



Regular Meeting of the Natural Heritage Advisory Committee August 21, 2025 Agenda

Remote participation: Contact natural.heritage@dncr.nc.gov for Teams meeting link.

In-person meeting location: Nature Research Center room 4508, 121 West Jones Street, Raleigh, NC

Documents to be discussed during the meeting will be accessible online at:

https://www.ncnhp.org/events

NHAC Members: Jeff Marcus (chair), Alan Weakley, Jay Leutze, Kim Brown, Brian Byfield, Kevin Melvin, Jocelyn Wilson, Lee Leidy, Susan Cameron

NHP Staff: Misty Franklin, Scott Pohlman

DNCR Staff: Deputy Secretary Jeff Michael, Division of Land and Water Stewardship Director Will Summer, General Counsel Zoe Hansen Burnet.

10:00 AM Call to Order and Reading of Ethics Reminder - Jeff Marcus, Chair In accordance with the State Government Ethics Act, it is the duty of every Natural Heritage Advisory Committee member to avoid both conflicts of interest and appearances of conflict. Does any Natural Heritage Advisory Committee member have any known conflict of interest or appearance of conflict with respect to any matters coming before the Natural Heritage Advisory Committee today? If so, please identify the conflict or appearance of conflict and refrain from any undue participation in the particular matter involved.

Land Acknowledgement - Jeff Marcus, Chair

As we gather to discuss wise stewardship of critically important properties in NC, we gratefully acknowledge the Native American peoples who were the original stewards of these lands. We pay our respect to those past, present, and emerging people who have been custodians of these lands and waters.

Welcome, Introductions, and Logistics: NHAC, DNCR, NHP

• Department of Natural and Cultural Resources Updates: Deputy Secretary Jeff Michael

- Division of Land and Water Stewardship Updates: NC Land and Water Fund Executive Director and Division Director Will Summer
- NHP updates, special projects, ongoing priorities: Misty Franklin

01 Review Agenda for Additions and Deletions - All

02 Review Previous Meeting Minutes - All

Dedicated Nature Preserve Overview (Scott)

New Dedications and amendments to add property:

O3 Grandfather Mountain State Park Amendment (NC Division of Parks and Recreation)

O4 Bakers Lake State Natural Area (NC Division of Parks and Recreation) (pending DPR review)

Other Topics

Next Meeting Date: November 13, 2025 in person or via Teams

11:00 Adjourn





May 14, 2025 Natural Heritage Advisory Committee Meeting Minutes (for review)

In-person meeting location: Trinity Center Conference Room, 618 Salter Path Rd, Pine Knoll Shores, NC 28512

Documents discussed during the meeting were accessible online at: https://www.ncnhp.org/events

NHAC Members:

In-person: Alan Weakley, Sue Cameron, Jay Leutze. Online: Jeff Marcus (chair), Lee Leidy, Kim Brown. Absent: Jocelyn Wilson, Brian Byfield, Kevin Melvin.

NHP Staff:

In-person: Misty Franklin, Scott Pohlman, Michael Schafale, Katherine Culatta (recording minutes).

DNCR Staff:

In-person: Deputy Secretary Jeff Michael, General Counsel Zoe Hansen Burnet, Division of Land and Water Stewardship Director Will Summer, DLWS Executive Assistant Terri Murray, DLWS Acquisition Program Manager Marissa Hartzler, Environmental Policy Fellow Anne-Elisabeth Baker

9:00 AM Call to Order and Reading of Ethics Reminder - Jeff Marcus, Chair In accordance with the State Government Ethics Act, it is the duty of every Natural Heritage Advisory Committee member to avoid both conflicts of interest and appearances of conflict. Does any Natural Heritage Advisory Committee member have any known conflict of interest or appearance of conflict with respect to any matters coming before the Natural Heritage Advisory Committee today? If so, please identify the conflict or appearance of conflict and refrain from any undue participation in the particular matter involved.

Lee Leidy initially recused herself from discussion of Holly Shelter Game Land Dedication, but later reversed recusal during discussion based on impartiality relating to project details. No additional discussion.

Land Acknowledgement - Jeff Marcus, Chair

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present, and emerging people who have been custodians of these lands and waters.

Welcome, Introductions, and Updates: NHAC, DNCR, NHP

- NC Department of Natural and Cultural Resources Deputy Director Jeff Michael - Department Updates
 - o New DNCR Secretary Pamela Cashwell joined the Land and Water Fund meeting and field trips earlier this week. She brings extensive experience in state government to her leadership of the department. One area of focus has been addressing department staff vacancies across the department.
 - o Hurricane Helene recovery continues. Two state parks (Chimney Rock and Mt. Mitchell) remain closed, both due to external access issues.
 - o The department budget is expected to be lower in coming years.
- NC Land and Water Fund Executive Director and Division Director Will Summer - Program updates.
 - o Staff are reviewing NC Land and Water Fund (NCLWF) applications. The total amount applied for will exceed funds available- exact amount will be determined by the final state budget for FY 25-26.
 - o Potential additional funding sources for NCLWF applications are a potential standalone Hurricane Helene recovery bill, and use of DEQ Flood Resiliency Blueprint funds for qualifying projects.
 - o The Conservation Tax Credit has been reinstated for two years. As written, it applies only to fee-simple donations. An amendment to include easements has passed the legislature and will next be before the governor.
- Natural Heritage Program Manager Misty Franklin Program updates
 - o NHP staff are surveying LWF application sites.
 - o The Chatham County Natural Areas Inventory update will be finalized in June or July. The county will use the inventory to inform future growth, recreation, and conservation planning.
 - o Surveys of peatlands in the Albemarle-Pamlico region are ongoing.
 - o NHP staff are working with US Forest Service to assess impacts from Hurricane Helene, using remote sensing and NHP data to prioritize areas for survey across Western North Carolina. Also working on a contract with USFS for impact surveys in the Pisgah and Nantahala National Forests.
 - o Inventory of Falls Lake shoreline and tributaries will begin this summer.
 - o 2025 marks the 40th anniversary of the Nature Preserves Act.

O1 Review Agenda for Additions and Deletions - All: No additions or deletions.

O2 Review Previous Meeting Minutes: No edits or changes. Kim Brown moved to approve; Sue Cameron seconded. No discussion. Approved unanimously via roll call vote.

Dedicated Nature Preserves (Scott Pohlman)

- Dedication is an agreement attached to the land. It cannot be rescinded by the owner. Requires approval of Council of State and Governor. Includes specific management rules.
- Dedicated Nature Preserves often have zones, including Primary Area, Primary (Restoration) Area), Special Management Area, and Buffer Areas, depending on site-specific conditions.
- State dedications require letter of allocation from State Property Office. For other lands, the dedication is recorded with deed.

Management proposals and potential amendments to remove property

<u>03 New River State Park bridge replacement (Elk Shoals - HB-0054) update -</u> Scott Pohlman

- Previously approved by Natural Heritage Advisory Committee at February 2025 meeting, with recommendations for bat-friendly bridge construction and transfer of the old right-of-way to State Parks.
- Scott Pohlman presented at a public meeting held May 8. The public comment period is open until June 8. The next step is Council of State review.
- Jay The bridge washed out during Hurricane Helene, was replaced in its current location, and will now be demolished and rebuilt to the westwas holding off on rebuilding the bridge in favor of building in the new location considered?
- Scott No, replacement after the hurricane was completed quickly.
- Jeff Marcus Has there been a response to the recommendations of bat-friendly bridge and transferring the old ROW to State Parks?
- Scott The recommendations have been acknowledged but NHP has not received official plans.
- No further discussion or motion on this item.

<u>04 Chimney Rock State Park Amendment proposal - Scott Pohlman</u>

 The presented material is preliminary and for information only. If it goes forward, the project will likely require a Major Amendment request requiring NCLWF board approval.

- AT&T requests a permanent easement for redundant fiber cable, to include a 15-30 foot maintained right-of-way through Chimney Rock State Park along Worlds Edge Road. This will impact dedicated area and property funded by Land and Water Conservation Fund (NPS).
- Five natural communities and one rare plant are present near the proposed route. Surveys for federally listed White Irisette, which is known from nearby similar habitat, are recommended.
- Will Is the proposed route set, or are there alternatives? All alternatives, not only those proposed by AT&T, should be considered.
- Jay Did Land and Water Conservation Fund funding contribute to the affected parcel in particular, or to the park overall?
- Scott Thinks this parcel directly, will confirm. (Confirmed).
- Alan Have any parcels been identified for potential land exchange?
- Scott Specific areas have not been identified. Land exchange is encouraged if the project proceeds.
- Mike Land exchange value to parks (i.e. recreation access) may not match ecological value. Potential land exchange should align with LWF funding goals.
- Jeff Marcus Parks has declined a previous request, what changed that they have been instructed to reconsider?
- Jeff Michael Due to public safety concerns, local communities and legislators have pushed for better communications connections following communication failures during Hurricane Helene.
- Misty AT&T consultants should take the lead on biological surveys, NHP staff will coordinate with them and assist as needed to minimize and avoid impacts to element occurrences and the Dedicated Nature Preserve.
- Jeff Marcus Encourages the committee to shape alternatives early in the planning process. The committee worked to write and revise the following statement:
 - o The Natural Heritage Advisory Committee has been made aware of the proposed easement, and has concerns about direct and indirect impacts to the Dedicated Nature Preserve, rare species, and natural communities. The committee encourages AT&T to explore alternative routes that address these concerns alongside public safety needs.
- Votes: Jay Leutze moves to approve a first draft, Alan Weakley seconds. In discussion, Scott Pohlman adds statement of public safety needs, Jeff Marcus adds statement of rare plants and natural communities. Jay Leutze moves to approve statement above, Alan Weakley seconds. Unanimous approval by roll call vote.

05 City of Salisbury water intake Yadkin River Game Land - Scott Pohlman

- Previously reviewed by Natural Heritage Advisory Committee at February 2025 meeting, at which time the City of Salisbury requested 10 acres for water intake facility to draw water from the Yadkin River and proposed exchange of 19 acres owned by the city to be added to the game land.
- NHP staff surveyed the proposed 19 acres exchange parcel and found good quality habitat with over 90% of area qualifying for dedication as Primary Area.
- NCWRC supports the exchange based on comparable habitat and improved access.
- NCLWF board approved the parcel exchange at May 12 2025 meeting, and recommended dedication of the exchange parcel.
- Will The parcel to be impacted was transferred from ALCOA to WRC at the same time as LWF funded parcels, but was not part of the LWF project. There is no legal demand on this parcel, but WRC wishes to work with LWF in the interest of conservation value and maintaining a good relationship for future LWF funding requests.
- No further discussion or motion on this item.

<u>06 Eno River Diabase Sill (NCPCP) and Penny's Bend Registered Heritage</u> <u>Area (USACE) - Snow Hill Road expansion proposal (NCDOT) - Misty Franklin</u>

- The presented material is preliminary and for information only.
- NCDOT Start of Study to add left turn lane and traffic signal from Snow Hill Road onto northbound Old Oxford Road to address safety issues
- Four rare plant species are known from the proposed project area, with four other rare plant species and one S1G1 community nearby.
- NCNHP, NCPCP, USACE, and NC Botanical Garden (manager of Penny's Bend RHA) staff have informed NCDOT staff of concerns and asked to minimize impacts.
- No detailed proposal from NCDOT yet, but impacts expected on the north side of Snow Hill Road, which will affect the Dedicated Nature Preserve.
- Mike If safety issues stem from lack of traffic signal, is a new left turn lane necessary after installation of the traffic signal?
- No further discussion or motion on this item.

New Dedications and amendments to add property:

<u>07 Rattlesnake Creek Forests (Department of Adult Corrections) - Scott</u> Pohlman

- Voluntary dedication in partnership with Department of Adult Corrections
- Riparian zones and good-quality forests are dedicated as primary. Element occurrence is Mixed Mesic Hardwood Forest (Piedmont Subtype).
- Alan What are the buffer and primary-restoration areas?
- Katherine Buffer areas are lower-quality forest dominated by loblolly pine. The primary restoration area is a small impoundment that NCDAC may eventually remove for stream restoration.
- Alan Weakley moves to accept the dedication, Lee Leidy seconds. No further discussion. Passed unanimously by roll call vote.

<u>O8 Holly Shelter Game Land (NC Wildlife Resources Commission) amendment</u> – Mike Schafale

- Amendment to add Sleepy Creek tract (1,627 acres, NCLWF #2022-112)
 to DNP
- Added acres are 1,577 primary, 20 special management, and 50 buffer. It is a mosaic of Pond Pine Woodland and Longleaf Pine communities, with some buffer for remnant Loblolly Pine plantation. The special management area encompasses a powerline easement.
- Planned Mountains-to-Sea Trail route goes through the tract.
- Total DNP is 16,692 acres: 10,572 primary and 6,390 buffer, part of the Holly Shelter Game Land and Vicinity Natural Area (R1C1).
- Element occurrences include 8 natural communities and 3 rare plants.
- Alan Weakley moves to accept the amendment, Sue Cameron seconds. No further discussion. Passed unanimously by roll call vote.

<u>09 Yadkin River Game Land (NC Wildlife Resources Commission) - Mike Schafale</u>

- New DNP includes 4,787 acres: 1,730 primary, 3,057 buffer.
- Riparian zones and remnants of high quality natural areas to be added as primary. Buffer areas separate several distinct natural areas. Much of the non-dedicated land has been heavily impacted by historic land use.
- Element occurrences include 13 natural communities and 2 rare animals.
- Alan Weakley moves to accept the dedication, Lee Leidy seconds. No further discussion. Passed unanimously by roll call vote.

Break: 10:45-11:00 am

10 Three Top Mountain Game Land (NC Wildlife Resources Commission) amendment - Scott Pohlman

- Amendment to add 92 acres to DNP: 47 primary and 45 buffer.
- Total DNP is 3,532 acres: 1,988 primary and 1,544 buffer, part of the Three Top Mountain Natural Area (R1C1).
- Element occurrences include 3 natural communities and 3 rare plants.
- Jeff Marcus moves to accept the amendment, Alan Weakley seconds. No further discussion. Passed unanimously by roll call vote.

New Registries

Registered Heritage Areas (Scott Pohlman)

- Registry recognizes a natural area for its natural heritage resource values
- Voluntary agreement to protect and manage the natural area that can be rescinded by either party
- Management recommendations provided by NHP

11 Horseshoe Lake (Suggs Mill Pond) and Marshy Bay RHA - Scott Pohlman

- Private landowner in Bladen County.
- Adjacent to existing state conservation land (directly adjacent to Suggs Mill Pond Game Land, close to Bladen Lakes State Forest, Jones Lake State Park)
- 3,089 acres, 84 primary.
- Existing fire program implemented by landowner. NHP expects to have an active role in management recommendations.
- Element occurrences include 4 natural communities.
- Jeff Marcus in interest of transparency, The Nature Conservancy has an easement on part of the property and may expand to cover more acreage. Jeff has no direct involvement and can judge the proposal impartially, so does not recuse.
- Lee Leidy moves to accept the registry, Jay Leutze seconds. No further discussion. Passed unanimously by roll call vote.

12 Camp Merrie-Woode RHA amendment - Scott Pohlman

- Registry was approved at February NHAC meeting, but Registered area was later reduced at request of Camp Merrie Woode.
- The proposed update reduces registry area from 286 to 264 acres, in anticipation of current and potential development in area west of stream. The removed area does not include any element occurrences.

- Element occurrences within the registry include 3 natural communities and 1 rare plant.
- Jay Notes appreciation for anticipation by Camp Merrie-Woode of future uses that may not comply with registry before finalizing the agreement.
- Alan Weakley moves to accept the registry, Jay Leutze seconds. No further discussion. Passed unanimously by roll call vote.

Other Topics

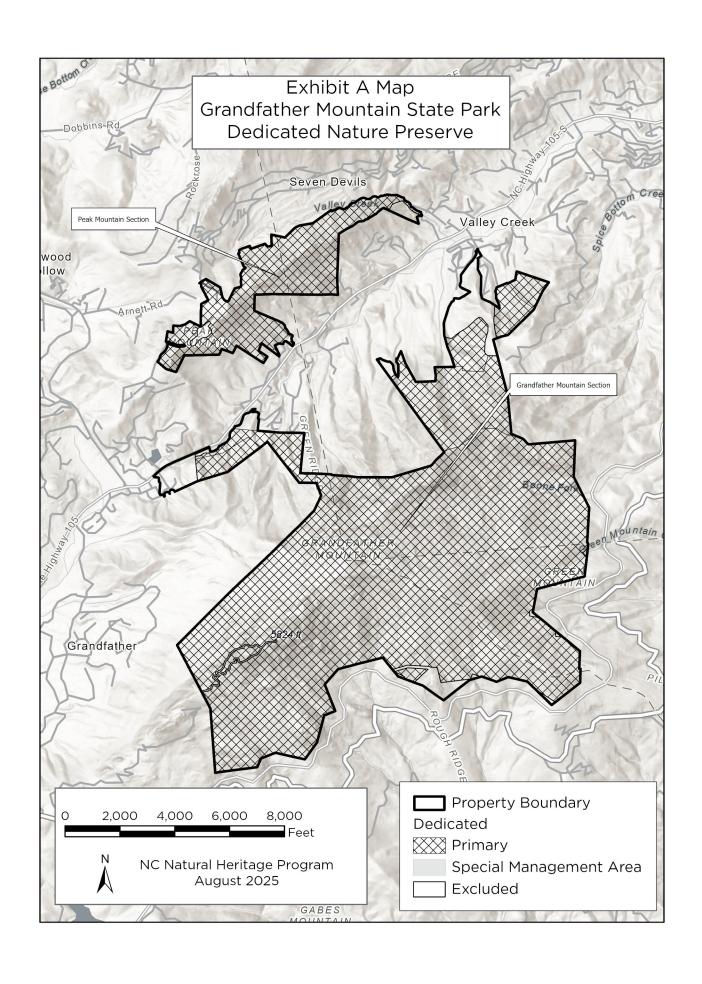
13 Proposed change to dedication template language - Scott Pohlman

- Proposal to include language "This agreement shall be perpetual. It is an easement in gross, runs with the land, and is enforceable by Grantee, its successors and assigns, against Grantor, its representatives, successors, assigns, lessees, agents, and licensees." in future dedication agreements.
- This change spurred from discussion with DNP manager for which the managing organization changed (Department of Public Safety to Department of Adult Corrections).
- Phrasing adopted from NC Land and Water Fund easement template.
- Alan Requests confirmation that this is clarifying language, and does not change legal implications of agreements.
- Zoe Confirms.
- Jay Does inclusion of new language in future agreements imply this statement does not apply to older agreements?
- Zoe No, this is clarifying language only and does not retroactively change older agreements. The minutes of this meeting serve as documentation of this interpretation.
- No vote is required on this matter. No further discussion or motion on this item.

Next Meeting Date: Virtual meeting August 21, 10 am - 12 pm.

Adjournment

Jay Leutze moves to adjourn, Sue Cameron seconds. Passed unanimously by roll call, meeting adjourned 11:30 am.



(INSERT DATE)

Secretary Pamela B. Cashwell Department of Natural and Cultural Resources Mail Service Center 4601 Raleigh, North Carolina 27699-4601

Re: Dedication of Areas within the State Park System

Dear Secretary Cashwell:

Pursuant to Part 42 of Article 2 of Chapter 143B of the North Carolina General Statutes, this letter of allocation is executed for the purpose of dedicating the State-owned lands hereinafter described as a North Carolina Nature Preserve.

Those real properties are allocated to the Department of Natural and Cultural Resources and currently managed by the Division of Parks and Recreation, briefly described below and more specifically described in Exhibit A.

Site Name Approximate Total Acreage

A. Grandfather Mountain State Park

3,222 acres

The terms of the grant agreements between the Division of Parks and Recreation and the North Carolina Land and Water Fund (former Natural Heritage Trust Fund and Clean Water Management Trust Fund) require dedication of the qualified portion of the Grandfather Mountain State Park, acquired as state lands with grants from the Funds, including grants 200810501, 201202504, 2017-060, 2021-003, and 2023-041.

These articles of dedication replace the articles of dedication for Grandfather Mountain State Park approved by the Council of State at their August 4, 2020 meeting. The articles reflect additions of property to the preserve, including 405 acres recommended for dedication by Natural Heritage Advisory Committee at 21 Aug 2025 meeting, and provide more accurate boundaries.

THIS ALLOCATION IS MADE SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

- 1. <u>Definitions</u>: As used in this allocation, the terms "natural area," and "nature preserve" have the same meaning as contained in North Carolina General Statutes 143B-135.254.
- 2. <u>Dedication</u>: The preserve, as described in this Allocation, is hereby dedicated as a **nature preserve** for the purposes provided in the Nature Preserves Act. A portion of the property was previously dedicated through a conservation easement recorded in Avery County, NC, Register of Deeds, November 17, 1998, Deed Book 312, pages 925-943. The terms of the conservation easement are compatible with those of this letter of allocation.
- 3. <u>Duration</u>: Subject to the limitations of NCGS 143B-135.264, this agreement shall be perpetual, in gross, running with the land.
- 4. **Primary Custodian**: The primary Custodian of the preserve will be the Department of Natural and Cultural Resources, Division of Parks and Recreation.
- 5. **Primary Classification**: The primary classification and purpose of the preserve will be conservation, scientific research, passive recreation, and nature education.

6. Rules for Management:

A. <u>Character of Visitor Activity</u>: The principal activities in the preserve shall be non-consumptive outdoor recreation and education in designated areas. These activities may be regulated by the Custodian to protect and conserve the natural values of the preserve.

Activities and uses unrelated to those listed above are prohibited except as provided in this Dedication or unless necessary to carry out the purposes of the preserve. Prohibited activities include, but are not limited to, commercial development; commercial silviculture; agriculture and grazing; gathering of plants or plant products for purposes other than approved research; the removal, disturbance, molestation, or defacement of minerals, archaeological and natural resources; and those activities specifically restricted in this Dedication.

- B. <u>Orientation and Guidance of Visitors</u>: The Custodian reserves the right to orient and guide visitors for educational programs, scientific research, and preserve management. Exhibits, programs and printed materials may be provided by the Custodian. The Custodian may create and maintain nature trails, overlooks, boardwalks, and primitive campsites adequate to promote the permitted use of the preserve. Guardrails, fences, steps, bridges, and boardwalks may be provided when appropriate. The Custodian reserves the right to erect structures necessary to protect the preserve from unwanted or excessive visitor traffic and structures to restrict visitor access to sensitive environmental resources.
- C. <u>Roads and Trails</u>: The Custodian may construct and maintain service roads for patrol, fire control, right-of-way maintenance, and other management activities. The Custodian may

- maintain roads presently existing within the preserve. Otherwise, the construction of roads will be prohibited.
- D. <u>Other Structures and Improvements</u>: Buildings or facilities other than those defined above shall not be erected by the Custodian within the preserve, and they must be consistent with the purposes of the preserve as stated herein.
- D. <u>Research and Collecting Permits</u>: Any person wishing to engage in scientific research or collecting shall first secure written permission from the Custodian.
- E. <u>Vehicles</u>: There will be no horseback riding or bicycling except on trails designated for these purposes and no use of any motorized vehicles except boats. The Custodian may use vehicles as necessary for the management of the preserve.
- F. <u>Excavation</u>: There will be no mining, drilling, removal of topsoil, sand, gravel, rock, minerals, or other material, nor any change in topography or surface hydrology of the preserve. Exceptions for ecological restoration to more natural conditions, consistent with the Management Plan, may be made in consultation with the North Carolina Natural Heritage Program.
- G. <u>Water Level Control</u>: The purpose of water level control shall be to maintain the preserve's natural water regimes. Water levels that have been altered by human activities may be changed, if necessary, to restore the preserve to its natural condition. In a preserve with a long history of managed hydrology, water levels may be managed to perpetuate the ecosystems that have evolved around the hydrology. Millponds are an example of situations in which water levels have been historically managed.
- H. <u>Bringing in Flora and Fauna</u>: No exotic flora and no animals except leashed dogs and cats, horses on trails designated for horseback riding, or animals being reintroduced shall be brought into the preserve. Any reintroduction will be of species native to the natural community and shall be done according to an approved resource management plan.
- I. <u>Fire</u>: Use of prescribed burning is permitted as necessary for the biological management of the preserve. Any prescribed burning must be done according to an approved fire management plan for the park unit in question. Fires are also permitted in conjunction with supervised activities of the Custodian, or in designated areas within primitive campsites.
- J. <u>Disturbance of Natural Features</u>: The disturbance of other natural features is prohibited except for control of disease that would damage or reduce the significance of the preserve, reduction of fire fuel load after severe storm damage, or for purposes of ecological management as stipulated in the Park unit's approved management plan and that which is consistent with the purposes of this Dedication.
- K. <u>Control of Populations (natural and exotic)</u>: Any control of animal or plant populations, other than fishing, shall be only to correct situations where populations have been significantly altered from natural conditions. The Custodian may, in accordance with an approved resource management plan, apply biological controls, herbicides and pesticides, and other means deemed necessary or appropriate to control or eradicate exotic or native species of plant or animal that are degrading the natural character of the preserve.

- L. <u>Control of Natural Processes</u>: Natural processes will be managed according to the policy of the North Carolina State Parks Natural Resource Management Policy. Generally, natural resources will be managed by allowing natural environments to evolve through natural processes with minimal influence from human activities. Exceptions are enumerated in the Policy Statement.
- M. <u>Management Plan</u>: These rules for management constitute a management plan within the meaning of 07 NCAC 13H.0300 until detailed plans for each park are prepared. The dedicated nature preserve will continue to be subject to other applicable regulations within NCAC Title 07, Chapter 13. Where contradictions may arise between this instrument of dedication and other management regulations, the terms of this Dedication shall take precedence.
- 7. **Amendment, Modification, and Termination**: Any changes to this Dedication must be made in accordance with the provisions of North Carolina General Statutes 143B-135.264, which require the approval of the Governor and the Council of State.

The Governor and Council of State have approved the dedication of the State-owned lands described by this document at a meeting in (City Name), North Carolina on (DATE).

Sincerely,

Gabriel J. Esparza

CONSENTED AND AGREED TO:

Pamela B. Cashwell

Department of Natural and Cultural Resources

EXHIBIT A

GRANDFATHER MOUNTAIN STATE PARK DEDICATED NATURE PRESERVE GRANDFATHER MOUNTAIN SECTION

COUNTY: Avery, Caldwell, and Watauga

PHYSIOGRAPHIC PROVINCE: Northern Mountains

TOPOGRAPHIC QUAD: Grandfather Mountain

SIZE OF AREA: ca. 2,841 acres (all primary)

OWNER/ADMINISTRATOR: State of North Carolina, Division of Parks and Recreation

LOCATION: Grandfather Mountain State Park is located northeast of Linville, generally bounded by the Blue Ridge Parkway on the south and east, and private lands and The Nature Conservancy on the north and west. The park protects headwaters and streams in two river basins: Green Ridge Branch, Shanty Spring Branch, and the Watauga River in the Watauga River Basin and Dixon Creek, Green Mountain Creek, Linn Cove Branch, Stack Rock Creek, Little Wilson Creek, and Wilson Creek in the Upper Catawba River Basin.

The Grandfather Mountain State Park Dedicated Nature Preserve contains one of the largest concentrations of rare species in North Carolina. These are listed in Table 1 and Table 2 (there is a good probability that additional rare species, not listed here, which have been found in the Grandfather Mountain area on lands owned by The Nature Conservancy, Grandfather Mountain, Inc, US Forest Service, and the Blue Ridge Parkway may also be present within Grandfather Mountain State Park). In 1992 Grandfather Mountain was recognized as an International Biosphere Preserve. At 5,964 feet, Grandfather Mountain is the highest peak on the Blue Ridge Escarpment. The mountain is home to many rare Southern Appalachian endemic species and northern disjuncts, including a handful of species that are known from five or fewer populations in the world.

Defined by sharp, rocky peaks, Grandfather Mountain supports excellent occurrences of many rare high elevation community types and an exemplary assemblage of rare plant and animal species. Federally Endangered plant species include spreading avens (*Geum radiatum*) and Roan Mountain bluet (*Houstonia montana*). Federally Threatened plant species include Heller's blazing-star (*Liatris helleri*) and Blue Ridge goldenrod (*Solidago spithamaea*). Other rare plants include mountain bittercress (*Cardamine clematitis*), tall larkspur (*Delphinium exaltatum*), Carolina saxifrage (*Micranthes caroliniana*), Gray's lily (*Lilium grayi*), the liverworts *Sphenolobopsis pearsonii* and *Plagiochila sullivantii* var. *sullivantii*, and numerous others. Federally Endangered animal species include Virginia big-eared bat (*Corynorhinus townsendii virginianus*), Carolina northern flying squirrel (*Glaucomys sabrinus coloratus*), and spruce-fir moss spider (*Microhexura montivaga*). Other rare animal species include eastern smallfooted myotis (*Myotis leibii*), Alleghany woodrat (*Neotoma magister*), southern water shrew (*Sorex palustris punctulatus*), Southern Appalachian northern saw-whet owl (*Aegolius acadicus*), and Southern Appalachian black-capped chickadee (*Poecile atricapillus practica*).

Grandfather Mountain supports excellent examples of eighteen known natural community types. Rare types include High Elevation Rocky Summit, Fraser Fir Forest, Boulderfield Forest, Red Spruce-Fraser

Fir Forest, and Montane Cliff (Calcareous Subtype). The High Elevation Rocky Summit natural communities on the mountain are widely considered the best-known examples. Between the rocky crags and summits along the summit ridge at the highest elevations, good quality Fraser Fir Forests and Red Spruce-Fraser Fir Forest grow. The northwest flanks of the mountain support extensive Boulderfield Forest natural communities. Excellent examples of Northern Hardwood Forest grow on much of the mountain. Mid to lower slopes support High Elevation Red Oak Forests. Rich Cove Forests of good quality grow at the mid to lower elevations. Generally, these coves and drainages also support numerous High Elevation Seep natural communities. Acidic Cove Forest, Heath Bald, Montane Cliff (Acidic Subtype), and Montane Cliff (Calcareous Subtype) natural communities are scattered on the mountain.

Table 1. Rare plant species at Grandfather Mountain State Park Dedicated Nature Preserve

Scientific Name	Common Name	State Status	Federal Status
Aconitum reclinatum	Trailing Wolfsbane	Significantly Rare	
Athyrium angustum	Northern Lady Fern	Significantly Rare	
Bazzania nudicaulis	A Liverwort	Significantly Rare	
Brachyelytrum aristosum*	Northern Shorthusk	Significantly Rare	
Calamagrostis canadensis var. canadensis	Canada Reed Grass	Special Concern- Vulnerable	
Cardamine clematitis	Mountain Bittercress	Significantly Rare	
Carex roanensis	Roan Sedge	Significantly Rare	
Cetraria arenaria	Sand-loving Iceland Lichen	Special Concern- Vulnerable	
Chamerion angustifolium ssp. circumvagum	Fireweed	Endangered	
Conioselinum chinense	Hemlock-parsley	Threatened	
Cystopteris fragilis	Fragile Fern	Significantly Rare	
Delphinium exaltatum	Tall Larkspur	Endangered	
Dendrolycopodium hickeyi	Pennsylvania Ground-pine	Significantly Rare	
Epilobium ciliatum ssp. ciliatum	American Willow-herb	Significantly Rare	
Geum geniculatum	Bent Avens	Special Concern- Vulnerable	
Geum radiatum	Spreading Avens	Endangered	Endangered
Gymnoderma lineare	Rock Gnome Lichen	Endangered	Endangered
Homalia trichomanoides	Lime Homalia	Significantly Rare	
Houstonia montana	Roan Mountain Bluet	Endangered	Endangered
Lepra andersoniae	Glady's Mountain Spikes	Significantly Rare	

Scientific Name	Common Name	State Status	Federal Status
Leptodontium excelsum	Grandfather Mountain Leptodontium	Significantly Rare	
Leptodontium flexifolium	Pale-margined Leptodontium	Significantly Rare	
Liatris helleri	Heller's Blazing-star	Threatened	Threatened
Lilium grayi	Gray's Lily	Threatened	
Melanelia stygia	Alpine Camouflage Lichen	Significantly Rare	
Metzgeria consanguinea	A Liverwort	Significantly Rare	
Micranthes caroliniana	Carolina Saxifrage	Significantly Rare	
Muhlenbergia sobolifera	Rock Muhly	Threatened	
Mylia taylorii	A Liverwort	Significantly Rare	
Packera paupercula var. paupercula*	Balsam Ragwort	Special Concern- Vulnerable	
Plagiochila austinii	A Liverwort	Significantly Rare	
Plagiochila exigua	A Liverwort	Significantly Rare	
Plagiochila sullivantii	A Liverwort	Significantly Rare	
Platanthera grandiflora	Large Purple-fringed Orchid	Significantly Rare	
Rhodiola rosea*	Roseroot	Endangered	
Rhododendron vaseyi	Pink-shell Azalea	Significantly Rare	
Solidago spithamaea	Blue Ridge Goldenrod	Threatened	Threatened
Sphagnum capillifolium*	Northern Peatmoss	Significantly Rare	
Sphenolobopsis pearsonii	A Liverwort	Significantly Rare	
Stenanthium leimanthoides	Pinebarren Death-camas	Threatened	
Trichophorum cespitosum	Deerhair Bulrush	Significantly Rare	
Xanthoparmelia monticola	Mountain Rock-shield Lichen	Significantly Rare	

^{*} indicates historical records not relocated in the past 20 years.

Table 2. Rare animal species at Grandfather Mountain State Park Dedicated Nature Preserve

Scientific Name	Common Name	State Status	Federal Status
Accipiter striatus	Sharp-shinned Hawk	Significantly Rare	
Aegolius acadicus	Northern Saw-whet Owl	Threatened	
Catharus guttatus	Hermit Thrush	Significantly Rare	

Scientific Name	Common Name	State Status	Federal Status
Certhia americana	Brown Creeper	Special Concern	
Coccyzus erythropthalmus	Black-billed Cuckoo	Significantly Rare	
Corynorhinus townsendii virginianus	Virginia Big-eared Bat	Endangered	Endangered
Desmognathus organi	Northern Pigmy Salamander	Significantly Rare	
Falco peregrinus	Peregrine Falcon	Endangered	
Glaucomys sabrinus coloratus	Carolina Northern Flying Squirrell	Endangered	Endangered
Inflectarius subpalliatus	Velvet Covert	Special Concern	
Loxia curvirostra	Red Crossbill	Special Concern	
Mesodon andrewsae	Balsam Globe	Significantly Rare	
Microhexura montivaga	Spruce-fir Moss Spider	Significantly Rare	Endangered
Myotis leibii	Eastern Small-footed Myotis	Special Concern	
Myotis lucifugus	Little Brown Bat	Endangered	
Myotis septentrionalis	Northern Long-eared Bat	Endangered	Endangered
Neotoma magister	Appalachian Woodrat	Special Concern	
Paravitrea andrewsae	High Mountain Supercoil	Special Concern	
Perimyotis subflavus	Tricolored Bat	Endangered	Proposed Endangered
Plethodon welleri	Weller's Salamander	Special Concern	
Poecile atricapillus	Black-capped Chickadee	Special Concern	
Polygonia faunus	Smyth's Green Comma	Significantly Rare	
Setophaga magnolia	Magnolia Warbler	Significantly Rare	
Sorex dispar blitchi	Southern Rock Shrew Shrew	Significantly Rare	
Sorex palustris punctulatus	Southern Water Shrew	Significantly Rare	
Sylvilagus obscurus	Appalachian cottontail	Significantly Rare	
Sphyrapicus varius	Yellow-bellied Sapsucker	Significantly Rare	

BOUNDARY JUSTIFICATION: The dedicated area includes most of the land owned by NC Division of Parks and Recreation at Grandfather Mountain, except the Profile Trail parking area at NC 105, the trail easements retained by Grandfather Mountain Stewardship Foundation including the ladders and cables from the summit parking area to McCrae Gap, the easements along the Blue Ridge Parkway held by the National Park Service, and parts of small tracts about 1.3 mile east of NC Highway 105 at the Avery-Watauga County line.

MANAGEMENT AND USE: The Dedicated Nature Preserve is the majority of the Grandfather Mountain State Park owned by the State and used for public recreation and conservation. The most important management needs will be to protect the fragile rare species habitat from trampling along the trail system. The high elevation rocky natural communities are particularly vulnerable to human impacts, and the need to limit human disturbance is ongoing. Any proposed activities within the protected species habitat should be planned with care to minimize impacts. Creation of any new trails, including rock climbing routes, should be carefully planned to avoid any rare species habitat. Regulatory agencies (US Fish and Wildlife Service, NC Plant Conservation Program, and NC Wildlife Resource Commission) and the NC Natural Heritage Program should be consulted when planning and installing any features within the protected species habitat. Much of the mountain's Canada hemlock (*Tsuga canadensis*) populations are under attack from the hemlock woolly adelgid (*Adelges tsugae*). This non-native insect pest threatens the survival of both the Canada hemlock and the Carolina hemlock (*T. carolinensis*) throughout their respective ranges. Resources at Grandfather Mountain may be among the most vulnerable to the effects of climate change of any in the state. Rare species and natural communities should be monitored for changes related to climate, and interventions may be necessary if populations are found to be declining.

EXHIBIT A

GRANDFATHER MOUNTAIN STATE PARK DEDICATED NATURE PRESERVE PEAK MOUNTAIN SECTION

COUNTY: Avery and Watauga

PHYSIOGRAPHIC PROVINCE: Northern Mountains

TOPOGRAPHIC QUAD: Valle Crucis

SIZE OF AREA: ca. 381 acres total (All Primary including 0.13 acre Special Management Area)

OWNER/ADMINISTRATOR: State of North Carolina, Division of Parks and Recreation

LOCATION: The Peak Mountain Section of the Grandfather Mountain State Park Dedicated Nature Preserve is centered about 1.7 miles north-northeast of the junction of NC Highway 105 and NC Highway 184 and about one mile south of the summit of Hanging Rock Mountain. It is one ridge north of Grandfather Mountain and is located between the communities of Seven Devils and Valley Creek.

DESCRIPTION: The Peak Mountain Section is centered on a high elevation (~4500 feet) ridgeline running northeast-southwest and terminating at the summit of Peak Mountain (also known as Dun Vegan Mountain). It includes the very steep and rocky southeast and northwest facing slopes descending from the ridgeline. Along the ridge line and at Peak Mountain are several High Elevation Rocky Summits (Typic Subtype) which support significant populations of Roan Mountain Bluet (Houstonia montana), Heller's Blazing Star (Liatris helleri), Golden Tundra Moss (Rhytidium rugosum), and Sand-loving Iceland Lichen (Cetraria arenaria). Hermit Thrush (Catharus guttatus) and Winter Wren (Troglodytes hyemalis) live on the preserve. Rabbits meeting the phenotype for Appalachian Cottontail (Sylvilagus obscurus) were also observed on the Preserve but have not been definitively identified with genetic testing. While the Rocky Summit at Peak Mountain has been developed, with a leveled clearing and observation deck, the other two Rocky Summits have minimal human impact. The steep southeast facing slopes of the preserve contain excellent Northern Hardwood Forest (Rich and Typic Subtypes) which is in old growth condition. A small population of Roan Sedge (Carex roanensis) occurs on the lower slopes in this community. High quality Chestnut Oak Forest (Dry Heath Subtype), High Elevation Red Oak Forest (Heath and Typic Subtypes) and Rich Montane Seeps are also present. A road runs from Hanging Rock Gap to the summit of Peak Mountain and some lots have been cleared along the road as part of a failed housing development. The preserve is surrounded by second home and ski resort development but is relatively intact and is very significant for conservation due to the presence of high-quality and mature natural communities and rare plants and animals.

BOUNDARY JUSTIFICATION: The Primary Area includes the areas of natural communities in good condition or areas that are younger but have a substantial proportion of representative canopy species of the natural community remaining. Areas with less natural composition were excluded from the dedication. The Primary Area also includes areas within 100 feet of waterways as mapped by the NC Stream Mapping Project. Valley Creek is included in the WAT/Watauga River Aquatic Habitat and Dedication of riparian zones along this stream and its tributaries contribute to maintaining water quality and instream habitat. A small area on the ridge that has been impacted from lot clearing was excluded from the Dedication, but it is embedded within Primary and should revegetate well into a forested condition, allowing for passive restoration.

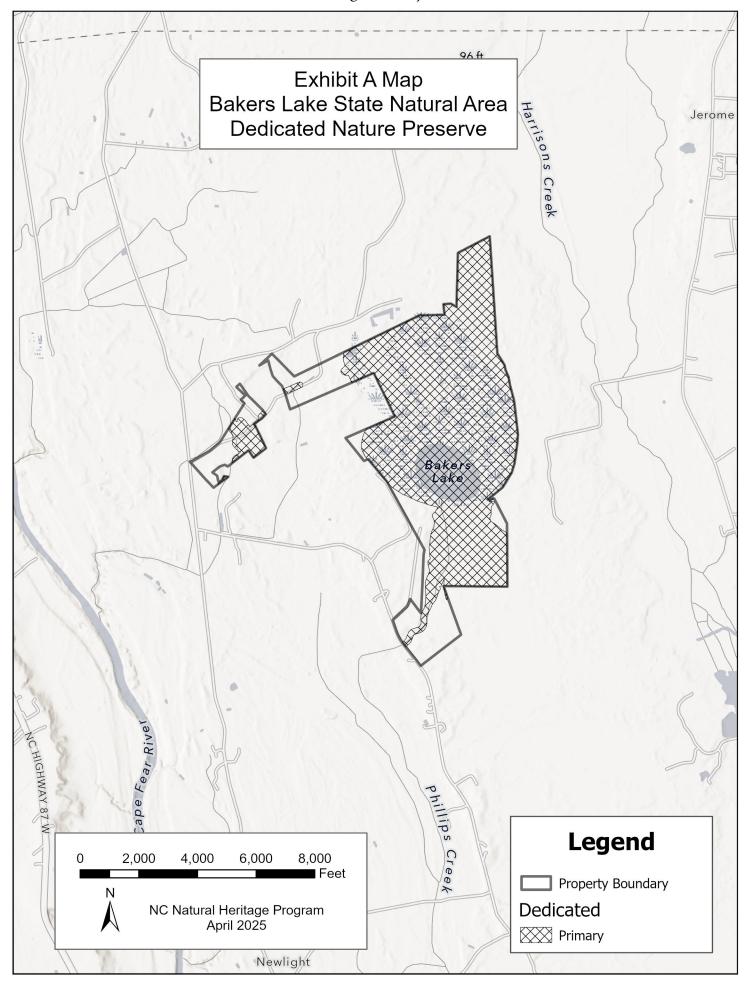
A small area at the summit of Peak Mountain is defined as a Special Management Area. This area includes an artificial, leveled clearing with a wooden viewing platform and picnic tables. Roan Mountain Bluet (*Houstonia montana*) occurs on the edge of the clearing, both on the rock faces as well as in the adjacent mowed area.

MANAGEMENT AND USE: The Custodian will manage the property to protect natural heritage values including quality natural communities, rare plants, animals, and aquatic resources. Due to the sensitive nature of the rock outcrop communities, the preserve should not be open to the public apart from guided hikes or special programming. Since the preserve is currently receiving some visitation by the public, there will need to be an effort to control access and monitor unauthorized usage.

Special Management Area: This area is composed of an artificial, leveled clearing at the summit of Peak Mountain which also supports a population of Roan Mountain Bluet (*Houstonia montana*). The user-created trail which leads from the clearing to the upper outcrop should be permanently closed to protect the Roan Mountain Bluet population which lies directly in the path, as well as the integrity of the High Elevation Rocky Summit community. A welded wire fence or other similar barrier should be installed to protect the Roan Mountain Bluet that grows in the clearing from trampling. Some of the woody shrubs and saplings in the gravelly opening where the Roan Mountain Bluet occurs may need to be cut back at a regular interval to prevent over-shading. This work should occur in the dormant season and the response of the plants should be monitored. The wooden viewing platform should be maintained if possible as it provides an appropriate end destination for hikers and may prevent them from impacting other areas. The clearing at the peak, apart from the area occupied by Roan Mountain Bluet, may continue to be kept open with mowing so that it can be used for park programming.

Primary Restoration: The cleared homesite areas on the ridge should be allowed to naturally revegetate and will require management for the invasive species present there. These include spotted knapweed (*Centaurea stoebe*), coltsfoot (*Tussilago farfara*), sericea lespedeza (*Lespedeza cuneata*), reed canary grass (*Phalaris arundinacea*) and yellow flag iris (*Iris pseudacorus*).

Any trails or other developments that are proposed for the preserve will require a biological survey in collaboration with the NC Natural Heritage Program.



Pending Review by DPR

(INSERT DATE)

Secretary Pamela B. Cashwell Department of Natural and Cultural Resources 4601 Mail Service Center Raleigh, North Carolina 27699-4601

Re: Dedication of Areas within the State Park System

Dear Secretary Cashwell:

Pursuant to Part 42 of Article 2 of Chapter 143B of the North Carolina General Statutes, this letter of allocation is executed for the purpose of dedicating the State-owned lands hereinafter described as a North Carolina Nature Preserve.

Those real properties are allocated to the Department of Natural and Cultural Resources and currently managed by the Division of Parks and Recreation, briefly described below and more specifically described in Exhibit A.

Site Name

Approximate Total Acreage

Bakers Lake State Natural Ares

931acres

Dedication of the qualified portions of the tracts fulfills the terms of the grant agreement with the North Carolina Land and Water Fund [#2022-062].

THIS ALLOCATION IS MADE SUBJECT TO THE FOLLOWING TERMS AND CONDTIONS:

- 1. <u>Definitions</u>: As used in this allocation, the terms "natural area," and "nature preserve" have the same meaning as contained in North Carolina General Statutes 143B-135.254.
- 2. <u>Dedication</u>: The preserve, as described in this Allocation, is hereby dedicated as a **nature preserve** for the purposes provided in the Nature Preserves Act.
- 3. **Duration**: Subject to the limitations of NCGS 143B-135.264, this agreement shall be perpetual, in gross, running with the land.
- 4. <u>Primary Custodian</u>: The primary Custodian of the preserve will be the Department of Natural and Cultural Resources, Division of Parks and Recreation.
- 5. <u>Primary Classification</u>: The primary classification and purpose of the preserve will be conservation, scientific research, passive recreation, and nature education.

6. Rules for Management of the Primary Area:

A. <u>Character of Visitor Activity</u>: The principal activities in the preserve shall be non-consumptive outdoor recreation and education in designated areas. These activities may be regulated by the Custodian to protect and conserve the natural values of the preserve.

Activities and uses unrelated to those listed above are prohibited except as provided in this Dedication or unless necessary to carry out the purposes of the preserve. Prohibited activities include, but are not limited to, commercial development; commercial silviculture; agriculture and grazing; gathering of plants or plant products for purposes other than approved research; the removal, disturbance, molestation, or defacement of minerals, archaeological and natural resource; and those activities specifically restricted in this Dedication.

B. <u>Visitors and Visitor Facilities</u>: The Custodian reserves the right to orient and guide visitors for educational programs, scientific research, and preserve management. Exhibits, programs and printed materials may be provided by the Custodian. The Custodian may create and maintain nature trails, overlooks, boardwalks, and primitive campsites adequate to promote the permitted use of the preserve. Guardrails, fences, steps, bridges, and boardwalks may be provided when appropriate. The Custodian reserves the right to erect structures necessary to protect the preserve from unwanted or excessive visitor traffic and structures to restrict visitor access to sensitive environmental resources.

When constructing new natural surface trails within the nature preserve for the purpose of hiking and non-motorized bicycling, all new trail construction and realignment requiring soil disturbance must follow best practices for sustainable trail design and construction. The Custodian may construct and maintain bridges or other stream crossings up to ten (10) feet wide across streams in the nature preserve, provided such crossings are connected to trails permitted herein, constructed in a way as to maximize water quality protection, and permitted by all applicable regulatory authorities. The number of stream crossings must be minimized.

C. The Custodian may construct and maintain service roads for patrol, fire control, right-of-way maintenance, and other management activities. The Custodian may maintain roads presently existing within the preserve. If an existing access road runs within or along a boundary of the Primary Area and the Custodian demonstrates a compelling need to do so, then subject to the written approval of the Natural Heritage Program, the Custodian may within the Primary Area use a strip of land up to fifty feet (50') wide outside and adjacent to the road's existing footprint for the purpose of improving the access road. A strip of land approved under this provision shall not be longer than 1,000 feet long.

Custodian plans to construct one road for visitors to access the planned parking area from Burney Road (SR 1320) as shown approximately on the map titled "Bakers Lake State Natural Area Dedicated Nature Preserve Proposed Roadway Alignment". Custodian will work with the Natural Heritage Program to site exact road location to avoid or minimize ecological impacts of the road alignment. The construction of roads for purposes other than those described in this document will be prohibited.

If an existing North Carolina Department of Transportation ("NCDOT") road runs within or along a boundary of the Primary Area and NCDOT demonstrates a compelling need to do so, then subject to the written approval of both the Primary Custodian and the Natural Heritage Program, NCDOT may within the Primary Area use a strip of land up to fifty feet (50') wide outside and adjacent to the road's existing NCDOT right-of-way for the purpose of improving the NCDOT road. A strip of land approved under this provision shall not be longer than 1,000 feet long. The Primary Custodian and the Natural Heritage Program shall concur only if the proposed improvements and the associated activities will not cause significant impacts to rare species, small-patch natural communities, adjacent streams, or other Natural Heritage resource values. The existing NCDOT road that runs within or along a boundary of the Primary Area at the time of the issuance of this letter of allocation is SR1320.

<u>D.</u> Other Structures and Improvements: Buildings or facilities other than those defined above shall not be erected by the Custodian within the preserve.

- E. <u>Research and Collecting Permits</u>: Any person wishing to engage in scientific research or collecting shall first secure written permission from the Custodian.
- F. <u>Vehicles</u>: There will be no horseback riding or bicycling except on trails designated for these purposes and no use of any motorized vehicles except boats. The Custodian may use vehicles as necessary for the management of the preserve.
- G. <u>Excavation</u>: There will be no mining, drilling, removal of topsoil, sand, gravel, rock, minerals, or other material, nor any change in topography or surface hydrology of the preserve.
- H. Water Level Control: The purpose of water level control shall be to maintain the preserve's natural water regimes. Water levels that have been altered by human activities may be changed, if necessary, to restore the preserve to its natural condition. In a preserve with a long history of managed hydrology, water levels may be managed to perpetuate the ecosystems that have evolved around the hydrology. Millponds and canals are an example of situations in which water levels have been historically managed.
- I. <u>Bringing in Flora and Fauna</u>: No exotic flora and no animals except leashed dogs and cats, horses on trails designated for horseback riding, or animals being reintroduced shall be brought into the preserve. Any reintroduction will be of species native to the natural community and shall be done according to an approved resource management plan.
- J. <u>Fire</u>: Use of prescribed burning is permitted as necessary for the biological management of the preserve. Any prescribed burning must be done according to an approved fire management plan for the park unit in question. Fires are also permitted in conjunction with supervised activities of the Custodian, or in designated areas within primitive campsites.
- K. <u>Disturbance of Natural Features</u>: The disturbance of other natural features is prohibited except for control of disease that would damage or reduce the significance of the preserve, reduction of fire fuel load after severe storm damage, or for purposes of ecological management as stipulated in the Park unit's approved management plan and that which is consistent with the purposes of this Dedication.
- L. <u>Control of Populations (natural and exotic)</u>: Any control of animal or plant populations, other than fishing, shall be only to correct situations where populations have been significantly altered from natural conditions. The Custodian may, in accordance with an approved resource management plan, apply biological controls, herbicides and pesticides, and other means deemed necessary or appropriate to control or eradicate exotic or native species of plant or animal that are degrading the natural character of the preserve.

- M. <u>Control of Natural Processes</u>: Natural processes will be managed according to the policy of the North Carolina State Parks Natural Resource Management Policy. Generally, natural resources will be managed by allowing natural environments to evolve through natural processes with minimal influence from human activities. Exceptions are enumerated in the Policy Statement.
- N. <u>Management Plan</u>: These rules for management constitute a management plan within the meaning of 07 NCAC 13H.0300 until detailed plans for each park are prepared. The dedicated nature preserve will continue to be subject to other applicable regulations within NCAC Title 07, Chapter 13. Where contradictions may arise between this instrument of dedication and other management regulations, the terms of this Dedication shall take precedence.
- 7. Amendment, Modification, and Termination: Any changes to this Dedication must be made in accordance with the provisions of North Carolina General Statutes 143B-135.264, which require the approval of the Governor and the Council of State.

The Governor and Council of State have approved the dedication of the State-owned lands described by this document at a meeting in (City Name), North Carolina on (DATE).

Sincerely,

Gabriel J. Esparza

CONSENTED AND AGREED TO:

Secretary Pamela B. Cashwell Department of Natural and Cultural Resources

EXHIBIT A

BAKERS LAKE PRESERVE DEDICATED NATURE PRESERVE

DESCRIPTION

COUNTY: Bladen County

PHYSIOGRAPHIC PROVINCE: Coastal Plain

TOPOGRAPHIC QUAD(S): Duart

SIZE OF AREA: ca. 931 acres total (all Primary Area).

OWNER/ADMINISTRATOR: State of North Carolina, Division of Parks and Recreation

LOCATION: Bakers Lake State Natural Area is located between the Cape Fear River and NC Highway 54 and approximately 17.5 air miles south of Fayetteville. South entrance is along Burney Road and the north entrance is along Pine Acres and Squires Farm Roads. The nature preserve is within White Oak Township and includes all or portions of Bladen County parcels 037800131553 and 037800131553.

DESCRIPTION: The Bakers Lake State Natural Area Dedicated Nature Preserve is a high-quality flooded peat-based Carolina Bay with bay rims and a pocosin that extends south along Phillips Creek, and protects the majority of the Bakers Lake Carolina Bay Natural Area as identified by the NC Natural Heritage Program. Several globally rare natural communities occur within the Bakers Lake Dedicated Nature Preserve.

One of the best examples of the globally rare Natural Lake Shoreline Swamp (Cypress Subtype) natural community encompasses the entire shoreline around Bakers Lake. The lake is circled with Bald Cypress (*Taxodium ascendens*) and Swamp Gum (*Nyssa biflora*) with a variation of plant species depending on aspect and exposure. These plant species include Loblolly Bay (*Gordonia lasianthus*), Atlantic White Cedar (*Chamaecyparis thyoides*), Sweetbay (*Magnolia virginiana*), Shining Fetterbush (*Lyonia lucida*), and Laurel-leaf Greenbriar (*Smilax laurifolia*).

The globally rare Low Pocosin (Gallberry-Fetterbush Subtype) natural community is a large expansive pocosin that occupies most of this Carolina Bay. This example is one of the best in the state and occurs in deep peat and soggy soils. This natural community has a canopy of Pond Pine (*Pinus serotina*), an understory of Red Maple (*Acer rubrum*), and is known for having a dense and diverse shrub layer, dominated by Honey Cup (*Zenobia pulverulenta*) with abundant Leatherleaf (*Chamaedaphne calyculata*). Other shrub species include Maleberry (*Lyonia ligustrina*), Shining Fetterbush (*Lyonia lucida*), Little Gallberry (*Ilex glabra*), and Big Gallberry (*Ilex coriacea*).

Another globally rare natural community is the Peatland Atlantic White Ceder Forest. Atlantic

White Ceder (*Chamaecyparis thyoides*) is dominant in the canopy. Pond Pine (*Pinus serotina*) is also present in the canopy with an understory of Loblolly Bay (*Gordonia lasianthus*) and Black Gum (*Nyssa biflora*). The shrub layer is moderately dense with Shining Fetterbush (*Lyonia lucida*) and Southern Highbush Blueberry (*Vaccinium formosum*).

Outside of this Carolina Bay, two additional globally rare natural communities are known from Bakers Lake State Natural Area Dedicated Nature Preserve. The Pond Pine Woodland (Typic Subtype) natural community follows Phillips Creek out of Bakers Lake along an area of shallow organic deposits. The canopy is open and sparse and only consists of Pond Pine (*Pinus serotina*). There is a sparse understory of Loblolly Bay (*Gordonia lasianthus*) and Red Maple (*Acer rubrum*). The shrub layer is dense and tall with two dominant shrubs, Shining Fetterbush (*Lyonia lucida*) and Titi (Cyrilla racemiflora). Along the rim of Bakers Lake are two sandy, domed areas classified as the Sand Barren (Typic Subtype) natural community. These sandy, xeric features, often where bare sand is prevalent, are botanically rich. Scattered, mature Longleaf Pine (Pinus palustris) are dominant in the canopy throughout both patches. Turkey Oak (Quercus laevis) is the only hardwood present. The shrub layer includes both Southern Dwarf Huckleberry (Gaylussacia dumosa) and Dangleberry (Gaylussacia frondosa), along with Staggerbush (Lyonia mariana), Dwarf Azalea (Rhododendron atlanticum), and Small Gallberry (Ilex glabra). Sand Spikemoss (Bryodesma acanthonota) and lichens are common mat/cushion plants. Wiregrass (Aristida stricta) is common along with Common October Flower (Polygonella polygama), Wire Plant (Stipulicida setacea), and patches of Switch Cane (Arundinaria sp.).

In addition to the aforementioned globally rare natural communities, a section of the Cypress-Gum Swamp (Blackwater Subtype) natural community crosses this property and runs along the upper reaches of Phillips Creek. In this example, Swamp Black Gum (*Nyssa biflora*) is the only tree species in the canopy. No evidence of Bald Cypress (*Taxodium distichum*) in this section is documented. This example has deep, flooded areas with evidence of beaver activity.

The dedicated area also provides habitat for a population of the rare Chicken Turtle (*Deirochelys reticularia reticularia*), which is a state listed species of Special Concern. An atypical species of turtle that is short-lived, the animal frequently digs nests and lays eggs during cooler months. No other rare species are known from Bakers Lake Preserve. However, large groups of waterfowl species have been observed sitting on the water in Bakers Lake. Bald Eagles (*Haliaeetus leucocephalus*) have been observed foraging for waterfowl on the property, but no nests have been documented.

BOUNDARY JUSTIFICATION: Primary Areas are generally drawn to include the extent of mature, intact natural forest and wetland natural communities and areas of older regenerating forests with a high potential for ecological restoration. Primary Areas also include 100-foot riparian area along streams, creeks, and significant ditches along Phillips Creek, a condition of the NC Land and Water Fund grant. Other areas that are highly disturbed or have low ecological value are not included in the dedicated area at present, but could be managed to provide buffer function, or restored to natural conditions.

MANAGEMENT AND USE: Bakers Lake Preserve is managed for wildlife and offers wildlife

viewing and recreational opportunities. The Primary Area should be allowed to naturally mature and remain with limited intervention. However, prescribed fire will benefit the Sand Barren natural community, and burning should be allowed to continue into margins of adjacent pocosins. Plowed lines for fire breaks should be avoided completely, in favor of light disking or mowed fire lines. Monitoring and management for invasive species should be a priority. The Custodian may implement hydrologic restoration projects at canals, streams, and altered wetlands where appropriate and feasible to re-establish more natural conditions, in consultation with the Natural Heritage Program.

Natural Heritage Advisory Committee

North Carolina Natural Heritage Program

August 21, 2025



North Carolina Natural Heritage Program

Recommendations for Dedication and Registry

Submitted to the Natural Heritage Advisory Committee

August 21, 2025



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

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

<u>Primary (Restoration) Area:</u> 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.

<u>Special Management Area:</u> 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.

State land dedications

- Dedication of qualifying portions required when lands were acquired with NC Land and Water Fund grants.
- Dedication is done by Letter of Allocation

Aquatic Standards for State Land Dedication

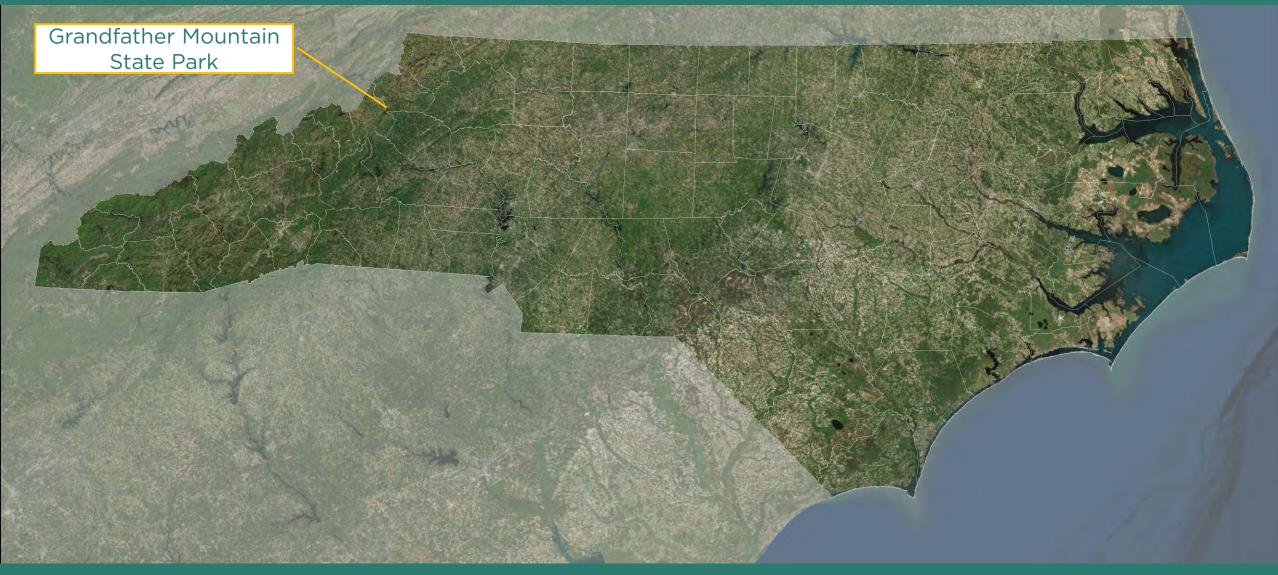
- 100 ft riparian zone on all perennial streams
 - Minimum standard
- 300 ft riparian zones along perennial streams with NHP Aquatic Habitat
 - If Aquatic Habitat has federally listed species, add 200 ft riparian zone on all perennial tributary streams to the Aquatic Habitat
 - If Aquatic Habitat does 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

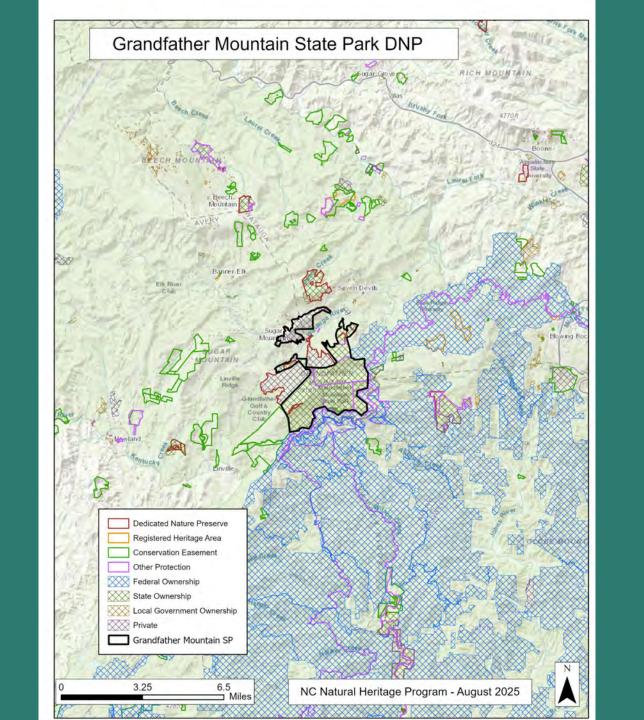
Grandfather Mountain State Park Dedicated Nature Preserve

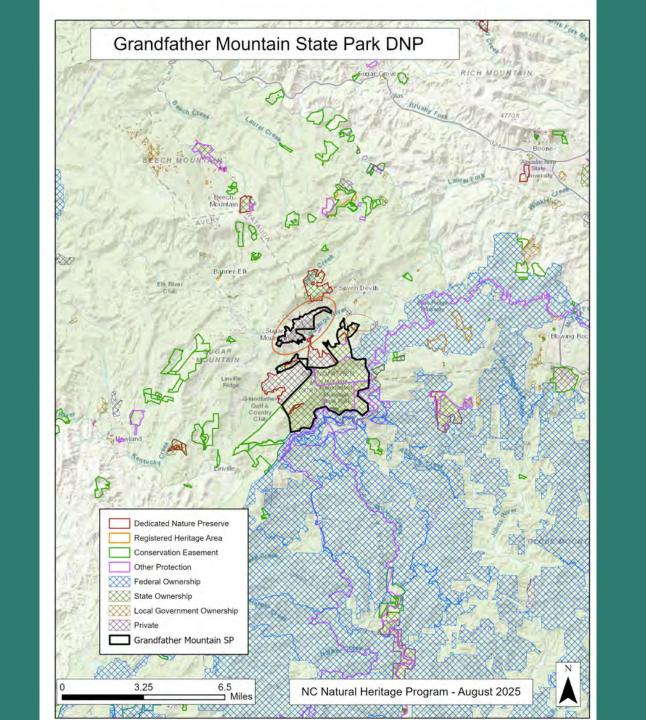


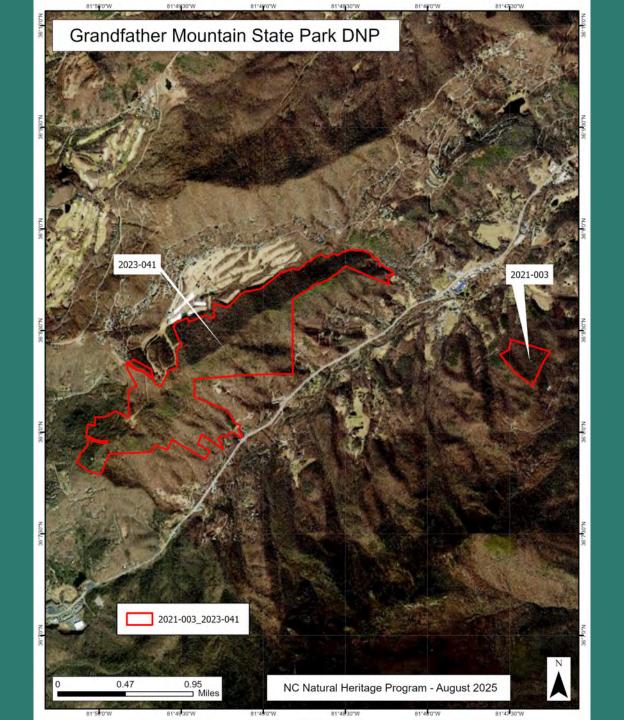


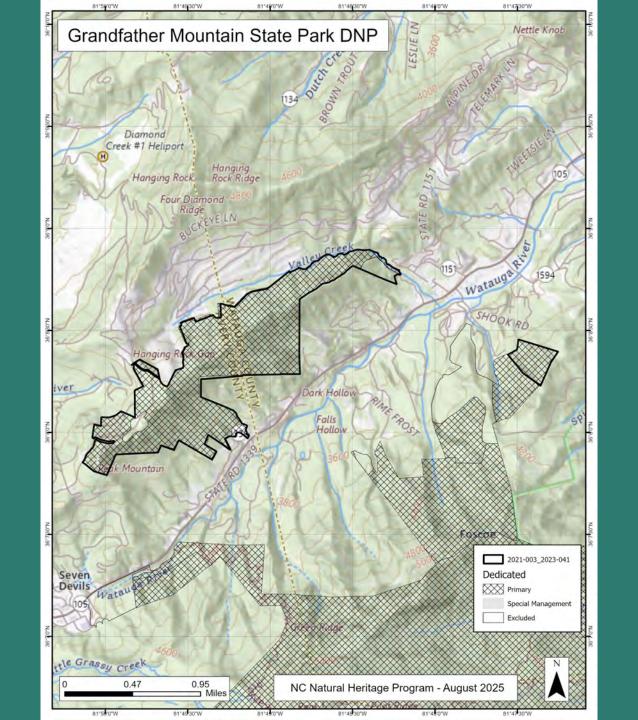
Grandfather Mountain State Park DNP

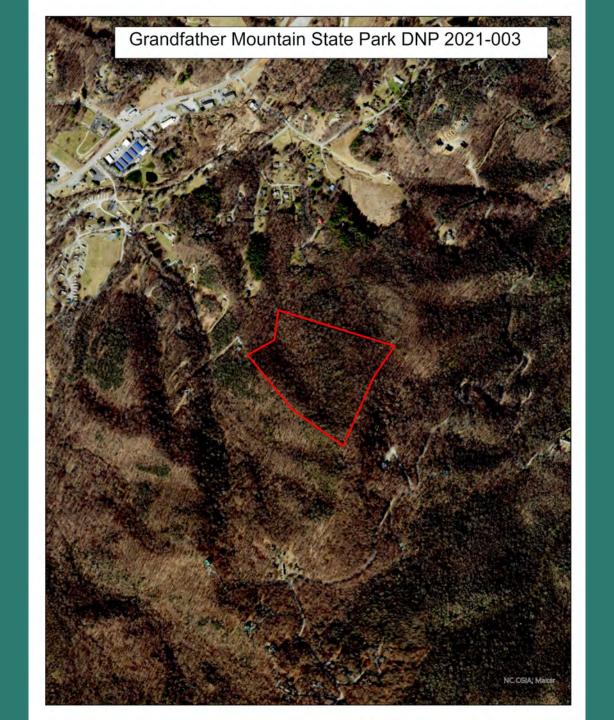


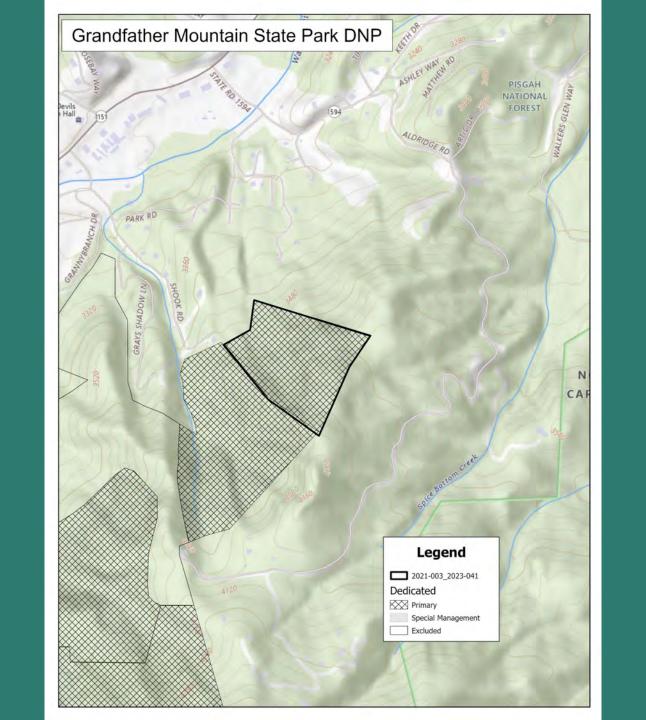


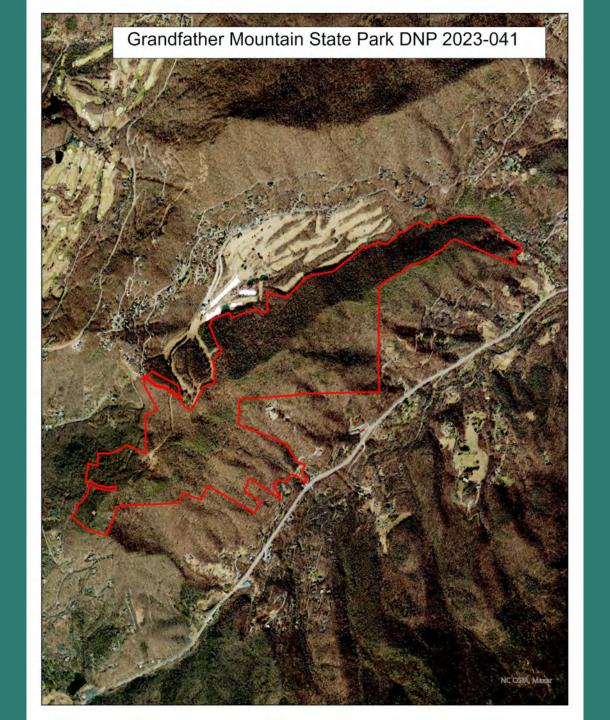


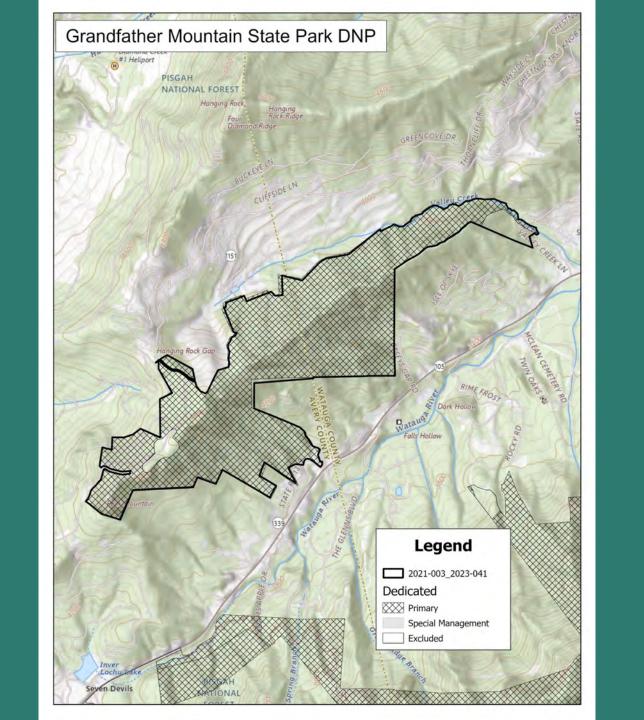












Grandfather Mountain State Park DNP

Amendment to add two tracts (NCLWF #2023-041 and 2021-003)

- Adds 405 acres to DNP
 - All primary, including 0.13 acres special management
- Total DNP acres:
 - 3,222 acres primary
- 2021-003 Part of Grandfather Mountain natural area R1C1 Element Occurrences include:
 - Acidic Cove Forest (Typic Subtype) S4G5
 - High Elevation Red Oak Forest (Typic Herb Subtype) S3G4
 - Montane Cliff (Acidic Subtype) S3G3
 - Northern Hardwood Forest (Rich Subtype) S3G3
 - Rich Montane Seep S3G3
- 2023-041 Part of Dun Vegan Mountain natural area R2C2 Element Occurrences include:
 - Heath Bald (Catawba Rhododendron Subtype) S2G2
 - High Elevation Rocky Summit (Typic Subtype) S2G2
 - Rich Cove Forest (Montane Intermediate Subtype) S4G4
 - Roan Mountain Bluet (Houstonia montana) S2G5T2
 - Roan Sedge (Carex roanensis) S2G3 and 10 more



Rocky Summit (above), Northern Hardwood Forest (below) photos by Jess Schaner



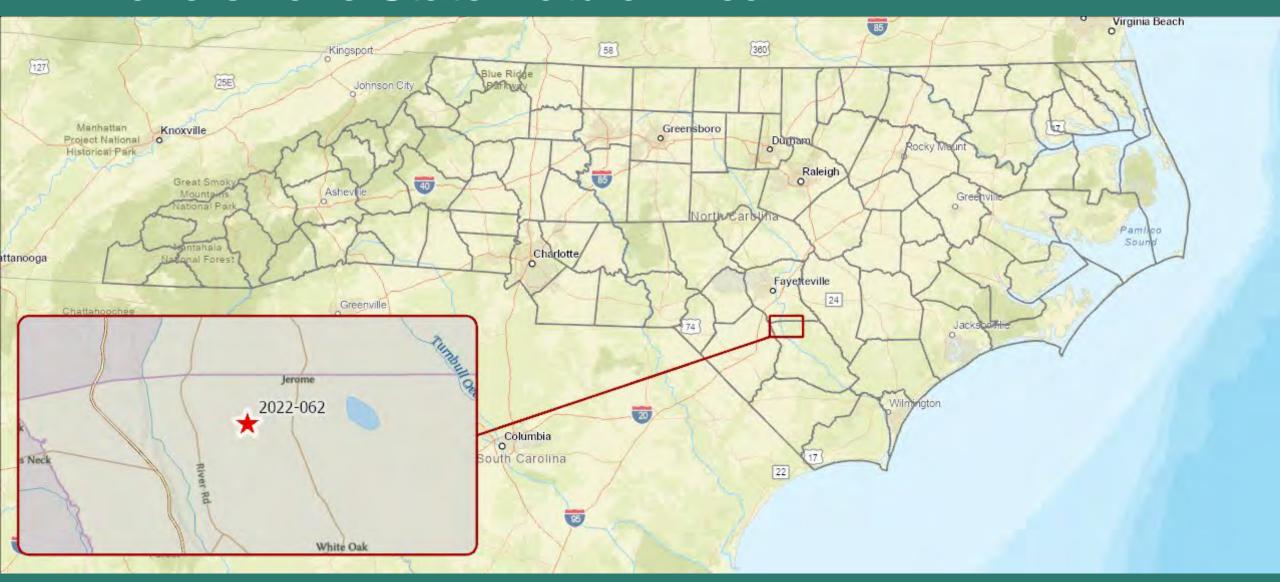
Bakers Lake State Natural Area Dedicated Nature Preserve Pending Review by Division of Parks & Recreation



Bakers Lake photo provided by NC Land and Water Fund



Bakers Lake State Natural Area DNP



Approved Dedication Maps will be inserted for Meeting

Bakers Lake State Natural Area DNP

New Dedication fulfills terms of NCLWF grant agreement 2022-062

- 931 acres, all primary (out of 1,100 acres purchased)
- Protects the majority of Bakers Lake Carolina Bay R2C3

Element Occurrences include:

- Low Pocosin (Gallberry-Fetterbush Subtype) S2/G2
- Natural Lake Shoreline Swamp (Cypress Subtype) S2/G3
- Peatland Atlantic White Cedar Forest S1/G2
- Pond Pine Woodland (Typic Subtype) S3/G3
- Sand Barren (Coastal Fringe Subtype) S1/G2 (right)



Photos provided by NCLWF





Questions:

Misty Franklin
Division of Land and Water Stewardship
Natural Heritage Program
Misty.Franklin@dncr.nc.gov



