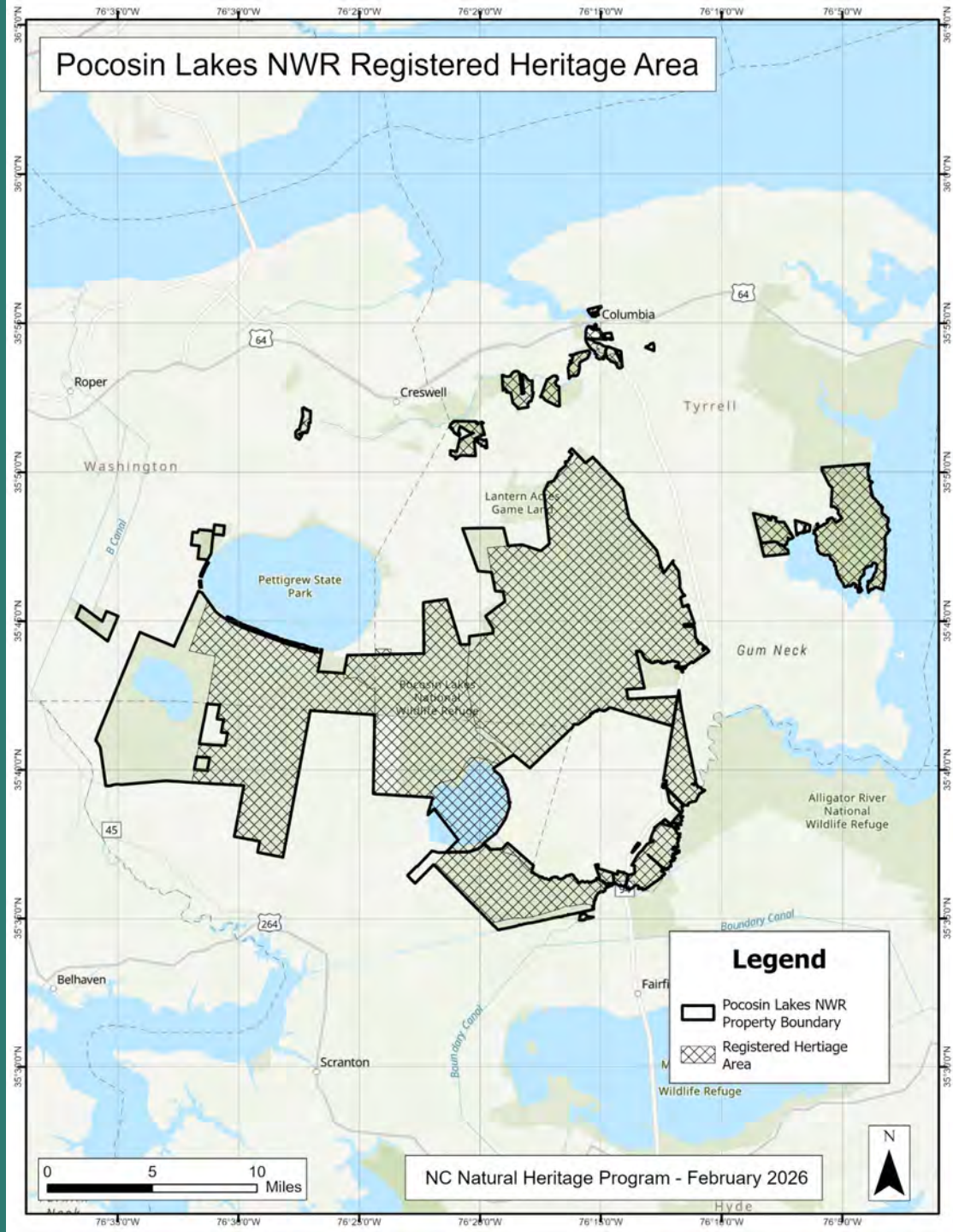
Pocosin Lakes NWR Registered Heritage Area



Pocosin Lakes NWR RHA



Pocosin Lakes NWR Registered Heritage Area



Pocosin Lakes National Wildlife Refuge

Registered Heritage Area

Voluntary Registry Agreement with US Fish and Wildlife Service

- 101,413 acres

Protects much or all of multiple natural areas:

- Upper Alligator River Pocosin – R1/C1 (42,087 acres)
- Scuppernong River Swamp Forest – R2/C2 (2,660 acres)
- Upper Alligator River Marshes and Forests – R1/C1 (2,581 acres)
- New Lake Fork Pocosin and New Lake – R1/C3 (11,377 acres)
- Harvester Road Tall Pocosin – R2/C5 (15,498 acres)
- Frying Pan Swamps – R5/C5 (7,093 acres)

Also includes Allen Road Restoration Area (20,104 acres)

Pocosin Lakes National Wildlife Refuge

Registered Heritage Area - Continued

Element Occurrences include:

- Berry's Skipper (*Euphyes berryi*) – S1/G3
- Floating Bog – S1/G1
- High Pocosin (Evergreen Subtype) – S3/G3
- Low Pocosin (Gallberry-Fetterbush Subtype) – S2/G2
- Natural Lake Shoreline Swamp (Sweetgum Subtype) – S1/G1
- Nonriverine Swamp Forest (Mixed Subtype) – S3/G3
- Nonriverine Swamp Forest (Sweetgum Subtype) – S2/G2
- Peatland Atlantic White Cedar Forest – S1/G2
- Pond Pine Woodland (Typic Subtype) – S3/G3
- Red Wolf (*Canis rufus*) – S1/G1
- Red-cockaded woodpecker (*Leuconotopicus borealis*) – S2/G3
- Tidal Swamp (Cypress--Gum Subtype) – S4/G3
- Tri-colored bat (*Perimyotis subflavus*) – S3/G3 ...