Grandfather Mountain State Park
General Management Plan

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Table of Contents

I. Mission and Purpose.....**4**

II. History.....**8**

III. Themes and Inventory.....**10**

IV. Planning.....**27**

I. MISSION AND PURPOSE

General Management Plans:

The 1987 State Parks Act (G.S.143B – 135.40) requires each park to have an individual General Management Plan. As required, these plans seek to identify an individual parks purpose as a unit within the larger parks system and provide an analysis of the park's major resources and facilities. The GMP also identifies current and future needs of the park and prioritizes a list of proposed projects intended to meet those identified needs. These plans are considered living documents, recognizing the various and dynamic factors which influence the planning process. Each park's GMP is scheduled to be revisited every five years, or sooner if needed, to reflect the direction and vision of the State Parks Division.

State Parks Mission

The 1987 State Parks Act also defines the purpose of the state parks system. It establishes that: The State of North Carolina offers unique archaeologic, geologic, biologic, scenic and recreational resources. These resources are part of the heritage of the people of this State. The heritage of a people should be preserved and managed by those people for their use and for the use of their visitors and descendants.

Park Overview:

In early 2009, the General Assembly formally authorized Grandfather Mountain State Park. The purchase of 2,456 acres from the Hugh Morton family protects backcountry trails, important watersheds, and a varied range of ecosystems including Calloway Peak, which sits 5,946 feet high at the apex of Avery, Caldwell and Watauga Counties.

Grandfather Mountain State Park is located 20 miles from Boone, 17 miles from Blowing Rock, and 73 miles from Asheville. This park provides a unique wilderness backcountry hiking and camping experience.

In 2017, Grandfather Mountain State Park had an annual visitation of 87,000 people. Grandfather Mountain State Park is a popular tourist and hiking destination. Hiker attendance on these popular trails has increased dramatically since the inception of the state park and is expected to grow. The mountain soils and ecosystems are fragile and highly susceptible to irreversible damage through overuse. Over 70 species of rare, threatened and endangered plants and animals live on the mountain. Some of which are found only in a few isolated populations and are endemic only to this mountain, or to a very few high peaks regionally, and are susceptible to being damaged or destroyed by human overuse.

Cables and ladders provide a unique backcountry experience

Grandfather Mountain State Park manages 3,647 acres along with 4,563 acres of State natural areas within a 30-mile radius. The natural areas include: Yellow Mountain, Bear Paw, Beech Creek Bog, Sugar Mountain Bog, and Pineola Bog. The bog properties preserve unique Appalachian Mountain bogs and fens.

Beech Creek State Natural Area conserves the headwaters to the Beech Creek within the Watauga River watershed

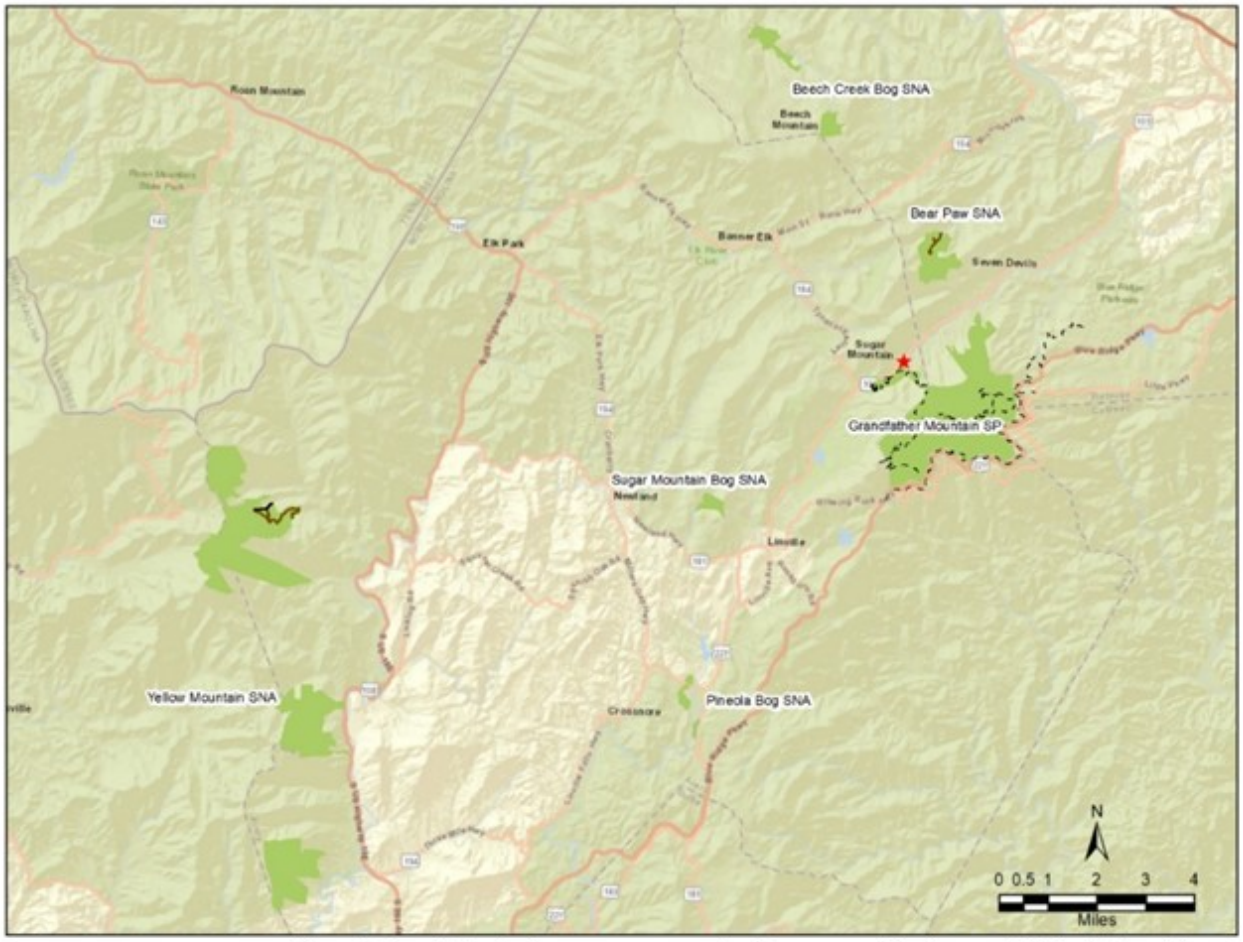
Yellow Mountain State Natural area preserves the high mountain heath bald and grasses, down into deep mountain hollows, protecting flora, fauna along with high mountain trout streams leading into the North Toe River.

Bear Paw State Natural Area preserves northern hardwood forests and upland seepages and spray cliffs.

Beech Creek Bog protects northern hardwood forests, upland seepages, spray cliffs and the maternal roost for federally threatened Virginia Big Ear Bats.

Pineola Bog conserves and protects mountain bog and fens, which provides habitat for the protected bog turtle and four-toed salamander. Bogs provide natural water purification and flood water control and provide habitat for many species of flora and fauna, some of which are federally listed as rare, threatened or endangered, including the bog turtle.

Example of bog ecosystem found at Pineola Bog State Natural Area



Grandfather State Park manages several unique mountain bogs and State Natural Areas

PARK PURPOSE:

Grandfather Mountain exists primarily to promote stewardship through environmental education. To protect the valuable biologic resources and to provide outdoor recreation opportunities. The park also protects scenic corridors and sensitive natural resources.

II. HISTORY

Profile of Grandfather Mountain

The stone profile of Grandfather Mountain has long gazed out over the ancient Appalachians. This park is a United Nations International Biosphere Reserve and as known for as apex of the Blue Ridge mountains with ecological diversity. Towering nearly a vertical mile over the Piedmont, Grandfather has been recognized for centuries as a sentinel summit. In 1794, the dramatic views convinced the Botanist Andre Michaux that he had climbed "the highest peak in all North America." He observed alpine-like vegetation and vistas on the highest peaks, to cascading streams far down in the foothills. More than a dozen distinct ecological zones stretch across the landscape. Seventy-plus species of rare, threatened and endangered plants and animals populate this rugged mountain. The park is known for some of the most severe weather and challenging hiking trails in the south. Hikers find Grandfather Mountain to be a unique and significant place to encounter the outdoors.

"By 1968, the only task remaining was the completion of a seven-mile stretch around Grandfather Mountain. To preserve the fragile environment on the steep slopes of the mountain, the Linn Cove Viaduct, a 1,200-foot suspended section of the Parkway, was designed and built. The viaduct represents one of the most challenging engineering projects along the Parkway, fusing advanced roadway engineering with an ecologically sensitive landscape design that integrates '*design with nature*' design principles and practices."

In 2008, an agreement was reached for the State Parks system to acquire 2,456 acres of Grandfather Mountain. The property is commonly known as the "backcountry" of the park. The acquisition was arranged with the help of The Conservation Fund and Nature Conservancy, which holds conservation easements on the mountain covering nearly 4,000 acres. The mountain at elevation 5,946 feet, provides a unique habitat to more than 70 threatened or endangered species.

Grandfather Mountain State Park is a designated International Biosphere Reserve

In 2017, the first capital improvement project was completed in the park. This project included a 0.60-mile extension of the Profile Trail, trailhead parking, restroom facilities and paved road.

Restroom and Profile trailhead provides a centralized area for public and staff access. A contact station will be designed and constructed

III. THEMES AND INVENTORY

Themes

The significant archeological, geologic, scenic, recreational and biological resources of North Carolina should be represented in the State Park system. These resources, as cited in the State Parks Act, are divided into subcategories called resource "themes". There have been 108 themes identified that should be protected to preserve representative examples of unique resources. For this GMP only themes that are of high significance to *Grandfather Mountain State Park* are shown. The theme chart only applies to Grandfather Mountain State Park, not natural areas (Yellow Mountain, Bear Paw, Beech Creek Bog, Sugar Mountain Bog, and Pineola Bog).

Grandfather Mountain Theme Table

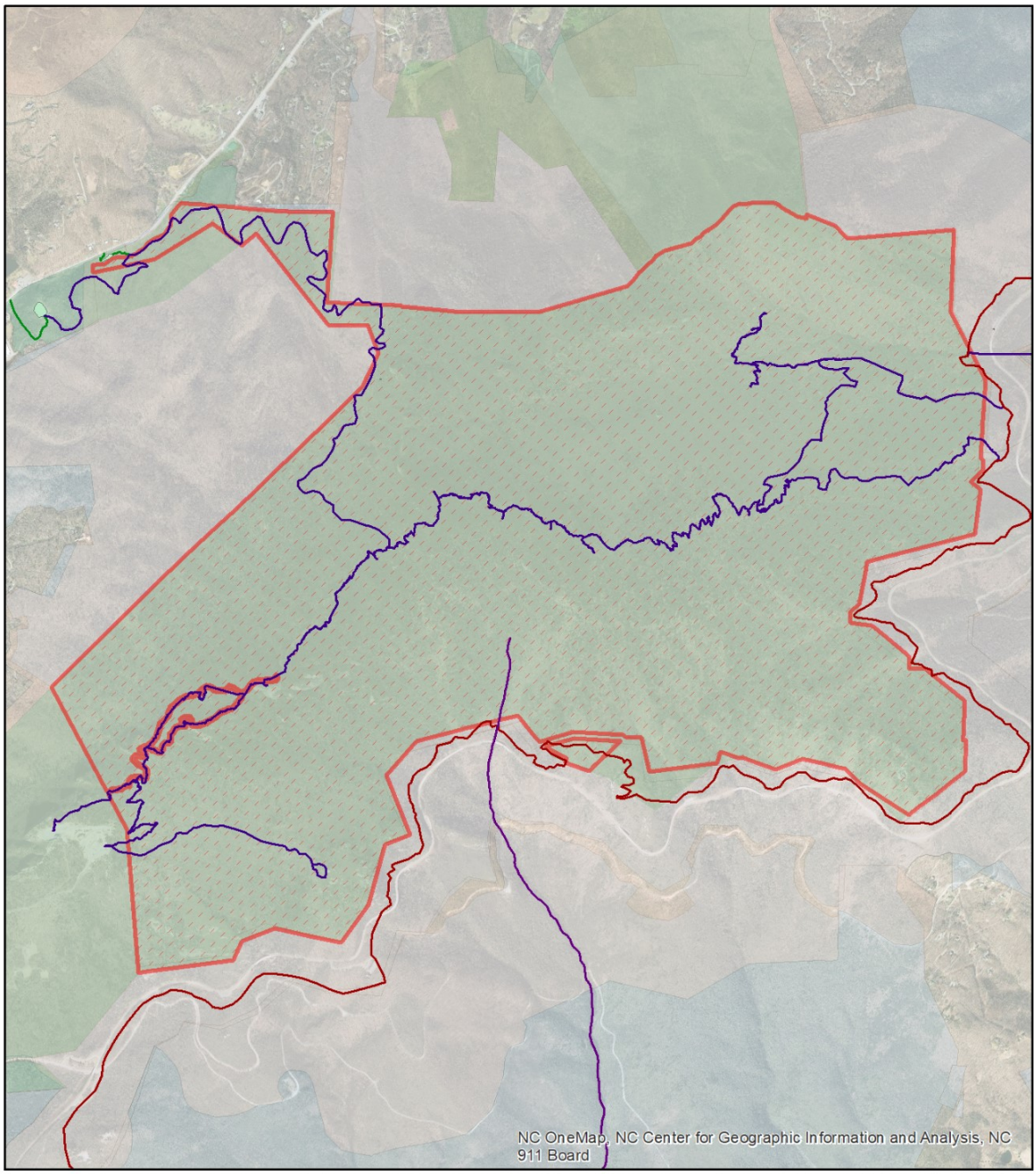
Theme Type	Theme	Grandfather Significance	State Parks System Representation
Biological	Grass and Heath Balds	High	Moderate
Biological	High Elevation Rock Outcrops	High	Moderate
Biological	Low Elevation Cliffs and Rock Outcrops	High	Moderate
Biological	Mountain Cove Forests	High	Adequate
Biological	Northern Hardwood Forests	High	Adequate
Biological	Spruce-Fir Forests	High	Moderate
Biological	Upland Seepages and Spray Cliffs	High	Moderate
Biological	Montane Oak Forest	High	Adequate
Geological	Cliffs	High	Adequate
Geological	Exfoliation Outcrops	High	Adequate
Scenic	Caves/Cliffs	High	Moderate
Scenic	Forests	High	Moderate
Scenic	Scenic Highways	High	Little
Scenic	Scenic Vistas	High	Moderate

*See the Systemwide Plan for references to Theme and Inventory terms. Themes have both actual and "potential" future needs to be at a park.

Scenic vistas and Spruce -fir forest

Exfoliation Outcrops

Blue Ridge Park way is a Scenic Byway managed by the National Park Service



Proposed
Dedicated Nature Preserve
Grandfather Mountain
State Park

January 2019

Legend

DNP and RHA
SYMBOLOGY
Dedicated Nature Preserve

0 1,000 2,000
Feet

International Biosphere Reserve

Grandfather Mountain State Park is part of the Southern Appalachian Cooperative of Biosphere Reserves which also includes: Mount Mitchell State Park, Great Smoky Mountains National Park, Oak Ridge National Environmental Research Park and Coweeta Hydrologic Laboratory. The World Network of Biosphere Reserves, initiated in 1971 by the United Nations Educational, Scientific and Cultural Organization (UNESCO), consists of internationally designated protected areas that demonstrate a balanced relationship between people and nature. The Grandfather Mountain Biosphere Reserve was established in November 1992.

The biosphere reserve area at Calloway Peak provides designation for conservation and logistic purposes

The Southern Appalachian Man and the Biosphere (SAMAB) Cooperative is a group of natural resource agencies working together to promote communication on key issues important to the Southern Appalachians with a focus on decision-making principles to foster sustainability.

The mission of the World Network of Biosphere Reserves has three main objectives:

- Minimize the loss of biodiversity
- Increase awareness of how cultural diversity and biological diversity affect each other
- Promote environmental sustainability

Each reserve is intended to fulfill three complementary functions:

- a *conservation* function (preserve landscapes, ecosystems, species, and genetic variation),
- a *development* function (foster sustainable economic and human development),
- *a logistic* function (support demonstration projects, environmental education and training, and research and monitoring related to local, national, and global issues of conservation and sustainable development). Biosphere reserves contain one or more core areas, which are securely protected sites; a clearly identified buffer zone; and a flexible transition area.

Conservation Easements

The State Park is encumbered with various conservation easements granted to The Nature Conservancy (TNC). Three of the conservation easements granted to the Nature Conservancy were funded by grants from the Clean Water Management Trust Fund and have been assigned to the State of North Carolina. These conservation easements limit development of the original acquisition tract for the state park. The easements were established by Hugh Morton thru regulatory agencies, who inherited and operated the mountain until his passing in 2006.

Dedicated Nature Preserve

The Grandfather Mountain State Park Dedicated Nature Preserve (DNP) contains one of the largest concentrations of rare species in North Carolina and is home to many rare Southern Appalachian endemics and northern disjuncts. In fact, several species, such as the Spruce fir moss spider are known to have less than five populations in the world.

Red spruce located along Nuwati Trail

Rich Cove forests are found at the mid to lower elevations

Defined by sharp, rocky peaks, Grandfather Mountain and supports examples of twelve known natural community types.

Rare types include High Elevation Rocky Summit, Fraser Fir Forest, Boulder field Forest, Red Spruce-Fraser Fir Forest, and Montane Calcareous Cliff. 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 Boulder field 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, and Montane Calcareous Cliff natural communities are scattered on the mountain.

Over 70 rare, threatened or endangered species live on Grandfather Mountain. Fauna examples include the Carolina northern flying squirrel, Weller's salamander, and the Spruce fir moss spider; a relative of the tarantula that lives only above 5,000 feet elevation in rocky moss masts under spruce and Fraser fir trees. Flora examples include spreading avens, Heller's blazing star, mountain bluet, and Blue Ridge golden rod. At least 32 species found on the mountain are critically imperiled globally because of extreme rarity.

The park protects headwaters and streams in two river basins; Watauga and Catawba. The tributaries include: Green Ridge Branch, Shanty Spring Branch, Boone Fork, and the Watauga River in the Watauga River Basin and Dixon Creek, Green Mountain Creek, Linn Cove Branch, the Linville River, Stack Rock Creek, Little Wilson Creek, and Wilson Creek in the Upper Catawba River Basin. This watershed district is a designated critical, trout and outstanding resources watershed.

Watauga River is a designated critical, trout and outstanding resources (ORW) watershed

The dedicated area includes all of the land owned by N.C. Division of Parks and Recreation at Grandfather Mountain (high quality natural area as identified by the Heritage program), except the Profile Trail parking area at Highway 105, the trail easements retained by Grandfather Mountain Stewardship Foundation including the ladders and cables from the summit parking area to McCrae Gap, and the easements along the Blue Ridge Parkway held by the National Park Service.

The most important management needs will be to protect the fragile rare species habitat, from extensive walking 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 appropriate regulatory and conservation agencies with minimal impacts. Rare species and natural communities should be monitored for changes related to climate, and interventions and management controls may be necessary if populations are found to be declining.

Weller's Salamander (Plethodon welleri) is found in cool forests with rocky terrain. It is mainly found in North Carolina near Grandfather Mountain.

Fraser Fir Forest and red spruce-Fraser Fir Forest ecosystem are found along summit ridge at the highest elevations

Inventory:

While Grandfather Mountain State Park is moderately developed, however, it received 87,000 visitors a in 2017. Due to the proximity to the Boone region and Appalachian State University and urban centers of Charlotte and Ashville this park has become a destination park for wilderness and back country trails.

Facility Inventory:

Grandfather Mountain State Park was established in 2009. However, numerous facilities and campsites need to be replaced and upgraded due to extensive age and use.

Trails Inventory:

13.38 miles of backcountry hiking trails provides beginner and advanced trails. However, due to extensive use by hikers in challenging terrain, many of the trails need reroutes and improvements to backcountry campground facilities.

The 13.00-mile-long Tanawha Trail, managed by National Park service, is a dedicated section of the Mountains to Sea Trail.

Panoramic view near McCrae Peak and the Blue Ridge Mountain escarpment

Grandfather Mountain State Park

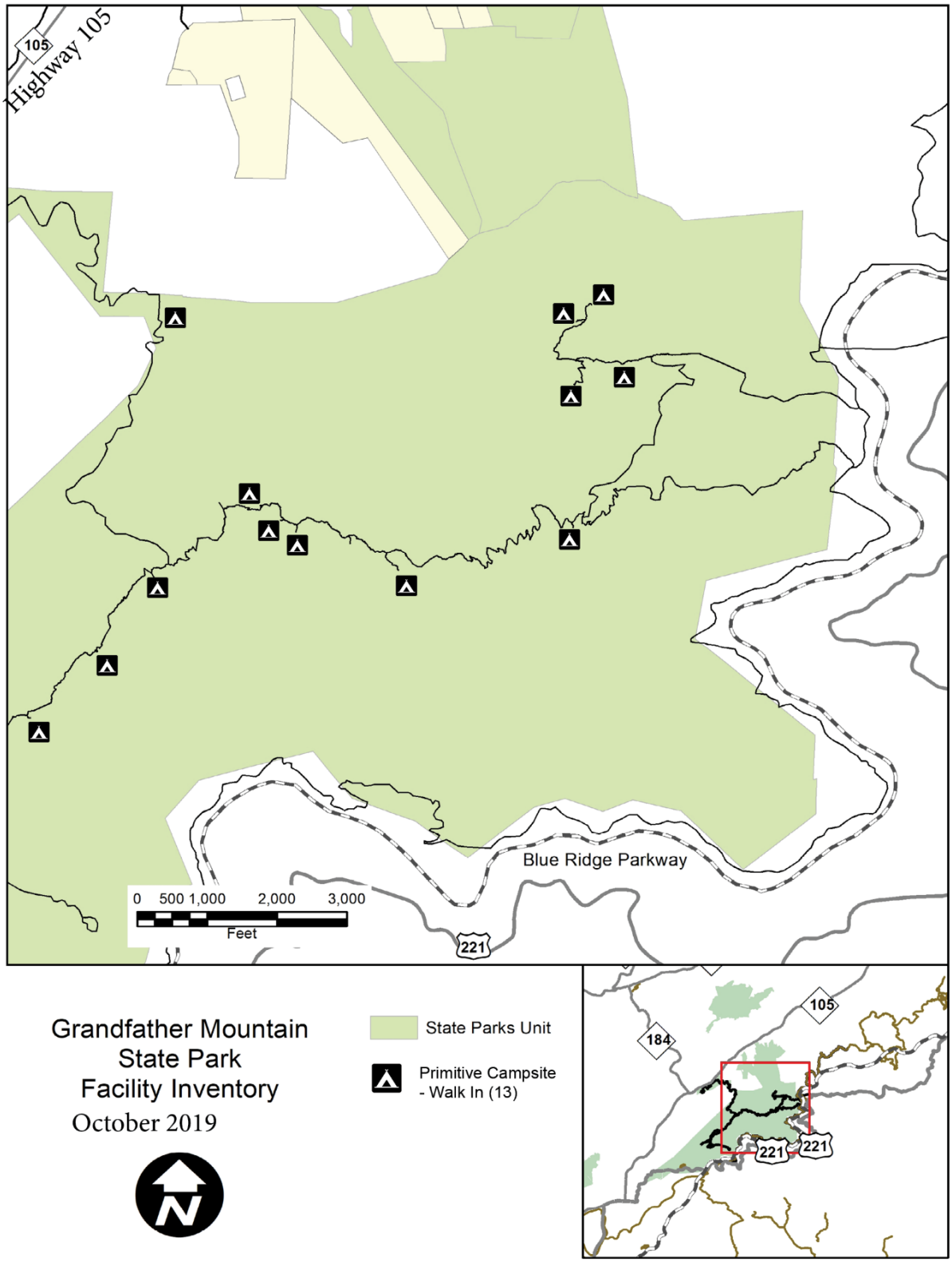
Dated: March 2020

NC STATE PARKS - FACILITY INVENTORY SPREADSHEET

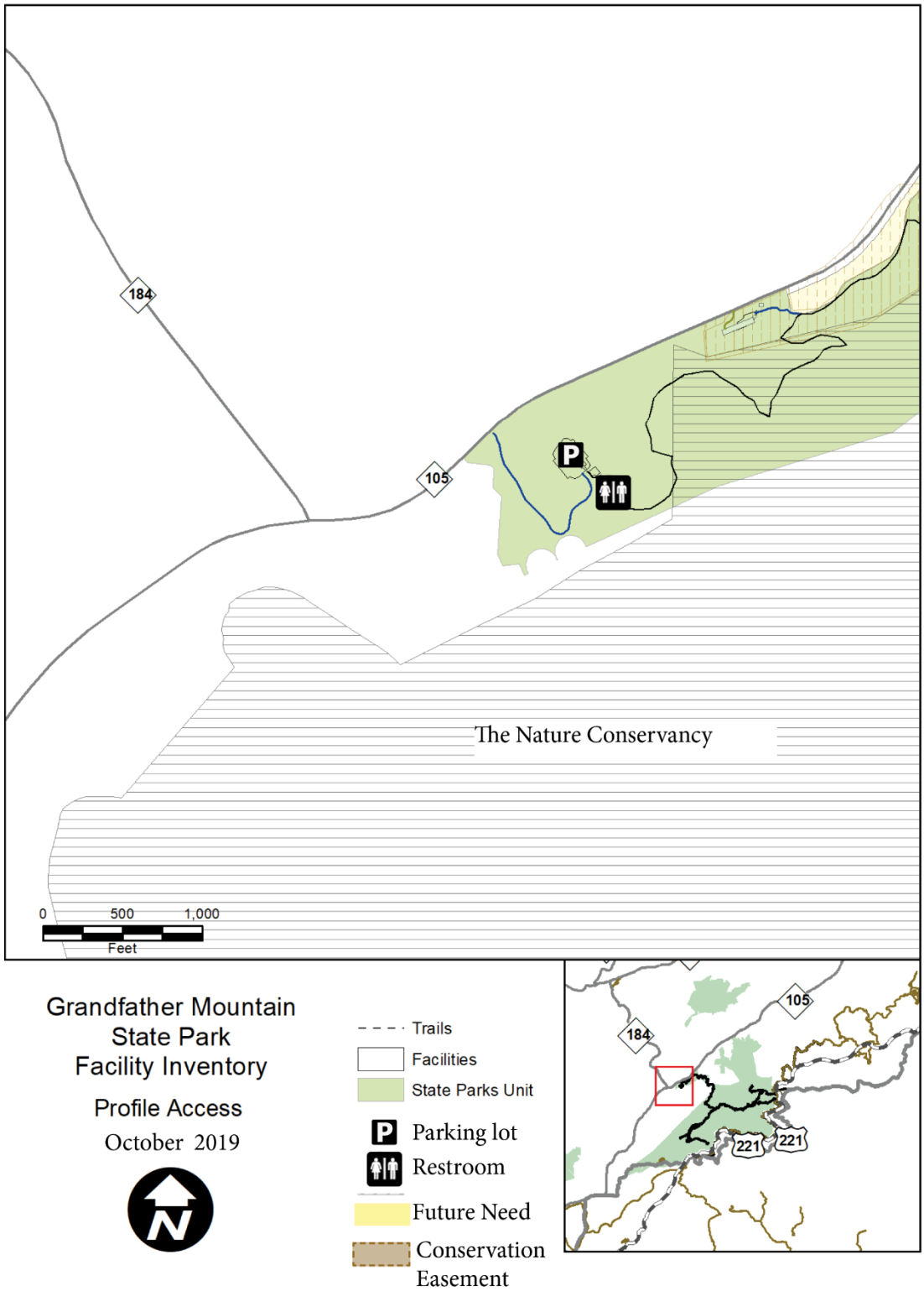
State Park Unit(Alpha Code): GRMO	Area(If Applicable):		Grandfather Mountain State Park
	Date(MM/YY):	Oct-19	
Public Buildings	Unit	Total #	Condition	Repairs needed (If Applicable)
Restroom bldg at Profile Trailhea	SITE	1	Good	Construction recently completed , needs downspouts
Profile Trail - Parking lot	BLDG	1	Good	Construction recently completed
Overlook Structures				
Storytellers Rock	NATURAL	1	Poor	No fencing. Trail to overlook needs improvement and erosion control measures.
Top Crag View	NATURAL	1	Poor	No fencing. Protection strategy for Appalachian Sand Myrtle
Watauga View	NATURAL	1	Poor	No fencing. Trail to overlook needs improvement. Erosion control. Need protection strategy for Roan Mountain Bluets .
Grandmother View	NATURAL	1	Fair	No fencing
Flat Rock View	NATURAL	1	Fair	No fencing. Flatrock trail and view need maintenance including: establish route, and install stone steps to view. Proposed Signage/central area and fencing is needed to minimize vegetation impacts dependent on trail reroutes
Staff Buildings	Unit	Total #	Condition	Repairs needed (If Applicable)
Maintenance Building	BLDG		Leased	Storage unit leased. Lease ends 2/2019. Bond funding will provide storage or equipment and staff facilities in profile trail access area
Recreation Facilities	Unit	Total #	Condition	Repairs needed (If Applicable)
Campground facilities				
Alpine Meadow Group Campsite	SITE	1	Fair	Blackberry vegetation needs to be cleared. Access to site needs to be established and needs installation of erosion control measures, no fire permitted
Attic Window Campsite	SITE	1	Fair	No fire permitted, Spur trail to site needs erosion control improvements. Site needs a few trees cleared. Refurbish/ improve tent platform structure.
Briar Patch Campsite	SITE	1	Fair	Spur trail to site needs erosion control improvements. Clear some Frasier fir sapplings to maintain width. Site needs selective trees cleared. Needs new fire ring.
Calloway Gap Group Campsite	SITE	1	Poor	No fire permitted, Spur to site needs erosion control measures and improvements. Site needs a few trees cleared. Refurbish tent platforms.
Cliffsite Campsite	SITE	1	Fair	No fire ring; Spur to site needs erosion control, improvements. Site needs a few trees cleared.
Daniel Boone Group Campsite	SITE	1	Poor	Spur trail to site needs erosion control measures and improvements. Site badly eroded. Site needs a few trees cleared. Refurbish tent platforms. Spur trail to bear cables and water needs improvement

Hermitage Campsite	SITE	1	Poor	Spur trail to site needs erosion control, improvements approx 1/8 mile with steep slopes. Site needs a few trees cleared. Spur trail connection to water needs improvement
High Balsam Shelter	SITE	1	Poor	Reconstructed in 1981. Needs rebuilt, should move back from cliff to drier ground. Site needs a lot of trees dropped. Spur trail need erosion control and site improvement.
Profile campsite	SITE	1	Fair	Fire ring; Spur to site needs erosion control and improvements.
Ravens Roost Campsite	SITE	1	Poor	Erosion throughout site. Some trees need to be cleared. Refurbish tent platform.
Refuge campsite	SITE	1	Fair	Fire ring provided; Spur to site needs erosion control and site improvements.
Streamside campsite	SITE	1	Poor	Site needs erosion control. Tent site too close to water needs to be rehabilitated. Fire ring needed.
Storyteller Rock Campsite	SITE	1	Poor	Site needs erosion control and outlying spur trails and over reaching site expansion needs refurbishment. Tent platforms need repair and fire ring needs replacement
Trail ladders and cables				
Grandmother View	SITE	1	Good	
MacRae Peak	SITE	1	Good	
Underwood Trail	SITE	1	Poor	
Infrastructure	Unit	Total #	Condition	Repairs needed (If Applicable)
Water	SITE		Good	On city water provided by Sugar Mountain . City well is located at Profile Trailhead.
Sewer	SITE		Good	City sewer provided by Sugar Mountain .
Electrical	SITE		Good	
Roads	SITE		Good	Profile access road is managed by Park , needs stormwater and erosion control improvements
Other facilities (points of interest)	Unit	Total #	Condition	Repairs needed (If Applicable)
Indian House cave	SITE	1	Poor	Spur trail to 'cave' needs extensive work. Erosion, minor re-routing and adequate number of stone steps
Shanty Spring	SITE	1	Poor	This area could use rockwork to re-direct user to prevent trail user from impacting sensitive vegetation. Trail repairs to this site should be completed with two RTP grant projects . Spring box was fortified with trail renovation funding.
ADDITIONAL NOTES:				
Grandfather Mountain was established in 2009 and a majority of the facilities are naturalistic, and built by the Morton Family prior to purchase to State Parks . This park is utilized year round and offers a unique backcountry experience. A majority of this park is within a Dedicated Nature Preserve and has significant heritage value as part of an International Biosphere Reserve dedicated by United Nations. Any future amenities need to have minimal environmental impacts.				

FACILITY INVENTORY



FACILITY INVENTORY – PROFILE ACCESS



TRAILS INVENTORY – ASSESSMENT

Status	Description
1	Good condition/some routine trail maintenance required
2	Moderate trail maintenance required
3	Heavy erosion in places and/or unsustainable grades.
4	Trail closed due to erosion, damage, or other reasons. Make comments on closure reason.

Popularity	Description
4	Single most popular trail in the park w/ most visitors hiking this trail
3	Very popular trail with heavy usage in the park
2	Moderate usage by park visitors but other trails in the same park are more popular
1	Very little traffic overall or compared to other trails in the same park

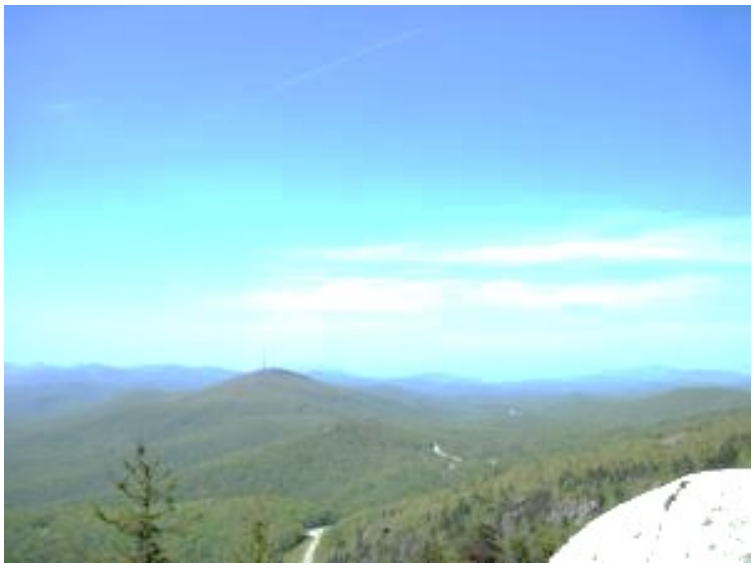
TRAILNAME	USE	SURFACE	WIDTH	MEASURETYP	COMMENT	Blaze		Status	Popularity	Priority Score	Comments
Asutsi Trail	Hike	Native	2		Trail Guide	None					Does not belong to DPR: is NPS trail
Black Rock Trail	Hike	Native	2		Trail Guide	Yellow Circle		3	2	5	
Cragway Trail	Hike	Native	2	Mapping GPS	GPS 1208	Orange Circle		3	3	6	Temporary closure for contract work
Daniel Boone Scout Trail	Hike	Native	2	Mapping GPS		White Diamond		3	3	6	
Grandfather Extension Trail	Hike	Native	2		Trail Guide	Yellow Circle		3	3	6	
Grandfather Trail	Hike	Native	2	Mapping GPS	Trail Guide	Blue Diamond		3	3	6	
Nuwati Trail	Hike	Native	2	Mapping GPS	GPS 1208	Blue Circle		2	3	5	Temporary closure for contract work
Profile Trail	Hike	Native	2		Trail Guide	Orange Diamond		3	4	7	
Tanawha Trail	Hike	Native	2		Trail Guide	white feather		3	2	5	Does not belong to DPR: is NPS trail (although it is MST)
Underwood Trail	Hike	Native	2	Mapping GPS		Yellow Diamond		3	2	5	

TRAILS INVENTORY

Trails Inventory	Hiking	Equestrian	Paddle Trail
Black Rock Trail	1.00		
Cragway Trail	1.00		
Daniel Boone Scout	3.00		
Grandfather Extension Trail	0.60		
Grandfather Trail	2.40		
Nuwati Trail	1.20		
Profile Trail	3.60		
Underwood Trail	0.58		
Grandfather Mountain SP Totals (miles)	**13.38**	**0**	**0**

TRAILS:

Black Rock Trail: The trail head is located inside the private Grandfather Mountain attraction. This 1.00-mile- trail has moderate slopes to a panoramic view of the swinging bridge, MacRae and Attic Window peaks, Beacon Heights and Grandmother Mountain located to the southwest. Hikers must use ladders and cables to access the cables to access the views.



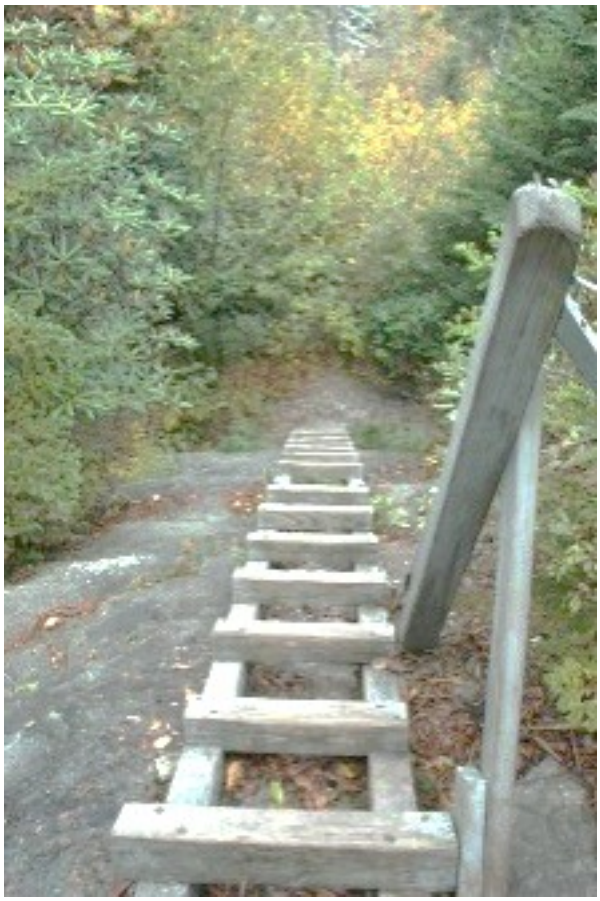
Black Rock Trail traverses a northern hardwood and spruce forest

Cragway Trail traverses rhododendron and blueberry thickets for a scenic viewshed of Boone Bowl and Calloway Peak

Cragway Trail: This out and back 1 mile long strenuous hiking trail is located between Nuwati and Daniel Boone Scout Trails. Boulders and crags provide panoramic vistas and elevated views of the Boone Fork region and Calloway Peak and views of the Boone Bowl and Calloway Peak.

Daniel Boone Scout Trail:

This 3.0-mile-long out and back trail begins at the eastern trail begins at the eastern section of the park, along the Blue Ridge Parkway and Tanawha Trail and climbs to Calloway Peak using in place ladders and cables to ascend 2000 feet over three miles. About halfway up, at Flat Rock view, hikers reach the junction of Cragway Trail. The upper half of the Daniel Boone Scout Trail is strenuous but has views of Julian Price Park.



Daniel Boone Scout Trail has a ladder with 30 segments to access the top

Grandfather Extension Trail: This 0.60 mile out and back trail begins in the Black Rock parking area and ends at the Grandfather Trail, below a scenic view of MacRae Peak. This trail forms a loop with the first 0.50 mile of the Grandfather Trail and the Bridge Trail.

Grandfather Extension Trail begins at the Black Rock parking lot inside the Stewardship Foundation property and ends at the Grandfather Trail, in a Spruce fir ecosystem

Grandfather Trail: This 2.40-mile trail runs across the ridgeline of the mountain. The trail parking runs between Calloway Peak and the Grandfather Mountain swinging bridge parking lot. There are several challenging chutes, cables and ladders.

Nuwati Trail: This 1.20-mile trail follows the track of an old logging road. Trailhead parking is located off Blue Ridge Parkway-Boone Fork access along the Blue Ridge Parkway, managed by National Park Service. This trail is an easy but rocky hike with a 500-foot gain in elevation. A short spur trail leads to the scenic view of the Boone Bowl and Calloway Peak from Storyteller's Rock.

Nuwati Trail has stream crossings, aspens, which are unique to the eastern region

Grandfather Trail offers scenic views of MacRae Peak

Profile Trail: Trailhead parking is located at the profile parking and restroom facility off Highway 105. This 3.60-mile trail follows the Watauga River and has views of Mount Rogers and White Mountain in Virginia. Shanty Spring transitions into a strenuous path that joins the Grandfather Trail and into the Canadian fire zone.

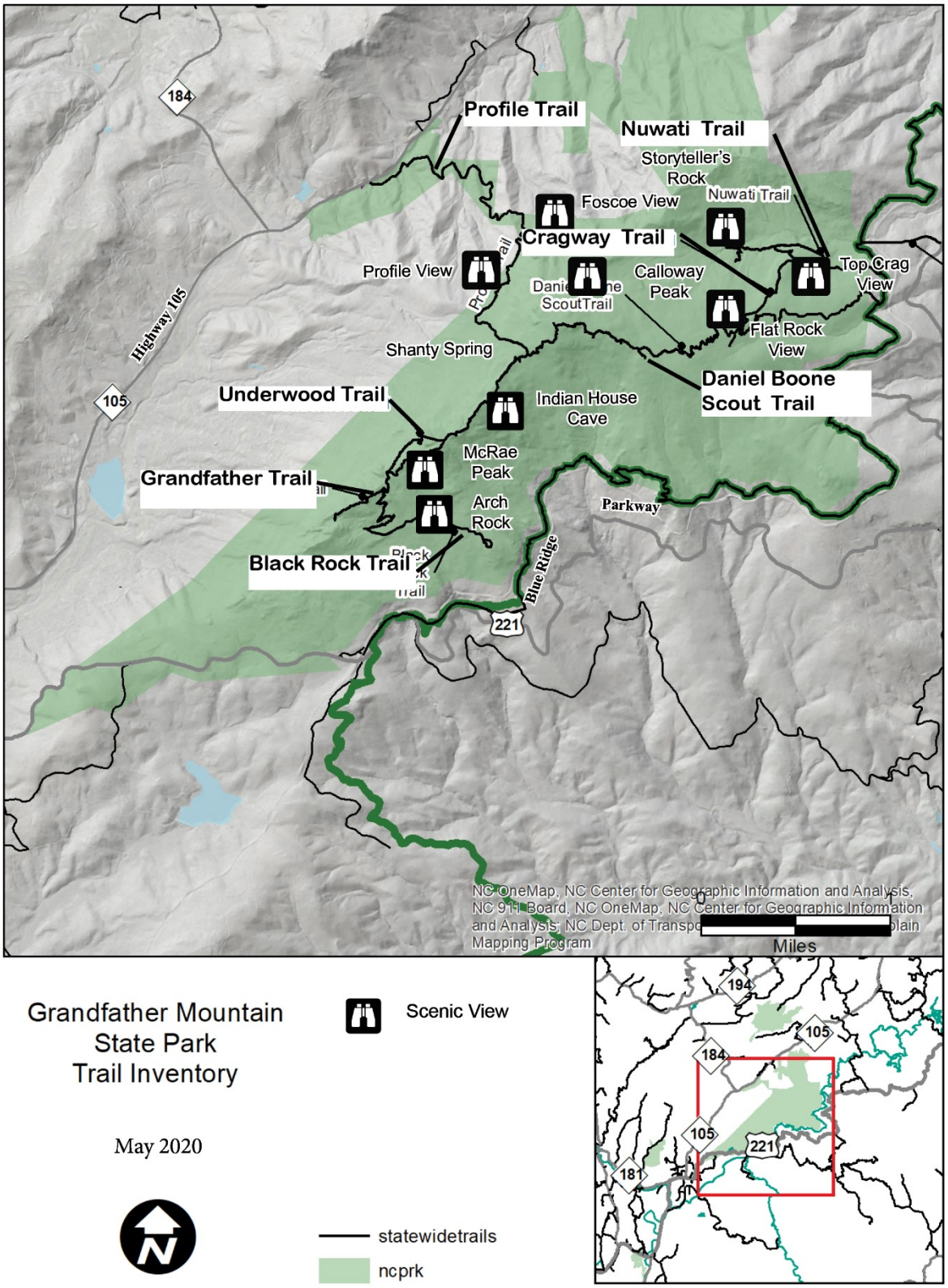
Profile Trail transitions out of hardwoods and into the Canadian fir ecosystem in the crest area

Underwood Trail: This strenuous 0.58-mile trail meets the Grandfather Trail at Grandfather Gap at its lower terminus and at MacRae Gap its higher terminus, just beyond MacRae Peak. The trail makes a steep, very rocky route under the crest line around Raven Rock Cliff by way of one ladder.

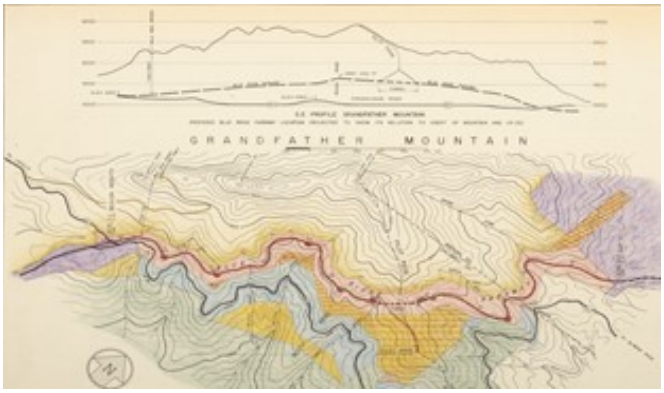
The backcountry trail system uses a ladder system to access the top of natural rock outcrops

Underwood Trail is a strenuous trail with one ladder to make up significant elevation change. The trail makes a steep, very rocky loop under the crest line around Raven Rock Cliffs

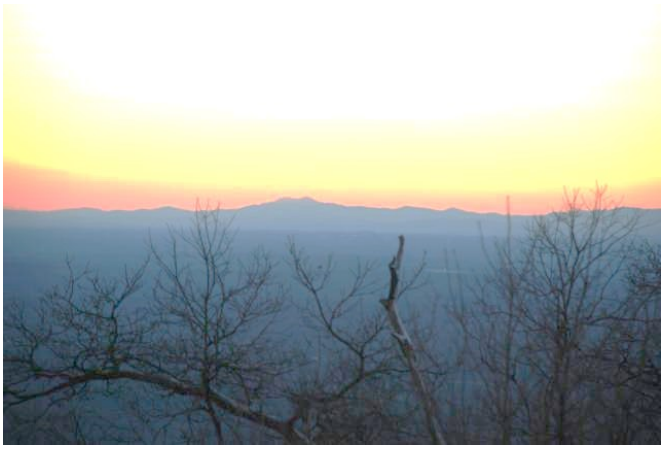
TRAIL INVENTORY



IV. PLANNING

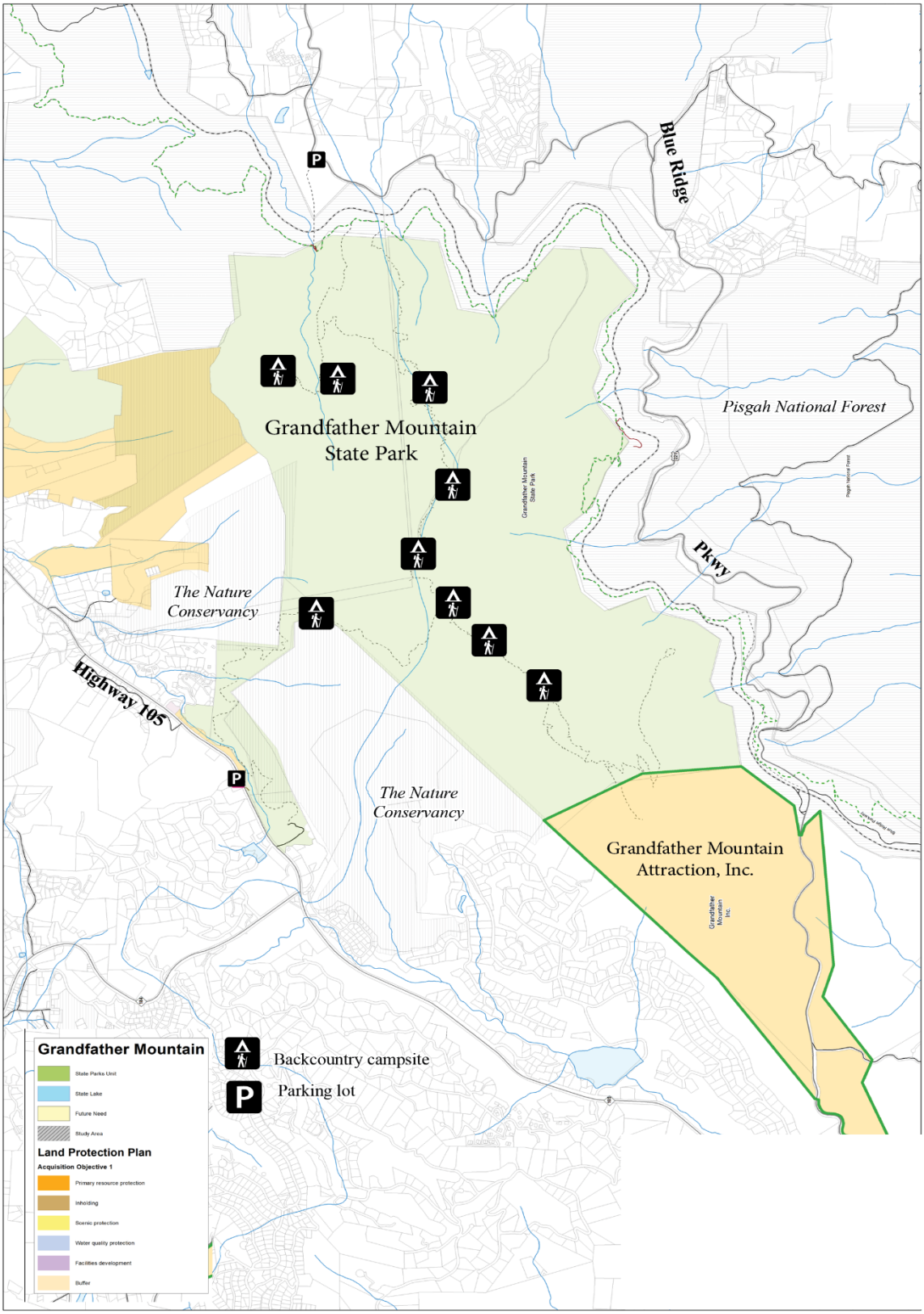


Construction drawings of the Blue Ridge Parkway roadway alignment along Grandfather Mountain shows how the parkway was constructed and integrated into the landscape of the surrounding area

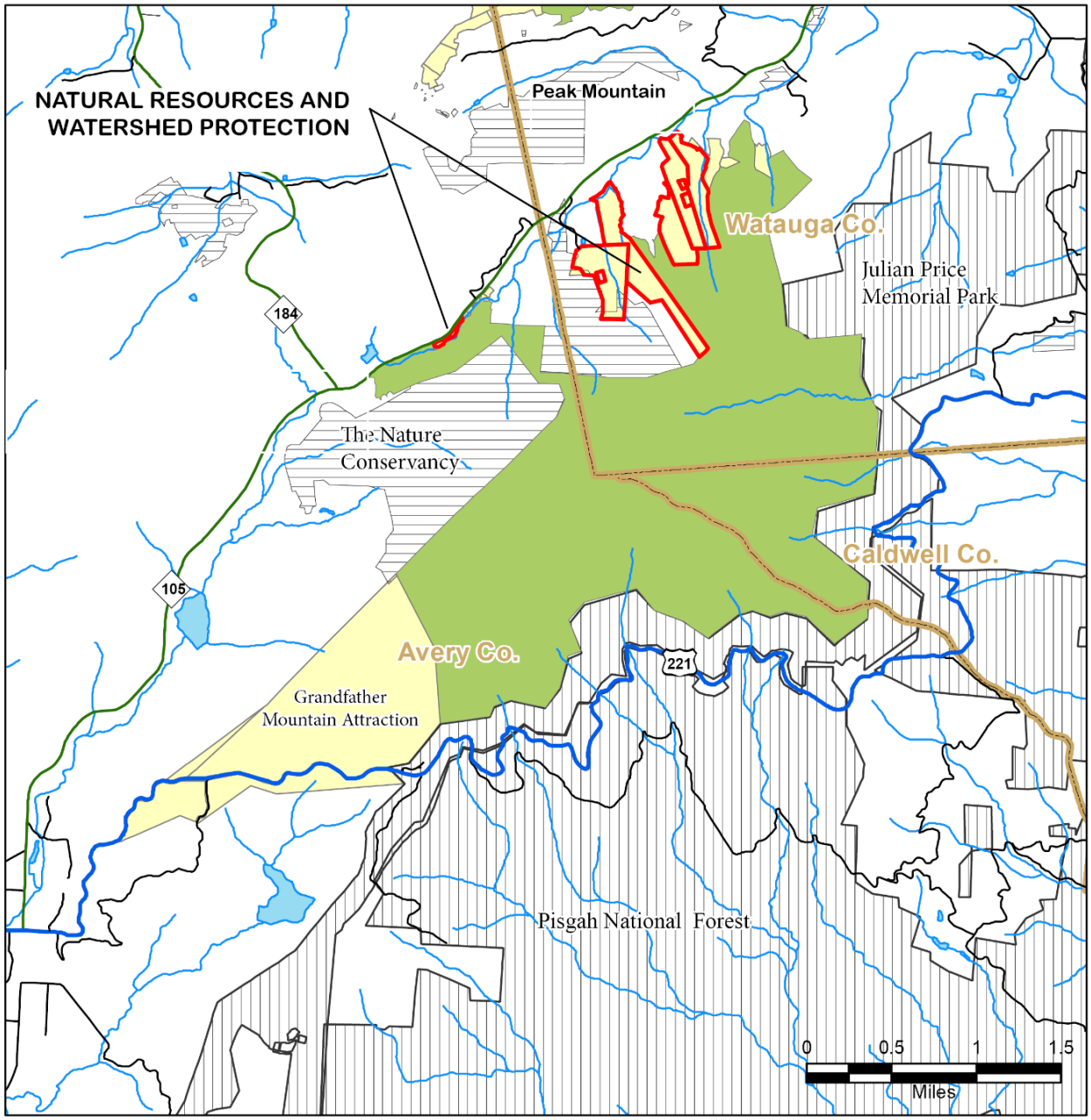


Scenic and panoramic viewshed of Grandfather Mountain ranges from the Black Mountains to the Unicoi Mountains

LAND PROTECTION PLAN



LAND PROTECTION PLAN – CRITICAL ACRES



Grandfather Mountain
State Park

Critical need
State Parks Unit
Future Need

Other Conservation Land
Federal
State
Other

N

October 2019

PROJECT LIST

BOND PROJECTS		
PROJECT#1	**PROJECT TITLE**	**** CONCEPTUAL COST**
1	Proposed Maintenance building at Profile Trailhead	$ 1,035,330
GMP PROJECTS		
PROJECT#1	**PROJECT TITLE**	**** CONCEPTUAL COST**
1	Profile Trail reroutes & Repair	$180,000
2	Parkway Trails Reroutes	$ 32,000
3	Nuwati Trail Renovations	$127,000
4	Daniel Boone Scout/Cragway Trails reroutes (Boone Bowl Loop Trail)	**$** 183,000
5	Daniel Boone Scout/Cragway/Grandfather Trails Reroutes (Top Crag View to Profile Trail)	$ 287,900
6	Remove and replace Hi-Balsam Shelter	$ 65,000
	****TOTAL**	**$ 875,900**

*** Planning estimate project includes 25% contingency, does not include design fee, nor escalation.*

BOND PROJECT:

1. Proposed Maintenance yard at Profile Trail:

Proposed 2,800 square feet enclosed maintenance building, expansion area, staff parking, dumpster, chain-link fence, and separate road access will provide a usable workspace for maintenance staff. Equipment needs to be protected due to extreme high winds and cold conditions for 4-6 months each year. Park staff is required to manage 3,647 acres of land at Grandfather Mountain, as well as 4,454 acres at Yellow Mountain, Bear Paw, Sugar Mountain and Beech Creek Bog State Natural Areas.

GENERAL MANAGEMENT PROJECTS:

1. Profile Trail Reroutes & Repair:

This project will provide trail renovations along the Profile Trail. This section needs reroutes and selective repairs to provide for an improved visitor experience.

Scope of work includes:

- Construct 13,004 linear feet (2.46 miles) of trail alignment along Profile Trail
- 11,400 linear feet (2.16 miles) of decommissioned and unstainable trail
- Adequate rock work
- Selective tree removal
- Install new Shanty Spring box

Stone steps are integrated into the natural slope and topography. This design and construction follow standard sustainable building practices

2. Parkway Trails Reroutes:

This project will provide trail renovations along Boone Fork Parking Connector (managed by National Park Service) and Asutsi trail near the Blue Ridge Parkway access area. See "GMP Trail Projects Overview map" on page 38 for reference.

Scope of work includes:

- Construct 1,007 linear feet (0.19 miles) along Boone Fork connector trail
- Construct 2,638 linear feet (0.49 miles) along the Asutsi Trail corridor
- Stone steps contingency
- Selective tree removal contingency

3. Nuwati Trail Renovations:

This project will provide trail renovations from Storyteller's Rock View to Nuwati Trail. The installation of stone steps and trail alignment will help provide a safer experience for camping and families. See "GMP Trail Projects Overview map" on page 38 for reference.

Scope of work includes:

- Install 225 stone steps to access Storyteller's Rock View
- Construct 5,990 linear feet (1.13 miles) of reroute trail construction along Nuwati Trail corridor
- Selective tree removal

4. Daniel Boone Scout/Cragway Trails Reroutes:

This project will provide trail renovations to create the "Boone Bowl Loop Trail" system, combining the Daniel Boone Scout and Cragway Trails. Construction of reroutes and decommissioning previous unsustainable trail alignments will provide an improved backcountry experiences for visitors. See "GMP Trail Projects Overview map" on page 38 for reference.

Scope of work

- Construct 16,530 linear feet (3.13 miles) of new trail construction
- Decommission 6,738 linear ft (1.27 miles) of unsustainable trail
- Rock work contingency (including rock removal, steps, cribbing, or drainage features)

Daniel Boone Scout Trail is 0.02 mile long corridor thru Fraser fir ecosystem

5. Daniel Boone Scout/Cragway/Grandfather Trails Reroutes (Top Crag View to Profile Trail)

This project will provide trail renovations from Daniel Boone Scout Trail to Cragway to Grandfather Trails. A complete re-route for this trail segment is recommended. This project will abandon unsustainable trail routes and provide a safer trail experience. See "GMP Trail Projects Overview map" on page 38 for reference.

Daniel Boone Scout Trail

Scope of work includes:

- Install stone steps,
- Decommission of 13,651 linear feet (2.59 miles) of unsustainable trail
- Construct 26,179 linear feet (or 4.96 miles) and spur trails to views
- Upgrade existing campgrounds

Daniel Boone Campsite

6. Remove and replace Hi -Balsam Shelter:

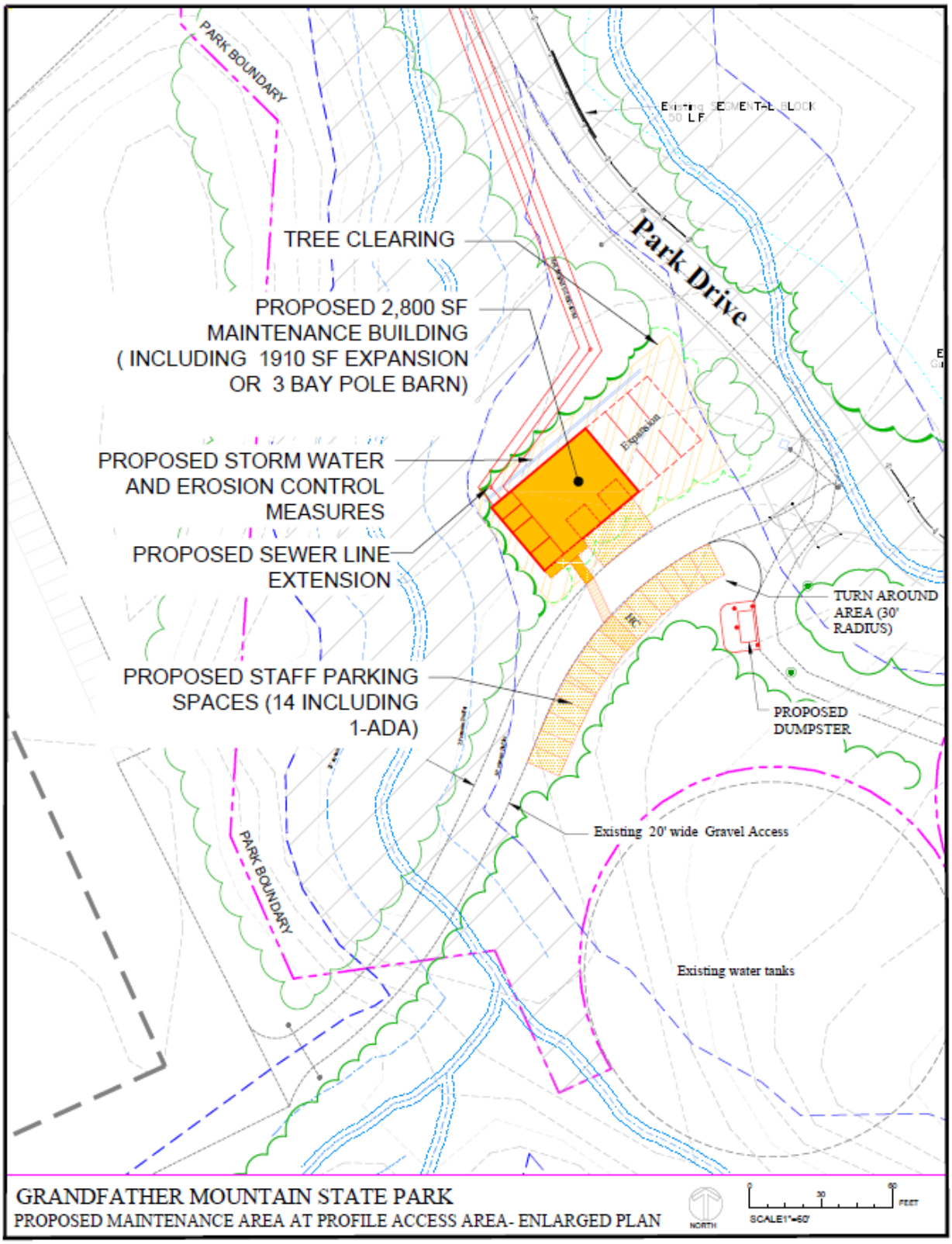
The Hi-Balsam shelter, located off the Daniel Boone Scout trail, will be demolished. The structure was rebuilt in 1981 out of logs and local building materials. A prefabricated shelter will be placed on a building pad away from the edge of cliff.

Scope of work includes:

- Demolition of 37 year old structure
- Mobilization of supplies and structure via helicopter
- Selective tree clearing
- Install building pad
- Install prefabricated shelter

Hi-Balsam shelter needs to be demolished and replaced with a new shelter built to standard construction practices

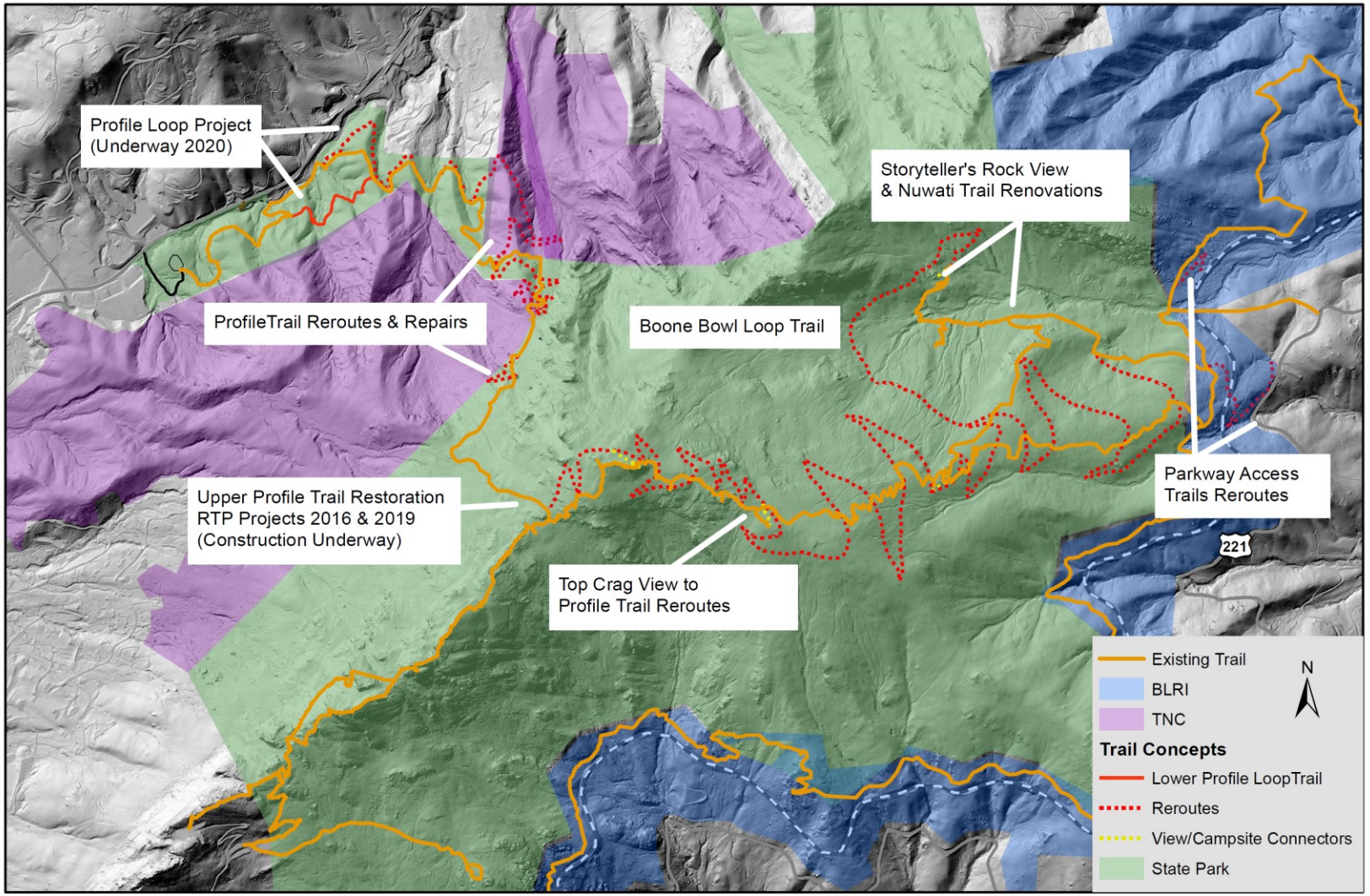
BOND PROJECT: PROPOSED MAINTENANCE BUILDING AT PROFILE TRAIL



BOND PROJECT: PROPOSED MAINTENANCE BUILDING AT PROFILE TRAIL

Exterior of maintenance bldg at Elk Knob State Park

Inside of layout space for storage and equipment at Elk Knob State Park



Grandfather Mountain State Park
GMP Trail Projects Overview

May 2020

0 1,000 2,000 4,000 6,000 8,000 Feet

0 0.25 0.5 1 1.5 2 Miles

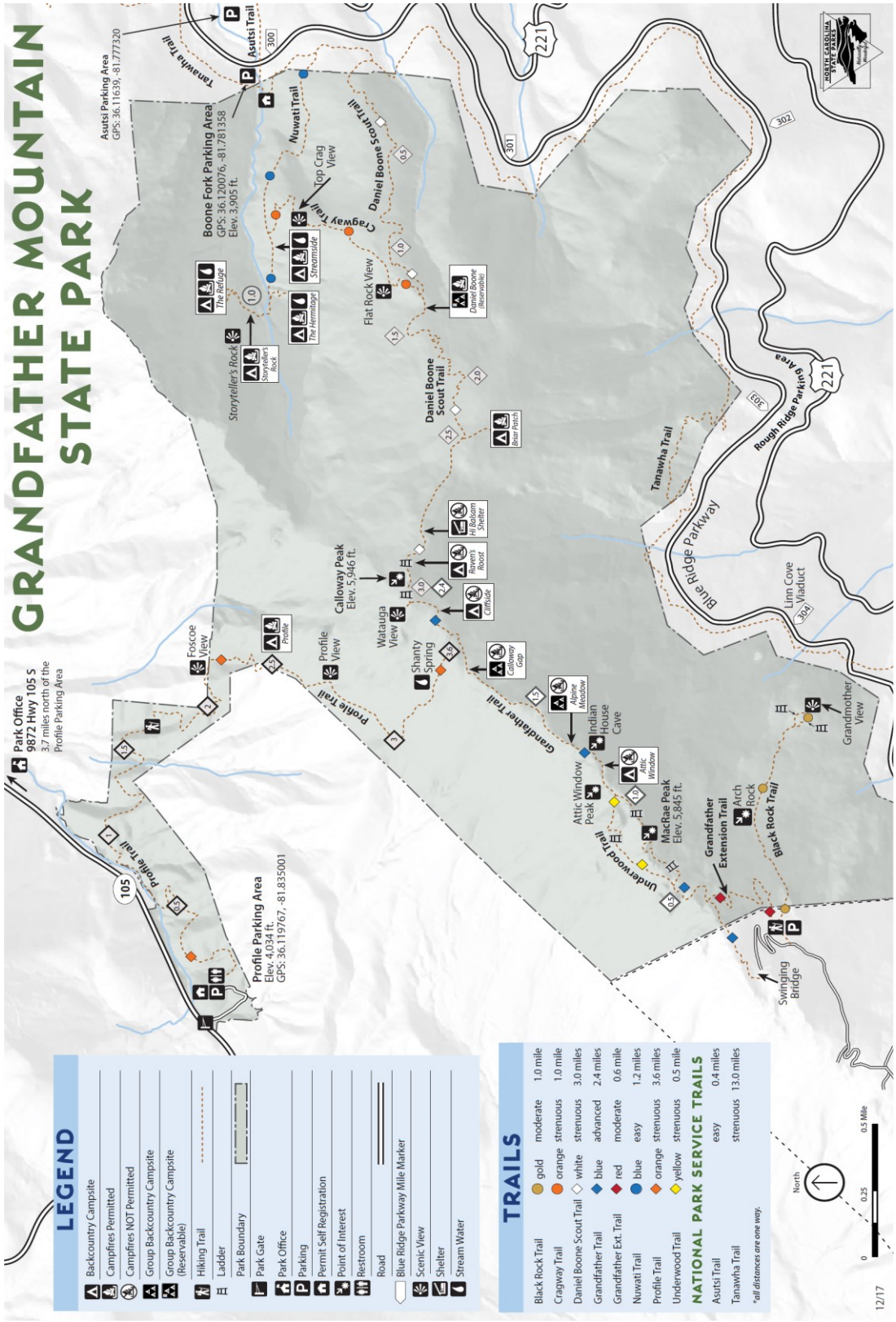
NORTH CAROLINA STATE PARKS
Naturally Wonderful

Contour Interval = 20'

Grandfather Mountain has panoramic views of the Blue Ridge escarpment

Ladders along the trail corridor and rock outcrops allow for climbers to reach the ridgeline

PARK MAP


GRANDFATHER MOUNTAIN STATE PARK
Park Office
9872 Hwy 105 S
3.7 miles north of the Profile Parking Area
Asutsi Parking Area
GPS: 36.11639, -81.777320
Tanawha Trail
Asutsi Trail
Boone Fork Parking Area
GPS: 36.120076, -81.781358
Elev. 3,905 ft.
Nuvati Trail
Top Crag View
Cragway Trail
Daniel Boone Scout Trail
Storyteller's Rock
Flat Rock View
Daniel Boone Scout Trail
Tanawha Trail
Blue Ridge Parkway
Rough Ridge Parking Area
Linn Cove Viaduct
Foscoe View
Profile Trail
Profile Parking Area
Elev. 4,034 ft.
GPS: 36.119767, -81.835001
Profile View
Calloway Peak
Elev. 5,946 ft.
Watauga View
Shanty Spring
Grandfather Trail
Alpine Meadow
Indian House Cave
Attic Window Peak
Attic Window
MacRae Peak
Elev. 5,845 ft.
Underwood Trail
Grandfather Extension Trail
Arch Rock
Black Rock Trail
Grandmother View
Swinging Bridge
LEGEND
Backcountry Campsite
Campfires Permitted
Campfires NOT Permitted
Group Backcountry Campsite
Group Backcountry Campsite (Reservable)
Hiking Trail
Ladder
Park Boundary
Park Gate
Park Office
Parking
Permit Self Registration
Point of Interest
Restroom
Road
Blue Ridge Parkway Mile Marker
Scenic View
Shelter
Stream Water
TRAILS
Black Rock Trail gold moderate 1.0 mile
Cragway Trail orange strenuous 1.0 mile
Daniel Boone Scout Trail white strenuous 3.0 miles
Grandfather Trail blue advanced 2.4 miles
Grandfather Ext. Trail red moderate 0.6 mile
Nuvati Trail blue easy 1.2 miles
Profile Trail orange strenuous 3.6 miles
Underwood Trail yellow strenuous 0.5 mile
NATIONAL PARK SERVICE TRAILS
Asutsi Trail easy 0.4 miles
Tanawha Trail strenuous 13.0 miles
*all distances are one way.
North
0
0.25
0.5 Mile
12/17