



**NORTHERN PEAKS TRAIL
MASTER PLAN**

SUMMER 2017

PRODUCED FOR:

North Carolina Division of Parks and Recreation
Watauga County Tourism Development Authority
Ashe County
Ashe County Chamber of Commerce
West Jefferson Tourism Development Authority
Town of Boone
High Country Pathways, Inc.
Blue Ridge Conservancy

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THE NORTHERN PEAKS TRAIL EXTENDS FOR APPROXIMATELY 40 MILES FROM BOONE TO MOUNT JEFFERSON LINKING SUBSTANTIAL PUBLIC LANDS AND NATIONALLY SIGNIFICANT BIOSPHERES.



1

BACKGROUND AND INTRODUCTION

The trail master plan serves as a road map for establishing the Northern Peaks Trail (NPT) in Watauga County and Ashe County, North Carolina. This chapter provides background information and outlines the plan's purpose, goals, process, and organization.

IN THIS CHAPTER



Purpose and Background



Plan Goals



Planning Process



Plan Organization



BACKGROUND

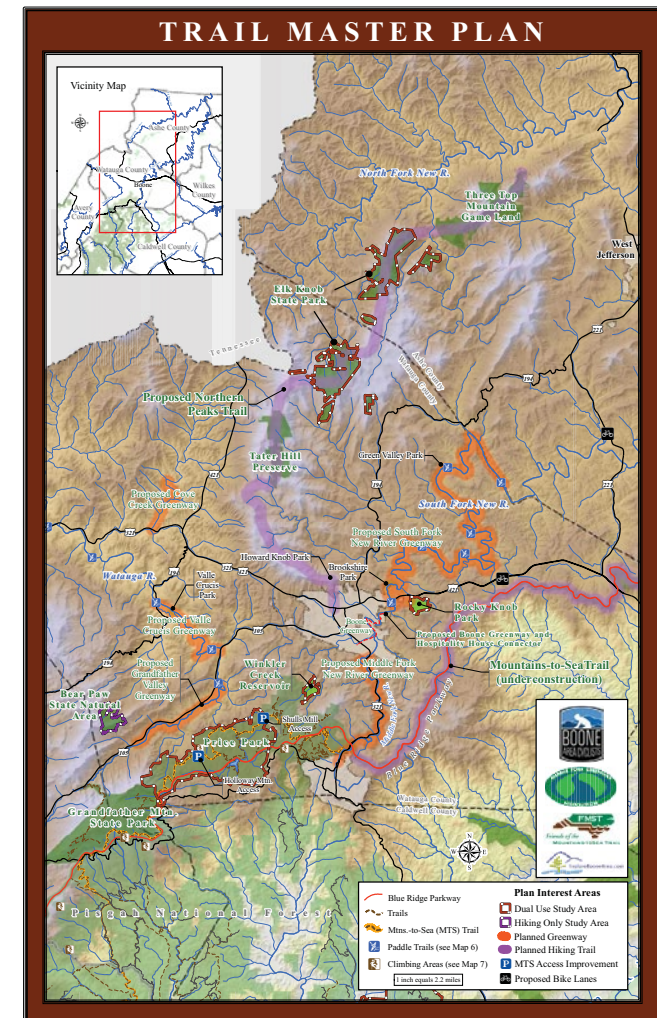
In 2011, the Watauga County Tourism Development Authority (WCTDA) published the *Boone Area Outdoor Recreation Plan* which proposed more than 20 tourism-related capital infrastructure improvements for the Boone Area of North Carolina. A draft of this plan was presented to the public for comments and input in March 2010; more than 400 citizens attended the Boone Area Outdoor Recreation Summit where the Northern Peaks Trail (NPT) was highly lauded. The NPT provides an opportunity to establish a long distance trail that will link the Town of Boone to West Jefferson along a series of mountain peaks, including many lands that have been protected for conservation purposes.

Since the WCTDA's adoption of the Outdoor Recreation Plan, the organization has continued to implement priority projects with financial support from multiple programs administered by the North Carolina Division of Parks and Recreation (NCDPR). The WCTDA and NCDPR are once again partnering as the primary sponsors of the NPT Master Plan. In addition, the concept of the Northern Peaks Trail Master Plan has attracted many other partners.

Stakeholders from across Watauga and Ashe counties recognize the unique economic development and quality of life opportunities presented by the NPT. This master planning effort is funded by not only the WCTDA and NCDPR, but also Ashe County, Ashe County Chamber of Commerce, West Jefferson Tourism Development Authority, Town of Boone, and High Country Pathways, Inc. The NPT has the potential to galvanize the Region's public lands and communities like nothing before. Local government officials and community leaders are prepared to work together, and the NPT Master Plan exemplifies this commitment.

Evaluation of the NPT for State Trail designation was a key component of the planning process as requested by NCDPR. The NPT Framework Plan completed in the fall of 2016 presented a determination that the NPT met minimum criteria for State Trail eligibility. This document expands upon the framework plan to evaluate the NPT based on final criteria for State Trail Designation. This plan concludes that the NPT satisfies the final criteria for State Trail designation and recommends that this designation be pursued for the trail.

THIS MASTER PLANNING EFFORT IS FUNDED BY THE NC DIVISION OF PARKS AND RECREATION, WATAUGA COUNTY TOURISM DEVELOPMENT AUTHORITY, ASHE COUNTY, ASHE COUNTY CHAMBER OF COMMERCE, WEST JEFFERSON TOURISM DEVELOPMENT AUTHORITY, TOWN OF BOONE, AND HIGH COUNTRY PATHWAYS, INC.



MAP 1: 2011 BOONE AREA OUTDOOR RECREATION MAP

The WCTDA's 2011 Boone Area Outdoor Recreation Plan proposes more than 20 tourism-related capital infrastructure improvements, including the Northern Peaks Trail.



PLAN GOALS

1. FEASIBLE TRAIL ROUTES

Identify strategic areas for implementation in order to achieve connectivity over time.

2. LAND MANAGER ENGAGEMENT

Directly engage public and conservation land managers to assess support for the trail route.

3. ENVIRONMENTAL EDUCATION

Utilize the NPT as a platform for communicating the significance of the area's biodiversity and the importance of environmental stewardship.

4. TRAIL CHARACTER AND BRAND

Develop a distinct visual brand for the trail and design facilities and signage to create a unique identity for the trail.

5. SUPPORT OTHER COMMUNITY GOALS

Leverage trail investment to support other community goals including economic development, tourism growth, and conservation.

6. CULTIVATE PARTNERSHIPS

Develop partnerships between public land managing agencies, local governments, non-profits, and citizen-stakeholders to implement the trail.

A scenic view of a mountain range with green hills and a blue sky. The foreground shows rocky terrain with small white flowers and green plants. The background features rolling hills and mountains under a clear sky.

A CRITICAL COMPONENT OF THIS PLAN WAS LAND MANAGER ENGAGEMENT.



PLANNING PROCESS

1. DIRECTION SETTING AND PROJECT LAUNCH | JULY 2016

The planning team met with local trail and government leaders to generally discuss environmental constraints, opportunities for trail connectivity, and brand strategy.

2. LAND MANAGER ENGAGEMENT | JULY-AUGUST 2016

The planning team engages each major public and private-conservation land manager to assess project feasibility and preliminary ecological implications.

3. FRAMEWORK PLAN | AUGUST-SEPTEMBER 2016

The NPT Framework Plan is published that addresses minimum criteria for State Trail eligibility, projected economic impact, and branding and facility design.

4. ANALYSIS AND DRAFT PLAN | OCTOBER 2016-FEBRUARY 2017

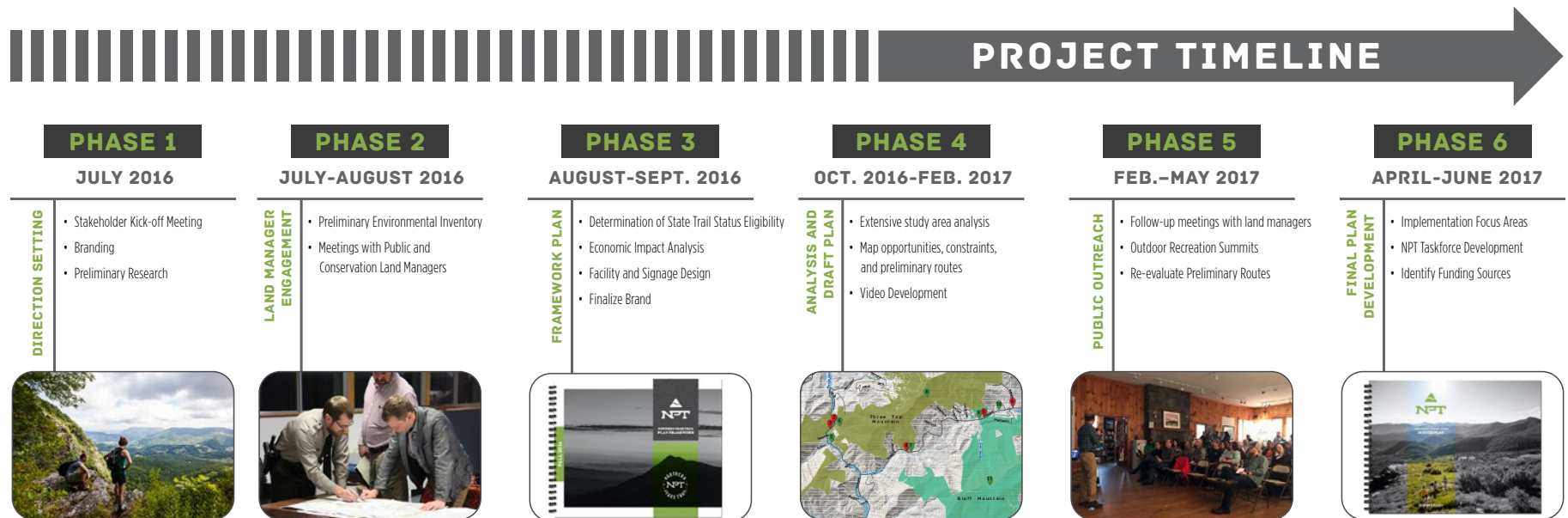
The planning team conducted a thorough site analysis of the study area and identified various trail route options.

5. PUBLIC OUTREACH | FEBRUARY-MAY 2017

The planning team held follow-up meetings with public land managers and hosted the Boone and Ashe Outdoor Recreation Summits to share NPT preliminary routes and conceptual renderings. The trail routes are re-evaluated based on feedback from the public.

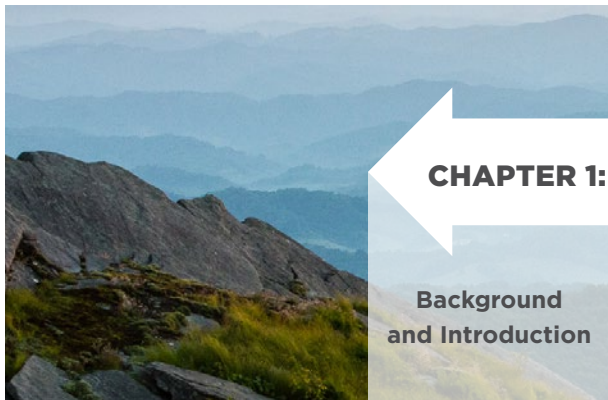
6. FINAL PLAN DEVELOPMENT | APRIL-JUNE 2017

The final plan is developed published for review by NCDPR, stakeholders, and the public.

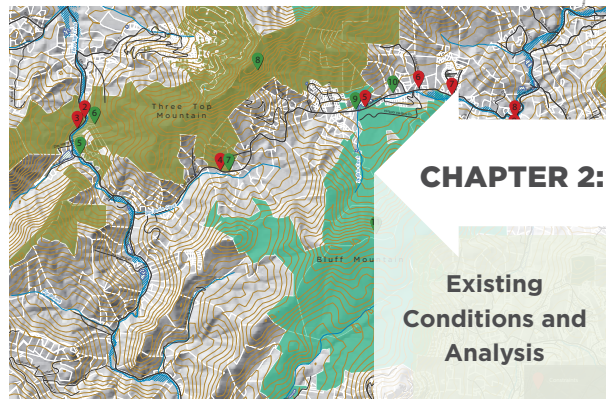




PLAN ORGANIZATION



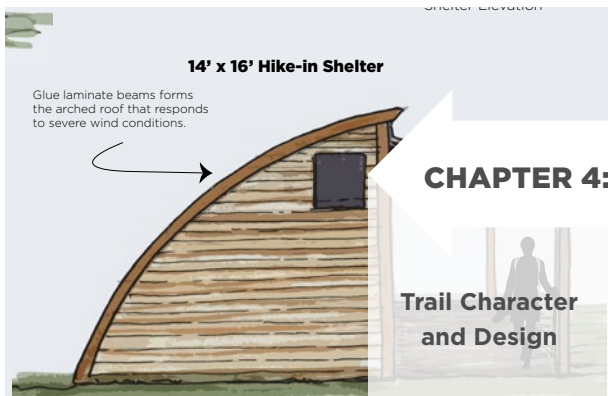
This chapter outlines the plan's purpose, goals, process, and organization.



This chapter provides a comprehensive analysis of the opportunities and constraints within the study area, profiles major public lands, identifies preliminary route alternatives, and introduces the priority focus areas.



This chapter describes the significant efforts to engage the public throughout the trail corridor including major community outreach events in Boone and West Jefferson.



This chapter presents the visual brand for the trail, provides design concepts for support facilities and signage, and identifies trail types.



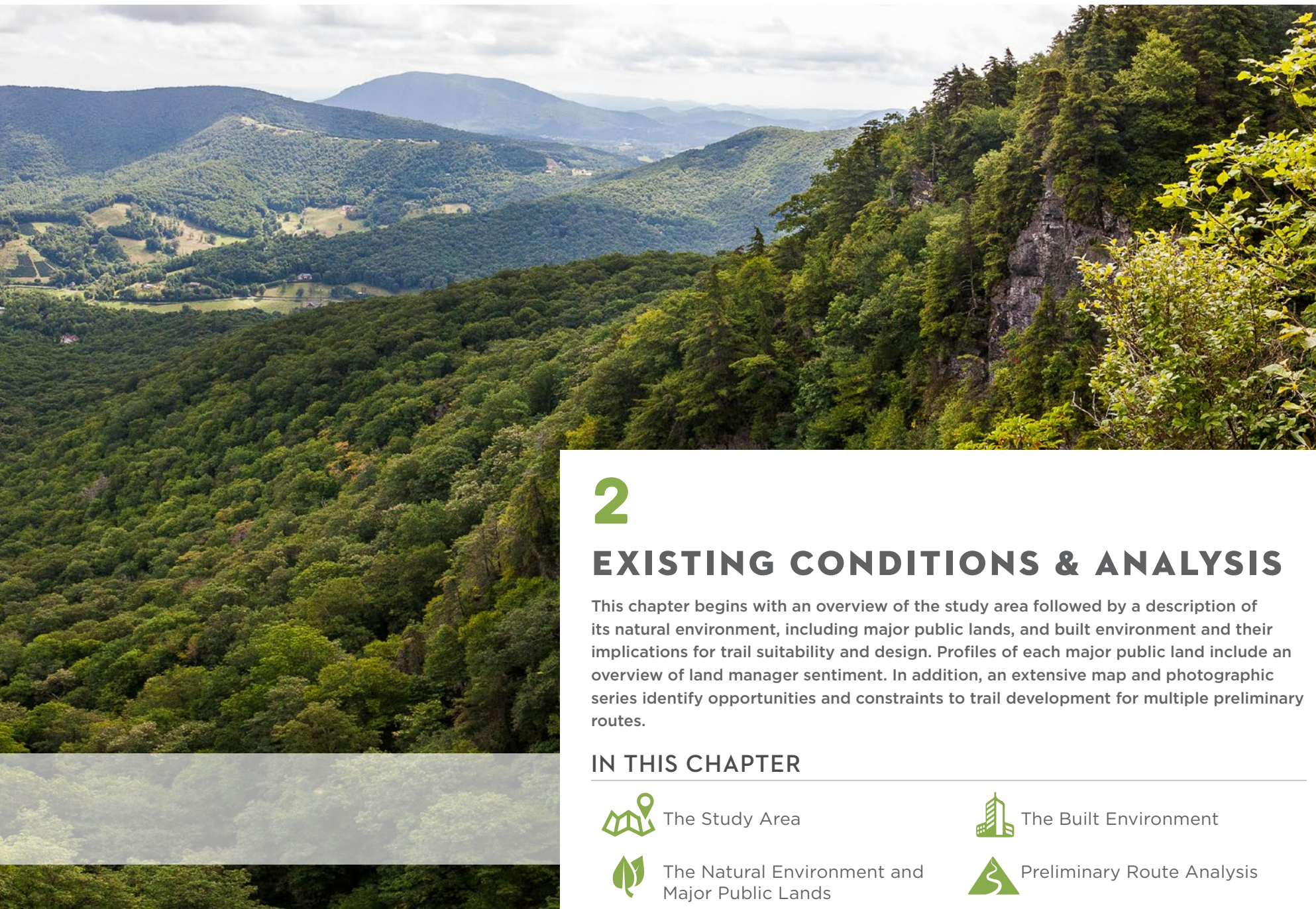
This chapter is organized according to four (4) priority focus areas. Each focus area description includes a map that identifies the preferred alignment and is supported by photo-renderings and design schematics.



This chapter provides implementation details according to specific focus area and outlines an organizational structure to carryout plan recommendations.



THE NPT TRAVERSES OUTSTANDING NATURAL RESOURCE AREAS OF THE NORTH CAROLINA HIGH COUNTRY.



2

EXISTING CONDITIONS & ANALYSIS

This chapter begins with an overview of the study area followed by a description of its natural environment, including major public lands, and built environment and their implications for trail suitability and design. Profiles of each major public land include an overview of land manager sentiment. In addition, an extensive map and photographic series identify opportunities and constraints to trail development for multiple preliminary routes.

IN THIS CHAPTER



The Study Area



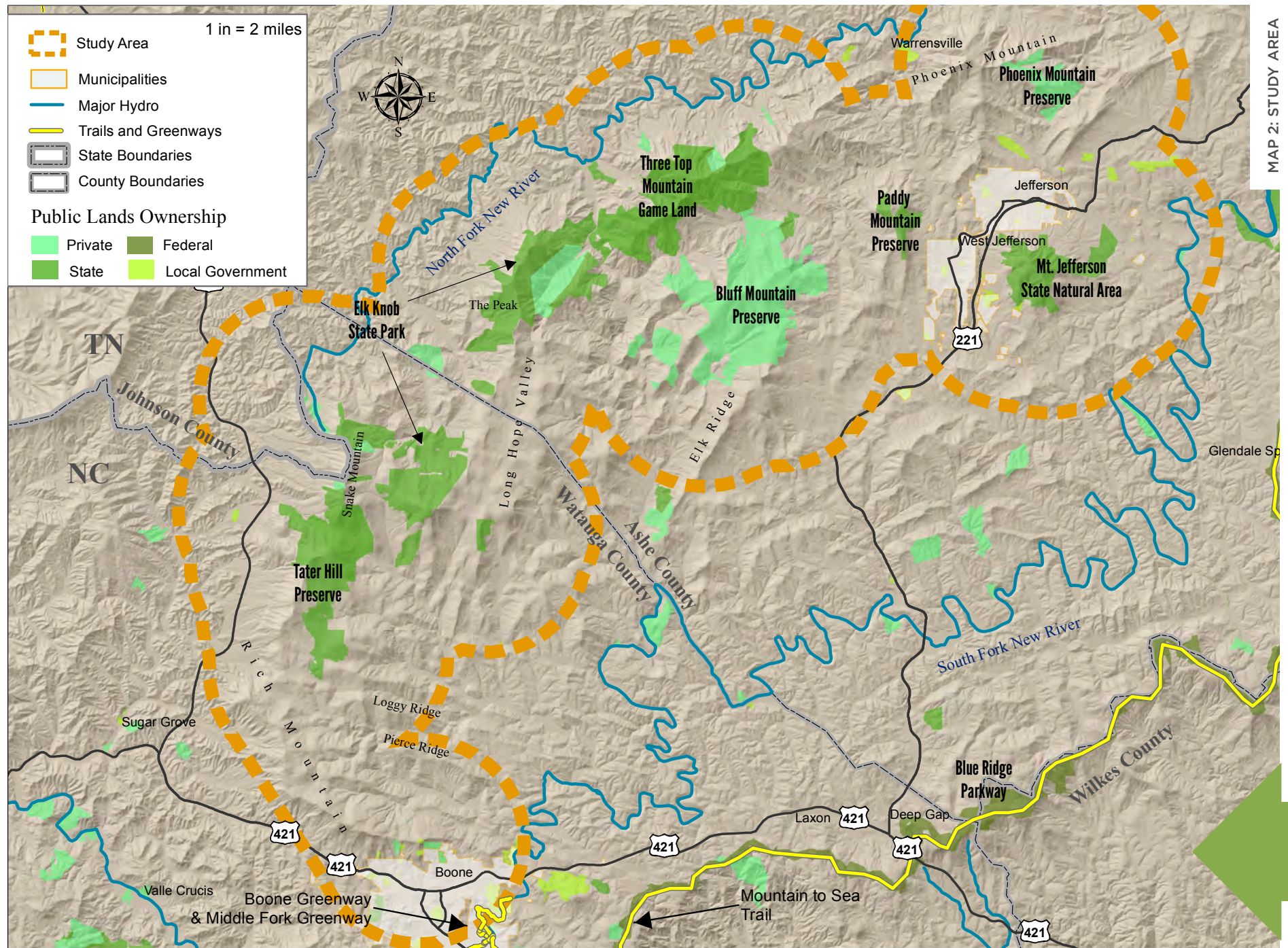
The Natural Environment and
Major Public Lands



The Built Environment



Preliminary Route Analysis



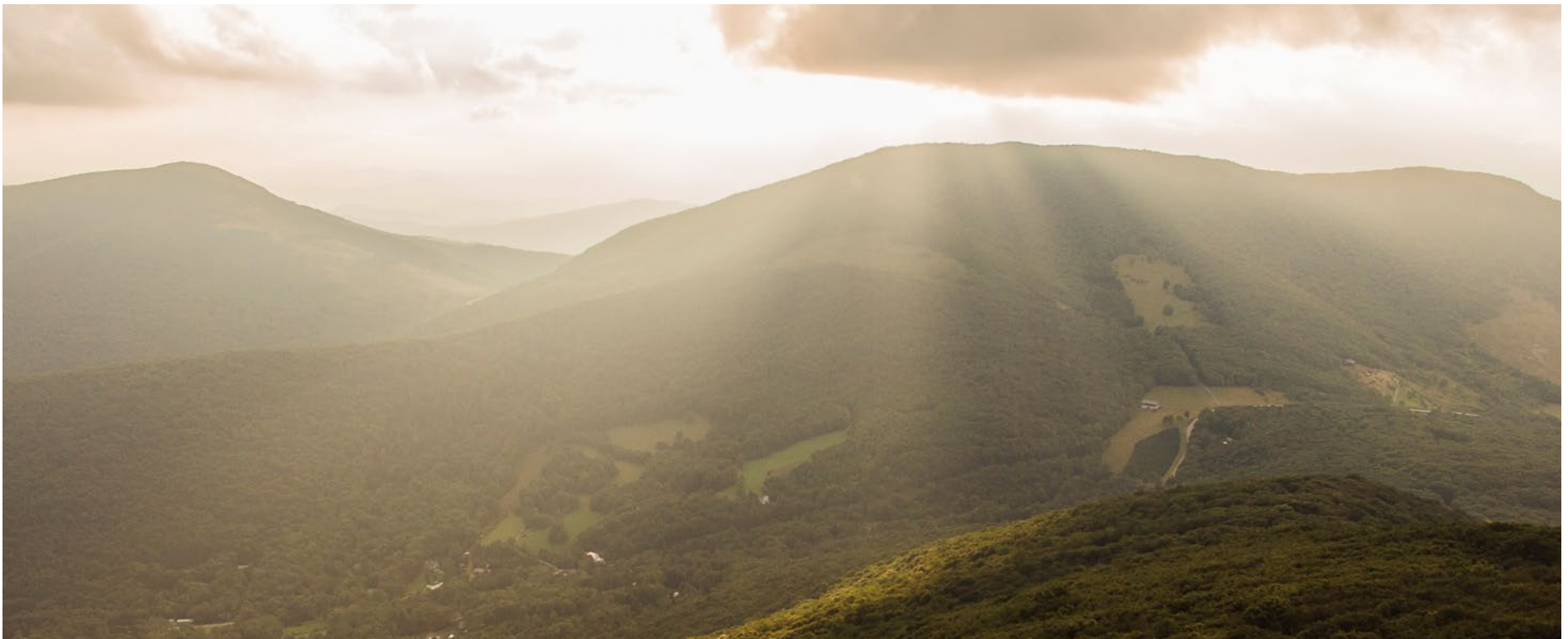
MAP 2: STUDY AREA



THE STUDY AREA

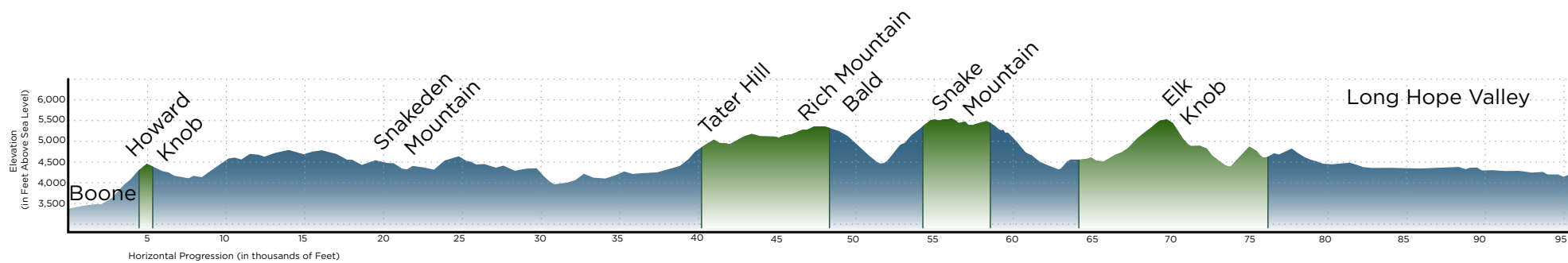
The NPT study area's southern terminus is located at Rivers Park in Downtown Boone and extends approximately 40 miles north to the summit of Mount Jefferson State Natural Area in Ashe County. The NPT study area includes a two-mile wide radius from each major peak along this unique mountain chain.

The uncommon geologic qualities and mineral composition of amphibolite rock produces unusually rich soils, and when combined with elevation and other environmental factors, results an abundance of natural biodiversity.



THE NPT STUDY AREA INCLUDES A TWO-MILE WIDE RADIUS FROM EACH MAJOR PEAK WITHIN THIS UNIQUE MOUNTAIN CHAIN AND PROVIDES A CONNECTION BETWEEN DOWNTOWN BOONE AND WEST JEFFERSON.

THE AMPHIBOLITE SUBSTRATE WITHIN THE NPT STUDY AREA IS THE LARGEST CONCENTRATION OF THIS UNIQUE ROCK TYPE IN THE APPALACHIANS.





THE NATURAL ENVIRONMENT AND MAJOR PUBLIC LANDS

The deposit of amphibolite rock within the NPT study area stretches for thousands of acres and is the largest concentration of amphibolite substrate in the Appalachians. The unique mineral composition of this amphibolite macro-site yields unusually rich soils that support high levels of exotic flora and fauna.

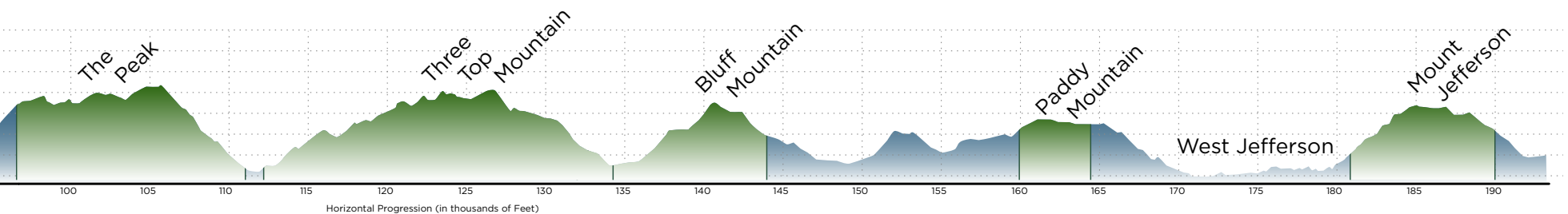
Consider these findings:

1. The study corridor includes 16 North Carolina Natural Heritage Areas, which are considered critical for conservation of the natural biodiversity of North Carolina;
2. There are 123 rare species, including 91 rare plant species and 32 rare animal species;
3. There are more than 20,000 acres of protected lands within the study area, including 12,154 acres owned by the State of North Carolina, 4,334 acres owned by private land trusts, and 4,143 acres that are protected through conservation easement; and
4. An estimated \$35 to 50 million of public monies have been spent to protect land along the Northern Peaks.

This section includes a descriptive profile of each major public land or private conserved land within the NPT study area, including: 1) Elk Knob State Park; 2) Mount Jefferson State Park; 3) Three Top Game Land; 4) Tater Hill Preserve; and 5) Paddy Mountain Preserve.

Throughout the summer of 2016, the planning consultant team met with the three land managing agencies responsible for each of the major conserved lands: the NC Division of Parks and Recreation; NC Wildlife Resources Commission; and NC Plant Conservation Program. A summary of key points from each meeting is provided.

APPROXIMATELY 40% OF THE NPT IS LOCATED WITHIN EXISTING CONSERVED LANDS.





ELK KNOB STATE PARK

Owner: State of North Carolina

Land Managing Agency and website:

North Carolina Division of Parks and Recreation,
<http://www.ncparks.gov/>

Agency contact: Tracy Minton, Park Superintendent,
tracy.minton@ncparks.gov, elk.knob@ncparks.gov, 828-297-7261

Acres: 3,680 acres; includes 60 parcels

Purchase price of state owned land: \$15,320,000

GENERAL DESCRIPTION

Elk Knob State Park is located in northeastern Watauga and southwestern Ashe counties. Conservation areas include several fragmented areas along Long Hope Mountain between Rich Mountain Bald and Three Top Mountain. The primary public access area is located at the base of Elk Knob, two miles to the north of Meat Camp along Meat Camp Road (State Road 1340). State-managed lands make up the majority of the area with 3,477 acres, 59 percent of which is in Watauga County.

Elk Knob State Park was established to provide public access to this unique natural area and protect it from future development. Concerned citizens and The Nature Conservancy worked together to purchase the land and then deeded it to North Carolina in 2003. Elk Knob is the second tallest peak in Watauga County. Additionally, portions of the headwaters of the New River originate from this peak.

KEY FEATURES

- There exists a 729-acre game land adjacent to the main public lands of Elk Knob to the southwest.
- The game lands are made up of two easements along Rich Mountain Road and are not considered when counting acreage above.
- Elk Knob has an elevation of 5,520 feet and features excellent views of Stone Mountain, Rittle Knob, Meat Camp, and much of Watauga and Ashe counties.
- The park is still developing much of its trail network and facilities. Currently, primitive camp sites can be found less than a mile from the parking area, and the Summit Trail brings visitors to the top of Elk Knob
- Elk Knob State Park is home to five (5) species of rare plants or lichens, and two (2) rare animal species.

NATURAL COMMUNITIES

- Grassy Bald
- High Elevation Rocky Summit
- Northern Hardwood Forest (Beech Gap subtype)





MOUNT JEFFERSON STATE NATURAL AREA

Owner: State of North Carolina

Land managing agency and website:

North Carolina Division of Parks and Recreation,
<http://www.ncparks.gov/>

Agency contact: Joseph Shimel, Superintendent,
 joseph.shimel@ncparks.gov, 336-246-9653

Acres: 1,006 acres; includes 25 parcels

Purchase price of State owned land: \$8,058,500

GENERAL DESCRIPTION

Mount Jefferson State Natural Area is located in central Ashe County just south of Jefferson and east of West Jefferson. The park can be accessed by Mount Jefferson Natural Area Road off of US 221 North. Most of the park land exists above 3,000 feet save for a small region extending toward NC Highway 88.

Mount Jefferson is a significant natural area because of the lush amphibolite soils and the cluster of rare species at the site. The area was officially created as a state natural area in 1956 to preserve access to the mountain. In 1974, the park was designated as a national natural landmark by the National Park Service. The Natural Heritage Program has the site listed as state significant.

KEY FEATURES

- This area provides views of all surrounding county land including Three Top, Bluff, Phoenix, Jefferson, West Jefferson, and the Blue Ridge.
- There are well-maintained access roads to the top of Mount Jefferson. Longboard races are frequently hosted along the access road.
- Mount Jefferson State Natural Area contains two (2) rare plant or lichen species and five (5) rare animal species.

NATURAL COMMUNITIES:

- High Elevation Red Oak Forest
- Northern Hardwood Forest
- High Elevation Rocky Summit
- Heath Bald



LAND MANAGER SENTIMENT: NC DIVISION OF PARKS AND RECREATION



The planning team met with Sean McElhone, West District Superintendent for NCDPR, whose responsibilities include the supervision of both Elk Knob and Mount Jefferson. Also in attendance was Tracy Minton, Park Superintendent of Elk Knob.

The NPT is a familiar concept to these land managers and was very well-received, as it provides an opportunity to connect state-owned natural resources and attract more park users. Land managers shared older maps with the planning team that showed the concept of the NPT, particularly the connection among Snake Mountain, Elk Knob, and The Peak.

Land managers are favorable to the NPT provided the trail location does not undermine the integrity of the natural resource.

KEY FINDINGS AND PLANNING IMPLICATIONS

1. NCDPR leadership envisions a strategic expansion that will ultimately provide for a 13,000 acre park at Elk Knob.
2. The primary trail development priority is to connect Snake Mountain, Elk Knob, and The Peak, which could then connect to Three Top Game Lands. Such trail connections, historically referred to as the "Amphibolite Trail," have been conceptualized for many years and are depicted on maps at the Elk Knob State Park ranger office.
3. Land managers prefer that the NPT utilize the existing Elk Knob Summit Trail and then continue northeast to The Peak and take advantage of its unique ridgeline. NCDRR has the final authority to determine/approve trail routes in state park units.
4. State Park planners are considering areas below The Peak and along Three Top Creek for public parking and access.
5. Family camping facilities are being considered with the pending acquisition of the 300 acre Cherry Tree Farm.
6. The Sunalei Private Development has expressed the desire to connect trails through their development, which includes a private conservation easement on the western slope of Snake Mountain.
7. Three Top and The Peak are adjacent, divided by a Three Top Road; the NPT master plan should identify and provide a design concept for this crossing.
8. Develop a rendering/schematic for crossing Meat Camp Road.
9. Consider and recommend opportunities for primitive camping.
10. Mount Jefferson State Natural Area has recently been expanded and includes a tract with highway access, which should be considered for the NPT trail route.



TRAIL CONNECTIONS BETWEEN SNAKE MOUNTAIN, ELK KNOB, AND THE PEAK, HISTORICALLY REFERRED TO AS THE “AMPHIBOLITE TRAIL,” HAVE BEEN CONCEPTUALIZED FOR MANY YEARS AND ARE DEPICTED ON MAPS AT THE ELK KNOB STATE PARK RANGER OFFICE.



THREE TOP MOUNTAIN GAME LAND

Owner: State of North Carolina

Land managing agency and website: North Carolina Wildlife Resources Commission; <http://www.ncwildlife.org/>

Agency contact: Kip Hollifield, Mountain Ecoregion Supervisor & Certified Wildlife Biologist®, kip.hollifield@ncwildlife.org, 828-442-3988

Acres: 2,560 acres; includes 267 parcels, 142 (2,431 acres) of which are owned by the state

Purchase price of state owned land: \$2,321,000

GENERAL DESCRIPTION

Three Top Mountain Game Land is located in western Ashe County approximately 3 miles east-southeast of Creston. The range of peaks extends from Trout in the southwest to Warrentonville in the northeast. There are several parking areas by which visitors can gain access to the game land along Hidden Valley Road and Ben Bolen Road. The Nature Conservancy and the NC Wildlife Resource Commission have purchased a majority of subdivided parcels from a failed development community along the western slopes of Three Top. Many roads still exist as part of the subdivided parcels, and some of the lots have seen residential development.

Three Top Mountain Game Land was established in cooperation with The Nature Conservancy in 1993. Since then, additional lands have been purchased to expand the conserved area. The North Carolina Wildlife Resources Commission has established an unbroken game land with the conserved lands. As a natural area, Three Top Mountain Game Land is important as a connector within the Amphibolite Mountain range. Due in large part to the rich soils, the site hosts a cluster of 16 rare plants species, one rare animal, and several high-quality examples of natural communities. Diverse forest communities have been identified along the slopes of Three Top with occurrences of rarer seep and cliff communities. The Natural Heritage Program lists Three Top as nationally significant.

KEY FEATURES

- There are a large number of fee simple properties within the Three Top Mountain management area. Many of these parcels exist in subdivisions.
- The Three Top Mountain Game Land comprises 2,486 acres. The North Carolina Resources Commission utilizes the old subdivision roads to access the inner game lands.
- The views from Three Top Mountain include: Bluff Mountain, Long Hope Mountain, Mount Jefferson, and Phoenix Mountain.
- Three Top Mountain Game Land is home to four (4) species of rare plants or lichen and one (1) rare animal.

NATURAL COMMUNITIES:

- High Elevation Rocky Summit
- Rich Cove Forest
- Montane Oak-Hickory Forest
- Northern Hardwood Forest



LAND MANAGER SENTIMENT: NC WILDLIFE RESOURCES COMMISSION



The Planning Team met with WRC representatives including Andrea Leslie, Mountain Habitat Conservation Coordinator, Kip Hollifield, Mountain Ecoregion Supervisor, and Kendrick Weeks, Western Wildlife Diversity Biologist Supervisor.

The group agreed that a route along the south slope of Three Top would be appropriate; any future trail route should avoid rock outcrops. There is limited access to the property at this time and there are no designated trails. While hunters often merely walk through the wooded landscape, trail access is important, particularly for wildlife observation and birding user groups.

KEY FINDINGS AND PLANNING IMPLICATIONS

1. The NPT route should avoid rock outcrops and rare plants.
2. Trail construction is most appropriate along the south slope.
3. Camping is not permitted at this time.
4. The planning team was encouraged to explore trailheads and parking opportunities along the perimeter of the Game Land.
5. The Ben Bolen parking area provides for six to eight cars, and there is room for expansion.
6. Land managers encouraged the NPT planning team to include the Natural Heritage Program early within the planning process.
7. Three Top and The Peak ridges are adjacent to each other, divided by Three Top Road; the NPT master plan should identify and provide a design concept for this crossing.





TATER HILL PLANT CONSERVATION PRESERVE

Owner: NC Department of Agriculture

Land Managing Agency and website: Plant Conservation Program (PCP); <http://www.ncagr.gov/plantindustry/plant/plantconserve>

Agency contact: Lesley Starke, Plant Ecologist, Lesley.starke@ncagr.gov

Acres: 1173 acres. Includes 12 parcels, 11 (1,162 acres) owned by the state

Purchase price of state owned land: \$7,407,500

GENERAL DESCRIPTION

Potato Hill, or “Tater Hill,” is located in north-central Watauga County, North Carolina. Tater Hill exists along Rich Mountain between Sugarloaf Mountain and Rich Mountain Bald. The site is approximately 5 miles to the north-northwest of Boone. Almost the entire site is located above 4,000 feet in elevation and is accessed along Replogle Road.

The land area is significant because of a cluster of unique plants and animals found within an equally distinctive landscape. The land is characterized by High Elevation Rocky Summit, Grassy Bald, Northern Hardwood Forest, High Elevation Seep, Rich Cove Forest, and Southern Appalachian Bog communities as well as Amphibolite Mountain geology. The bog area exists to the southeast while the grassy balds and exposed rock faces punctuate the north. The Plant Conservation Program manages the land and regularly lead hikes into the area. In the past, intentional flooding of the area, logging, beaver hunting, and private development have threatened the existence of the natural communities.

KEY FEATURES

- Many undeveloped private and old logging roads interlace the land.
- There area significant views of Meat Camp, Grandfather, Howards Knob, Beech Mountain, Harmon Knob, Nettle Knob, Zionville, and Rich Mountain from the conservation area.
- There are no public facilities on the preserve, signage is limited, and nature hikes are led from a single parking lot near the beginning of Replogle Road.
- The Plant Conservation Program offers guided hikes into the area. The current contact for scheduling hikes is Matt Estep (estepmc@appstate.edu).
- Tater Hill Conservation Preserve contains six (6) rare plant or lichen species and two (2) rare animal species.



PADDY MOUNTAIN

Owner: State of North Carolina

Land Managing Agency: Plant Conservation Program (PCP);
<http://www.ncagr.gov/plantindustry/plant/plantconserve/>

Agency Contact: Lesley Starke, Lesley.starke@ncagr.gov

Acres: 260 Acres

GENERAL DESCRIPTION

Paddy Mountain is located 1.5 miles to the northwest of West Jefferson. The protected area has no obvious access points. Lands owned by the state of North Carolina do however extend to Von Turner Road, which lies immediately off of NC-194. There are currently no scheduled hikes into the Paddy Mountain area according to the Friends of Plant Conservation, Inc. website. Plant Conservation Program staff typically leads a hike to the peak of Paddy Mountain once per year in late summer.

Paddy Mountain has been identified as a place of natural significance. The North Carolina Natural Heritage Program (NHP) lists Paddy Mountain, similar to the other Amphibolite peaks, as unique for its geology and natural communities. High Elevation Rocky Summit, a globally rare community type, is present in this area. Surrounding forest cover and little evidence of access to the area further identify Paddy Mountain as a high quality example of an Amphibolite peak. The protected area is within three miles of both Bluff Mountain to the West and Three Top to the Northwest making it an important connection in the greater region.

KEY FEATURES

- Paddy Mountain is lower and warmer than most of the other peaks, giving it a slightly different makeup than surrounding peaks.
- A noted concern is a new housing development in the surrounding area.
- Paddy Mountain is relatively close to downtown West Jefferson.
- Paddy Mountain Preserve contains three (3) rare plant or lichen species.

NATURAL COMMUNITIES:

- High Elevation Rocky Summit
- Montane Oak-Hickory Forest
- Rich Cove Forest
- Chestnut Oak Forest

LAND MANAGER SENTIMENT: NC PLANT CONSERVATION PROGRAM



The planning team met with the NC Plant Conservation Program Board of Directors in July 2016. There are significant concerns among this group regarding how the trail could effect their mission and the sensitive nature of Tater Hill and Paddy Mountain.

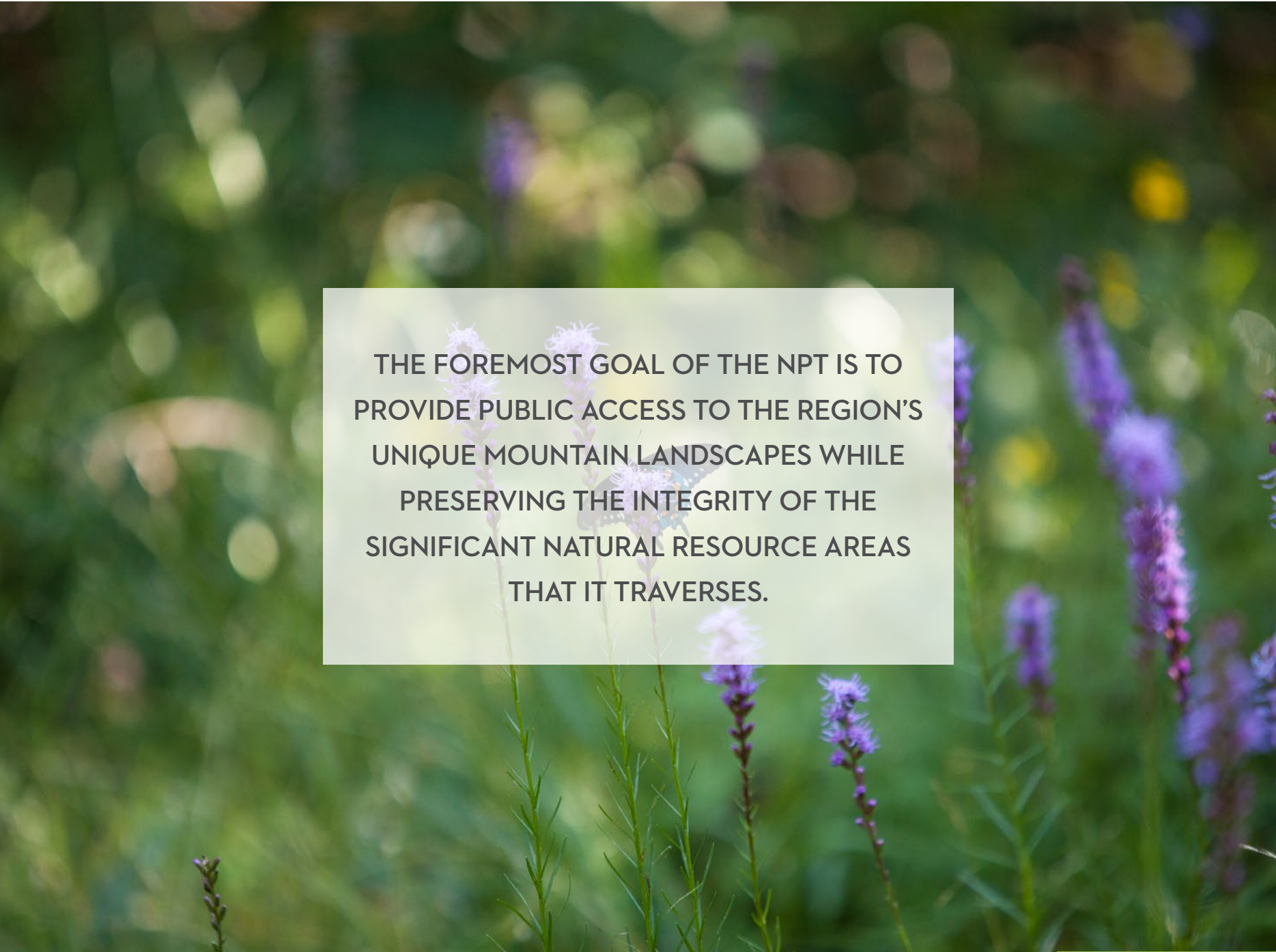
The Board authorized the planning team to conduct additional due diligence and a more thorough analysis of the agency's public lands and their dedication documents. In late 2016 and early 2017, the planning team will meet with NC Plant Conservation Program staff and its partners to explore Tater Hill and surrounding areas. The NPT planning team will collaborate in partnership with Plant Conservation Program staff and present any findings and requests to the agency's Board of Directors prior to publishing the final NPT Master Plan.

Any trail development efforts must include approval from the NC Natural Heritage Program. The NC Plant Conservation Board of Directors are uncertain as to whether a public trail, such as the NPT, is appropriate considering their mission and the sensitive nature of their managed properties. Further analysis is warranted.

KEY FINDINGS AND PLANNING IMPLICATIONS

1. The NPT planning team must meet with the scientific sub-committee as a first step to receiving a recommendation from the agency's Board of Directors.
2. Further due diligence will include a tour of the Tater Hill property and surrounding properties.
3. Any recommended routes, although not guaranteed for approval, should first utilize existing roads or trails and remain a considerable distance from sensitive natural areas.





THE FOREMOST GOAL OF THE NPT IS TO
PROVIDE PUBLIC ACCESS TO THE REGION'S
UNIQUE MOUNTAIN LANDSCAPES WHILE
PRESERVING THE INTEGRITY OF THE
SIGNIFICANT NATURAL RESOURCE AREAS
THAT IT TRAVERSES.





THE BUILT ENVIRONMENT

The opportunities and constraints found with the human and built environment are critical for determining suitable trail locations, feasibility, an ideal user experience, construction costs, and necessary permits. Integration of the trail into the downtowns of Boone and West Jefferson will require special design consideration as the trail transitions from a predominantly isolated natural environment into an urban core.

This section highlights areas and assets in the towns of Boone and West Jefferson and their implications for developing the NPT.

TRAIL TOWNS

The NPT'S greatest opportunity for distinction is the accessibility of a world-class outdoor experience and connectivity from the town of Boone to West Jefferson through one of North Carolina's most outstanding natural resource areas.

BOONE

The southern terminus of the study area is located in the Town of Boone, a historic university town located in the heart of the Southern Appalachians. The town has an enduring reputation as a utopia for outdoor recreation which earned it the distinction as one of Outside Magazine's "Best Places to Live" in 2015. The community embraces this identity as evidenced by the broad network of grassroots organizations and citizens that consistently demonstrate their support for efforts to expand area outdoor recreation offerings.



Boone's thriving historic main street is a major contributing factor to its desirability as a place to live and play. The downtown is comprised of a variety of commercial, civic, and residential land uses. As a North Carolina Main Street Community, the town strives for economic vitality within the context of historic preservation of the downtown core. The downtown thoroughfare, King Street, is characterized by historic mixed-use buildings that provide upper-story apartments and a variety of vibrant local shops, studios, restaurants, and professional offices on the ground floor. Boone's downtown is served by an uninterrupted sidewalk network that seamlessly links the campus of Appalachian State University to King Street. The existing sidewalk system and planned streetscape improvements on Howard Street provide a significant opportunity for integrating the NPT into the downtown environment.

THE NPT IS ANCHORED BY THE TOWNS OF BOONE AND WEST JEFFERSON.

WEST JEFFERSON

The Town of West Jefferson is nestled between Paddy Mountain and Mount Jefferson, the northern terminus of the NPT. West Jefferson's iconic mountain setting and recent public investment in the streetscape of Jefferson Avenue have established the town as a premiere High Country destination for visitors, new residents, vibrant small businesses, and industry-leading companies such as GE Aviation. West Jefferson is North Carolina Main Street Community and has been recognized multiple times for its downtown revitalization efforts. Most recently, the town was named a 2015 Great Main Street by the NC Chapter of the American Planning Association.



West Jefferson's vibrant downtown is comprised of various commercial, civic, and office-institutional land uses. The town's main street, Jefferson Avenue, features several blocks of historic one and two-story buildings that house local restaurants, shops, and professional offices. West Jefferson is known for its thriving arts district, Christmas tree industry, and local food scene including the acclaimed Ashe County Cheese factory located in the heart of town.

The downtown sidewalk network and inviting streetscape present a significant opportunity for trail connectivity from Paddy Mountain to Mount Jefferson. However, sidewalks and pedestrian facilities outside of the central business district are incomplete or inadequately designed. Highway 221 Business presents an opportunity to develop pedestrian and bicycle infrastructure that would link downtown West Jefferson north to the Town of Jefferson and south to a growing commercial business district.

LOCAL PARKS AND GREENWAYS

The Boone and West Jefferson areas have a collection of parks that serve as ideal locations for trail connections and trailheads. Some of these major assets include:

RIVERS PARK

Located on the west end of Boone near the campus of Appalachian State University, Rivers Park serves as the southern terminus of the NPT. The park is ideally situated across from significant mixed-use infill developments that are permitted for construction in the near future. The park property includes a historic stone house and surrounding lawn with exceptional views of Howard Knob rising above downtown Boone. The 14 acre site is owned by the Town and provides sufficient space for future trailhead amenities.



JUNALUSKA PARK

Boone's Junaluska Park is located in a residential area on the southern slope of Howard Knob between downtown Boone and the peak of Howard Knob. Park amenities include picnic shelters, basketball courts, restroom facilities, a ball field, and playground. Most of Junaluska's 10 acres is wooded and presents an opportunity for the development of a small trail network within the park as well as a trailhead at existing parking areas.



HOWARD KNOB PARK

This Watauga County park provides outstanding views of downtown Boone from the crest of Howard Knob, establishing it as a major destination for the NPT. As a popular location for visitors and locals, the park has significant potential as a destination-trailhead on Boone's nearest Amphibolite peak.



WEST JEFFERSON PARK

Tucked beneath the shadow of Paddy Mountain, West Jefferson Park or Bowie-Seagraves Park is within short walking distance from Jefferson Avenue's vibrant shops, galleries, and restaurants. The park features multiple recreation amenities including nearly a half mile of paved walking loops, establishing a significant trailhead in West Jefferson.



LOCAL PARKS AND GREENWAYS IN BOONE, WATAUGA COUNTY, AND WEST JEFFERSON PROVIDE CRITICAL DESTINATIONS FOR TRAIL CONNECTIVITY BETWEEN THE MAJOR PUBLIC LANDS.

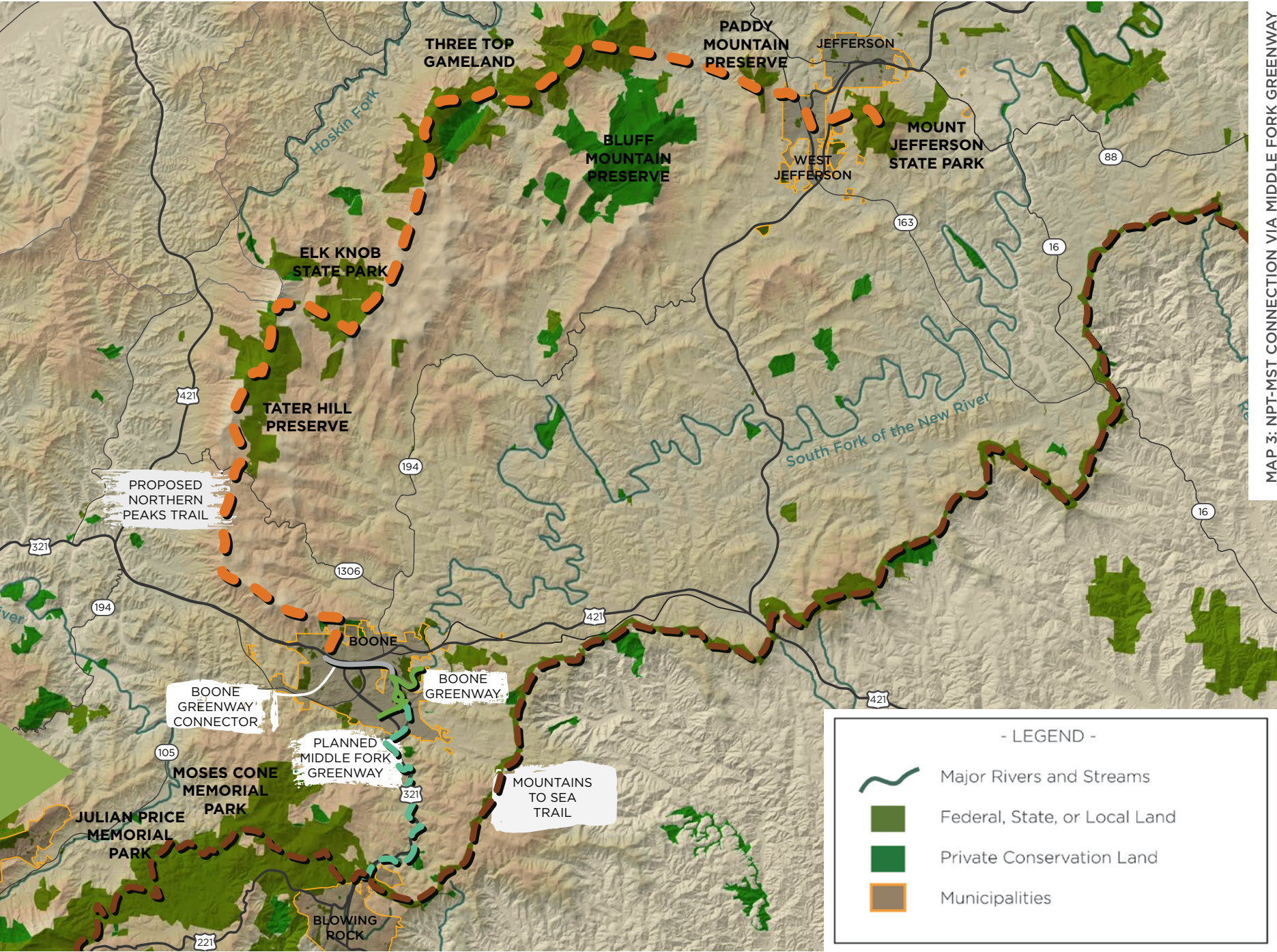
Boone Greenway and the Middle Fork Greenway

The existing Boone Greenway and Middle Fork Greenway, once complete, will provide a direct connection from the NPT to the Mountains-to-Sea State Trail (MST) near the Town of Blowing Rock.

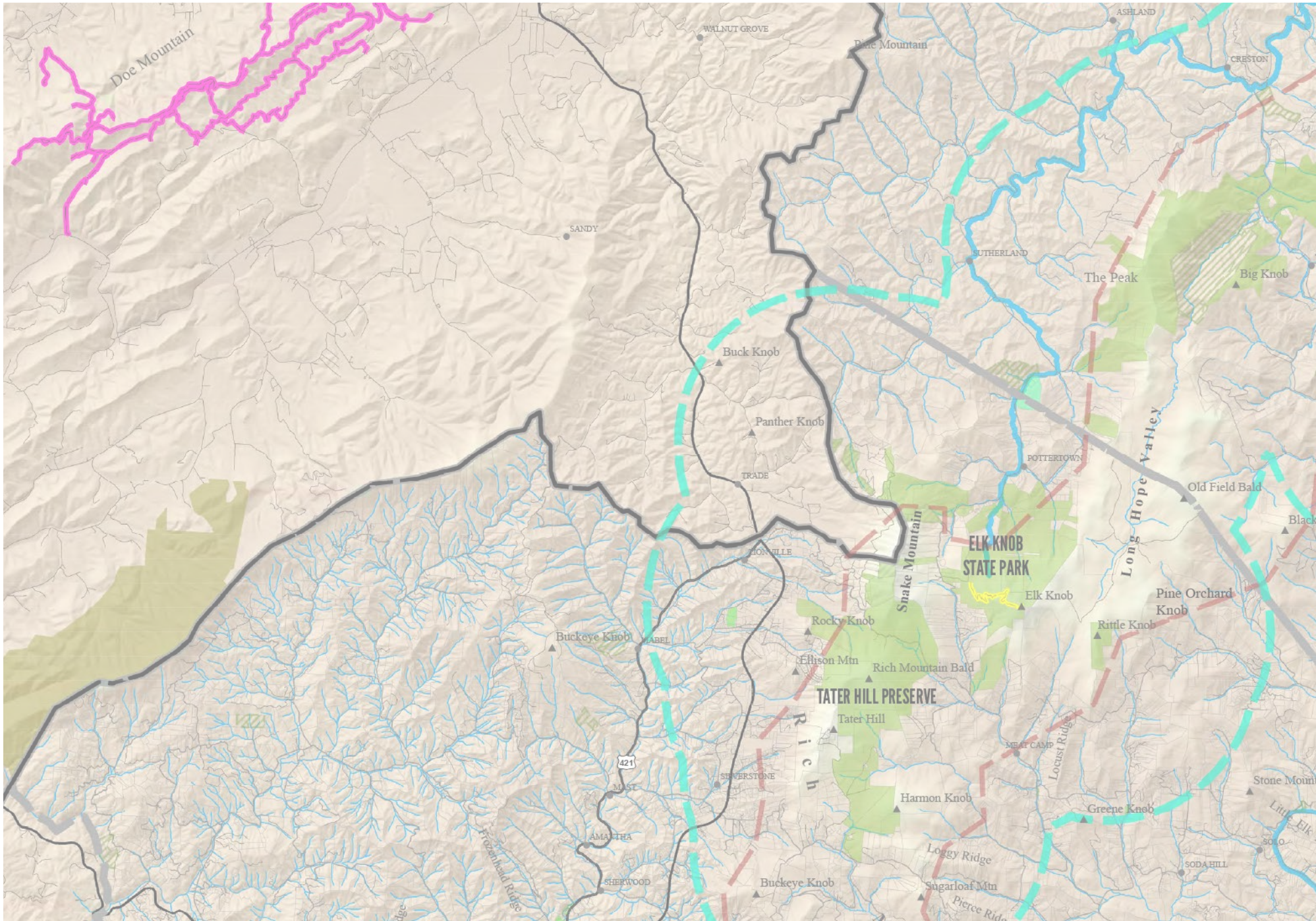
A proposed greenway connector from downtown Boone will link the NPT to the Boone greenway that extends south 3.5 miles to connect with the Middle Fork Greenway. The Middle Fork Greenway will link Boone to Blowing Rock and the MST to achieve a foremost goal of NC State Trails: interconnectivity.

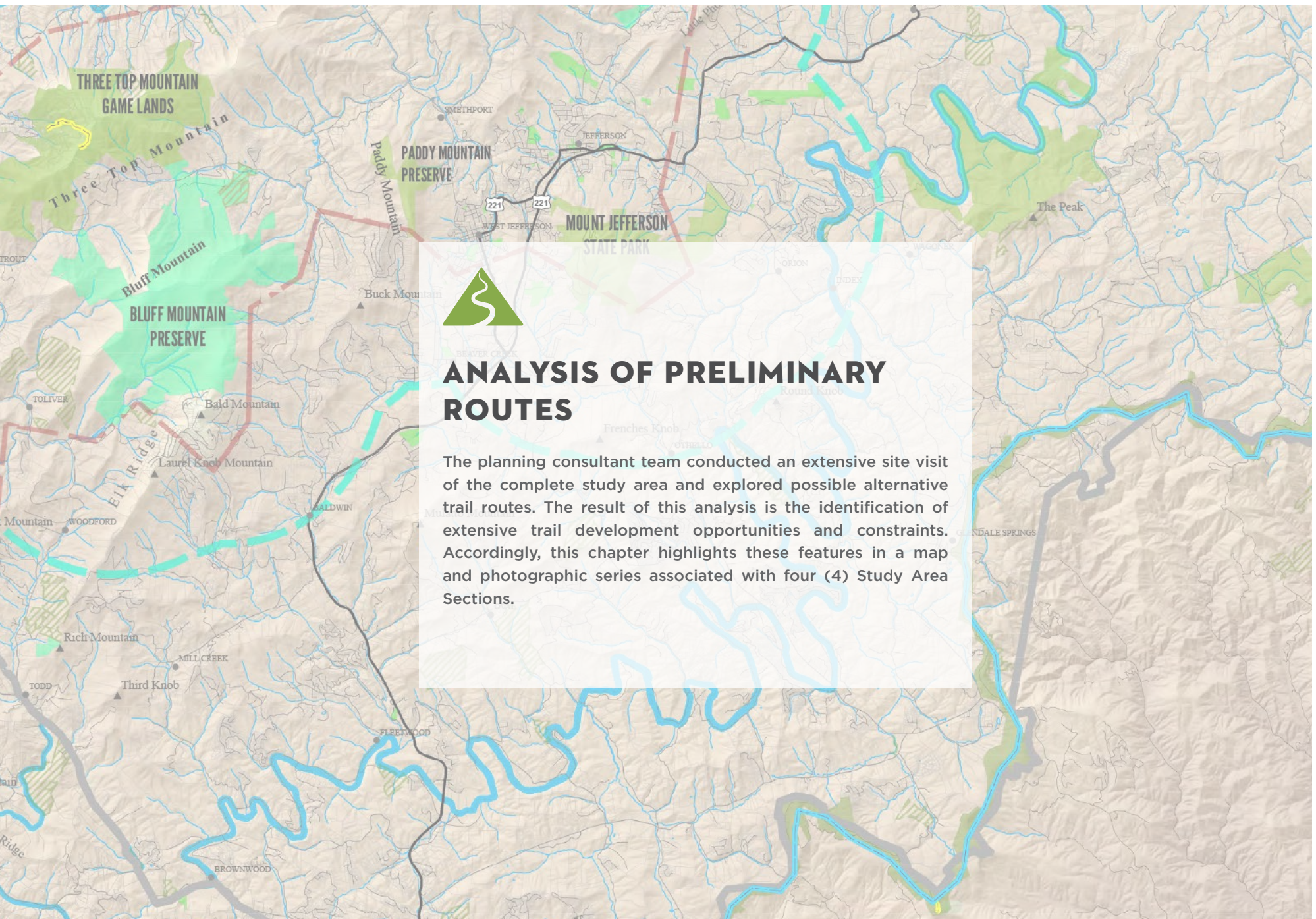
THE NORTHERN PEAKS TRAIL AND MOUNTAINS-TO-SEA STATE TRAIL WILL BE LINKED BY THE BOONE GREENWAY AND MIDDLE FORK GREENWAY.



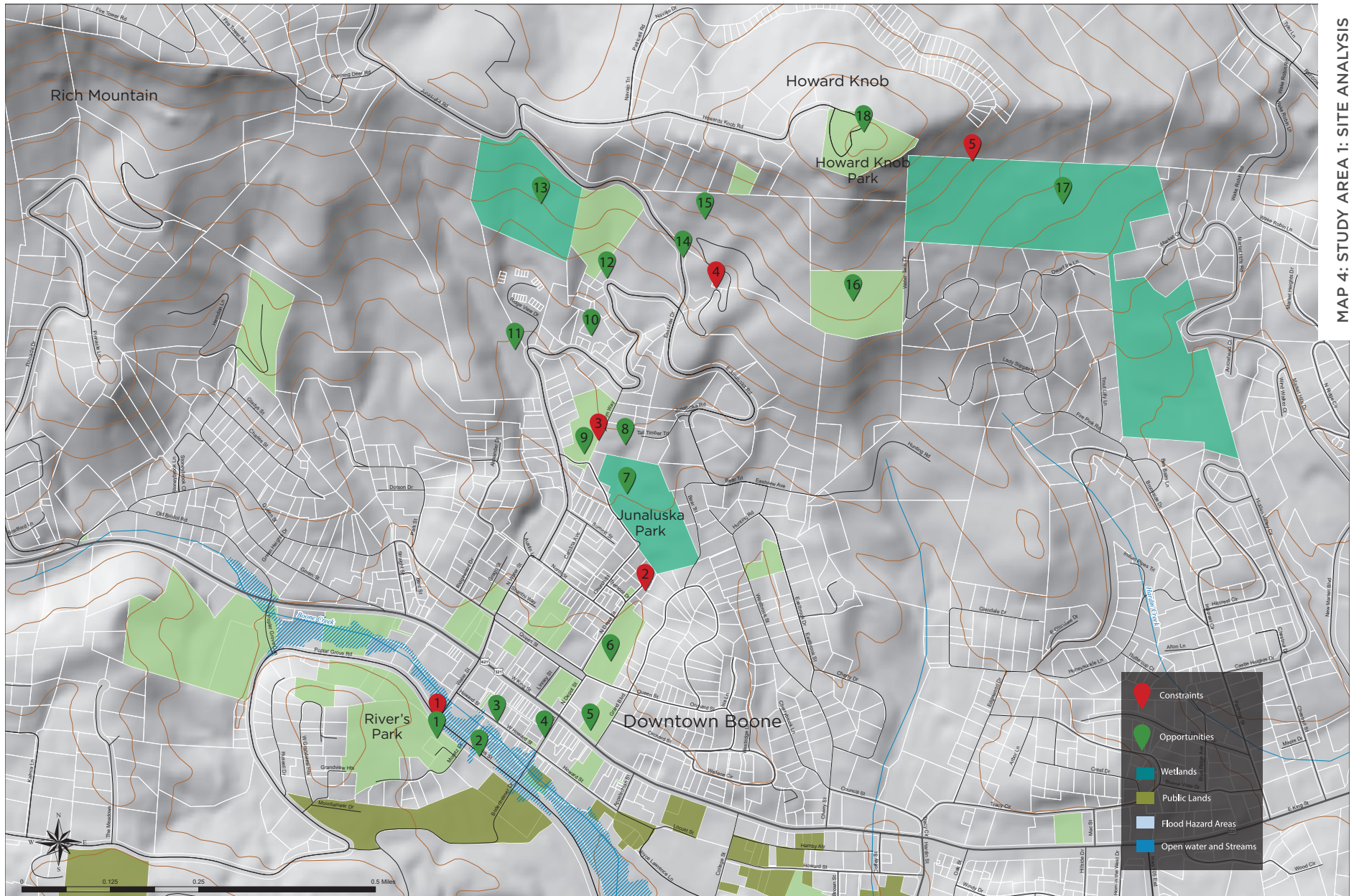


MAP 3: NPT-MST CONNECTION VIA MIDDLE FORK GREENWAY





STUDY AREA 1: SITE ANALYSIS



MAP 4: STUDY AREA 1: SITE ANALYSIS

STUDY AREA 1: OPPORTUNITIES & CONSTRAINTS

OPPORTUNITIES

Environmental features or community assets that are optimal for trail development and connectivity.

- 1 High visibility trailhead opportunity at Rivers Park.
- 2 Existing sidewalk network provides direct connection to ASU campus and dormitories.
- 3 Opportunity to incorporate NPT brand into Howard Street improvements.
- 4 Utilize existing sidewalk and pedestrian facilities in downtown Boone.
- 5 Connect to multiple points of interest in downtown Boone.
- 6 Connect to Watauga County Public Library.
- 7 Extend trail through Junaluska Park.
- 8 Connect to Western Youth Network.
- 9 Utilize Town of Boone water tank property.
- 10 Connect to Weekapaug Grove and utilize common area for trail route
- 11 Potential sympathetic landowner interested in conserving land for a park.
- 12 Trailhead opportunity at Town of Boone upper water tank property.
- 13 Utilize land held by Blue Ridge Conservancy.
- 14 Alternative temporary route on Junaluska Road is low-traffic, unpaved
- 15 Utilize existing unpaved road cut to connect to the Boone United Trail and Howards Knob
- 16 Opportunity to utilize Town of Boone Property.
- 17 Connect to Boone United Trail located in Blue Ridge Conservancy easement.
- 18 Connect to Howard Knob Park.

CONSTRAINTS

Natural or built features that present challenges, but do not necessarily preclude trail development.

- 1 Busy intersection at Rivers Street and Water Street does not adequately accommodate pedestrian crossing.
- 2 Steep topography and dense housing pattern north of the library.
- 3 Steep terrain between Western Youth Network and Town of Boone properties.
- 4 East Junaluska Road is narrow and terminates at private residence.
- 5 Boone United Trail terminates at extremely steep grade as it approaches peak of Howard Knob.



1 High visibility trailhead opportunity at Rivers Park.



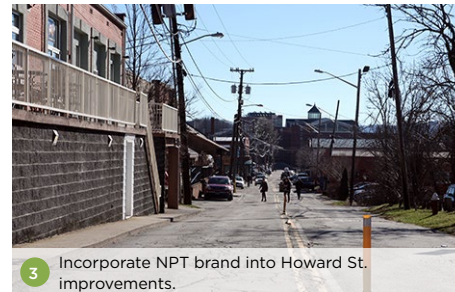
1 Intersection at Rivers St. and Water St. does not accommodate pedestrian crossing.



2 Existing sidewalk network connects to ASU campus.



3 Steep terrain between WYN and Town of Boone properties.



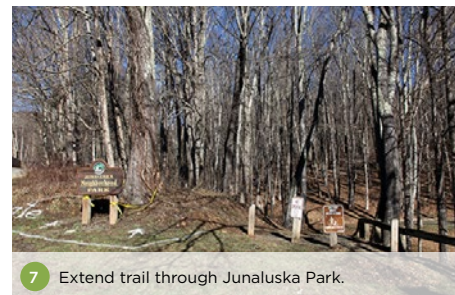
3 Incorporate NPT brand into Howard St. improvements.



4 Utilize Boone's existing sidewalk network.



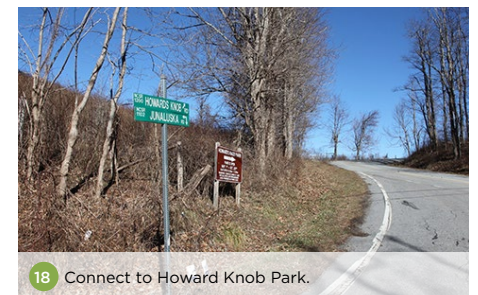
5 Connect to points of interest in downtown Boone.



7 Extend trail through Junaluska Park.

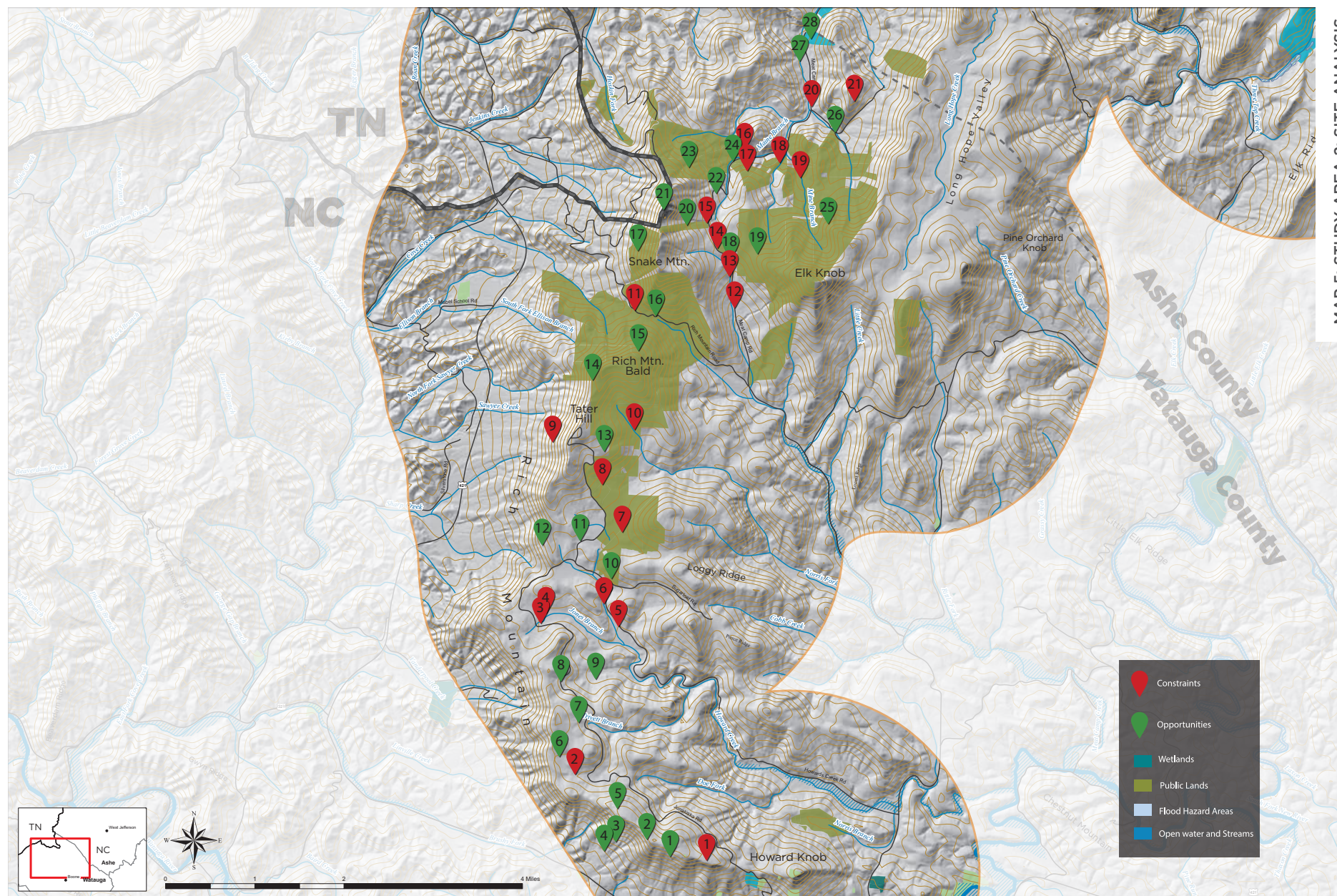


12 Trailhead opportunity at Boone's upper water tank property.



18 Connect to Howard Knob Park.

STUDY AREA 2: SITE ANALYSIS



MAP 5: STUDY AREA 2: SITE ANALYSIS

STUDY AREA 2: OPPORTUNITIES & CONSTRAINTS

OPPORTUNITIES

Environmental features or community assets that are optimal for trail development and connectivity

- 1 Potentially sympathetic landowner could provide easement for trail.
- 2 Rock outcrop at cell-tower compound presents opportunity for unique trail destination with southern views of Grandfather, Sugar, and Beech Mountains.
- 3 Potentially sympathetic landowner
- 4 Opportunity to utilize old road bed across undevelopable area of large residential lots.
- 5 Almost Heaven Road provides viable low-traffic, unpaved alternate route.
- 6 Large tracts of rolling farmland provide optimal location for trail.
- 7 The “Juna Bowl” provides unique topographic destination.
- 8 Viable alternate road route on Junaluska Road.
- 9 Alternate road route on Curley Maple Road.
- 10 Opportunity to utilize existing unpaved driveway cut and road bed into Tater Hill conserved lands.
- 11 Low volume residential traffic on Replogle Road provides viable alternate road route.
- 12 Large, wooded tracts provide optimal location for trail
- 13 Opportunity to utilize state-owned land at Tater Hill Preserve
- 14 Rich Mountain Bald presents unique natural feature and destination along the trail.
- 15 Opportunity to utilize leased game land with landowner approval.
- 16 Rich Mountain Gap provides scenic east-west views and trail visibility.
- 17 Opportunity to connect to Sunalei development and utilize conserved land on Snake Mountain.
- 18 Elk Knob State Park road frontage provides connection into park land from Meat Camp Road.

- 19 Trailhead opportunity in Elk Knob State Park.
- 20 State-owned land on west side of Meat Camp Road provides possible crossing location.
- 21 Opportunity to improve and formalize existing unofficial Snake Mountain Trail on private property.
- 22 Opportunity to formalize use and improve existing unofficial parking area currently on private property.
- 23 Utilize State Park land to connect to Snake Mountain.
- 24 State Park land on both sides of Meat Camp Rd. provides optimal location for trail crossing.
- 25 Opportunity for expansion of trail network at Elk Knob State Park.
- 26 Potential trail and park access from Stillie Snyder Road.
- 27 Potential to utilize floodplain between North Fork of the New River and Pottertown Road.
- 28 Opportunity to utilize conservancy owned land

CONSTRAINTS

Natural or built features that present challenges, but do not necessarily preclude trail development.

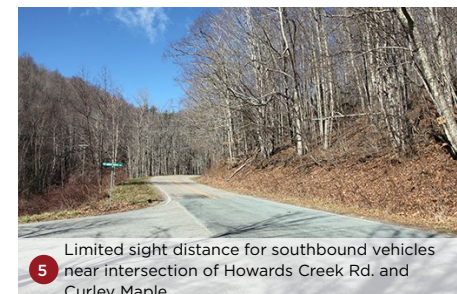
- 1 Steep ridgeline and residential development limit off-road route options
- 2 Gated residential development.
- 3 Intersection of Curley Maple and Junaluska Roads will require significant enhancement to improve sight distance for trail crossing.
- 4 Jones Branch Creek crossing may require culvert or bridge
- 5 Intersection of Curley Maple and Howards Creek Road will require improvements to address limited sight distance of southbound vehicles on Howard's Creek.
- 6 Narrow shoulders on Howards Creek Road create multiple pinch points.
- 7 Potato Hill Lake and wetland area.
- 8 Tributaries of Norris Fork may require bridges or culverts.
- 9 Topographical challenges limit trail feasibility.
- 10 Norris Fork crossing would require a culvert or bridge.
- 11 Rich Mountain Road crossing may require signage to alert hikers and vehicles of the approaching crossing.
- 12 Limited sight distance for northbound vehicles on Meat Camp Road at potential crossing.
- 13 Meat Camp Creek Crossing may require culvert or bridge.
- 14 Limited sight distance at Meat Camp Road Crossing near entrance to Elk Knob State Park.
- 15 Connection from State Land on east side of Meat Camp Rd. to Elk Knob SP entrance would require sidepath adjacent to road.
- 16 Maine Branch crossing may require culvert or bridge.
- 17 Very steep slope on east side of Meat Camp Rd. at possible crossing location.
- 18 North Fork of the New River crossing would require culvert or bridge,
- 19 Mine Branch crossing may require a culvert or bridge.
- 20 Trail development on both sides of Meat Camp Rd. are constrained by Steep Slope and the North Fork of the New River.
- 21 Multiple private tracts of land separate Elk Knob State Park and The Peak.



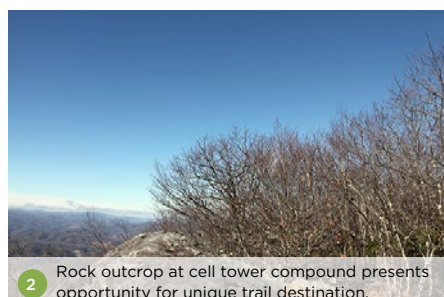
7 The “Juna Bowl” provides a unique topographic destination.



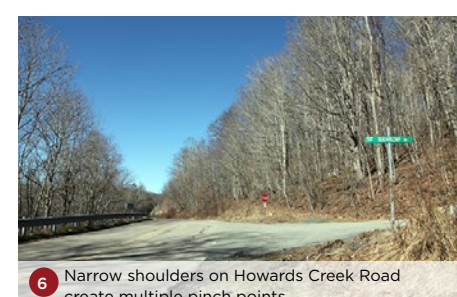
3 Intersection of Junaluska and Curley Maple Road will require improvements to limited sight distance.



5 Limited sight distance for southbound vehicles near intersection of Howards Creek Rd. and Curley Maple.

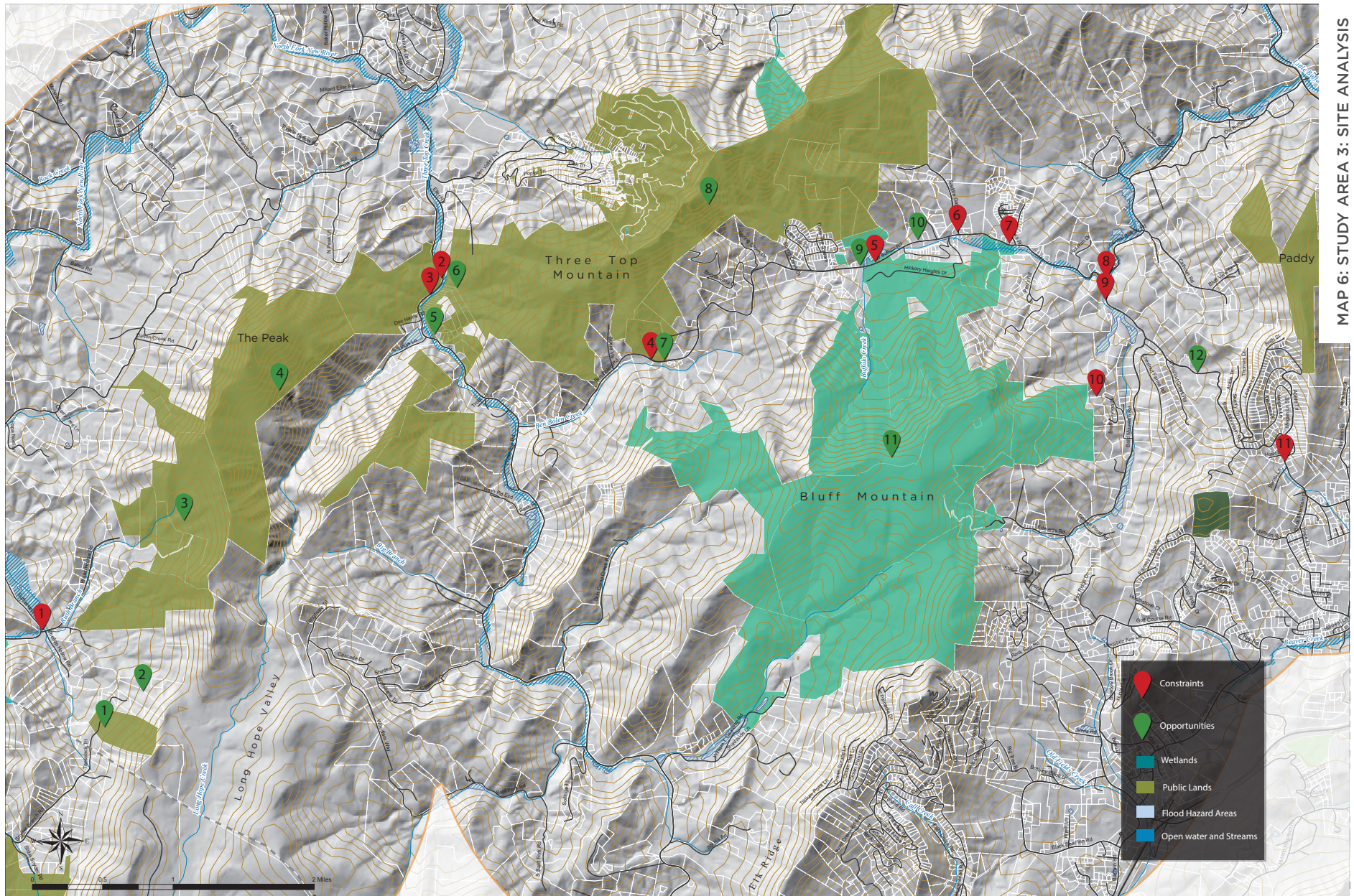


2 Rock outcrop at cell tower compound presents opportunity for unique trail destination.



6 Narrow shoulders on Howards Creek Road create multiple pinch points.

STUDY AREA 3: SITE ANALYSIS



MAP 6: STUDY AREA 3: SITE ANALYSIS

STUDY AREA 3: OPPORTUNITIES & CONSTRAINTS

OPPORTUNITIES

Environmental features or community assets that are optimal for trail development and connectivity.

- 1 Opportunity to utilize state-owned land.
- 2 Large wooded tracts provide optimal location for trail.
- 3 Utilize Brown Hollow Road right-of-way to connect to The Peak.
- 4 Utilize Elk Knob State Park managed land at The Peak; opportunity for network of trails.
- 5 Access driveway with small parking area at trailhead on Three Top Mountain.
- 6 Trailhead opportunity at on Three Top Road would provide access to The Peak and Three Top Mountain.
- 7 Opportunity to improve existing Three Top game land trailhead on Ben Bolen Road.
- 8 Opportunity to utilize and expand existing trail network on Three Top Mountain.
- 9 Opportunity to utilize existing private access drive on W. Buffalo Road to facilitate direct connection from Three Top to Bluff Mountain Preserve.
- 10 Flat shoulder on both sides of W. Buffalo Road could accommodate alternate trail route.
- 11 Opportunity to utilize existing trails within Bluff Mountain Preserve.
- 12 Buck Mountain Road provides viable option for unpaved alternate route.

CONSTRAINTS

Natural or built features that present challenges, but do not necessarily preclude trail development.

- 1 Wide road cut located in a curve at Sutherland Road and Brown Hollow Road.
- 2 Limited sight distance at Three Top Road crossing due to boulder outcropping.
- 3 Three Top Creek crossing will require a bridge.
- 4 Limited sight distance for eastbound vehicles approaching potential crossing near trailhead on Ben Bolen Road.
- 5 Ben Bolen Road crossing between Bluff Mountain Preserve lands on both sides of the road.
- 6 Steep terrain, Buffalo Creek, and homes located within close proximity to the street create pinch point on West Buffalo Road.
- 7 Pinch point caused by steep slope on both sides of West Buffalo Road.
- 8 Three-way intersection located in a curve with limited sight distance Central Buffalo Road and Buck Mountain Road.
- 9 Steep embankment and homes close to street create pinch point on Buck Mountain Road.
- 10 Residential subdivision lots do not provide viable option for trail exit from Bluff Mountain.
- 11 Steep shoulders create extended pinch point along Buck Mountain Road.



7 Opportunity to improve existing Three Top trailhead on Ben Bolen Road.



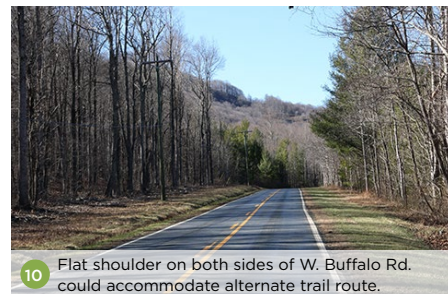
2 Limited sight distance at Three Top Rd. crossing due to boulder outcropping.



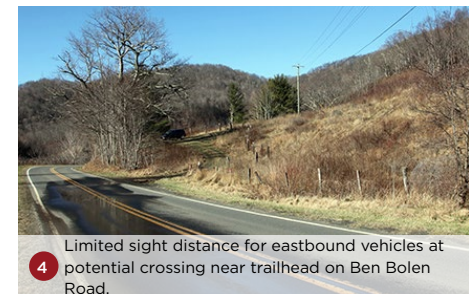
9 Opportunity to utilize existing access drive for direct connection from Three Top to Bluff Mountain Preserve.



3 Three Top Creek crossing will require a bridge.



10 Flat shoulder on both sides of W. Buffalo Rd. could accommodate alternate trail route.



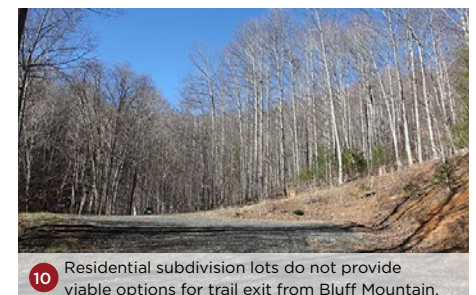
4 Limited sight distance for eastbound vehicles at potential crossing near trailhead on Ben Bolen Road.



5 Access driveway with small parking area at existing trailhead on Three Top Mountain.

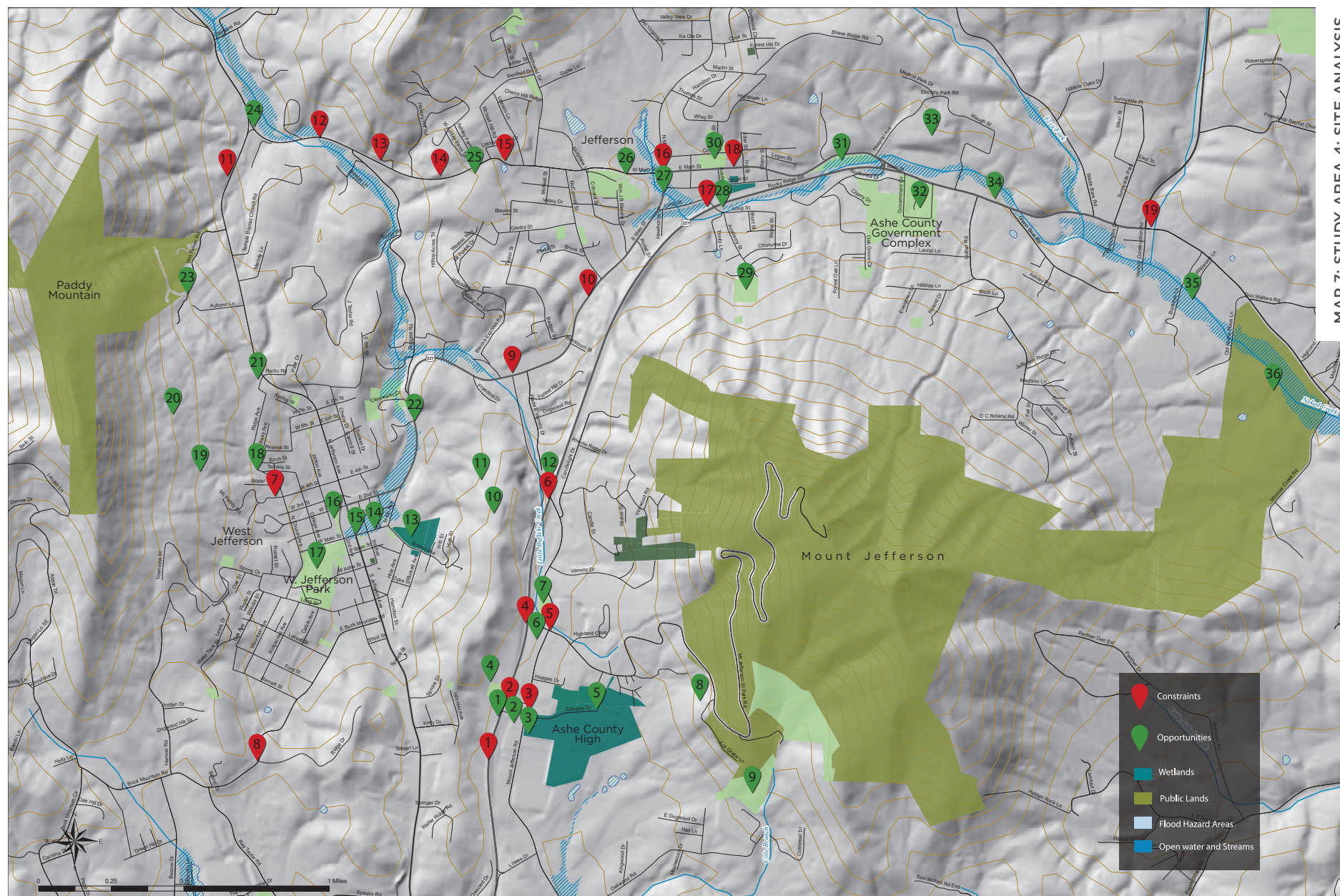


12 Trailhead opportunity at Boone's upper water tank property.



10 Residential subdivision lots do not provide viable options for trail exit from Bluff Mountain.

STUDY AREA 4: SITE ANALYSIS



STUDY AREA 4: OPPORTUNITIES & CONSTRAINTS

OPPORTUNITIES

Environmental features or community assets that are optimal for trail development and connectivity.

- 1 Opportunity for signalized crossing at proposed traffic signal
- 2 Utilize proposed sidewalk along Campus Dr.
- 3 Opportunity to use existing signal at Campus Rd./Mt. Jefferson Rd. for crossing.
- 4 Utilize large undeveloped tracts and Town of West Jefferson property
- 5 Connect to Ashe County High School and Wilkes Community College campus.
- 6 Gateway opportunity at Hwy. 221 and Mount Jefferson Road Intersection.
- 7 Connect to Ashe County Civic Center.
- 8 Potentially sympathetic landowner
- 9 Utilize large wooded tracts and Town of West Jefferson property
- 10 Utilize large, wooded tracts.
- 11 Utilize proposed Jefferson Greenway route
- 12 Opportunity for signalized crossing of Hwy. 221 at proposed traffic signal.
- 13 Connect to Early Childhood Learning Center
- 14 Utilize existing downtown sidewalk network.
- 15 Connect to points of interest in downtown West Jefferson
- 16 Connect to Ashe County Farmer's Market
- 17 Trailhead opportunity at West Jefferson (Bowie Seagraves) Park.
- 18 Opportunity to utilize existing driveway cut.
- 19 Potentially sympathetic landowner at end of Terrace Ave./Church Ave.
- 20 Potential Blue Ridge Conservancy/Town of West Jefferson acquisition
- 21 Utilize existing driveway cut.
- 22 Opportunity to utilize proposed pedestrian facility.
- 23 Access to Paddy Mountain via existing road cut on east side of Von Turner Rd.
- 24 Opportunity for western gateway in NCDOT ROW area north of Hwy. 88
- 25 Utilize flat shoulder along south side of Hwy. 88 from proposed Hwy. 194 Bypass to pond.
- 26 Utilize existing sidewalk on along West Main St. in downtown Jefferson.
- 27 Opportunity to utilize proposed sidewalk along South Main St. and Long St.
- 28 Utilize proposed traffic signal for signalized crossing of Hwy. 221.
- 29 Utilize proposed sidewalks along Academy St. to connect to Ashe County property.
- 30 Connect to points of interest in downtown Jefferson.
- 31 Opportunity for high visibility trailhead at Foster-Tyson Park.
- 32 Connect to Ashe County Government Complex.
- 33 Connect to Ashe County Memorial Hospital
- 34 Utilize proposed sidewalk along Hwy. 221 from East Main St. to Hwy. 16.
- 35 Extend trail through flat floodplain along Naked Creek.
- 36 Access Mount Jefferson State Park via road frontage property along Hwy. 16.

CONSTRAINTS

Natural or built features that present challenges, but do not necessarily preclude trail development.

- 1 Highway 221 widening to four-lane divided highway
- 2 Major highway crossing at Hwy. 221 and Campus Dr.
- 3 Major road crossing at Mount Jefferson Road and Campus Dr.
- 4 Non-signalized major highway crossing at Hwy. 221 and Mount Jefferson Park Rd Intersection crossing.
- 5 Major highway crossing at Hwy. 221 and Mt. Jefferson Rd.
- 6 Gated development at Mount Paddy Rd.
- 7 Pinch point created by steep slope.
- 8 Southern terminus of proposed Hwy. 194 Bypass will create major four-way intersection.
- 9 Business 221 is over-designed for current traffic volumes and lacks access control.
- 10 Multiple pinch points: buildings close to road, steep topography.
- 11 Pinch point at Little Buffalo Creek; homes in floodplain near road.
- 12 Steep Shoulders create pinch point from Doggett Rd. to Hickory Hill Rd.
- 13 Northern terminus of proposed Hwy. 194 Bypass will create three-way intersection.
- 14 Pinch point at drainage pond on south side of Hwy. 88.
- 15 Incomplete pedestrian crossing facilities.
- 16 Major highway crossing at Hwy. 221 and Long St.
- 17 Overdesign of East Main Street promotes high vehicle speeds creating undesirable pedestrian experience.
- 18 Major intersection at Hwy. 221 and NC 16.



15 Connect to points of interest in downtown West Jefferson.



16 Connect to Ashe County Farmers Market.



2 Major highway crossing at Hwy. 221 and Campus Dr.



17 Trailhead opportunity at West Jefferson Park.



10 Business 221 is over-designed for current traffic volumes and lacks access control.



30 Connect to points of interest in downtown Jefferson.



PRIORITY FOCUS AREAS

Two types of trail implementation areas emerged as a result of the in-depth analysis presented in this chapter: Priority Focus Areas and Opportunistic Areas.

There are four (4) Priority Focus Areas where concerted efforts should be made to advance the NPT. These areas are either under the control of NPT-supportive land managers or represent target areas for landowner outreach. Upon completion, NPT sections within each Focus Area are valuable as stand-alone hiking destinations until connectivity is achieved over time. The four

Priority Focus Areas are: 1) Boone; 2) Elk Knob; 3) Three Top; and 4) West Jefferson.

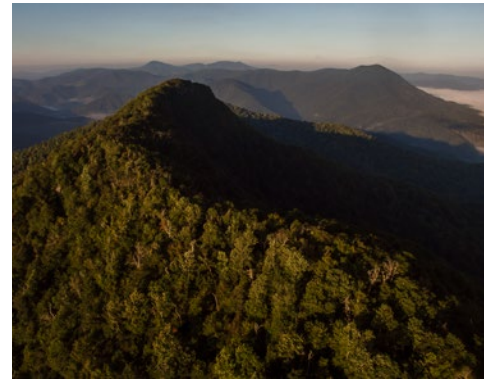
Opportunistic Areas are the zones between the Focus Areas that represent locations for passive implementation. Should an “opportunity” arise, such as landowner or conservation land manager willingness to provide for the NPT, then efforts should be extended accordingly. Otherwise, trail development efforts should remain concentrated on the Focus Areas.

Extensive detail is provided for each Focus Area in Chapter 5: Recommendations.



PRIORITY FOCUS AREA 1: BOONE

Downtown Boone to
Howard Knob



PRIORITY FOCUS AREA 3: THREE TOP

The Peak and Three Top Mountain
Game Land



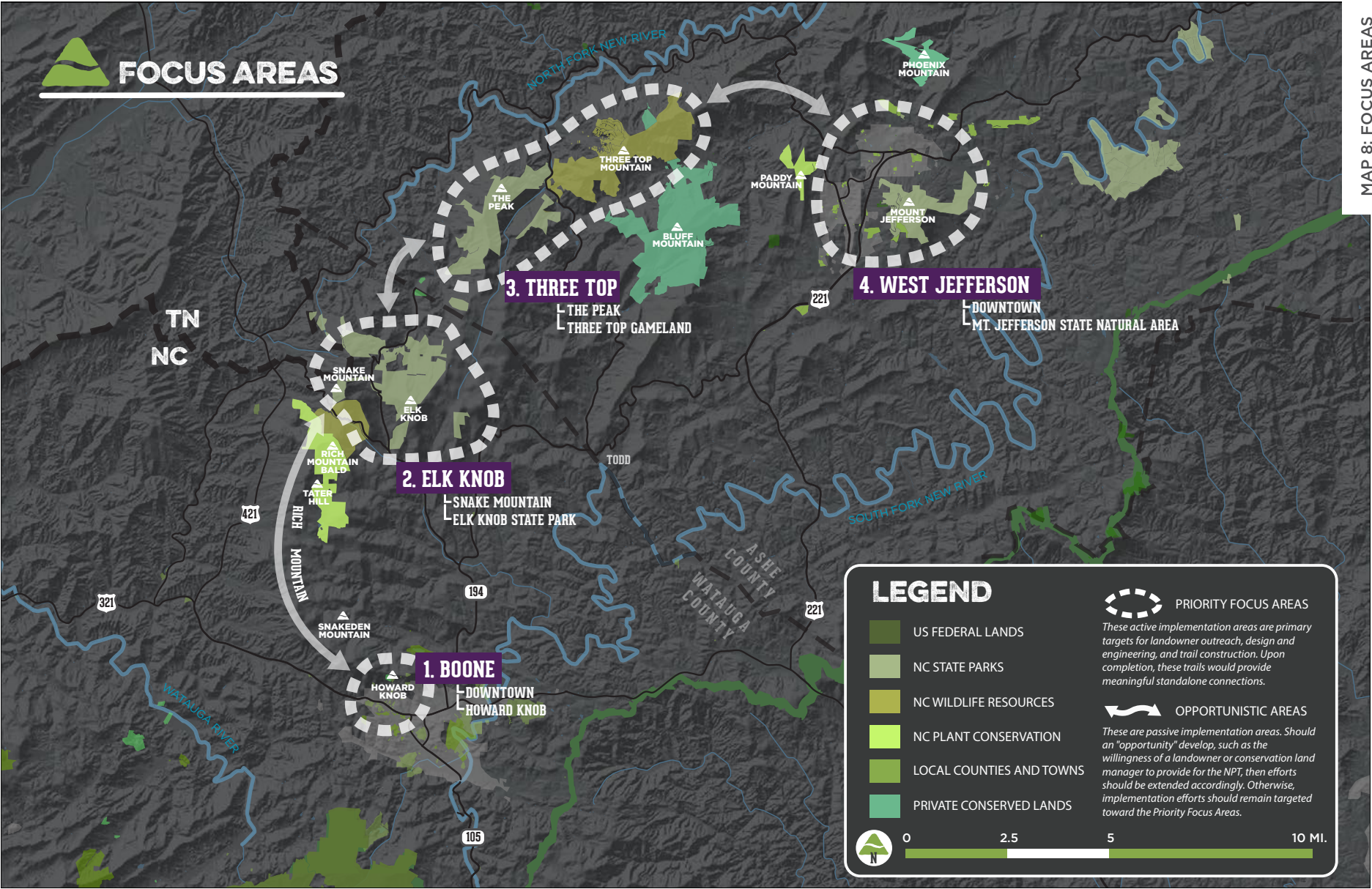
PRIORITY FOCUS AREA 2: ELK KNOB

Snake Mountain and
Elk Knob State Park



PRIORITY FOCUS AREA 4: WEST JEFFERSON

Downtown West Jefferson and
Mount Jefferson State Natural
Area





PUBLIC OUTREACH AND ENGAGEMENT WAS A KEY COMPONENT OF THE PLANNING PROCESS.



3

PUBLIC ENGAGEMENT

In an effort to share the trail analysis and provide opportunity for public comment, three major tools were used to engage the public: the NPT interactive website; NPT educational video; and the Boone Area and Ashe County Recreation Summits. This chapter describes each of these tools.

IN THIS CHAPTER



Interactive Website



Educational Video



The Outdoor Recreation
Summits



INTERACTIVE WEBSITE

The project website (www.northernpeakstrail.com) provides extensive information on the NPT including the vision, brand platform, environmental significance, proposed routes, and facility design. The site also features an interactive story map that allows users to explore proposed routes and view conceptual renderings of trail amenities at key locations throughout the study area.

Additionally, a web form embedded in the site provides interested citizens with an opportunity to submit their comments and contact information in order to receive project updates or become directly involved in various aspects of trail implementation including environmental stewardship, design, construction, maintenance, advocacy, and/or financial support. This feature of the site is essential in building a database of trail supporters and volunteers - a requirement for state trail designation. At this time, over 50 members of the general public have indicated their desire for direct involvement through the website, in addition to individuals who have pledged support through traditional forms of communication. A complete list of public comments submitted through the website can be found in Appendix D.



EDUCATIONAL VIDEO

The Northern Peaks Trail educational and promotional video features dramatic aerial footage of the Northern Peaks chain. The video highlights the unique geologic and environmental features of the Amphibolite macro site while exploring five elements necessary for success: partnerships; education; conservation; recreation; and community support.





“WOW! THIS TRAIL HAS BEEN A DREAM OF MINE SINCE HEARING A RANGER AT ELK KNOB STATE PARK DISCUSS THE CONCEPT.
I WOULD LOVE TO BE INVOLVED IN ANY WAY I CAN TO SEE THIS IDEA BLOSSOM AND BECOME A REALITY.
I AM SO HAPPY TO SEE THAT PLANNING FOR THIS TRAIL HAS TAKEN PLACE.”

- COMMENT SUBMITTED VIA NPT WEBSITE



BOONE AREA OUTDOOR RECREATION SUMMIT

On April 6, 2017 over 200 citizens attended the community's third Boone Area Outdoor Recreation Summit at the Harvest House in Boone. The event included a community social with local outdoor recreation vendors and updates on local greenway and mountain biking projects. A feature presentation on the Northern Peaks Trail included the video, environmental significance, proposed routes and focus areas, conceptual renderings, and a call to action for public engagement via the website. A few attendees shared concerns for the ecological impact that a trail might bring to sensitive areas. Overall, Summit attendees expressed a high level of support and excitement for the project.



EXHIBIT 4



**BOONE
SUMMIT**



ASHE OUTDOOR RECREATION SUMMIT

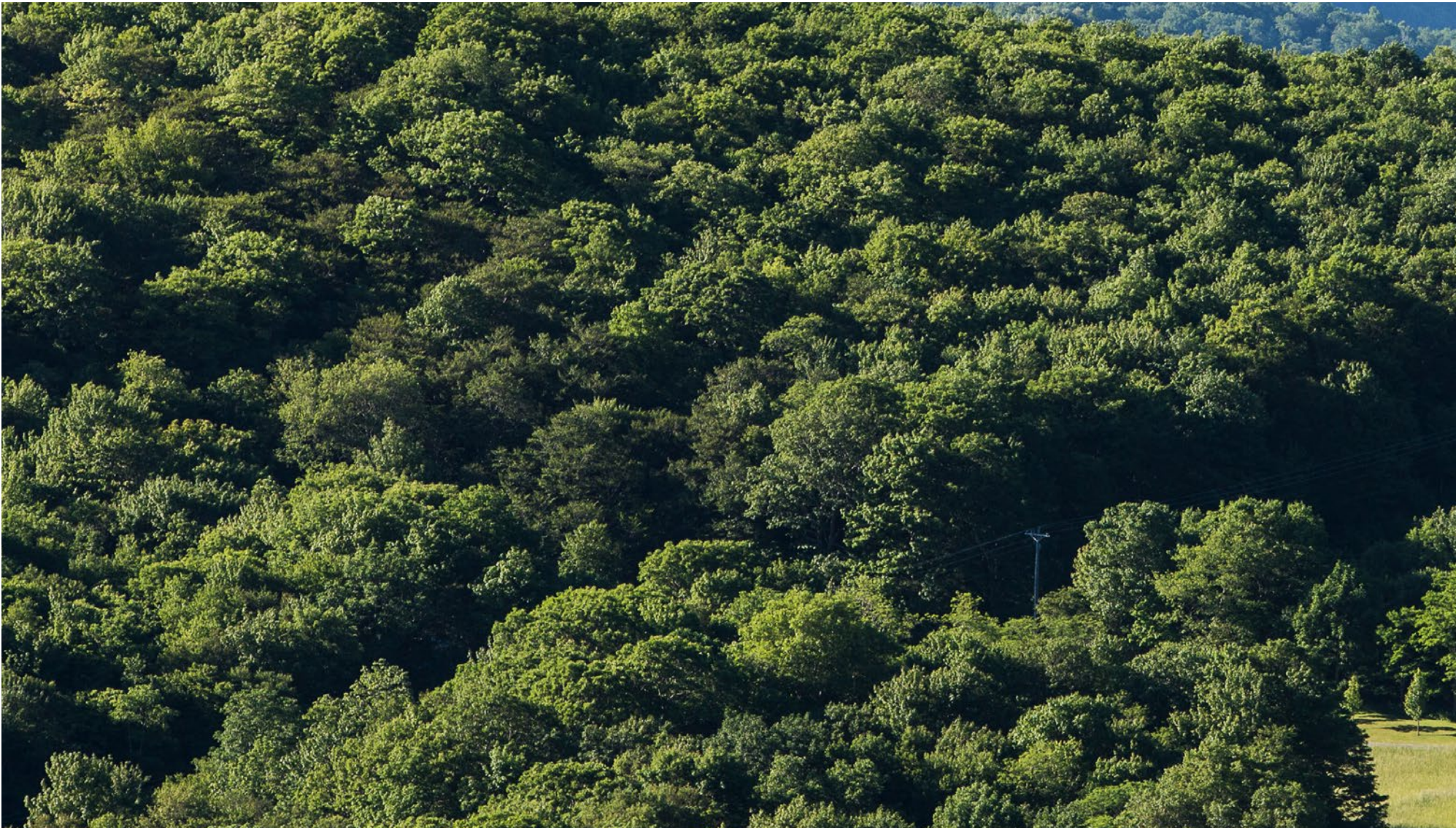


The Ashe Outdoor Recreation Summit held on May 4, 2017 at the Ashe County Arts Council followed a similar format to the Boone Area summit featuring local outdoor recreation vendors and presentations by the Blue Ridge and New River Conservancies. Approximately 40 Ashe County citizens attended. The event concluded with a comprehensive presentation on the NPT. Attendees expressed general support for a trail alignment that avoids sensitive ecological areas.

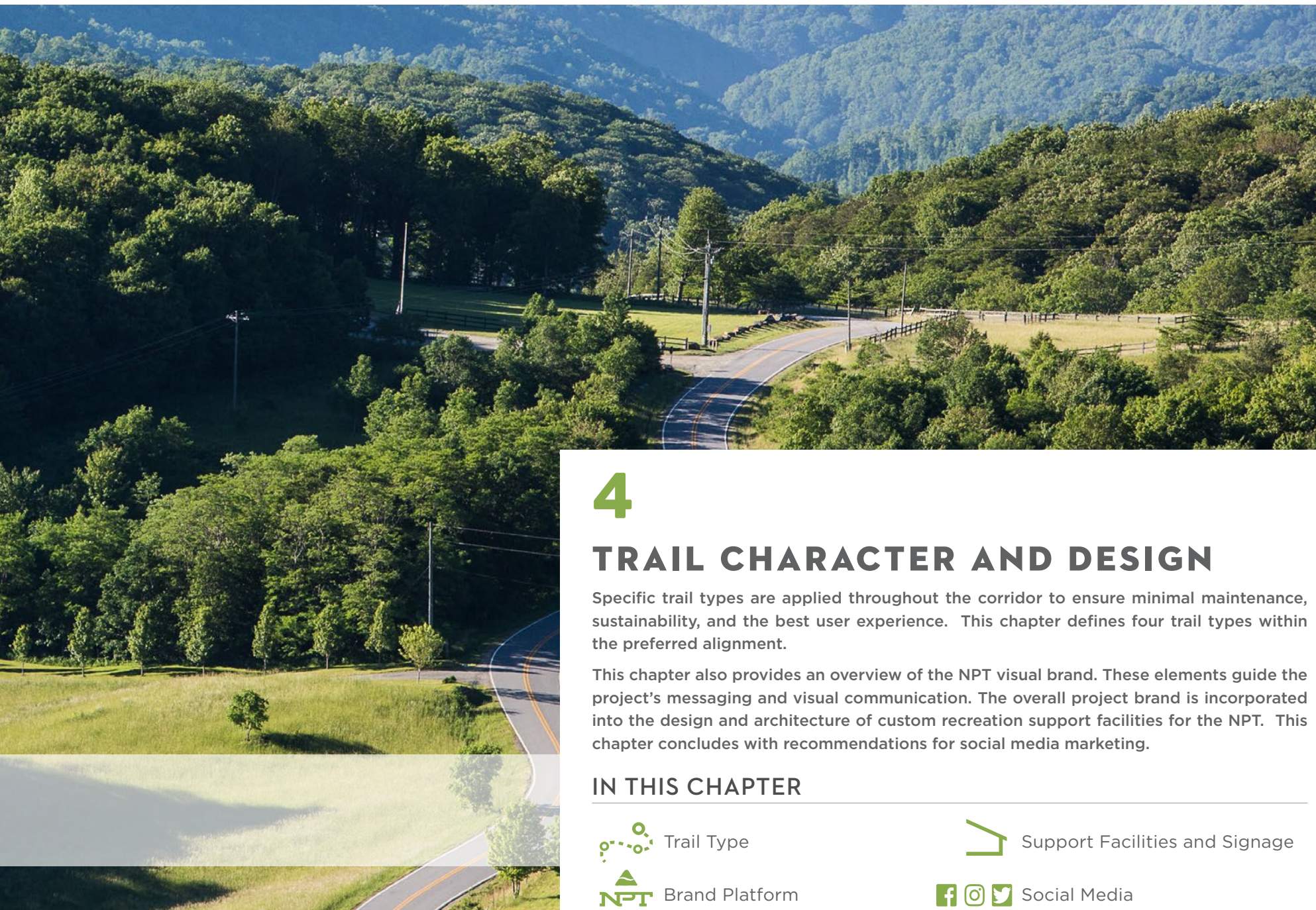
EXHIBIT 5



ASHE
SUMMIT



THIS CHAPTER PROVIDES DESIGN DETAILS FOR VARIOUS TRAIL TYPES, THE VISUAL BRAND OF THE NPT, AND SIGNAGE AND SUPPORT FACILITIES.



4

TRAIL CHARACTER AND DESIGN

Specific trail types are applied throughout the corridor to ensure minimal maintenance, sustainability, and the best user experience. This chapter defines four trail types within the preferred alignment.

This chapter also provides an overview of the NPT visual brand. These elements guide the project's messaging and visual communication. The overall project brand is incorporated into the design and architecture of custom recreation support facilities for the NPT. This chapter concludes with recommendations for social media marketing.

IN THIS CHAPTER



Trail Type



Brand Platform



Support Facilities and Signage



Social Media

TRAIL TYPE



Three trail types are proposed along the preferred alignment. A specific trail type is proposed according to its surrounding environment, location in a town or natural area, and opportunity to create a meaningful user experience.

Natural surface trail is recommended within each of the major public lands throughout the trail corridor. In urban areas, the trail transitions to a downtown sidewalk or NCDOT multi-use sidepath.



NATURAL SURFACE TRAIL: HIKING-ONLY

3' NATURAL SURFACE

User Group: Hikers

Material: Native Soils

Preferred Width: 3'

Avg. Construction Cost: \$4/ln. ft.

Preferred Easement Width: 25'

SOCIAL MEDIA: THE NEW WORD OF MOUTH



EXHIBIT 7

Trail users should be encouraged to utilize social media to share their experiences with their friends and “followers.” Special signage at trailheads in Boone and West Jefferson will signal users to consider posting pictures of themselves or their group of friends that were taken while hiking through the iconic Northern Peaks. After all, who can market this destination-quality trail better than trail users themselves? Let’s take advantage of social media--the new word of mouth.

#northernpeakstrail

The proposed official hashtag for Northern Peaks Trail is #northernpeakstrail. Use of this hashtag will allow local tourism leaders to curate local photos and content that can be shared on website and re-posted through other social media platforms.

Cross Promote with Other Notable Tags

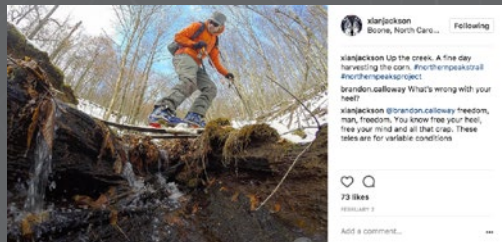
@ncparks

@ncwildlife

@exploreboone

@visitwestjefferson

@visitnc



THE NPT HASHTAG IS ALREADY BEING USED BY HIKERS IN THE AREA.

#NORTHERNPEAKSTRAIL



NORTHERN PEAKS TRAIL BRAND

The NPT brand development process is driven by the vision, values, and principles of project stakeholders, including state and regional recreation, conservation, and economic development leaders. The branding process

BRAND PLATFORM

POSITIONING SUMMARY

1. The NPT's greatest opportunity for differentiation is its significant protected biodiversity and the connectivity it provides between two classic western North Carolina mountain towns.
2. The trail must connect hikers directly into the main streets of both Boone and West Jefferson.
3. The trail traverses multiple nationally significant biospheres and some of the tallest peaks in North Carolina, offering unparalleled views of the North Carolina High Country.
4. NPT should be positioned as an ecotourism development project.

BRAND OBJECTIVE

The NPT brand will highlight the unique biodiversity and geography of the North Carolina High Country and the accessibility of a world-class outdoor experience from the towns of Boone and West Jefferson.

BRAND PROMISE

Biodiversity. A nationally significant biosphere, containing rare plant and animal species and forest communities.

Geography. Part of the world's most ancient mountain chain, offering unparalleled views of the North Carolina High Country.

Connectivity. Traverses significant public lands between two historic main street communities.

Education. Provides unlimited opportunities for environmental education.

requires assessing the NPT's unique qualities in relationship to other similar regional trails and provides a foundation for the NPT identity and visual brand.

BRAND GOALS

1. Elevate Watauga and Ashe counties as an outdoor recreation hub with easy access to some of the most unique biodiversity in the eastern US.
2. Galvanize support for securing additional public lands along the Northern Peaks.
3. Encourage trail use among locals and tourists.
4. Inspire environmental stewardship and protection of sensitive ecological areas within the Northern Peaks.

BRAND ESSENCE

A highly accessible, world-class hiking trail across an ancient mountain chain, through a nationally significant biosphere, that connects two classic western North Carolina mountain towns.

POSITIONING STATEMENT

The ancient Northern Peaks between the mountain communities of Boone and West Jefferson divide the vital New River and Watauga River watersheds and provide trail users with unparalleled access to some of America's most significant biospheres.

STORY BRANDING THEMES

- Conservation
- Recreation
- Education
- Eco-tourism/Economic Development

VISUAL BRAND





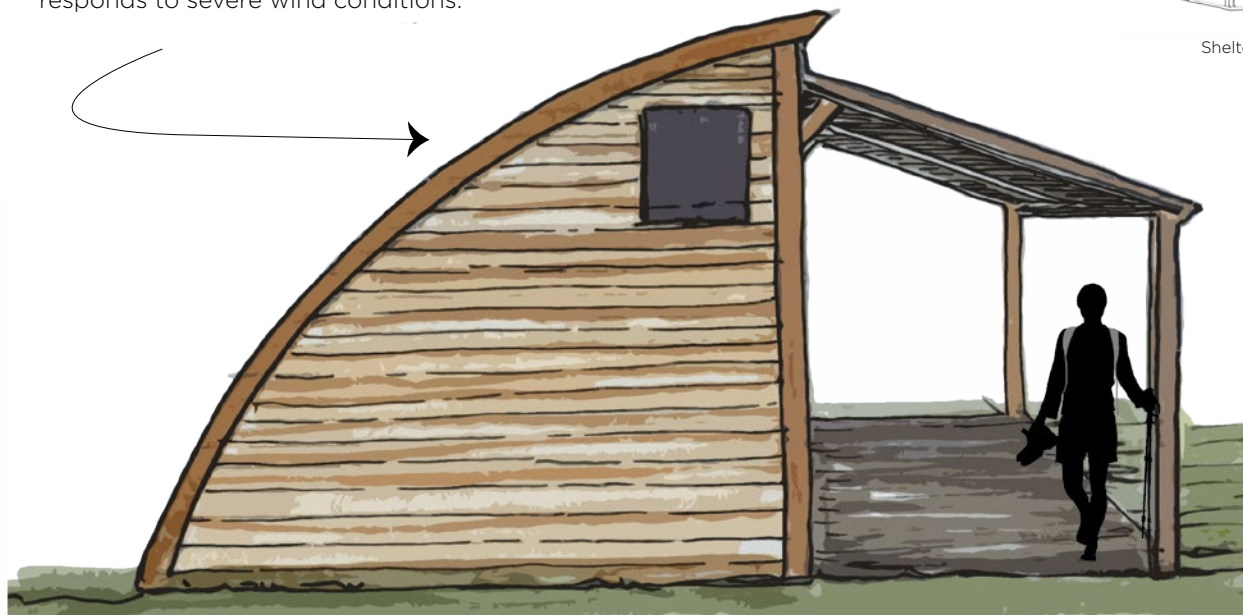
TRAIL SUPPORT-FACILITY DESIGN

The NPT signage and support facility design provides for a rugged, mountain-modern theme that incorporates resilient natural materials including native wood products and amphibolite stone. The design employs architectural

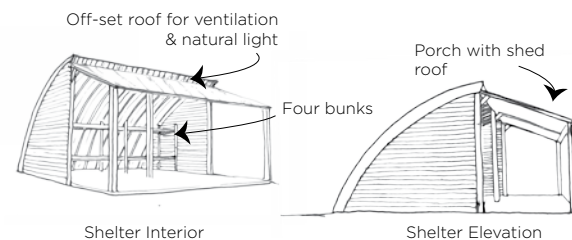
elements that protect users from conditions such as wind and rain. The facility design serves as a template that can be altered and further refined based on site specific needs and opportunities.

14' x 16' Hike-in Shelter

Glue laminate beams forms the arched roof that responds to severe wind conditions.



14' x 16' Hike-in Shelter



Trailhead Monument Sign



Interpretive Sign



Side perspective Front elevation

Map Kiosk



Confidence Marker

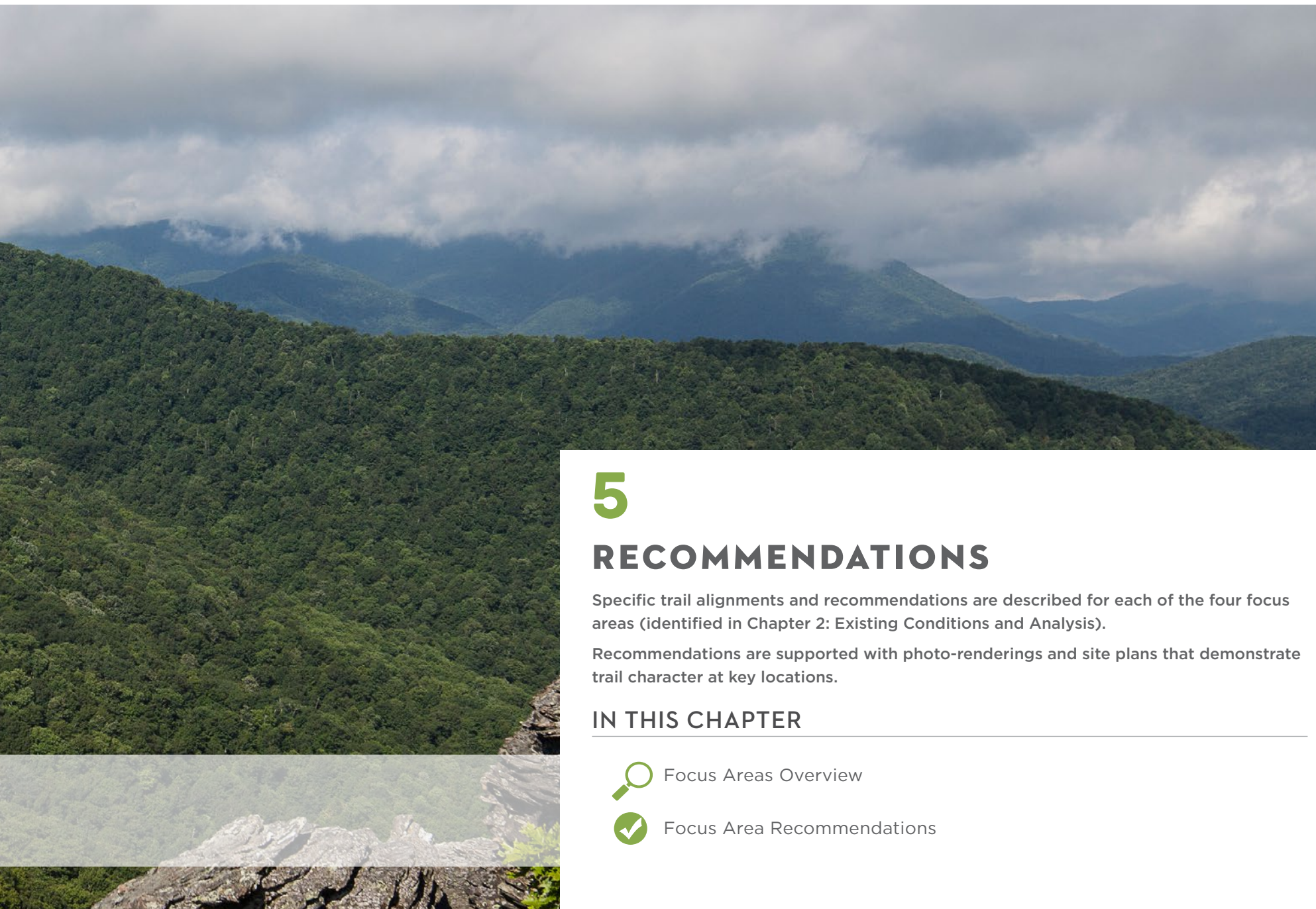


Roadside "break away" sign





THIS CHAPTER SERVES AS THE HEART OF THE NPT MASTER PLAN.



5

RECOMMENDATIONS

Specific trail alignments and recommendations are described for each of the four focus areas (identified in Chapter 2: Existing Conditions and Analysis).

Recommendations are supported with photo-renderings and site plans that demonstrate trail character at key locations.

IN THIS CHAPTER



Focus Areas Overview



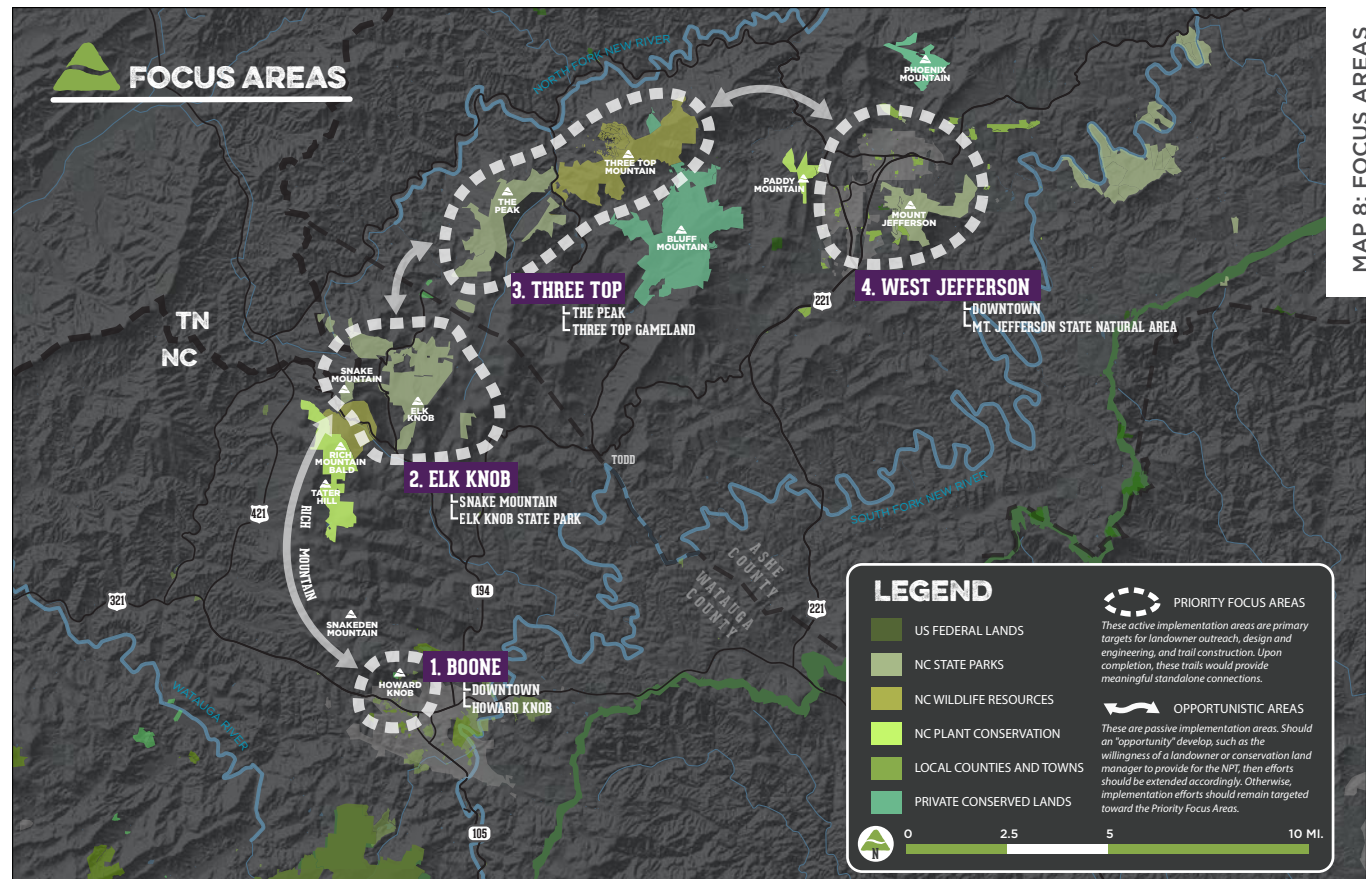
Focus Area Recommendations



FOCUS AREAS OVERVIEW

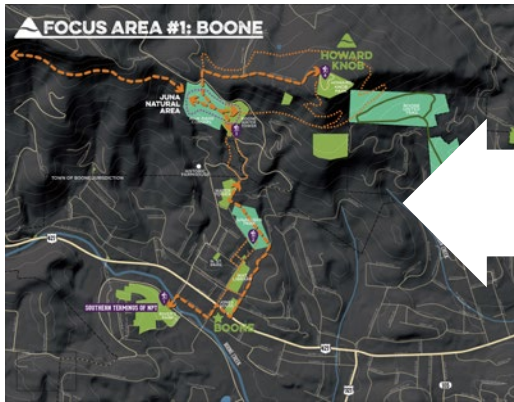
The 40 mile study area from Boone to Mount Jefferson State Natural Area is comprised of four (4) focus areas. The Focus Areas represent areas where concerted efforts should be made to advance the NPT. These areas are either under the control of NPT-supportive land managers or represent target areas for landowner outreach. Upon completion, NPT sections within each Focus Area are valuable as stand-alone hiking destinations until connectivity is achieved over time. The four Priority Focus Areas are: 1) Boone; 2) Elk Knob; 3) Three Top; and 4) West Jefferson.

In between each Priority Focus Area are Opportunistic Areas that represent locations for passive implementation. meaning, should an “opportunity” arise, such as landowner or conservation land manager willingness to provide for the NPT, then efforts should be extended accordingly.



MAP 8: FOCUS AREAS

THE 40 MILE STUDY AREA FROM BOONE TO MOUNT JEFFERSON STATE NATURAL AREA IS COMPRISED OF FOUR (4) FOCUS AREAS:
THIS CHAPTER IS ORGANIZED ACCORDINGLY.

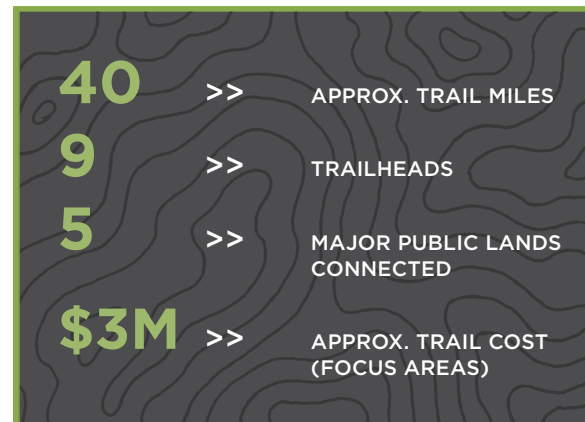


EACH FOCUS AREA IS ANCHORED BY A MAP THAT HIGHLIGHTS PROPOSED TRAIL ROUTES AND TRAIL FEATURES.

ABOUT THE FOCUS AREA MAPS

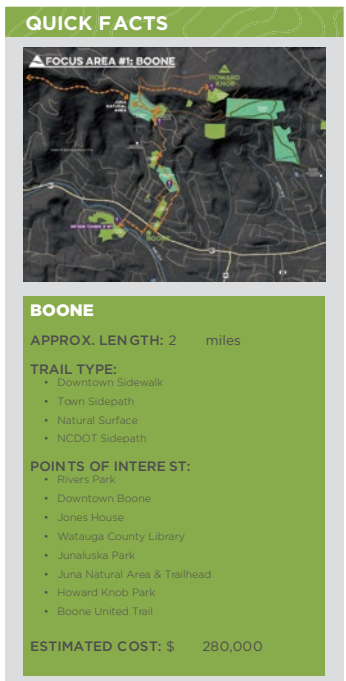
Each planning section is anchored by a map that highlights proposed trail routes and features. The proposed routes are identified as either primary routes, alternate routes, or existing state park trails. Routes proposed through major public lands are conceptual and will require detailed planning and environmental inventory prior to determining the final alignment. All trail routes are the result of extensive stakeholder meetings.

NPT: BY THE NUMBERS



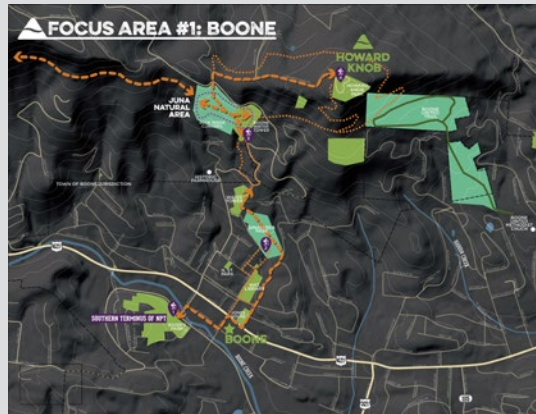
QUICK FACTS

Each Focus Area begins with a “quick facts” exhibit. This information includes the trail distance, trail type (see Chapter 4: Trail Character), and key features and assets associated with each area.



✓ FOCUS AREA 1: BOONE

QUICK FACTS



BOONE

APPROX. LENGTH:

- 2 miles

TRAIL TYPE:

- Downtown Sidewalk
- Natural Surface

POINTS OF INTEREST:

- Rivers Park
- Downtown Boone
- Jones House
- Watauga County Library
- Junaluska Park
- Juna Natural Area & Trailhead
- Howard Knob Park
- Boone United Trail

ESTIMATED COST:

- \$681,000

The proposed route in Focus Area 1 extends north approximately two (2) miles from the southern terminus at Rivers Park to Howard Knob Park.

KEY CONSIDERATIONS

- The trail takes advantage of Boone's sidewalk network and pedestrian-friendly streetscape improvements planned for Howard Street.
- After crossing King Street, the trail continues north on Grand Boulevard. Conversion of Grand Boulevard to a one-way northbound street provides for the creation of sidewalk and linear park adjacent to the Jones House. These improvements also relieve traffic that results from drivers attempting a left-hand turn onto King Street.
- The connection to Junaluska Park provides an opportunity for internal trail system that spurs from the NPT.
- The route utilizes two Town of Boone water tank properties.
- The Junaluska water tank property and adjacent Blue Ridge Conservancy land form the Juna Natural Area presenting a significant opportunity for a trailhead and looped trail system.
- The trail Connects to Howard Knob County Park via a proposed sidewalk along Howard Knob Road.

TRAILHEADS

There are four (4) main trailheads within this Focus Area: 1) Rivers Park; 2) Junaluska Park; 3) Juna Natural Area; and 4) Howard Knob Park.

RIVERS PARK

- NPT Southern Terminus
- Owned and maintained by Town of Boone
- Located near Appalachian State University and future mixed-use developments in Boone

- 14 acres site provides sufficient space for future amenities
- Exceptional views of Howard Knob

JUNALUSKA PARK

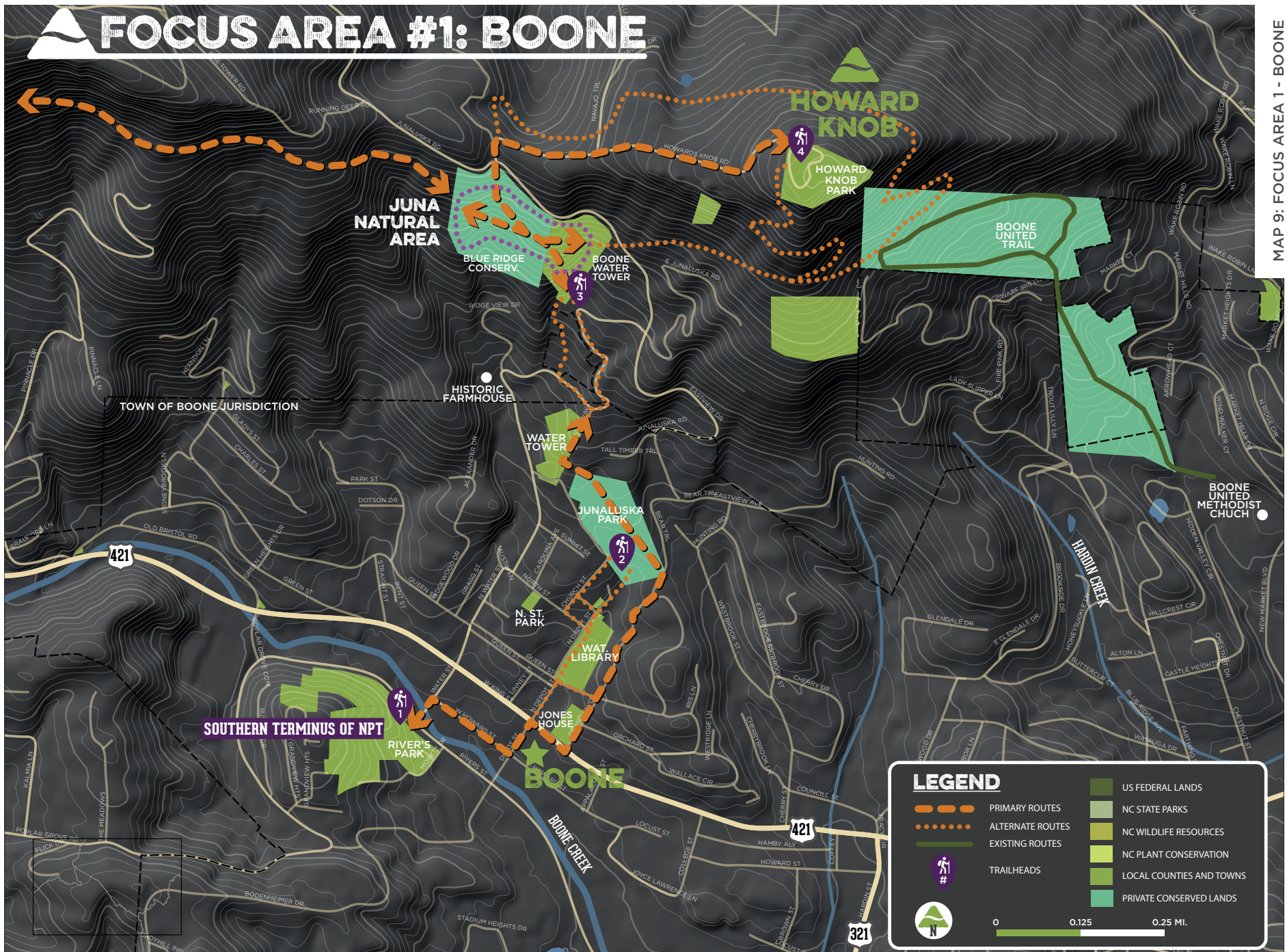
- Located north of downtown in a residential area
- 10 acre site owned by the American Legion; managed and maintained by the Town of Boone
- Amenities include picnic shelters, basketball courts, restroom facilities, a ball field, and playground
- Opportunity to utilize existing parking area and wooded land for small trail network within the park

JUNA NATURAL AREA

- Located along south side of Junaluska Road
- Comprised of Boone's Junaluska water tank property and Blue Ridge Conservancy property
- Potential for small trailhead with parking
- Opportunity to develop small multi-use loop trail

HOWARD KNOB PARK

- Located on the peak of Howard Knob
- 5.7 acre Watauga County Park
- Provides unparalleled views of downtown Boone
- Opportunity for major trailhead at existing parking facilities and restrooms
- Improvements identified in the 2011 Boone Area Outdoor Recreation Plan include a toddler play area, young adult adventure area with observatory, picnic shelter, perimeter loop trail, and overlook deck



SOUTHERN TERMINUS @ RIVERS PARK



EXHIBIT 8

EXISTING



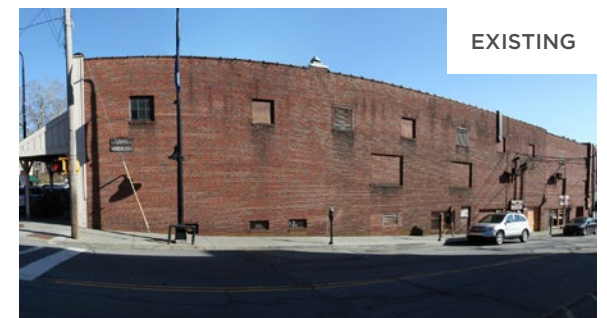
The southern terminus of the NPT at Rivers Park offers a unique perspective of Howard Knob above downtown Boone, including two mixed-use infill projects that will be constructed in the near future.

THE PROFILE @ DEPOT STREET

EXHIBIT 9



A blank façade along the east side of Depot Street in Boone presents an opportunity for public art that showcases each of the Northern Peaks and provides visual interest in a high visibility location downtown.



EXISTING

GRAND BOULEVARD LINEAR PARK

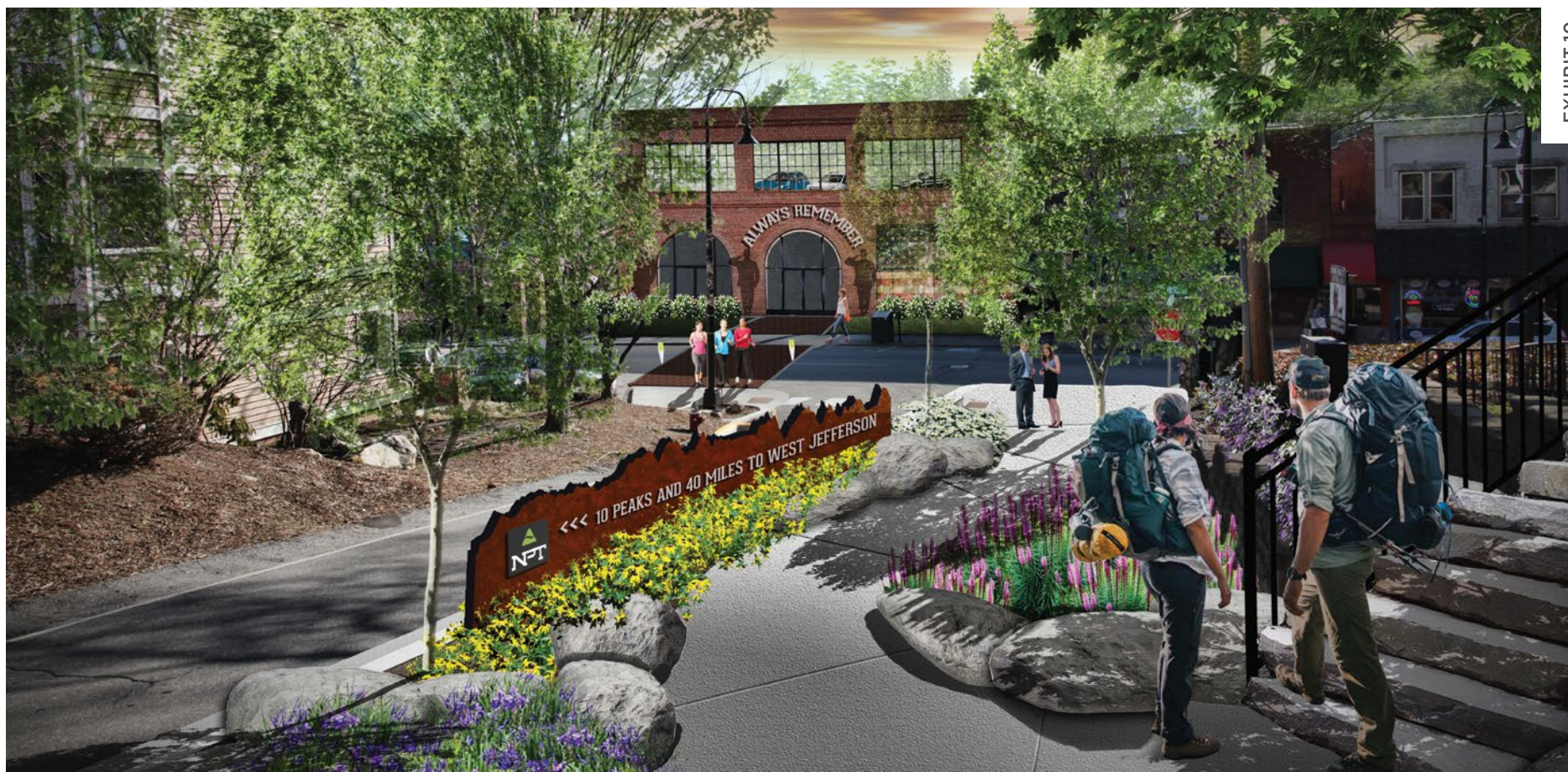


EXHIBIT 10

EXISTING



Conversion of Grand Boulevard to a one-way northbound street provides for a linear park and sidewalk that extends 400 feet to Queen Street and provides access to the Jones House property. These improvements also relieve traffic resulting from drivers attempting a left-hand turn onto King Street. In the background, Boone's planned Veterans Memorial and parking deck will accommodate visitors wishing to access the trail from downtown.

JUNA NATURAL AREA TRAILHEAD

EXHIBIT 11

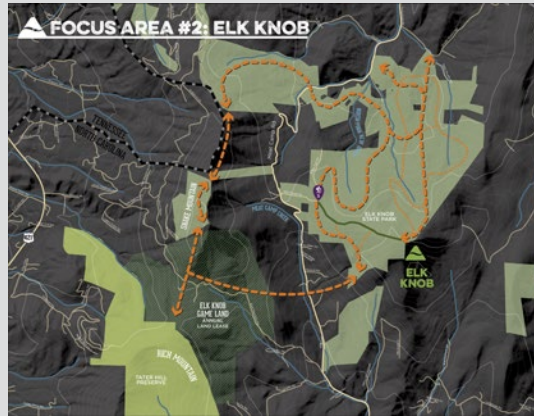


The Juna Natural Area includes property owned by the Town of Boone and Blue Ridge Conservancy. This area presents an opportunity for a small trailhead and trail network that provides access to the NPT.



✓ FOCUS AREA 2: ELK KNOB

QUICK FACTS



ELK KNOB

APPROX. LENGTH:

- 14 miles of new trail
- 5.5 miles existing in Elk Knob State Park

TRAIL TYPE:

- Natural Surface

POINTS OF INTEREST:

- Rich Mountain
- Snake Mountain
- Elk Knob State Park
- Headwaters of the North Fork of the New River

ESTIMATED COST:

- \$521,520

Proposed routes in Focus Area 2 extend throughout Elk Knob State Park. There are currently 5.5 miles of trail within the park. Expansion of the existing trail system to include the NPT and additional loops, will solidify the park as a major regional hiking destination.

KEY CONSIDERATIONS

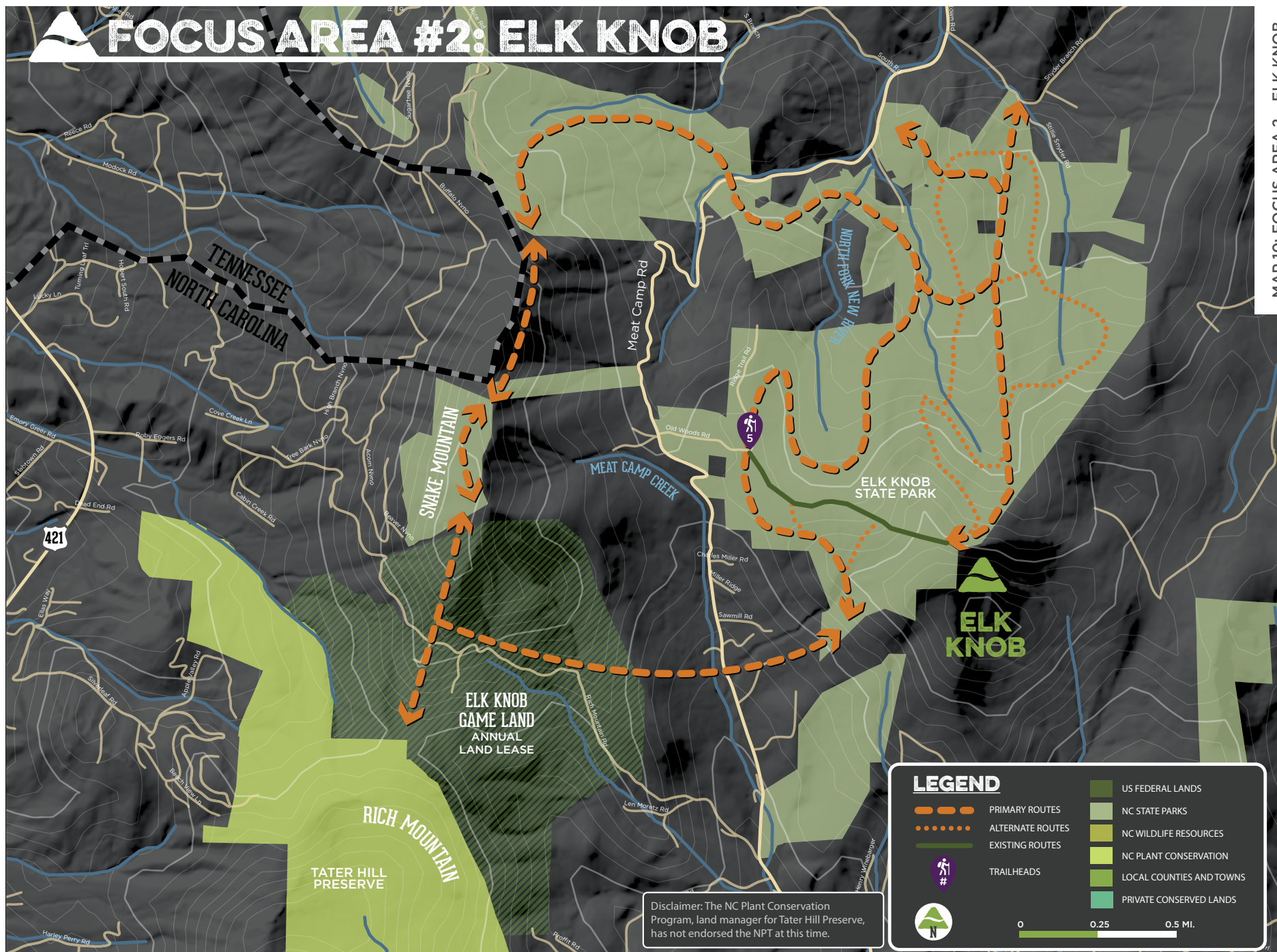
- Efforts should be made to protect the existing Snake Mountain summit trail through easements or acquisition by State Parks to create a complete loop that connects the peaks of Elk Knob and Snake Mountain.
- The 729 acre leased game land southwest of Elk Knob State Park should be explored as an opportunity for connecting Rich Mountain to Snake Mountain.
- Meat Camp Road and Stillie Snyder Road provide two options for exiting Elk Knob State Park to the north.
- NC Division of Parks and Recreation Land managers have endorsed the NPT at Elk Knob State Park.

TRAILHEADS

Elk Knob State Park is the main trailhead that anchors Focus Area 2.

ELK KNOB STATE PARK

- Existing facilities include three parking areas, restrooms, picnic shelter, and visitor center in the park office
- 5.5 miles existing trails include the summit trail, kids TRACK Trail, and backcountry trail
- Primitive camping located on the north slope includes two individual sites, two group sites, and zone camping
- Only state park that allows cross-country skiing and snowshoeing



ELK KNOB STATE PARK TRAILHEAD

EXHIBIT 12



EXISTING

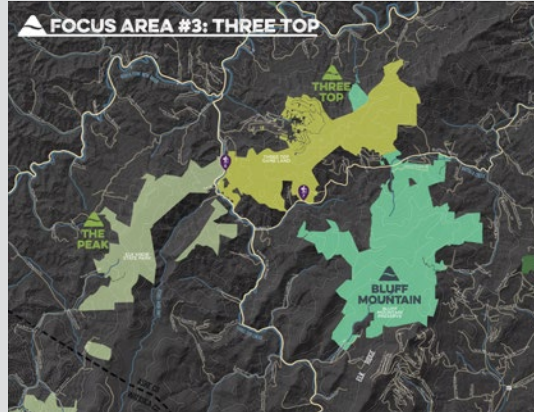


Improvements to the existing trailhead in Elk Knob State Park incorporate the NPT brand and facility design to signal trail access in a consistent manner with other trailheads.



✓ FOCUS AREA 3: THREE TOP

QUICK FACTS



THREE TOP

APPROX. LENGTH:

- 14 miles

TRAIL TYPE:

- Natural Surface

POINTS OF INTEREST:

- The Peak
- Three Top Creek
- Three Top Game Land
- Bluff Mountain

ESTIMATED COST:

- \$947,520

The primary route in Focus Area 3 extends southwest to northeast approximately 14 miles through The Peak (part of Elk Knob State Park) and Three Top Mountain Gameland, linking the two major public lands.

KEY CONSIDERATIONS

- The trail crosses Three Top Road and Three Top Creek to connect The Peak and Three Top Mountain at a proposed new trailhead location.
- The Peak provides an ideal location for primitive campsites that would provide through-hikers with a location for overnight stay.
- The trail within Three Top Mountain Gameland should be located along the south slope and avoid rock outcrops, as directed by the NC Wildlife Resources Commission.
- Existing trails in Three Top Mountain Game Land provide an opportunity to expand the system to include multiple loops.
- All proposed routes will be evaluated using GIS and field analysis by NC Wildlife Resources to avoid impact to rare and important species.

TRAILHEADS

The primary route in Focus Area 3 extends southwest to northeast approximately 14 miles through The Peak (part of Elk Knob State Park) and Three Top Mountain Game Land, linking the two major public lands.

THREE TOP ROAD

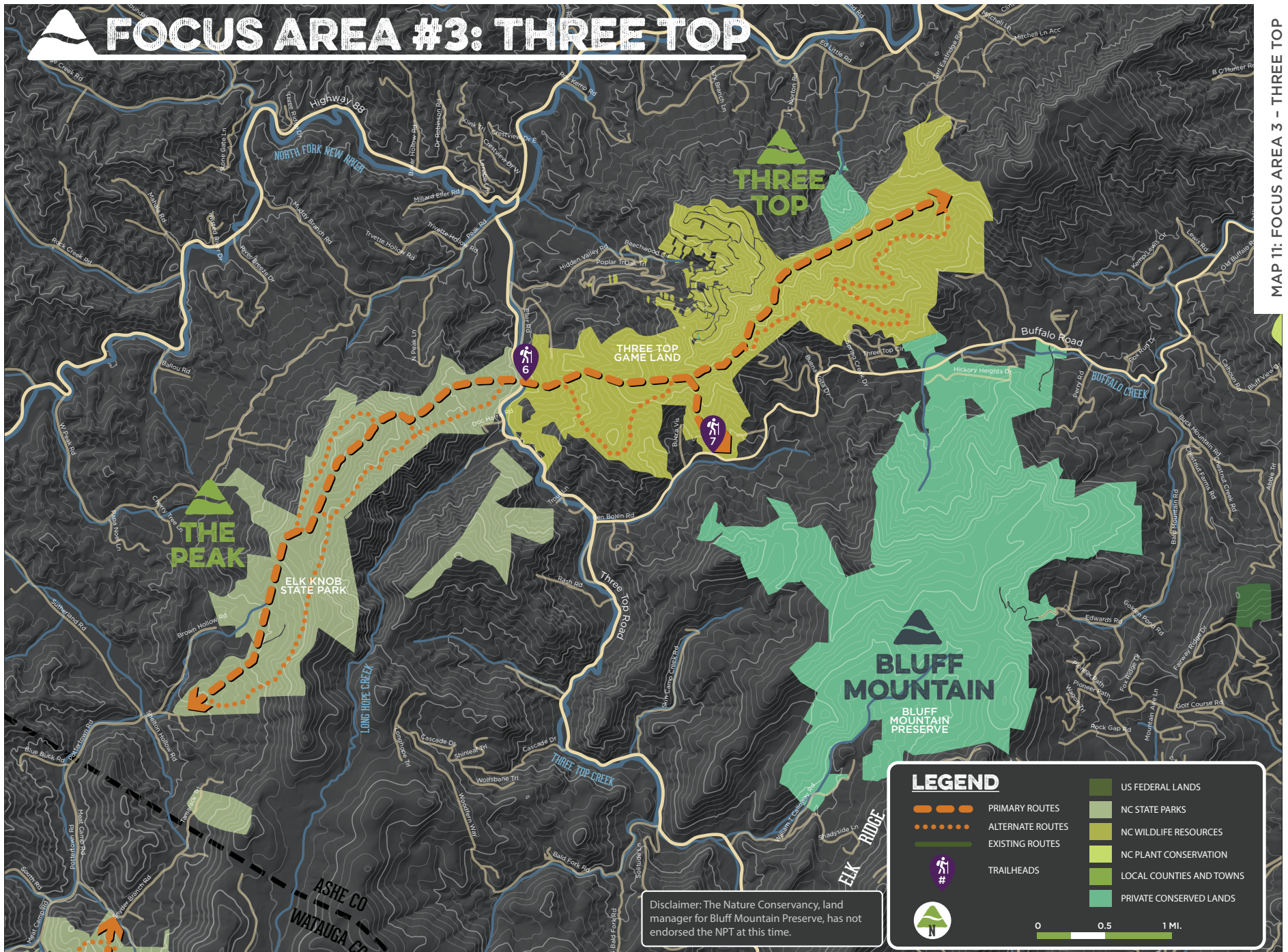
- Proposed location on Elk Knob State Park land on the west side of Three Top Road
- Provides direct access to the Peak to the west
- Pedestrian road crossing and bridge across Three Top Creek provides access to the game

land for hikers and hunters

- One-way linear design minimizes impact to the natural slope behind the parking area.
- Proposed amenities include 12 parking spaces, trailhead monument sign, map kiosk
- Restoration of existing historic barns on the property provide shelter to hikers as well as preserve the agricultural heritage of the area

BEN BOLEN ROAD

- Existing game land parking area on the north side of Ben Bolen Road
- Proposed improvements establish a formalized trailhead for hunters and hikers
- Trailhead design utilizes footprint of existing parking area to minimize disturbance of the land
- Paved drive and one-way loop provide for traffic circulation
- 10 standard and 5 parallel spaces provide parking for trail users
- Trailhead monument sign, map kiosk, and trail gateway incorporate elements of the NPT brand



MAP 11: FOCUS AREA 3 - THREE TOP

THREE TOP TRAILHEAD

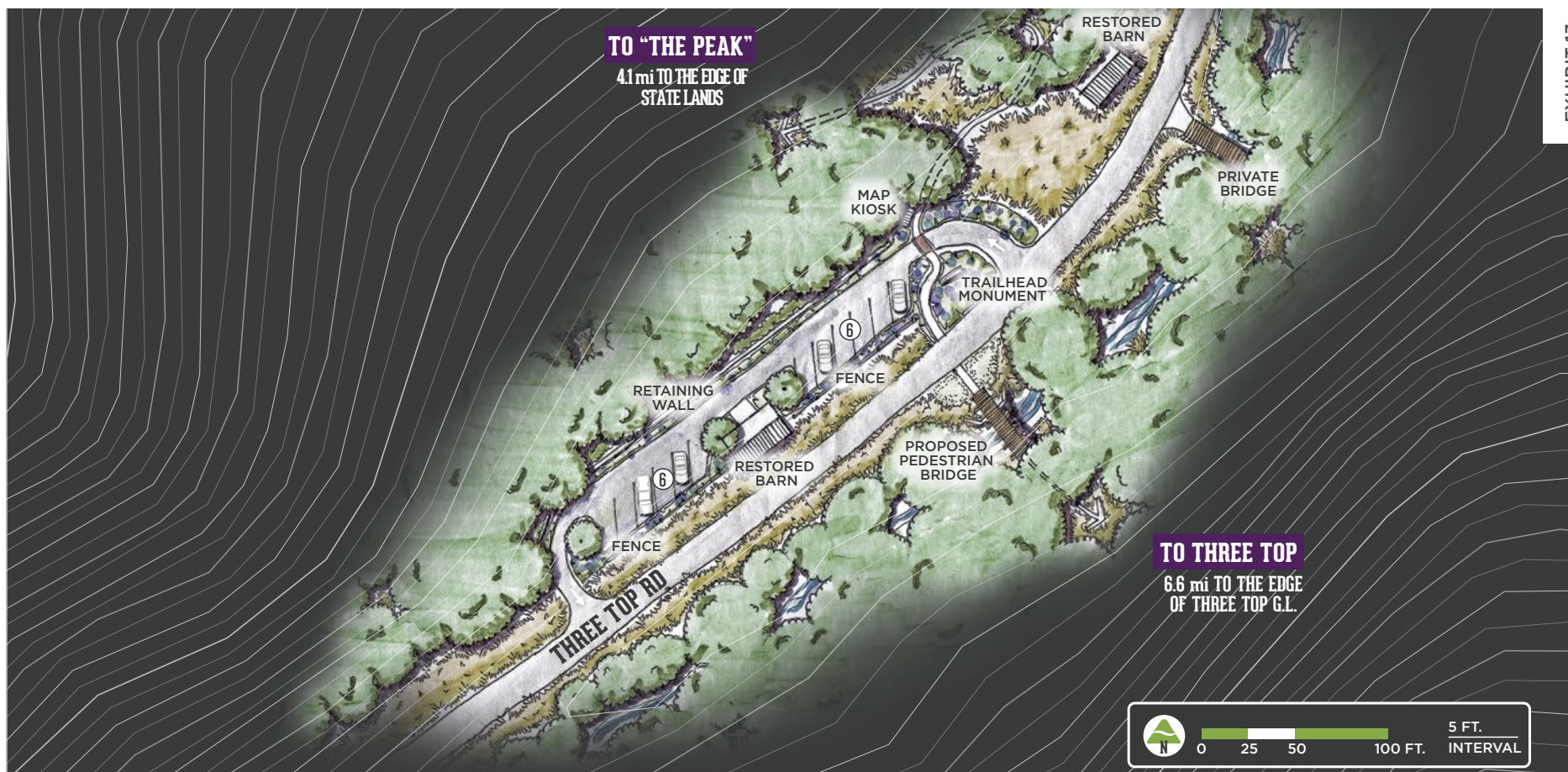


EXHIBIT 13

EXISTING



Located on state park land on the east side of Three Top Road and Three Top Creek, the Three Top Trailhead provides direct access to both the Peak and Three Top Game Land. The one-way linear design of the parking area minimizes required grading.

BEN BOLEN TRAILHEAD

EXHIBIT 14

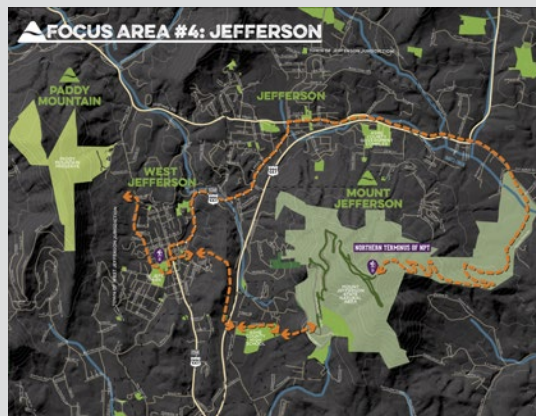


The existing parking area on Three Top Mountain Game Land located on the north side of Ben Bolen Road provides an opportunity to establish a trailhead. Proposed improvements include paved driveway and parking, trailhead monument sign located near the road, map kiosk, and gateway entrance to the trail.



✓ FOCUS AREA 4: WEST JEFFERSON

QUICK FACTS



WEST JEFFERSON

APPROX. LENGTH:

- 12 miles of new trail
- 5.15 miles existing in Mount Jefferson State Park

TRAIL TYPE:

- Downtown Sidewalk
- Natural Surface
- NCDOT Sidepath

POINTS OF INTEREST:

- Mount Jefferson State Natural Area
- Downtown Jefferson
- Foster-Tyson Park
- Downtown West Jefferson
- Ashe County Farmers Market
- West Jefferson Park
- Paddy Mountain Preserve

ESTIMATED COST:

- \$1,901,640

Proposed routes in Focus Area 4 create a complete trail loop by linking Mount Jefferson State Natural Area, downtown West Jefferson, and downtown Jefferson. The loop totals approximately 15 miles, including existing trail at Mount Jefferson and would link key assets in both towns.

KEY CONSIDERATIONS

- West Jefferson Park provides an opportunity to utilize existing amenities and walking loop for trailhead.
- Extension of the trail north and west from downtown West Jefferson could provide a future connection to Paddy Mountain.
- Applying a “road diet” to Highway 221 Business provides an opportunity to accommodate the trail by converting one of the vehicle lanes into a multi-use NCDOT sidepath.
- The walking loop and existing amenities at Foster-Tyson Park can serve as a trailhead.
- The trail utilizes the downtown sidewalk networks in Jefferson and West Jefferson.
- An NCDOT sidepath along US Highway 221 connects Foster-Tyson Park to Mount Jefferson along Highway 221 east.
- Hiker safety and natural resource protection present potential challenges to trail development through the eastern end of Mount Jefferson from Hwy. 221 to the peak.
- Downtown West Jefferson connects to the Ashe County High School campus via a multi-use sidepath along Campus Drive.

TRAILHEADS

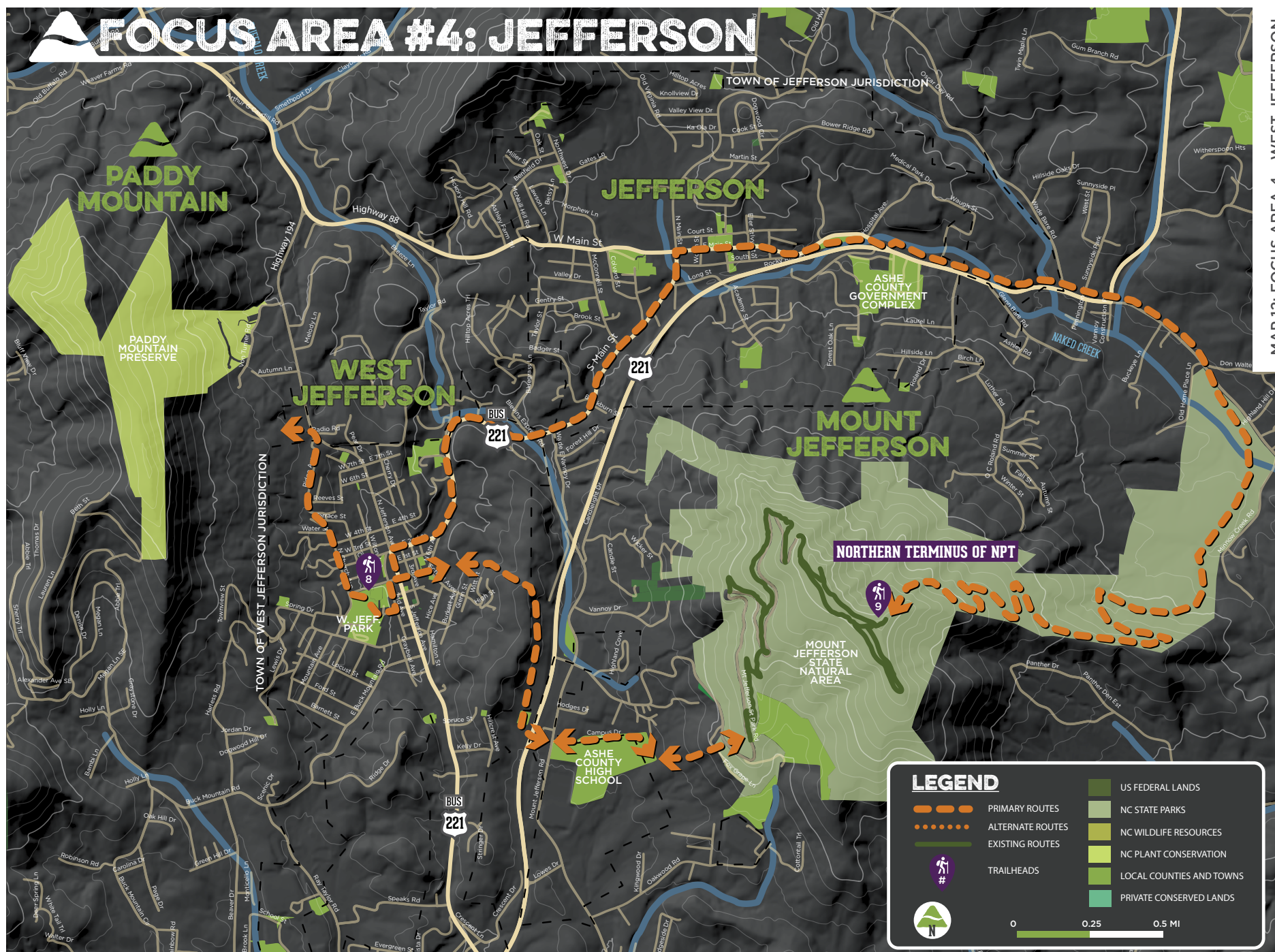
There are two (2) main trailheads within this Focus Area: Mount Jefferson State Natural Area and West Jefferson Park.

WEST JEFFERSON PARK (BOWIE-SEAGRAVES PARK)

- Located along Backstreet behind the library in downtown West Jefferson
- 12 acre site owned and maintained by the Town of West Jefferson
- Amenities include tennis courts, baseball field, playground, basketball court, restrooms, picnic shelters, and nearly a half mile of walking paths
- Opportunity for major trailhead that utilizes existing parking and facilities

MOUNT JEFFERSON STATE NATURAL AREA

- Northern terminus of the NPT
- Owned and managed by NC Division of State Parks
- Existing public facilities are located near the summit and include parking, restrooms, a large picnic area with a shelter and fireplace, and an observation deck
- 5.15 miles of existing trail include the summit trail, Kids TRACK Trail, and three other trails that lead hikers to additional overlooks or geologic features.



WEST JEFFERSON PARK TRAILHEAD



EXHIBIT 15

EXISTING



West Jefferson Park offers compelling views of Mount Jefferson. NPT signage, brand, and design elements seen in Rivers Park are utilized again here for visual consistency throughout the trail corridor.

HIGHWAY 221 BUSINESS ROAD DIET

EXHIBIT 16



A “road diet” on Highway 221 Business provides for the NPT as an NCDOT sidepath between West Jefferson and Jefferson. A travel lane is eliminated to accommodate a multi-use path on the southeast side of the road and a sidewalk on the northwest side. The sidewalk and planting strip define the street edge and provide highway access management by limiting continuous driveway cuts for adjacent businesses.

EXISTING



CAMPUS DRIVE INTERSECTION



EXHIBIT 17

EXISTING

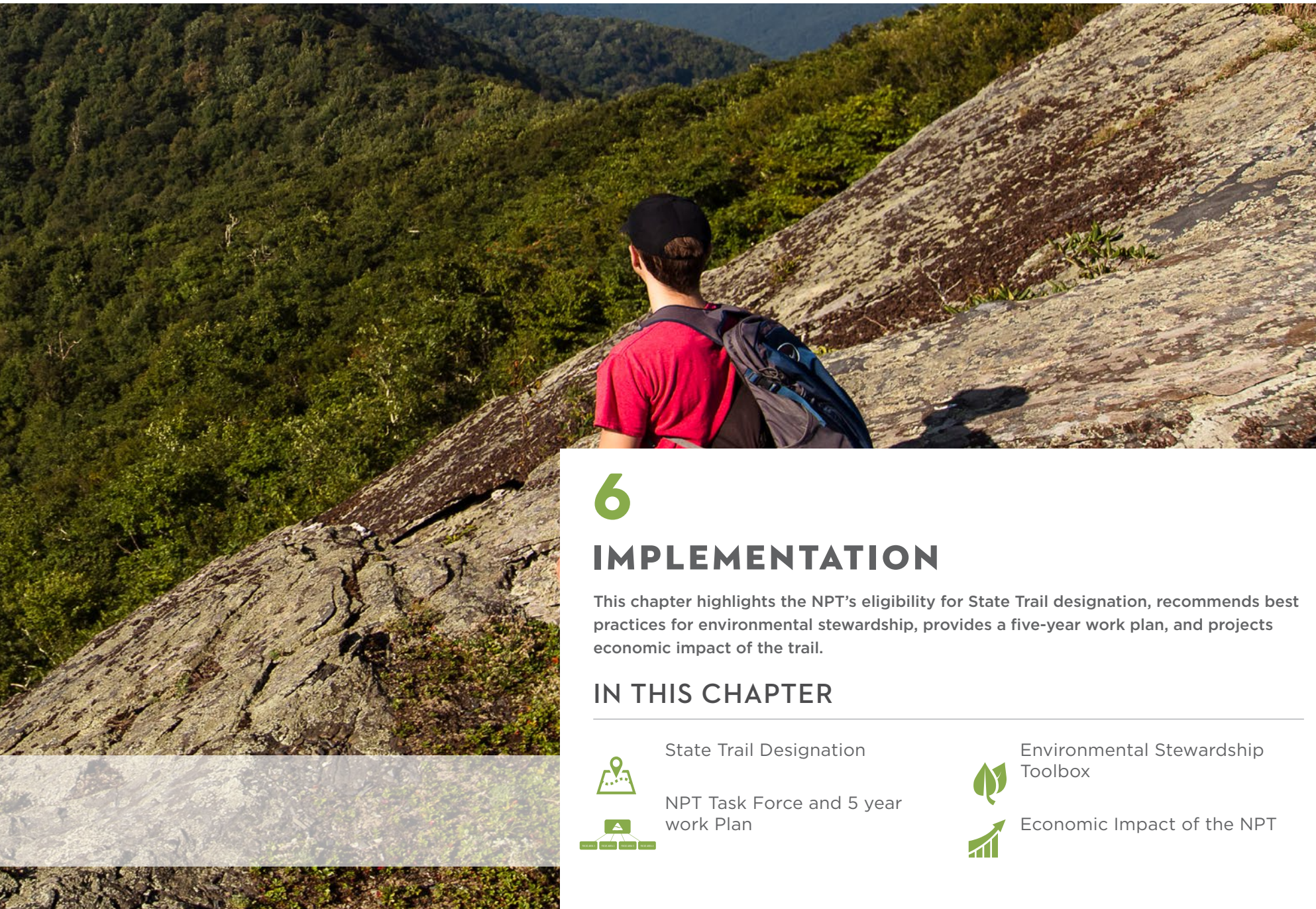


The intersection of Campus Drive and US Highway 221 is a critical crossing location for completing a trail connection from downtown West Jefferson to Mount Jefferson. Intersection improvements to the expanded highway facilitate a signalized crossing for trail users. Creation of a through-street with adjacent NCDOT sidepath establishes a direct connection from US Highway 221 to Jefferson Avenue and allows for controlled access and development of highway-frontage property.





THE PURPOSE OF THIS CHAPTER IS TO POSITION NPT STAKEHOLDERS FOR ACTION BY IDENTIFYING KEY STRATEGIES FOR IMPLEMENTATION.



6

IMPLEMENTATION

This chapter highlights the NPT's eligibility for State Trail designation, recommends best practices for environmental stewardship, provides a five-year work plan, and projects economic impact of the trail.

IN THIS CHAPTER



State Trail Designation



NPT Task Force and 5 year
work Plan



Environmental Stewardship
Toolbox



Economic Impact of the NPT



STATE TRAIL DESIGNATION

The State Parks Act (GS 143B-135.40) identifies State trails units of the state park system. A state trail is considered a linear corridor on land or water, separated from vehicular traffic, providing public access for non-motorized recreation or transportation. State Trails must be authorized by an act of the NC General Assembly.

Although state trails are units of the state parks system, they are not owned or managed by the Division of Parks and Recreation, like a traditional state park. Instead, state trails are comprised of multiple, connected sections. Each section is sponsored by a governmental agency, non-profit, or private landowner. Developing and maintaining a state trail requires partnerships.

When a new state trail is added to the system, North Carolina State Parks engages in a planning process to produce a feasibility study of the new trail. Effective planning is essential to determine a corridor for the trail and identify potential partners. Segments within the identified corridor that have local public support and viable section sponsors can be constructed.

Once a segment is constructed, the segment manager can apply for designation. All designation applications will be evaluated by the North Carolina Trails Committee and the Secretary of the Department of Natural and Cultural Resources.

NCDPR has established six (6) criteria for designating new State Trails. The character and environment of the NPT are evaluated against this criteria below

CRITERIA FOR CREATING NEW STATE TRAILS

MINIMUM CRITERIA

1. Significant natural, cultural, and scenic recreation value
2. Length and beauty to attract significant use from regions outside of the local area
3. Feasibility – minimal and surmountable challenges to trail development

The 2016 NPT framework plan, published in Fall 2016, demonstrates that the Northern Peaks Trail meets the minimum requirements for state trail designation.

FINAL CRITERIA FOR STATE TRAIL DESIGNATION

1. Local public support and the availability of trail volunteers

- ✓ Broad public support demonstrated at the Outdoor Recreation Summits
- ✓ Over 50 individuals have indicated their desire for direct involvement through the website

2. Section Sponsors committed to the design, construction, maintenance, and management of the trail

- ✓ **NPT Task Force**
- ✓ **Trail Partners**
 - Town of Boone
 - Watauga County TDA
 - Ashe County
 - Town of West Jefferson
- ✓ **Technical Support**
 - High Country Pathways
 - Destination by Design
 - Blue Ridge Conservancy
 - Elk Knob State Park
 - Mount Jefferson State Natural Area
 - NC Wildlife Resources Commission
 - North Carolina Trails Program

3. Environmental and economic sustainability

- ✓ **Trail alignment through major public lands must be verified by the NC Natural Heritage Program to ensure that the trail is located to avoid occurrences of rare species and sensitive ecological communities**
- ✓ **Sustainable trail building techniques and environmental stewardship best practices will be employed to protect the area's native biodiversity and ecological systems.**
- ✓ **\$2.5 million annual economic impact**

This Plan concludes that the NPT satisfies the criteria for state trail designation. The following sections provide detail on how the NPT achieves the criteria for State Trail designation.

ENVIRONMENTAL STEWARDSHIP TOOLBOX



The NPT's greatest strength is also its greatest challenge. Key areas within the NPT corridor were purchased for the primary purpose of protecting the rare flora and fauna endemic to this distinct natural area. Completion of the NPT on both public and private conservation lands will require a high level of cooperation between the conservation community, land managers, and trail developers.

Impacts of the NPT can be reduced by employing best-practices for trails in environmentally sensitive areas. These practices have been successfully employed in some of the most biodiverse and iconic trail locations in the world. The practices and features described below should be considered for implementation throughout the trail corridor.

1. LOCATION AND DESIGN

Strategically locate trailheads, support facilities, and parking lots at a significant distance away from sensitive ecological areas to discourage hiker access to vulnerable areas.

2. TRAIL KEEPERS

Build a volunteer base of "trail keepers" as part of each NPT taskforce to assist with conservation, advocacy, maintenance, and monitoring of the trail.

3. TRAIL MANAGER / RANGER POSITION

Establish a designated trail manager or ranger position to lead the NPT Task Force and serve as the lead contact for the NPT. This position will be most effective as a funded staff position. A stipend provided by land managing agencies, a local non-profit, or partnership of local government stakeholders could provide financial backing for the position.

4. EDUCATIONAL SIGNAGE

Use interpretive signage at trailheads to educate trail users on topics including, local flora and fauna, the importance of conservation, stewardship practices such as Leave-No-Trace, and proper behavior for wildlife encounters on the trail.

5. SHOE BRUSHES AND INSTRUCTIONAL SIGNAGE

Install shoe brushes and instructional signage at trail access points to educate trail users on the importance of limiting the spread of invasive exotic species.

6. PERMIT SYSTEM

Permit systems allow land managers to retain control over access to sensitive properties. A permit system can be designed to regulate multiple factors such as when hikers are allowed on the property and how many hikers are permitted on the trail per day, week, month, or season. A permit system also allows land managers to know who is on the property at any given time. Additionally, fees associated with acquiring a permit can provide a revenue stream to support administration costs and continued conservation efforts.

7. PARTICIPATORY EDUCATION

Use the trail to teach: conduct guided hikes, that emphasize conservation education; host Leave-No-Trace workshops and ecological education programs on site.

8. CITIZEN SCIENCE INITIATIVES

Citizen Science is a crowd-sourcing approach to scientific research in which members of the general public collaborate with professional scientists to assist with data collection and analysis to achieve a research goal. Citizen Science initiatives conducted along the NPT could be used to collect data on various species of interest and to monitor habitat quality.



NPT TASKFORCE AND FIVE YEAR WORK PLAN

State Trails require a partnership among multiple agencies, landowners, and local governments to implement a shared vision of connectivity throughout the region.

Since State Trails are not owned or directly managed by the NCDPR, except where located on State Park property, Section Sponsors are required. Section Sponsors, usually local government, non-profit units or a private landowner, are responsible for the construction, maintenance and management of their section. The presence of Section Sponsors and a local volunteer base are two important criteria for achieving state trail status.

The NPT Task Force will provide the framework for organizing Section Sponsors.

NPT TASK FORCE

The NPT Task Force will be comprised of local government and citizen leaders with an interest in realizing the trail. Although Task Force members may work across the whole of the NPT region, the organization should maintain a structure in accordance with the Implementation Focus Areas.

Approximately 50 task force members have been identified through the planning process; many of these individuals signed up on the NPT website after the Outdoor Recreation Summits held in Boone and West Jefferson in spring 2017. It will be the responsibility of the NPT Task Force to implement the NPT Master Plan.



THE NPT TASK FORCE

The NPT Task Force is organized according to the four (4) Implementation Focus Areas.

NPT TASKFORCE RESPONSIBILITIES

- » Trail Construction
- » Trail Maintenance
- » Advocacy & Promotion
- » Fundraising
- » Trail Planning and Design
- » Environmental Stewardship

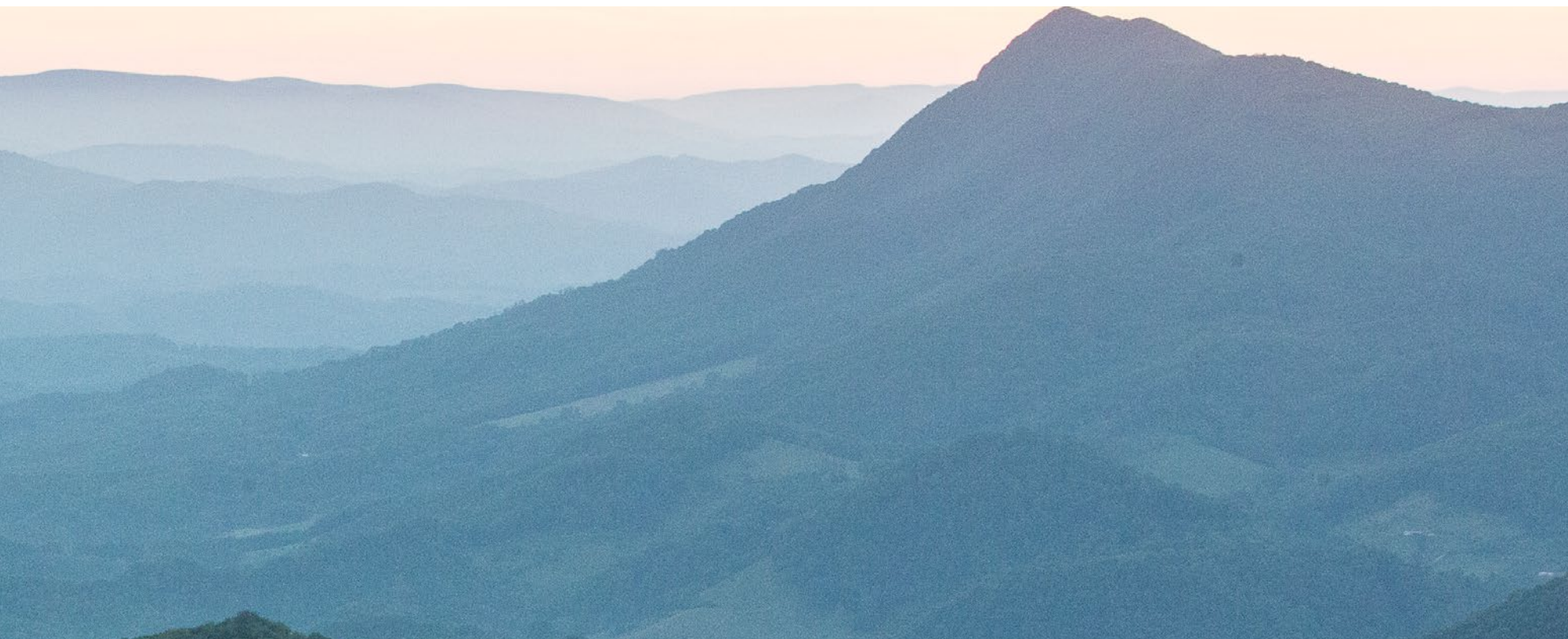
NPT FIVE YEAR WORK PLAN

The Five-Year NPT Work Plan is meant to provide the NPT Task Force will general direction for implementation. Upon their organization, the Task Force should develop working groups accordingly.

	FISCAL YEAR					NPT Taskforce
	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 22-23	Implementation Partners
General Implementation Tasks						
1. Formalize the NPT Taskforce						State and Local Government Stakeholders
2. Establish NPT as an NC State Trail						State and Local Government Stakeholders
Focus Area 1: Boone						
1. Design, Permit, and Construct the Rivers Park Trailhead						Town of Boone
2. Design, Permit, and Construct the Juna Natural Area Trailhead and Micro Trail System						Town of Boone; Blue Ridge Conservancy
3. Design, Permit, and Construct the Howard Knob Park Trailhead and Viewing Platform						Watauga County; Watauga TDA
5. Explore Grand Blvd. as a one-way road						Town of Boone
6. Make final NPT connections from Rivers Park to Howard Knob						Town of Boone; Watauga County; Watauga County TDA
Focus Area 2: Elk Knob						
1. Encourage the NC Division of State Parks to create an NPT position at Elk Knob State Park						NC State Parks; State and Local Government Stakeholders
2. Support State Park efforts to acquire additional property						NC State Parks; State and Local Government Stakeholders
3. Develop Overall Master Plan for Elk Knob State Park						NC State Parks; Watauga TDA
Focus Area 3: Three Top						
1. Design, Permit, and Construct the Three Top Road Trailhead Located on State Park Managed Property						NC State Parks; Ashe County
2. Design, Permit, and Construct the Ben Bolen Trailhead Located on NC Wildlife Managed Property						NC Wildlife Resources; Ashe County
3. Design, Permit, and Construct NPT from the Southern Extent of The Peak to the Northern Extent of Three Top Gameland						NC State Parks; NC Wildlife Commission; Ashe County
Focus Area 4: West Jefferson						
1. Develop a Plan and Ensure an NPT connection for the Hwy. 221 and Campus Drive Intersection						West Jefferson; NCDOT
2. Develop a Detailed Plan and Secure Easements and DOT Encroachment Agreements for Connecting Mount Jefferson State Park to the Hwy. 221/ Campus Dr. Intersection						NC State Parks; West Jefferson; NCDOT
3. Develop a Detailed Plan and Secure Easements to Link Downtown West Jefferson to the Hwy. 221 and Campus Drive Intersection						West Jefferson; NCDOT
5. Acquire Additional Property Adjacent to the Paddy Mtn. Preserve to help link Paddy Mtn. to West Jefferson Park						West Jefferson; Blue Ridge Conservancy
4. Develop a Business 221 Corridor Master Plan that incorporates the NPT						West Jefferson; Jefferson; NCDOT



**THE NORTHERN PEAKS TRAIL IS PROJECTED TO HAVE
A \$2.5 MILLION ANNUAL ECONOMIC IMPACT.**



ECONOMIC IMPACT OF THE NPT

Each year in North Carolina, the outdoor industry generates \$19.2 billion in consumer spending. This spending generates \$1.3 billion in state and local tax revenue, \$5.6 billion in wages and salaries, and supports 192,000 jobs according to estimates by the Outdoor Industry Association (2012). Visitation to North Carolina State Parks has doubled over the past 25 years, with record attendance at parks across the state in 2016. Without a doubt, outdoor recreation contributes significantly to the state and local economies.

As well-established tourist destinations due to their abundant natural resources and recreation opportunities, the Towns of Boone and West Jefferson could experience a significant economic boost from the NPT. A conservative economic impact analysis was performed utilizing data from comparable study areas, previous research studies, and the North Carolina Visitor Profile Report to forecast an estimated impact of the 40 mile trail. The NPT is projected to have a \$2.5 million annual economic impact on the region

(See Appendix C for the complete economic impact analysis.)





APPENDIX

- A. Budget
- B. Funding Sources
- C. Economic Impact Analysis
- D. Public Comments via NPT Website
- E. Three Top Mountain Gameland Letter of Allocation for Dedicated Nature Preserve

APPENDIX A: BUDGET

Focus Area 1: Boone	Units (LF)	Unit Cost	Total Cost
Downtown Sidewalk: Grand Boulevard	5000	\$50	\$250,000
Natural Surface Trail: Junaluska Park and Juna Natural Area	5000	\$6	\$30,000
Sidewalk: Howard Knob Road from Junaluska to County Park	2800	\$45	\$126,000
Major Road Crossing: Rivers Street Roundabout and crosswalks	1		\$275,000
Rivers Park Trailhead	1		\$150,000
Juna Natural Area Trailhead	1		\$125,000
Howard Park Trailhead Improvements	1		\$140,000
Total Section Cost			\$681,000
Focus Area 2: Elk Knob	Units	Unit Cost	Total Cost
Natural Surface Trail	73920	\$6	\$443,520
Major Road Crossings: Meat Camp Road	2	\$4,000	\$8,000
Major Bridge: North Fork of the New River	1		\$50,000
Elk Knob State Park Trailhead Signage (kiosk and post signage)	1		\$20,000
Total Section Cost			\$521,520
Focus Area 3: Three Top	Units	Unit Cost	Total Cost
Natural Surface Trail	73920	\$6	\$443,520
Major Road Crossing: Three Top Road	1	\$4,000	\$4,000
Major Bridge: Three Top Creek	1		\$50,000
Three Top Trailhead	1		\$225,000
Ben Bolen Trailhead	1		\$225,000
Total Section Cost			\$947,520
Focus Area 4: West Jefferson	Units	Unit Cost	Total Cost
NCDOT Sidepath	25152	\$65	\$1,634,880
Natural Surface Trail	36960	\$6	\$221,760
Downtown Sidewalk: Paddy Mtn. connection	1000	\$45	\$45,000
Major Road Crossing: Hwy. 221 at Campus Drive	1		\$125,000
Major Road Crossing: Hwy. 221 east	1		\$20,000
West Jefferson Park Trailhead improvements	1		\$30,000
Mount Jefferson Overlook improvements	1		\$30,000
Total Section Cost			\$1,901,640
Total			\$4,051,680

* Only includes new construction

* Does not include land or easement acquisition

* Does not include design, engineering, or permitting

* Final trail type will depend on specific environmental conditions

APPENDIX B: FUNDING SOURCES

Partnership Funding Agency	Natural and Built Environment Implications	Maximum Amount	Matching Funds Required	Deadlines
Clean Water Management Trust Fund (www.cwmff.net)	Land Acquisition: Fee Simple or Easement. Must protect floodplain areas. Greenway trails and other park areas are allowed.	N/A	Not specified, but 20% is competitive	February 1st
NC Water Resources (www.ncwater.org)	River access areas or greenways along rivers	N/A	50%	January 1st and June 1st
Recreation Trails Program (ncparks.gov/About/grants/main.php)	All types of trails and greenways	\$100,000.00	25%	Pre-application - Mid Jan Final application - Mid July
Parks and Recreation Trust Fund (ncparks.gov/About/grants/main.php)	All types of parks, trails, and recreation facilities	\$500,000.00	50%	February 1st
People for Bikes Community Grant	Trails and Greenways	\$10,000.00	20%	May 24th
NCDOT Transportation Plan For Bike and Pedestrian Projects	Bike and Pedestrian Projects- both engineering and construction	N/A (for major projects)	20% generally	N/A
TIGER	Construction provided all easements are secure.	N/A (min. \$1 million)	\$0 (for rural counties)	May (typical)

APPENDIX C: ECONOMIC IMPACT ANALYSIS

PROJECTED ECONOMIC IMPACT OF THE NORTHERN PEAKS TRAIL

OUTDOOR RECREATION INDUSTRY ECONOMIC PROFILE

In 2012, the annual economic value of outdoor recreation in America was estimated by the Outdoor Industry Association to be \$646 billion (\$81 billion directly from trail recreation) supporting 6.1 million direct jobs (more than 768,000 jobs from trail recreation), more than double that of the oil and gas industry in America. In addition, each year outdoor recreation generates \$80 billion in federal, state, and local tax revenue (\$10.6 billion from trail recreation). As recreation dollars change hands and work through the economy, the multiplier, or ripple, effect grows to \$1.6 trillion in total annual economic activity (\$196 billion from trail recreation) and 12 million U.S. jobs. Moreover, the outdoor recreation sector is resilient, growing even during economic downturns. As an example, the outdoor recreation industry grew about 5 percent annually between 2005 and 2011, with trail recreation playing an important part in that growth. In spring 2015, the number of people who went hiking/backpacking within the last 12 months amounted to 38.67 million in the United States, compared to 29.23 million in 2008, a 32 percent increase in seven years.

In a survey conducted by the Outdoor Recreation Resources Review Commission in 1960, walking for pleasure ranked second among Americans' favorite recreational activities. In 1965, the authors of the Trails for America report reflected that while public use of trails was unmeasured, the demand for trails exceeded what was available. According to the Outdoor Participation Report in 2013, more than 43 million Americans over 6 years of age went hiking and backpacking for having fun, exercising, getting in touch with nature, spending time with family and friends, or enjoying the outdoors on a beautiful day. In a 2015 survey among American Hiking Society members, it is apparent that most hikers are primarily getting out for short day hikes of less than five hours. One thing this indicates is that for Americans to readily participate in hiking, the trail should not be too distant from the communities in which they reside or visit. Most American Hiking Society members hike on trails that are within 60 miles of home, and of those, more than a third travel less than 15 miles to go hiking. This information reveals how important it is for trails to be

located near where people live so that more of the public may access and enjoy them.

NORTH CAROLINA OUTDOOR RECREATION ECONOMIC IMPACT

The 2012 Outdoor Industry Association Report notes that the North Carolina outdoor industry generates \$19.2 billion in consumer spending annually, \$1.3 billion in state and local tax revenue, 192,000 jobs, and \$5.6 billion in wages and salaries. Across the state, attendance at North Carolina's state parks and state recreation areas had record attendance in 2015, with 17.3 million visitors, up from 15.6 million in 2014, according to the North Carolina Division of Parks and Recreation. Over the past 25 years, attendance at state parks has nearly doubled. In 1989, eight million people visited state parks and state recreation areas.

EACH YEAR IN NC, THE OUTDOOR INDUSTRY GENERATES \$19.2 BILLION IN CONSUMER SPENDING.

According to the 2014 NC Visitor Profile Report, 24% of North Carolina visitors traveled to North Carolina’s Mountain Region, the 23 western-most counties of North Carolina. Approximately 11.4 million person-trips (approximately 9.0 million overnight person-trips) were made to the region. The proportion of first time out-of-state visitors to North Carolina’s Mountain Region was 16% in 2014, while the majority of out-of-state overnight visitors (62%) have visited more than three times in the past five years. Mountain Region visitors reported increases in activities from 2013 to 2014: visited with relatives (30% in 2014 vs. 26% in 2013); visited a state/national park (23% in 2014 vs. 20% in 2013); visited museums (14% in 2014 vs. 9% in 2013); and participated in wildlife viewing (14% in 2014 vs. 9% in 2013).

That state’s population has grown rapidly in the past 25 years with over 10 million residents (10,042,802; US Census, 2015), a 50% increase since 1990. In order to keep pace with this population growth, more outdoor recreation opportunities are needed, like hiking trails.

ESTIMATING VISITOR NUMBERS FOR THE NORTHERN PEAKS TRAIL: TRADE AREA AND MARKET PENETRATION

Trails and greenways impact our economy through community improvements, property values, tourism, events, jobs, and reduced healthcare costs. In order to project economic impacts to the region and likely number of visitors to the proposed Northern Peaks Trails, an estimate must be made in regards to the distance from which the area will draw visitors. This area, called the trade area, is the geographic area from which a community pulls the majority of its visitors. The trade area is the average distance in miles that a tourist is willing to travel to visit an area. A study conducted by the American Hiking Society in 2015 reported that members hike on trails that are within 60 miles of home and drove an average of five hours round trip.

For example, The Virginia Creeper Trail and the NC New River State Park are in the same area and can be used as a comparison. The Virginia Creeper visitor study by Bowker, Bergstrom, and Gill (2004) reported that 72 percent of users were day trippers and 28 percent of users stayed overnight. The New River Trail State Park reported in 2011 that 59 percent of their visitors came from the state and local area and 41 percent were from out of state (Cox, Hedrick, Jeffries, Kumar, Lyon R. Hill, Powell, Shackelford, Westfall, and Zilke, 2011). A 2004 report stated that Virginia Creeper summer visitation was approximately 106,558 and winter was approximately 23,614, for a total of 130,172 annual visitors.

This resulted in an economic impact of \$120,000-\$160,000 from local spending and \$2.2 million from non-local spending, totaling \$2.5 million. Primary overnight trips created the most impact on the local economy with \$114,398 in total output per 1,000 person-trips, 2.1 full-time job equivalents, and \$62,956 in total value added to the economy.

Examining existing local outdoor recreation destinations is a reliable strategy for predicting visitor numbers for new recreation offerings. Elk Knob State Park has one of the highest peaks in North Carolina’s high country at 5,520 feet with four trails. Elk Knob State Park saw an increase of 12 percent from 30,060 visitors in 2014 to 33,589 in 2015 with fewer than six miles of hiking trails. At 5,946 feet, Grandfather Mountain State Park offers 12 hiking trails. Visitation at Grandfather Mountain is up 30 percent from 72,926 in 2014 to 94,597 in 2015. Mount Jefferson has three hiking trails totaling fewer than four miles with 803 total acres and 1,006 acres for protection of natural and scenic resources to be acquired in the near future. New River State Park is 2,911 acres and offers access to the New River for paddling recreationists. New River State Park and Mount Jefferson Natural Area visitation were up 25 percent in 2015 with 240,894 visitors at New River State Park, and 124,533 visitors at Mount Jefferson State Natural Area (NC Parks, 2016).

A second component of visitor estimation is the market penetration rate. The penetration rate conveys how much of the total theoretical market uses a product (in this case, trails). Data collected by the Department of Parks, Recreation, and Tourism Management reports that 33 percent of adult North

TABLE 1: VISITATION RATES OF AREA STATE PARKS

PARK	2015 VISITATION	2014 VISITATION	% CHANGE
Elk Knob State Park	33,589	30,060	12%
Grandfather Mountain State Park	94,597	72,926	30%
New River State Park (240,894) plus Mount Jefferson State Natural Area (124,533)	365,427	293,262	25%

Carolinians used a trail in the past 12 months. A similar study completed around the same time estimated a more conservative figure, reporting that 22 percent of North Carolina residents participated in trail recreation over the course of a year (Siderelis, Christos, and Moore).

To estimate the number of unique visitors to the Northern Peaks Trail using both a 22 percent and 33 percent penetration rate, let’s assume a 60 mile trade area (suggested by the American Hiking Society). The 60 mile trade area includes the counties listed in Table 2 and yields a visitor population pool of 663,911.

At a 33 percent penetration rate, the Northern Peaks Trail could expect to see 219,090 unique visitors per year (663,911 multiplied by 33 percent). At a 22 percent penetration rate, the trail would attract 146,060 unique visitors per year (663,911 multiplied by 22 percent).

These figures assume that a visitor only visits once per year. According to the 2015 NC State Parks System-wide Plan, the majority (64 percent) of park users visit a state park at least three times per year. If this holds true, the number of visits, or visitation rate, to the Northern Peaks Trail would be significantly higher.

In applying the rates reported by the 2004 Virginia Creeper visitor study to the NPT,

TABLE 2: POPULATION OF NPT TRADE AREA

POPULATION OF COUNTIES WITHIN A 60 MILE TRADING	
COUNTY	POPULATION (2015) BY COUNTY
Watauga	51,079
Ashe	27,020
Avery	17,689
Caldwell	81,287
Wilkes	68,502
Alleghany	10,837
Burke	88,842
Alexander	37,325
McDowell	44,989
Yancey	17,587
Mitchell	15,246
Wythe, VA	29,119
Washington, VA	54,591
Smyth, VA	31,470
Grayson, VA	16,012
Johnson, TN	17,830
Carter, TN	54,486
TOTAL	663,911

we can project the number of day-trippers versus overnight visitors the trail will attract. Assuming the higher visitor number (219,090), 157,745 of the NPT’s annual visitors will be day trippers (72 percent) and 61,345 will be overnight visitors (28 percent). Applying the more conservative annual visitor figure (146,060), yields 105,163 day trippers and 40,897 overnight visitors.

THE ECONOMIC IMPACT OF THE NORTH PEAKS TRAIL

An economic impact analysis estimates the changes in regional economic activity that result from some action, measured as changes in visitor spending, regional income, and/or employment (Moore, Gitelson, and Graefe, 1994; Stynes and Halloran, 2004). There are three components necessary to perform an economic impact analysis:

- 1. Obtain an accurate number of users and user types
- 2. Estimate average spending per person per trip for each user type
- 3. Estimate direct and secondary effects of visitor spending

The Research Department of the U.S. Travel Association for the North Carolina Division of Tourism, Film and Sports Development (2013) reported tourism impact can be divided into several categories including retail (9.7 percent), entertainment and recreation (9.4 percent), food service (32.9 percent), transportation (public and private) (30.5 percent), and lodging (17.4 percent).

The following scenarios present economic outcomes based on varying assumptions related to the estimated number of visitors and the average spending amounts. Each of the scenarios utilizes the day-tripper and overnight visitor percentages (72 percent and 28 percent, respectively) of the Virginia Creeper Trail Visitor Study.

SCENARIO 1: HIGH NUMBER OF VISITORS & LOWER SPENDING AMOUNTS

A study conducted of the Blue Ridge National Heritage Area of more than 4,500 heritage tourists found that the average per person per day spending for overnight visitors was \$107.59 and for day trippers spending was \$62.67 (Evans, Dave, & Stoddard, 2006). For this scenario, let's assume the higher visitor projection: 219,090 of which 157,745 are day-trippers and 61,345 are overnight visitors. Based on these figures, day trippers will spend \$9,885,879 annually when visiting the NPT, and overnight visitors will spend \$6,600,130, resulting in a total annual economic impact of \$16,486,009. Tables 3 and 4 present these estimates, as well as the categorical impact.

TABLE 3: ESTIMATED ANNUAL SALES FORECAST, SCENARIO 1

ESTIMATED ANNUAL SALES FORECAST, SCENARIO 1		
	LOCAL DAY TRIPPER 72%	NON-LOCAL OVERNIGHT 28%
Estimated Number of Annual Visitors	157,745	61,345
Average of North Carolina per person per day Trip Expenditure	\$62.67	\$107.59
TOTAL SPENDING	\$9,885,879	\$6,600,130
TOTAL SPENDING BY ALL VISITORS	\$16,486,009	

TABLE 4: CATEGORICAL SPENDING, SCENARIO 1

CATEGORICAL ANNUAL SPENDING SCENARIO 1			
		DAY TRIPS	OVERNIGHT
Retail	9.7%	\$958,930	\$640,213
Entertainment & Recreation	9.4%	\$929,272	\$620,412
Food Service	32.9%	\$3,252,454	\$2,171,443
Transportation (public and private)	30.5%	\$3,015,193	\$2,013,040
Lodging	17.4%	N/A	\$1,148,423

TAXES

Given the sales forecast of \$16,486,009, it is possible to project tax revenue. With a sales tax rate of 4.75 percent in North Carolina, sales tax receipts can be estimated at \$783,085 per year. Locally, the forecast sales amount results in tax receipts ranging from \$329,720 (Watauga County, 2 percent rate) to \$453,365 (Ashe County, 2.75 percent).

SCENARIO 2: LOWER NUMBER OF VISITORS & LOWER SPENDING AMOUNTS

This scenario employs the more conservative 146,060 annual visitor number (105,163 day-trippers and 40,897 overnights) and the Blue Ridge National Heritage Area visitor spending amounts: \$107.59 for overnights and for day-trippers was \$62.67. Based on these figures, day-trippers will spend \$6,590,565 annually when visiting the NPT, and overnight visitors will spend \$4,400,108 resulting in a total annual economic impact of \$10,990,673. Tables 5 and 6 present these estimates, as well as the categorical impact.

TABLE 5: ESTIMATED ANNUAL SALES FORECAST, SCENARIO 2

ESTIMATED ANNUAL SALES FORECAST, SCENARIO 2		
	LOCAL DAY TRIPPER 72%	NON-LOCAL OVERNIGHT 28%
Estimated Number of Annual Visitors	105,163	40,897
Average of North Carolina per person per day Trip Expenditure	\$62.67	\$107.59
TOTAL SPENDING	\$6,590,565	\$4,400,108
TOTAL SPENDING BY ALL VISITORS	\$10,990,673	

TABLE 6: CATEGORICAL ANNUAL SPENDING, SCENARIO 2

CATEGORICAL ANNUAL SPENDING SCENARIO 1			
		DAY TRIPS	OVERNIGHT
Retail	9.7%	\$639,285	\$426,810
Entertainment & Recreation	9.4%	\$691,513	\$413,610
Food Service	32.9%	\$2,168,295	\$1,447,635
Transportation (public and private)	30.5%	\$2,010,122	\$1,342,032
Lodging	17.4%	N/A	\$765,618

TAXES

Given the sales forecast of \$10,990,673, it is possible to project tax revenue. With a sales tax rate of 4.75 percent in North Carolina, sales tax receipts can be estimated at \$522,057 per year. Locally, the forecast sales amount results in tax receipts ranging from \$219,813 (Watauga County, 2 percent rate) to \$302,243 (Ashe County, 2.75 percent).

SCENARIO 3: HIGH NUMBER OF VISITORS & HIGH SPENDING AMOUNTS

The North Carolina Visitor Profile (2014) published by the North Carolina Division of Tourism, Film and Sports Development reported the average trip expenditure by visitors to the Mountain Region was \$556, with \$702 for an overnight visitor and \$169 for a day tripper. Average overnight stay in the mountains was 2.5 nights with an average party size of two. So, for one person per day (consistent with the previous scenarios), the day-tripper spends \$84.50 (\$169/2 people), and the overnight visitor spends \$351 (\$702/2 people). For this scenario, we also assume the higher visitor projection: 219,090 of which 157,744 are day-trippers and 61,345 are overnight visitors. Based on these figures, day-trippers will spend \$13,329,368 annually when visiting the NPT, and overnight visitors will spend \$21,532,095, resulting in a total annual economic impact of \$34,861,463. Tables 7 and 8 present these estimates, as well as the categorical impact.

TABLE 7: ESTIMATED ANNUAL SALES FORECAST, SCENARIO 3

ESTIMATED ANNUAL SALES FORECAST, SCENARIO 3		
	LOCAL DAY TRIPPER 72%	NON-LOCAL OVERNIGHT 28%
Estimated Number of Annual Visitors	157,744	61,345
Average of North Carolina per person per day Trip Expenditure	\$84.50	\$351
TOTAL SPENDING	\$13,329,368	\$21,532,095
TOTAL SPENDING BY ALL VISITORS	\$34,861,463	

TABLE 8: CATEGORICAL ANNUAL SPENDING, SCENARIO 3

CATEGORICAL ANNUAL SPENDING SCENARIO 3			
		DAY TRIPS	OVERNIGHT
Retail	9.7%	\$1,292,949	\$2,088,613
Entertainment & Recreation	9.4%	\$1,252,961	\$2,024,017
Food Service	32.9%	\$4,385,362	\$7,084,059
Transportation (public and private)	30.5%	\$4,065,457	\$6,567,280
Lodging	17.4%	N/A	\$3,746,585

TAXES

Given the sales forecast of \$34,861,463, it is possible to project tax revenue. With a sales tax rate of 4.75 percent in North Carolina, sales tax receipts can be estimated at \$1,655,919 per year. Locally, the forecast sales amount results in tax receipts ranging from \$697,229 (Watauga County, 2 percent rate) to \$958,690 (Ashe County, 2.75 percent).

SCENARIO 4: CONSERVATIVE ECONOMIC IMPACT

Scenario 4 provides a conservative estimate of economic impact. This scenario significantly reduces the penetration rate and projected user spending that is provided in the other scenarios. The penetration rate is reduced to only 10 percent and spending is reduced by 50 percent when compared to the other most conservative estimates.

With a 10 percent penetration rate, 47,801 visitors are estimated to visit the NPT each year. Day and overnight trippers will spend \$31.34 and \$53.34, respectively. This conservative estimate results in an approximate \$2.5 million annual economic impact, and is recommended for messaging purposes as stakeholders, planners, and tourism leaders promote the NPT.

TABLE 9: ECONOMIC SCENARIOS COMPARISON

ECONOMIC SCENARIOS COMPARISON				
SCENARIO	PENETRATION RATE	SPENDING ESTIMATES		TOTAL SPENDING BY ALL VISITORS
		DAY TRIPS	OVERNIGHT	
1: High Number of Vistors & Lower Spending Amounts	33%	\$62.67	\$107.59	\$16,486,009
2: Low Number of Visitors & Lower Spending Amounts	22%	\$62.67	\$107.59	\$10,990,673
3: High Number of Visitors & High Spending Amounts	33%	\$84.50	\$351.00	\$34,861,463
4: Lowest Number of Visitors & Lowest Spending Amounts	10%	\$31.34	\$53.34	\$2,489,620

ECONOMIC IMPACT CONCLUSIONS

THE NORTHERN PEAKS TRAIL HAS A PROJECTED ECONOMIC IMPACT OF \$2.5 MILLION ANNUALLY.

The towns of Boone and West Jefferson – well-established tourist destinations in the North Carolina High Country – will enjoy a significant economic boost from the development of The Northern Peaks Trail.

Three different scenarios, utilizing comparable study areas, previous research data, and the North Carolina Visitor Profile Report, were developed to analyze the economic impact of the 35-mile trail linking these two destinations. A fourth, more conservative scenario significantly reduces the visitation and spending rates used within scenarios one, two and three.

As a result, scenario four – the most conservative estimate – results in an approximate \$2.5 million annual economic impact and is recommended for messaging purposes as stakeholders, planners, and tourism leaders promote the NPT.

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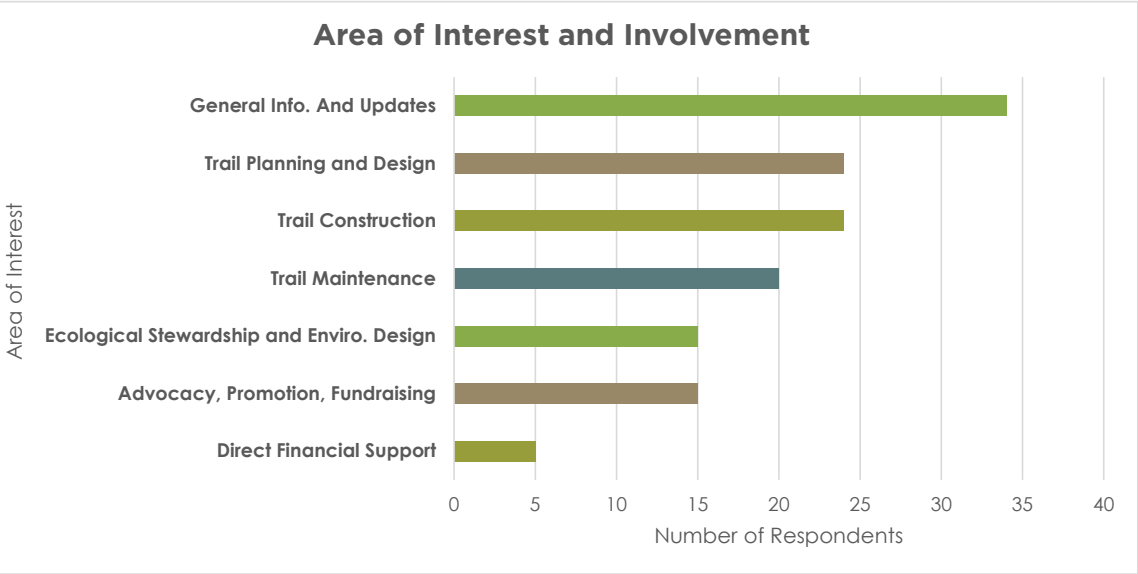
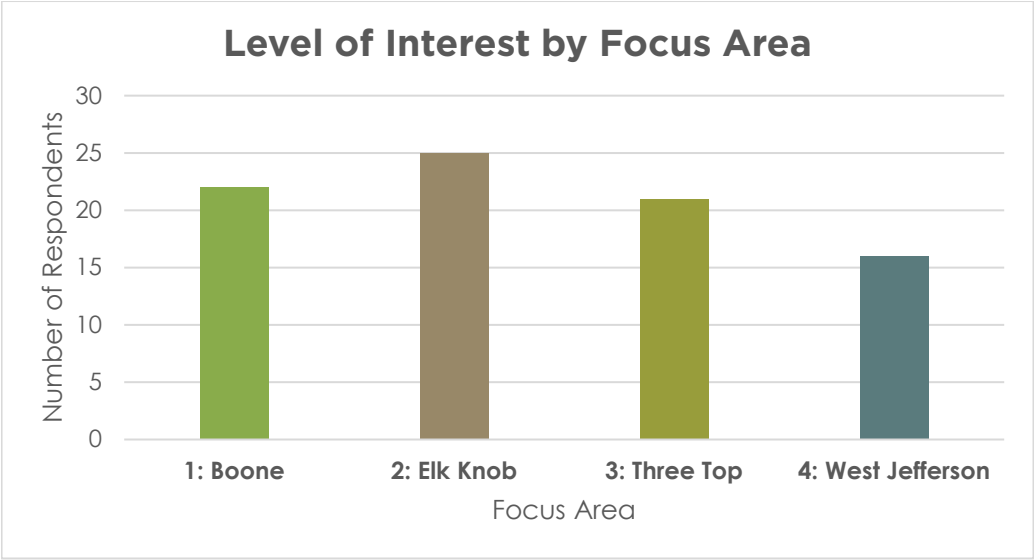
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APPENDIX D: PUBLIC COMMENTS SUBMITTED VIA NPT WEBSITE

1. We live in the view shed of Elk Knob and would like to be involved with this trail.
2. Great to hear about this tonight. I am excited about the future!
3. I have lived here in the mountains of NC for 30 years. Outdoor recreation is a huge part of my life. These mountains and the environment in general are dear to me. Currently I am slowly but surely working towards a degree in Community and Regional Planning at App State. I am interested in getting involved in any way I can help make this project go forward.
4. Wow! This is a dream of mine since my days at App and hearing one of the rangers mention it at Elk Knob. I would love to be involved in anyway I can to see this idea blossom and become a reality. I own a trail running event company called Tanawha Adventures that puts on races in mountains of NC. I donate a hefty percentage of our net profits to local conservation organizations and trail clubs to support the land conservation and trails. I would love to be involved in promoting this idea and helping build the trail. The amphibolite peaks are some of my favorite places in the world. I'm so happy to see an organization picking up the planning and implementation of it. Please let me know what I can do to help!
5. I'm very supportive of this project! I would love to help out however I can to have the trail become a reality.
6. Hi. My wife and I are completing a new home in Boone (Top of Boone) near Howard Knob and are interested in this NPT project.
7. My family is very keen to help with the trail. As a bit of backdrop, my father passed away a few weeks ago and we would like to name a shelter on the trail in his honor. You showed me a brief sketch of one of the shelters that you have in mind, it looks fantastic. How much would it cost to get naming rights for something like that? Additionally, our family would be happy to help in the construction process, even if it just means helping to hike in the materials to be used for the construction.
8. So excited to see how this is coming together! Proud to be a part of it.
9. This is a very ambitious project, but will have immeasurable value! I have a love for the outdoors and experience with field biology/ecology, project management, and web design. Let me know if I can be of any help.
10. Been around the area full time since 1983 in my practice of land surveying and planning. Slowing down a bit on the surveying as I age... looking forward to contributing on the project as an integral part of my Ecosystem Restoration Cooperative initiative locally.
11. Where can I learn more about the rare species of both flora and fauna in the Junaluska area? I have probably seen many of them in my backyard! It would be nice to identify them.
12. I have been conceptualizing such a trail since the early 1990s. I know and have hiked much of the route and feel I could make a positive contribution to the overall design of the trail. I have some specific ideas regarding an alternate start in Boone, which could be part of a focus area 1 loop trail, as well as ideas for connectors along the route.
13. Is it possible to build out from Mt. Jefferson, using historic roads no longer maintained for driving? We have a sample segment nearby connecting the Wilkes Comm. College part of Sparta to near the New River at the Virginia line.



APPENDIX E: THREE TOP MTN. LETTER OF ALLOCATION FOR DEDICATED NATURE PRESERVE

Secretary Susan Kluttz
Department of Natural and Cultural Resources
Mail Service Center 1651
Raleigh, North Carolina 27699-1651

Mr. Gordon S. Myers, Executive Director
N.C. Wildlife Resources Commission
Mail Service Center 1701
Raleigh, North Carolina 27699-1701

Subject: Dedication of Portions of the **Three Top Mountain Game Land**, Ashe County

Gentlemen:

Pursuant to Article 9A, Chapter 113A 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. These articles of dedication replace the articles of dedication dated February 10, 2014. The articles were amended to reflect additions of property to the preserve, correction of buffer area boundary on prior-designated lands, and acreage calculation correction.

This real property is currently administered by the North Carolina Wildlife Resources Commission as a portion of the **Three Top Mountain Game Land** and consists of approximately 2,217 acres located in Ashe County and composed of:

- | | | |
|----|---|-------------|
| 1. | Three Top Mountain tract (Primary Area) | 1,507 acres |
| 2. | Three Top Mountain tract (Buffer Area) | 1,031 acres |

all of which are specifically described in Exhibit A attached hereto and by reference made a part hereof. The dedicated lands shall be known collectively as the **Three Top Mountain Game Land Dedicated Nature Preserve**.

Dedication of the qualified portions of the tract fulfills the terms of any prior grant agreements, including those of the Natural Heritage Trust Fund.

EXHIBIT A

THREE TOP MOUNTAIN DEDICATED NATURE PRESERVE

COUNTY: Ashe

PHYSIOGRAPHIC PROVINCE: Blue Ridge

TOPOGRAPHIC QUAD: Warrensville

SIZE OF AREA: ca. 2,538 acres (1,507 acres primary area; 1031 acres buffer area)

OWNER/ADMINISTRATOR: State of North Carolina
Wildlife Resources Commission

DESCRIPTION: Three Top Mountain is one of a cluster of mountains in the northwest corner of North Carolina composed primarily of amphibolite or hornblende gneiss. Rising from 3000 feet to about 4900 feet, its topography is characterized by steep slopes, narrow to moderately broad ridges, narrow coves, rugged ridge top crags, and small sheltered cliffs and outcrops. The distinctive rock chemistry, which produces higher pH soils than is typical for the Blue Ridge, combines with the topography and other factors to support distinctive communities and a large number of rare species. The site is rated as Outstanding by the Natural Heritage Program, for its remarkable collection of rare species and natural communities.

The most significant single feature on the site is the set of High Elevation Rocky Summit communities along the ridge crest. The communities are in excellent condition and represent two rare subtypes of this community type. The largest number of rare species occurs on these rock outcrops. They support one of the largest populations of three rare plant species: the federally listed mountain bluet (*Houstonia montana*), Heller's blazing-star (*Liatris helleri*), and spreading avens (*Geum radiatum*). Other rare plant species present include the Carolina highland rush (*Juncus trifidus* ssp. *carolinianus*), golden tundra-moss (*Rhytidium rugosum*), Roan rattlesnakeroot (*Prenanthes roanensis*), bluebells (*Campanula rotundifolia*), Canada burnet (*Sanguisorba canadensis*), Carolina saxifrage (*Saxifraga caroliniana*), deerhair bulrush (*Trichophorum cespitosum*), fir clubmoss (*Huperzia selago*), and the lichen *Cetraria arenaria*. Also reported to be present is a nesting site for ravens (*Corvus corax*) and high potential for nesting by peregrine falcons (*Falco peregrinus*).

In more sheltered areas on the both flanks of the mountain are a couple of occurrences of Montane Cliff (Mafic Subtype), another rare community in very good condition. One of the cliffs supports another large population of the Carolina saxifrage, as well as uncommon plants such as walking fern (*Asplenium rhizophyllum*).

The forest communities that cover most of the preserve are of good quality, and most represent unusual subtypes developed in response to the amphibolite substrate and the northerly location within the Blue Ridge. They include Northern Hardwood Forest (Rich Subtype), High Elevation Red Oak Forest (Rich Subtype), and both the Montane Rich and Montane Intermediate subtype of Rich Cove Forest.

Northern Hardwood Forest is the most abundant community type in the dedicated area. The canopy is well-developed in most places but is wind-battered along the ridge crest. This is the rare Rich Subtype of Northern Hardwood Forest, supported by the base-rich soils formed from the amphibolite. It generally is

dominated by combinations of sugar maple (*Acer saccharum*), buckeye (*Aesculus flava*), white ash (*Fraxinus americana*), and beech (*Fagus grandifolia*), with some black locust (*Robinia pseudo-acacia*). The herb layer is fairly dense and contains species associated with rich soils as well as more typical species of high elevations. The understory and shrub layers are similarly mixed, and include unusual amounts of hop hornbeam (*Ostrya virginiana*) as well as species shared with spruce-fir forests, such as American rowan (*Sorbus americana*) and red elderberry (*Sambucus pubens*).

On the warmer slopes in several parts of the preserve are examples of High Elevation Red Oak Forest (Rich Subtype). A portion of the area occupied by this community is somewhat fragmented by roads built before purchase by the Wildlife Resources Commission. However, this portion is the most mature and is consequently highly significant. Lower elevation south-facing slopes in a few areas support Montane Oak-Hickory Forest communities, dominated by a mixture of white oak (*Quercus alba*) and other species. One area of mature forest on the south side has nesting cerulean warblers (*Dendroica cerulea*), one of the few locations for this species known in this part of the state.

Smaller areas of Rich Cove Forest are also present in the lower portions of the site. Both is the Montane Rich Subtype, again related to the amphibolite and containing added set of species of rich soils. A smaller area is the more common Montane Intermediate Subtype. Additional acreage of younger Rich Cove Forest is included in the buffer portion of the dedicated area, but several mature portions are in the primary area. Embedded in the Rich Cove Forest are small areas of Rich Montane Seep communities, with a similar canopy but with an herb layer tolerant of saturated soil conditions. Populations of rare plant species, trailing wolfsbane (*Aconitum reclinatum*) and of meehania (*Meehania cordata*), are present in some of the coves.

A few areas on the north side of the mountain support examples of the rare Carolina Hemlock Bluff community, dominated by Carolina hemlock (*Tsuga caroliniana*).

Wildlife populations include deer, wild turkey, squirrel, raccoon, black bear, and ruffed grouse. This portion of Ashe County supports a small black bear population which may use the site. The forests provide breeding habitat for many species of songbirds, including forest interior neotropical migrant species which will benefit from the unfragmented core portions of the site. Large salamander populations are also present, though no rare species have been found.

The preserve is also significant as part of a larger landscape. Three Top Mountain is nearly connected by buffer lands to the protected core natural area on Bluff Mountain and is connected by forested lands to the unprotected core area at Long Hope Valley. These connections increase the viability of wildlife populations on all three sites.

The preserve contains existing disturbed areas in the form of forest roads, which will be retained under the dedication agreement. The roads are at a fairly high density in the northwestern part of the area, but occur only at low density elsewhere.

BOUNDARY JUSTIFICATION: The primary boundary encompasses the rare species populations, the rare community occurrences, and the mature portions of the more widespread forest communities. It includes the central core area of the large landscape area centered on the mountain ridge. The smaller primary area on the south side encompasses a patch of mature forest which contains the cerulean warbler. The buffer area includes areas of younger forest and old pasture, generally downslope from the primary area, which will function to reduce intrusion of edge effects into the primary area, contribute to connection with nearby natural areas, and provide additional habitat for wider ranging animal species.

Several privately owned inholdings remain within the primary and buffer areas. These would qualify for dedication as primary or buffer area if they are acquired.

MANAGEMENT AND USE: The dedicated nature preserve will be managed as the Three Top Mountain Game Land, for protection of wildlife habitat and for public hunting. Improvement of game habitat will occur in the buffer areas and along existing roads in the primary area.

THIS DEDICATION OF THE **THREE TOP MOUNTAIN GAME LAND NATURE PRESERVE** IS MADE SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1. As used in this Letter, the terms "natural area" and "nature preserve" shall have the same meaning as contained in North Carolina General Statutes 113A-163.2(3) (4) respectively.
2. Pursuant to North Carolina General Statutes 113-164.8, all State-owned lands lying within the above designated area are hereby dedicated as a nature preserve to be known collectively as the **Three Top Mountain Game Land Nature Preserve** (hereinafter "preserve") for the purposes provided in the North Carolina Preserves Act, as amended, and other applicable law, and said State-owned land, shall be held, maintained, and used exclusively for said purposes.
3. **Primary Custodian:** The primary custodian of the preserve will be the North Carolina Wildlife Resources Commission, which will be responsible for managing the preserve in accordance with State Administrative Code 15 NCAC 12H.0300 and .0400.
4. **Primary Classification:** The primary classifications and purposes of the preserve will be conservation, nature education, wildlife management, hunting, fishing, trapping, and other recreational uses authorized by the Primary Custodian. The ecological significance of the Preserve is described in Exhibit A.
5. **Management Areas:** For the purposes of management, the preserve shall be considered to consist of a Primary Area (approximately 1,507 acres) and a Buffer Area (approximately 1,031 acres), as more particularly described in Exhibit A, attached thereto and by this reference made a part hereof. The Primary Area consists essentially of the core natural area encompassing High Elevation Rocky Summit, Montane Cliff, Northern Hardwood Forest, High Elevation Red Oak Forest, Rich Cove Forest, and associated natural communities, along with their known rare species occurrences.

The Primary Area--composed of the core natural area as described above--is deemed by the Secretary of the North Carolina Department of Environment and Natural Resources to qualify as an outstanding natural area under statutory criteria for nature preserve dedication (G.S. 113A-164.6) and further serves all of the public purposes for a dedicated preserve as stated in Administrative Rules 15 NCAC 12H.0301(b).

The Buffer Area, which contributes to the management and protection of the Primary Area, consists of lower elevation and predominantly younger rich cove and other hardwood forests which tend to be more altered in species composition than forests in the Primary Area.

6. **Rules for Management of the Primary Area(s):**

- A. **Character of Visitor Activity:** The principal visitor activities in the preserve shall be hunting, fishing, trapping, walking, research, and observation. These activities shall be regulated by the Custodian to prevent significant disturbance of the preserve. These activities may specifically 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 otherwise provided in these Articles or unless necessary to carry out the purposes of the preserve. Pro-

hibited activities include, but are not limited to: construction; commercial activities and development; commercial silviculture; agriculture and grazing; gathering of native species of plants or plant products; the removal, disturbance, molestation, or defacement of minerals, archaeological and natural resources, except for research purposes as approved by the Custodian; and those activities specifically restricted in these Articles.

There shall be no fires, except as necessary for ecological management of the preserve or in conjunction with supervised educational activities of the Custodian, or further excepted as herein provided or otherwise expressly permitted.

- B. **Consumptive Wildlife Uses:** Hunting, fishing, and trapping shall be permitted on the preserve subject to regulations and management by the North Carolina Wildlife Resources Commission.
- C. **Orientation and Guidance of Visitors:** The Custodian reserves the right to orient and guide visitors for educational programs, hunting and fishing uses, scientific research, and for preserve management. Exhibits, programs, and printed materials may be provided by the Custodian in service areas. The Custodian may restrict access to visitors in those instances or in such areas that restrictions may be determined necessary to safeguard sensitive environmental resources in the preserve.
- D. **Disturbance of Natural Resources:** The cutting or removal of trees, dead or alive, or the disturbance of other natural resources is prohibited except as necessary for removal of hazards to visitors, control of disease or insect infestation that would damage or reduce the significance of the preserve, restoration after severe storm damage, trail clearance and maintenance, or for purposes of maintenance or restoration of natural communities or rare species populations as stipulated in the preserve management plan and that which is consistent with the purposes of these Articles. Salvage timber cuts which may be necessary due to natural catastrophe will be allowed in both Primary and Buffer Areas, but in a manner that will contribute to the recovery of the prevailing natural conditions of the forest and in consultation with the North Carolina Natural Heritage Program.
- E. **Wild Fire Control:** Wild fires may mimic natural processes historically occurring in an ecosystem on a landscape level. When the extent of a wild fire does not threaten human life or structures, it may be allowed to burn with minimal control. If wild fire control is necessary, firebreaks may need to be established. When possible, existing roads and firebreaks will be utilized for wild fire control. When new firebreaks need to be established, environmentally sensitive areas will be avoided when possible. Old firebreaks which affect the natural hydrology of wetlands will be filled and allowed to revegetate. Planning of firebreak restoration should occur in consultation with the North Carolina Natural Heritage Program.
- F. **Water Control:** The purpose of water control shall be to maintain the preserve's natural water regime. Water levels that have been altered by man 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 or may be restored to natural condition. This decision should be made in consultation with the Natural Heritage Program. Millponds are an example of situations in which water levels have been historically managed.

G. Pollution and Dumping: There will be no storage or dumping of ashes, trash, garbage, hazardous substances, toxic waste, other unsightly or offensive material, or fill material, including dredge spoil in, on, or under the preserve. No underground storage tanks may be placed within the Preserve. No surface or ground waters of the Preserve may have pollutants added within the Preserve.

H. Control of Vegetational Succession: Control of vegetational succession may be undertaken if necessary to maintain or restore a particular natural ecosystem type or to preserve endangered, threatened, rare, or other unusual species. Controls will be done in the manner that best imitates the natural forces believed responsible for maintaining the natural ecosystem type, or that minimizes unnatural effects on non-target portions of the ecosystem. Prescribed burning is particularly essential to ecosystems where natural wild fire historically suppressed woody vegetation and promoted herbaceous diversity.

Within the former Hoo tract (see Exhibit A of the original dedication, dated October 26, 1999), any areas which may be determined, through examination of aerial photographs or topographic maps dated 1966 or later, to have been maintained in the past as crop land or pasture land, may be reclaimed and managed as grass/legume openings or other early successional habitat for the benefit of wildlife. These areas should be identified in the management plan and management should be coordinated with the Natural Heritage Program.

I. Control of Populations: Any control of animal or plant populations on the preserve shall be for the purpose of correcting those situations where those populations are significantly affecting natural conditions on the preserve, and in accordance with the Custodian's established regulations for hunting, trapping, or fishing of designated game animals. The Custodian may, in consultation with the North Carolina Natural Heritage Program, 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. Because of potential impacts on native species, no exotic flora or fauna shall be introduced into the preserve.

J. Research and Collecting Permits: Any person wishing to engage in scientific research requiring collecting or otherwise affecting anything within the preserve shall first secure written permission from the Custodian.

K. Roads and Trails: Construction and maintenance of roads, trails, and other access structures within Primary and Buffer Areas of the preserve will be limited to the level necessary to appropriately manage the preserve. New roads shall not be constructed in the Primary Area. When necessary, the Custodian may construct and maintain access limited to staff use for management purposes, such as service paths (single lane vegetated paths) for patrol, right-of-way maintenance, and other management activities, within the Primary Area. Number and width of new paths will be minimized, and sensitive areas avoided when possible. Existing roads that occur within or form a boundary of the Primary Area may be maintained by grading of the roadbed, replacing culverts, or adding stone as needed in order to maintain the integrity of the road for vehicular use. Daylighting of roads within the Primary Area should be minimized, but may be used if necessary to maintain the condition of the road. Access management and construction will be part of

the overall management planning process and will include consultation with the North Carolina Natural Heritage Program.

Portions of existing roads and trails located on the former Hoo and Coppley tracts (see Exhibit A of the original dedication, dated October 26, 1999) may be managed as linear wildlife openings. This may include management of native early successional vegetation or the seeding of grasses or legumes which may be deemed appropriate by Wildlife Resources Commission staff biologists as important for providing food and/or cover for native wildlife species occurring on the property. The width of any seeded areas may not exceed twenty feet. Maintenance may include fertilizing and/or mowing, but shall be limited to once annually.

On the former Hoo tract, the vegetation is patchy in terms of quality, with some accessible roadside stands being composed of young saplings. The Wildlife Resources Commission has expressed an interest in maintaining these small patches of younger vegetation as early successional shrub-scrub habitat, both for grouse and for other bird species which might benefit. Opportunities for such management within the larger preserve are limited by accessibility, topography, and habitat quality. Management of linear openings on this portion of the preserve may include reduction of shade by removal of woody vegetation for a distance of up to forty feet from the center line of the existing road, if the stand meets the following criteria. The stand should be defined based on the diameter of the trees within the stand, with a maximum diameter of 8 inches d.b.h. and an average diameter 6 inches d.b.h. The maximum size of any stand selected for harvest is 2 acres, with no more than 10 such openings being created and subsequently managed within the former Hoo tract.

L. Other Structures and Improvements: Structures or facilities shall not be erected by the Custodian within a preserve, except as may be consistent with the purposes of the preserve as stated in this dedication. Site selection shall be consistent with this dedication.

M. Management Plan: The Wildlife Resources Commission, as Primary Custodian of the preserve, shall be required to prepare and submit for approval to the Secretary of the Department of Environment and Natural Resources a management plan for the preserve. The management plan will be part of the larger management plan developed for the game lands. This plan shall be subject to all the provisions of this dedication and shall additionally be consistent with the management principles set forth in the North Carolina Administrative Code 15 NCAC 12H.0300 and .0400. In any case where contradictions may arise between this instrument of dedication and other management regulations, the terms of this dedication shall take precedence.

7. Rules for Management of the Buffer Area(s): Primary area rules also apply except that additional forestry and wildlife management activities may be planned and carried out as needed. Construction and maintenance of roads, trails, and other access structures within buffer area(s) of the preserve will be limited to the level necessary to appropriately manage the preserve. These activities will be conducted in accordance with policy of the N.C. Wildlife Resources Commission and general management philosophy as outlined in Commission planning documents, in addition to providing for the buffer functions in relation to the primary area(s). WRC rules and guidelines require the protection and enhancement of wildlife populations and habitat so that

hunting, fishing, trapping and other wildlife recreational opportunities are available to citizens of this State. Forest management is primarily conducted to enhance wildlife habitat.

Buffer functions within the dedicated area may include protecting the primary area(s) from indirect detrimental ecological effects, providing additional area for species and ecological processes that require larger areas, and providing important successional stages and disturbance regimes and other habitat diversity for wildlife. Based on these general objectives, the following buffer functions will be addressed in the management plan.

- 1) Landscape level function of community type and structure. (Buffer area management may involve timber harvest and other forms of stand manipulation, but will not involve forest canopy type conversion over more than limited areas, other than to restore stands to types suited for the site. Introduction of exotic species known to be invasive in natural communities will be avoided.)
 - 2) Maintenance of habitat connectivity and continuity among primary areas.
 - 3) Providing for habitat diversity.
 - 4) Management needs of rare animal and plant species populations occurring within the buffer area; and
 - 5) Protection of soil and hydrologic resources and processes within the primary area and extending into the buffer. (Buffers will be retained along streams, and watersheds of primary areas will be protected from hydrologic alteration.)
8. **Amendment and Modification:** The terms and conditions of this dedication may be amended or modified upon agreement of the Wildlife Resources Commission and Secretary of the Department of Environment and Natural Resources, and approved by the Council of State. Any portion of the tract dedicated pursuant to this instrument may be removed from dedication in accordance with the provisions of North Carolina General Statutes 113A-164.8.

The Governor and Council of State have approved the dedication of the State-owned lands hereinabove described as the **Three Top Mountain Game Land Nature Preserve** to be held in trust by the Custodian for the uses and purposes expressed in the Nature Preserves Act at a meeting held in the City of (City Name), North Carolina, on the _____ of _____, (YEAR).

Sincerely,

Bill Daughtridge, Jr.

BD

CONSENTED AND AGREED TO:

Secretary Susan Kluttz
Department of Natural and Cultural Resources

Gordon S. Myers, Executive Director
Wildlife Resources Commission

