

Crowders Mountain State Park General Management Plan



North Carolina Department of Natural and Cultural Resources

Division of Parks and Recreation

Mountain Region

February 2017

I. MISSION AND PURPOSE

MISSION:

Conservation: To protect North Carolina's natural diversity through careful selection and stewardship of state parks system lands;

Recreation: To provide and promote outdoor recreation opportunities in the state parks system and throughout the state; and

Education: To encourage appreciation of North Carolina's natural and cultural heritage through diverse educational opportunities; for all citizens of and visitors to the State of North Carolina.

Our purpose: The State of North Carolina offers unique archaeological, geologic, biologic, scenic and recreational resources. These resources are part of the heritage of the people of this State. The heritage of a people should be preserved and managed by those people for their use and for the use of their visitors and descendants.

PARK PURPOSE:

Crowders Mountain State Park was established in 1973 as a result of a grassroots citizens' effort to protect the area from possible strip mining. The park is a source of pride for local citizens, who remain interested in the park's significant geological, scenic, biological and recreational resources.

Representative examples of significant geologic resources in the park include: an exemplary quartzite hogback; unusually large bladed crystals of kyanite; (an aluminum silicate imbedded in the quartzite); and an excellent example of Draytonville conglomerate, a coarse quartz pebble conglomerate with rounded pebbles that commonly reach an inch or two in diameter.



Visitor Center

The significant scenic resources of the park include the contrast between rolling Piedmont hills and the sheer rock outcrops of the Kings Mountain Range. Numerous opportunities exist to view the panoramic Piedmont plateau from the park's cliffs, a scenic experience not found elsewhere in the rapidly urbanizing region. The two highest peaks protected by the park, Crowders Mountain and the Pinnacle, rise approximately 800 feet above the plateau, offering impressive natural scenery to the park visitors and travelers on Interstate 85.

Among the significant biological values are three exemplary plant communities and several rare plant species. The natural communities include Low Elevation Rocky Summit, which is rare in

the Piedmont, Piedmont Monadnock forest, and unusual Pine-Oak Heath. Rare plants present in the park include Bradley's spleenwort (*Asplenium bradleyi*), ground juniper (*Juniperus communis* var. *depressa*), Appalachian Golden-Banner (*Thermopsis mollis* var. *mollis*), Biltmore Carrion-Flower (*Smilax biltmoreana*), Mountain Witch Alder (*Fothergilla major*), and Smooth Sunflower (*Helianthus laevigatus*). A special species of butterfly, Long Dash (*Polites mystic*), inhabits the park, and vultures have been noted nesting on the cliffs. Crowders Mountain State Park is characterized by a significant amount of biological diversity and a transition of microenvironments from the Piedmont plateau to the two summits within the park. This park has an unusual combination of Piedmont and Montane ecologies which include fire- adapted species and community types.

A large swath of conservation land at Crowders Mountain State Park offers the highly populated region outstanding recreational opportunities and serves as a significant resource for the study of natural history and environmental education. The park offers a contrast to municipal and county facility-oriented recreation. Resource-compatible recreational activities such as hiking, camping, picnicking and fishing provide opportunities to experience nature and learn about the natural resources of the park. Interpretive programs focus on the geological and biological values of the park. Connecting to greenways and Kings Mountain State Park and Kings Mountain National Military Park, the trails lead to additional regional recreational and environmental educational opportunities.

Crowders Mountain State Park offers a contrast to the rapidly developing local area by protecting outstanding geologic, scenic and biologic resources and by providing high-quality outdoor recreational experiences in a setting predominated by the forces of nature. The Division of Parks and Recreation is charged with preserving the resources and providing park experiences that promote pride in and understanding of natural heritage of North Carolina.

II. HISTORY



Summit

Peaking at 800 feet above the surrounding countryside, resisting the forces of erosion throughout vast periods of time, Crowders Mountain and the Pinnacle are remnants of an ancient mountain range that has an elevation of 1,625 feet. Once the core of mighty mountains that towered thousands of feet above sea level, these surviving peaks are part of the Appalachian chain that formed in the region 450 to 500 million years ago. Geologically classified as kyanite-quartzite monadnocks, only the strength of quartzite has allowed these

pinnacles to withstand the wind, water and other forces that eroded less resistant peaks.

This unique area features sheer vertical cliffs ranging from 100 to 150 feet in height. Kings Pinnacle, by contrast, has a round, gentle profile and reaches an elevation of 1,705 feet. These

mountains and the saddle that connects them are oriented in a northeast to southwest direction, their slopes facing east and west. Spectacular views await those who ascend these mighty pinnacles.

Prior to the arrival of European settlers, much of the land in the area was natural prairie that was grazed by herds of buffalo. The peaks marked the boundary between the hunting lands of the Catawba and Cherokee Indians, and a major trading route of the Cherokees crossed Crowders Mountain.

By 1775, 80,000 settlers had migrated to the area from northern colonies. A treaty in 1777 allowed white settlers as far west as the Blue Ridge Mountains and the Catawbas retreated peacefully southward, but conflicts between the settlers and Cherokees persisted until after the Revolutionary War.



Scenic View

During the American Revolution, the "over-mountain men" won a major victory for the colonists at nearby Kings Mountain. This small volunteer army was composed of hunters, farmers and herdsmen from the fertile valleys west of the Alleghanies. Their conquest of British loyalists at Kings Mountain marked the first step of defeat that led to Cornwallis' surrender and the end of a long and bitter war.

The discovery of valuable minerals had considerable impact on the area. In 1799, a 17-pound gold nugget was discovered, and another weighing 28 pounds was discovered in 1803. Soon after, significant quantities of the treasured mineral were uncovered near Crowders Mountain. And, until the discovery of gold in California in 1849, North Carolina was the chief gold-producing state in the nation. Hundreds of mines scarred at least 10 counties during this North Carolina gold rush. Kyanite was also mined, and open-pit mining took place near Crowders Mountain,

producing a devastating effect on the environment.

When exploratory drilling and excavation began in 1970, the threat that Crowders Mountain would be mined led local citizens to seek its preservation. The Gaston County Conservation Society was organized to alert people to the danger of the loss of the landmark to block mining operations and to encourage the state to acquire the mountain for a park. On October 30, 1971, the Gaston College Ecology Club led a march from a nearby shopping mall to the base of Crowders Mountain to protest the potential of strip mining the mountain.

Based upon the 1971 proposal, the state approved Crowders Mountain as a potential state park, and funds were designated for land acquisition the following year. The new state park opened to the public in 1974, but it was not until 1977 that the summit of Crowders Mountain was included within the park boundary. Kings Pinnacle and additional acreage were acquired in 1987.

In 2000, an additional 2,000-acre segment of land was added to Crowders Mountain State Park. Funded by the NC Natural Heritage Trust Fund and the NC Parks and Recreation Trust Fund, this land connects the state park to Kings Mountain National Military Park and Kings Mountain State Park in South Carolina.

As of July 1, 2016, Crowders Mountain State Park manages 5,209 acres.



Shorts Lake

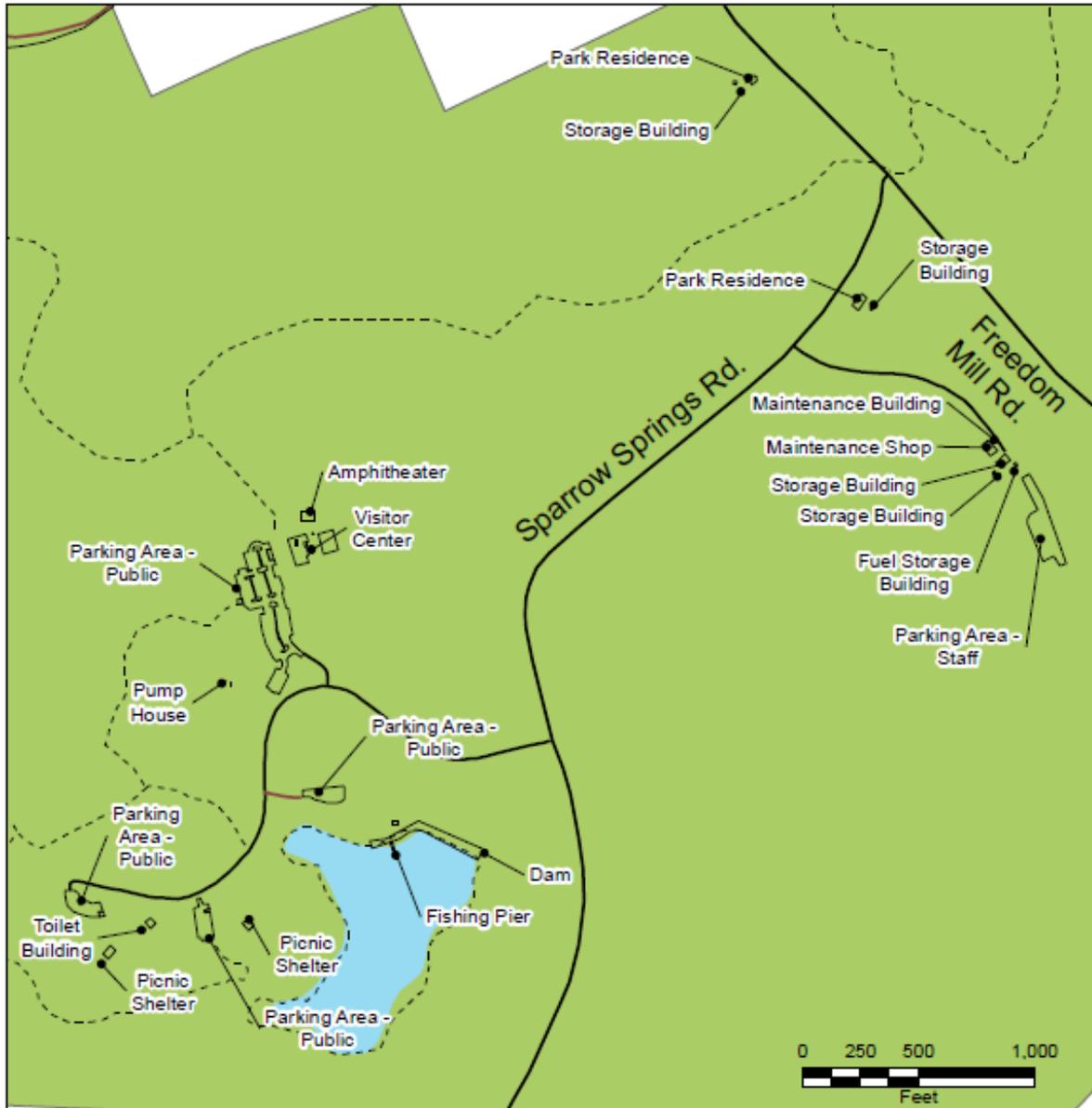
III. THEMES & INVENTORY

Crowders Mountain State Park Theme Table

Theme Type	Theme	Significance at Crowders Mtn.	State Parks System Representation
Archeological/Historic	Cemetery	High	Adequate
Archeological/Historic	Commercial	High	Moderate
Archeological/Historic	Public Works	High	Adequate
Archeological/Historic	Recreation	High	Adequate
Archeological/Historic	Rural-Domestic	High	Adequate
Archeological/Historic	Transportation	High	Moderate
Archeological/Prehistoric	Burial/Cemetery	High	Moderate
Archeological/Prehistoric	Campsite/Activity Area	High	Adequate
Archeological/Prehistoric	Quarry-Other	High	Adequate
Archeological/Prehistoric	Rock Art	High	Moderate
Archeological/Prehistoric	Shelter/Cave	High	Adequate
Archeological/Prehistoric	Trail/Path	High	Adequate
Biological	Low Elevation Cliffs and Rock Outcrops	High	Moderate
Biological	Piedmont and Coastal Plain Mesic Forests	High	Adequate
Biological	Piedmont and Coastal Plain Oak Forests	High	Adequate
Biological	Piedmont and Mountain Glades and Barrens	High	Little
Biological	Piedmont and Mtn Dry Coniferous Forests	Moderate	Moderate
Biological	Upland Seepages and Spray Cliffs	Moderate	Moderate
Geological	Cliffs	High	Adequate
Geological	Faults, Joints, and Related Features	High	Adequate
Geological	Folds and Related Features	High	Adequate
Geological	Inselbergs (Monadnocks)	High	Adequate
Geological	Mass Wasting Features	High	Adequate
Geological	Metamorphic Features	High	Adequate
Geological	Unusual Rock Types	High	Moderate
Scenic	Caves/Cliffs	High	Little
Scenic	Forests	High	Moderate
Scenic	Meadows/Grasslands	High	Little
Scenic	Reservoirs/Lakes	High	Adequate
Scenic	Rock Outcrops	Moderate	High
Scenic	Scenic Vistas	High	Moderate

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

VISITOR CENTER AREA
CROWDERS MOUNTAIN STATE PARK



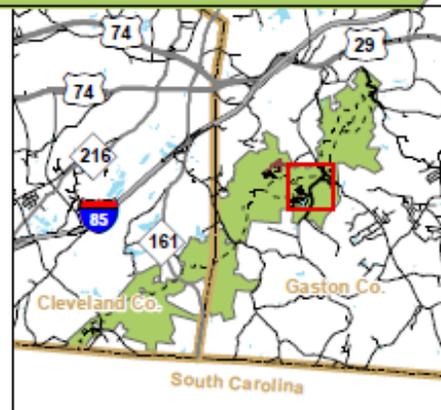
Crowders Mountain
State Park
Facility Inventory

Visitor Center Area

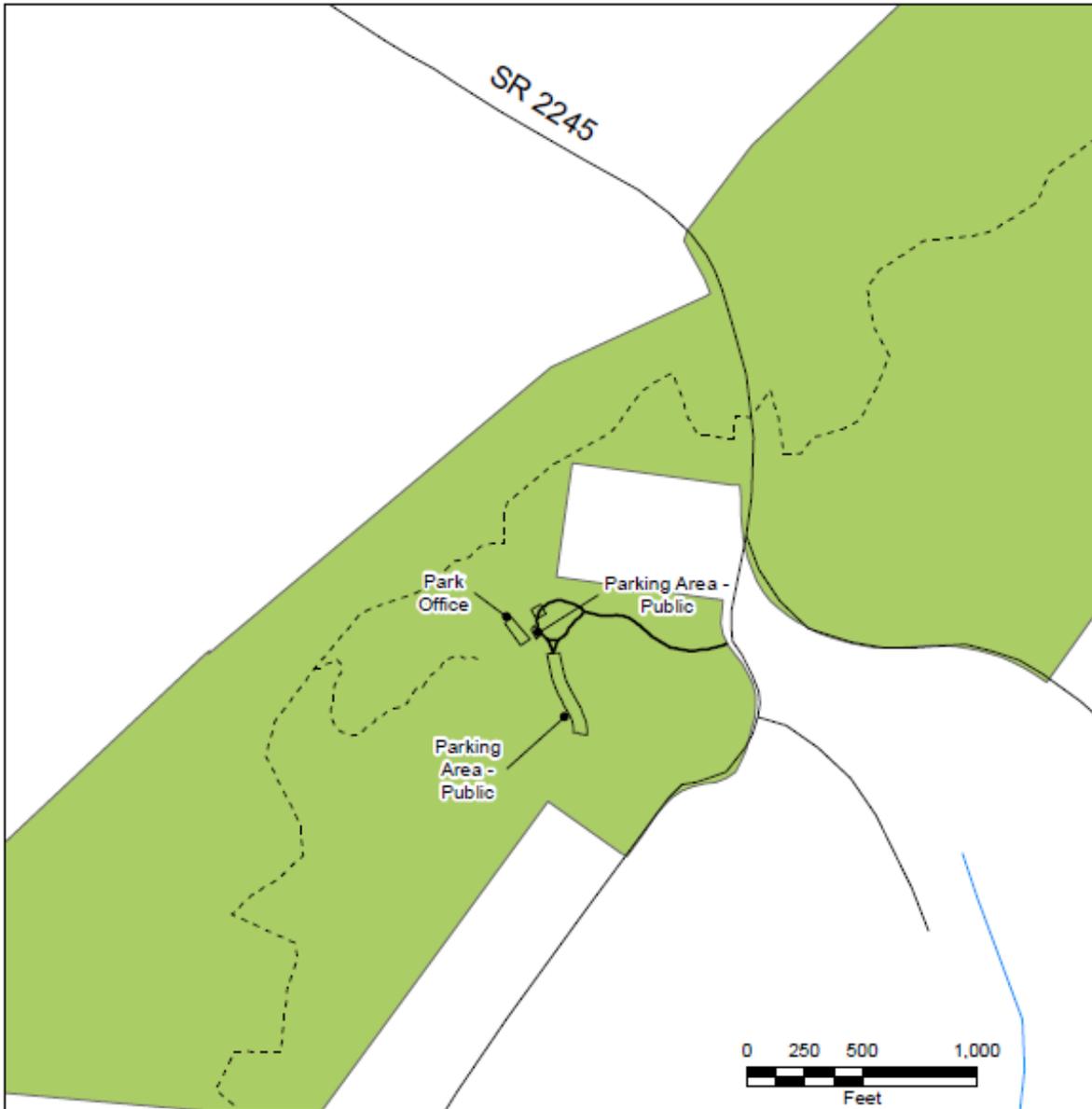
January 2017



- Existing Trail
- Road - Paved
- Road - Unpaved
- Existing Facilities
- State Parks Unit



FACILITY INVENTORY - BOULDERS SOUTH
CROWDERS MOUNTAIN STATE PARK

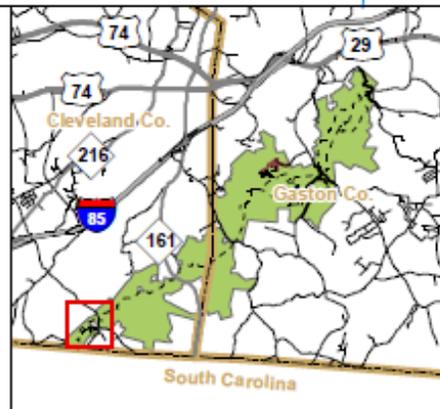


Crowders Mountain
State Park
Facility Inventory

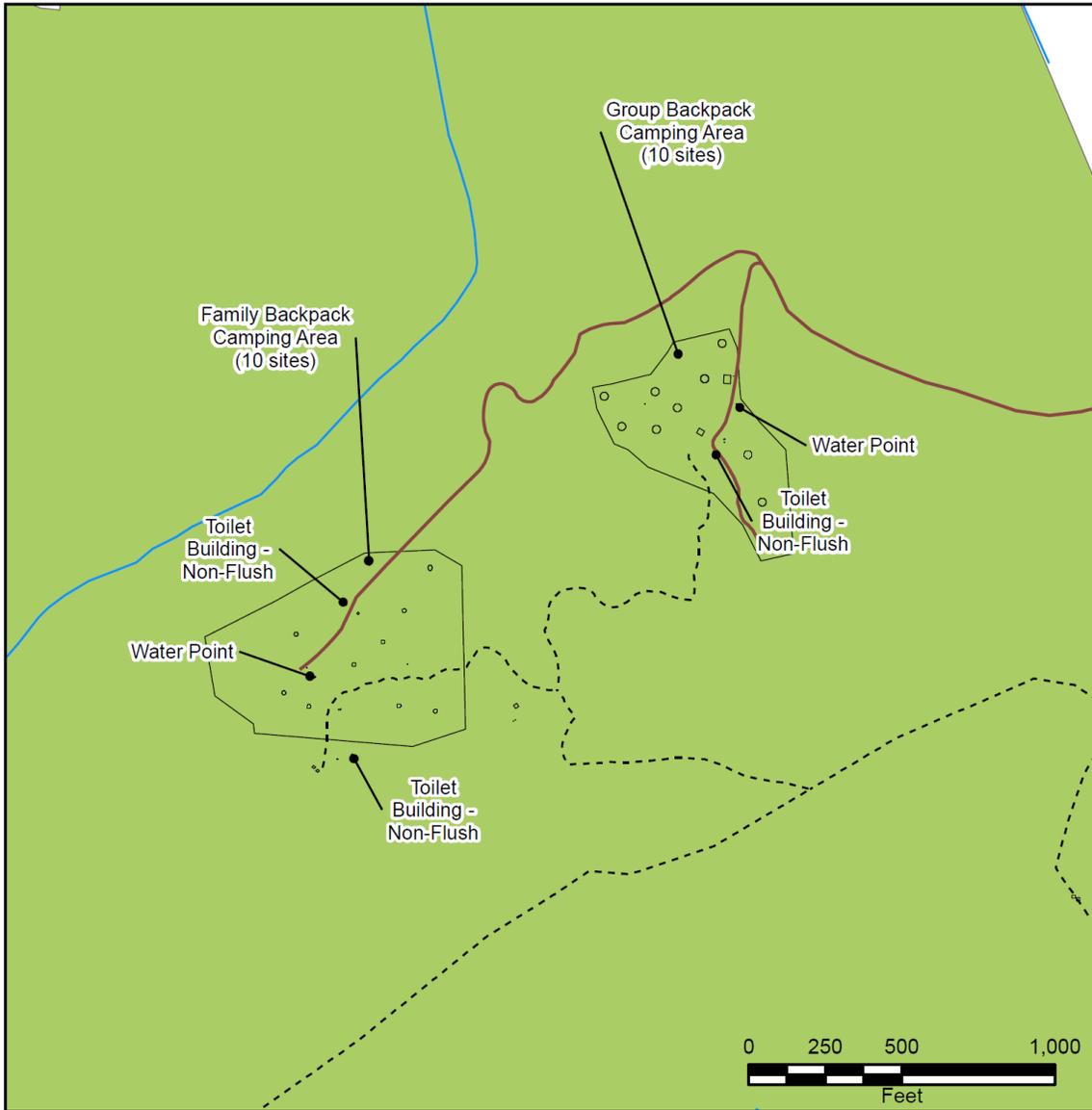
Boulders South
January 2017



- Existing Trail
- Road - Paved
- Road - Unpaved
- Existing Facilities
- State Parks Unit



FACILITY INVENTORY- CAMPGROUND CROWDERS MOUNTAIN STATE PARK



Crowders Mountain State Park Facility Inventory

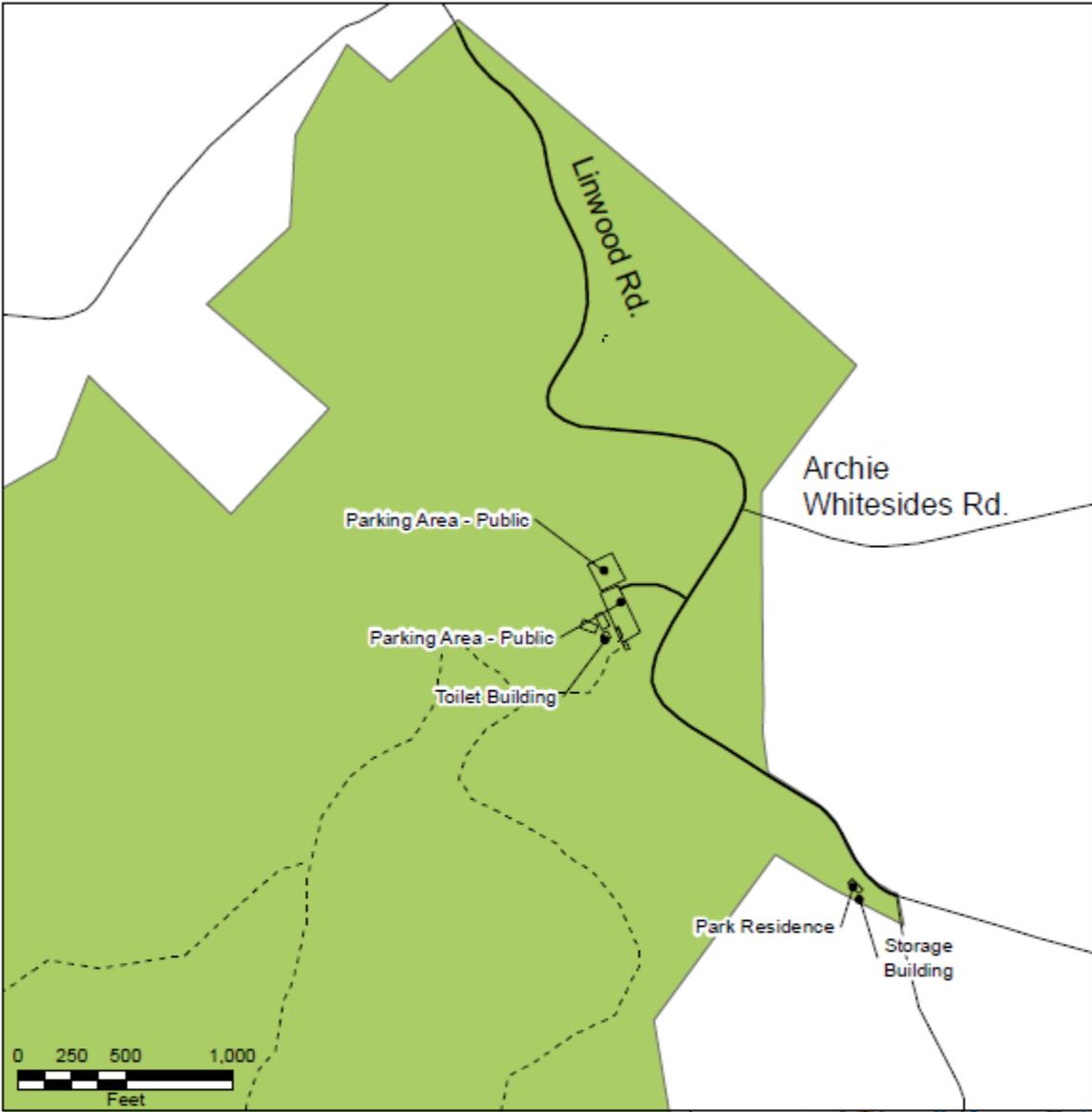
Campground
October 2015



- Existing Trail
- Road - Paved
- Road - Unpaved
- Existing Facilities
- State Parks Unit



FACILITY INVENTORY - LINWOOD ROAD ACCESS
 CROWDERS MOUNTAIN STATE PARK



Crowders Mountain
 State Park
 Facility Inventory

Linwood Road Access
 January 2017



- Existing Trail
- Road - Paved
- Road - Unpaved
- Existing Facilities
- State Parks Unit



TRAIL INVENTORY
CROWDERS MOUNTAIN STATE PARK

TRAIL INVENTORY	Hiking
Backside Trail	0.80
Crowders Trail	2.80
Family Camping Trail	1.00
Fern Trail	0.80
Group Camping Trail	1.10
Lake Trail	0.80
Pinnacle Trail	2.00
Ridgeline Trail	6.20
Rocktop Trail	1.50
Tower Trail	1.80
Turnback Trail	1.20
Crowders Mountain SP Totals (miles)	20.00

Trails

Backside Trail: is a strenuous 0.80 mile (one-way) trail that starts at the Linwood Access Area and ends at the summit of Crowder’s Mountain. Just before reaching the summit, hikers will climb up 336 wooden steps.

Crowders Trail: This moderately strenuous 2.80 mile (one-way) trail begins at the Visitor Center and ends at the backside trail before that trail reaches the summit. The trail includes one state road crossing

Family Camping Trail: This 1.00 mile (one-way) trail is accessed off of the Pinnacle trail and gives campers access to the family backpack camping area.

Fern Trail: This easy 0.80 mile loop trail begins at picnic shelter number 1, connects with a portion of the Turn-back Trail and follows a creek for some portions of the trail.

Group Camping Trail: This 1.10 mile (one-way) trail is accessed off of the Pinnacle trail and gives campers access to the group backpack camping area.

Lake Trail: This easy 0.80 mile loop trail goes around Shorts Lake.

Pinnacle Trail: This strenuous 2.00 mile (one-way) trail begins at the Visitor Center and ends at the summit of King's Pinnacle, the highest point in Gaston County at 1,705 feet.

Ridgeline Trail: a 6.20 mile (one way) trail starting near the summit of Kings Pinnacle, following the ridgeline all the way to the South Carolina State line. The Ridgeline Trail then continues for 2.50 miles into South Carolina through Kings Mountain State Park, and terminates at the 16 mile Kings Mountain National Recreation Trail that goes through Kings Mountain State Park and Kings Mountain National Military Park.

The Ridgeline Trail
Three Parks, Two States, One Trail

You are on the Ridgeline Trail
Distance: 7 miles.
Rating: moderately difficult
Basis:

Welcome to the North Carolina portion of the Ridgeline Trail. This unique hiking opportunity links Crowders Mountain State Park in North Carolina with two parks in South Carolina: Kings Mountain State Park and Kings Mountain National Military Park.

The Ridgeline Trail is also part of two much bigger trail systems. The Kings Mountain Gateway Trail is a gateway that will connect the City of Kings Mountain to the above noted parks as well as to the Oconee Mountain Victory Trail and the Appalachian Trail. The Carolina Thread Trail is a regional trail network of hiking and biking trails that will ultimately reach 15 counties in an effort to preserve natural corridors and connect people to nature.

Crowders Mountain State Park is one of more than 40 state parks and natural areas throughout the state that are managed by the NC Division of Parks and Recreation.

The trail was created by the Friends of State Parks in memory of John E. Graham (1927-2008). Friends of State Parks and other earth lovers purchased the trail beginning in South Carolina and ending in North Carolina. He was concerned by the public education and protection of an outstanding natural resource that state parks encompass. He demonstrated this passion through his years of leadership and as president of the Friends of State Parks, an environmental education organization dedicated to parks. Many important programs were brought to fruition under Graham's leadership, including the establishment of the Friends of State Parks, the creation of the State Parks Mag Guide, the Junior Ranger Program, and cultural programs in state parks.

Partnerships to Preserve Natural Spaces
Crowders Mountain State Park is all about partnerships. As a state park located across two counties and near major urban areas, the park partners with several law enforcement, DPW, and public agencies to help benefit the visitors of the park. In addition, the park relies on non-profit groups such as the Friends of Crowders Mountain State Park, Inc. and the Interstate Friends of State Parks to help promote, support and preserve the park now and into the future.

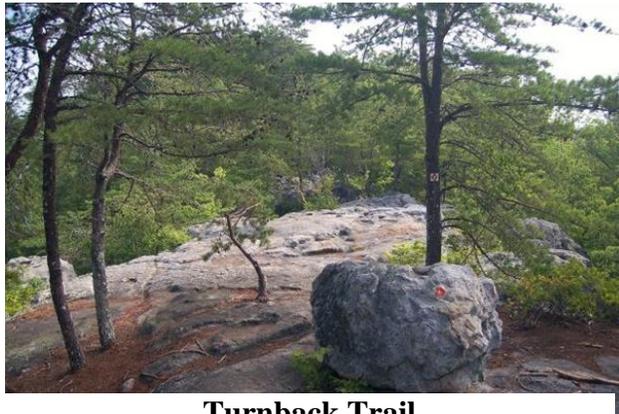
CROWDERS MOUNTAIN STATE PARK

Rocktop Trail: This strenuous 1.50 mile (one-way) trail starts near the road crossing of Sparrow Springs Road and Freedom Mill Road and ends at the summit of Crowders Mountain. There is no parking at either end of the trail and the trail must be accessed by either beginning on the Crowder's Trail (visitor center) or the Tower or Backside Trails (at the summit). This trail crosses several rock ledges and requires good footwear and careful attention to staying on the trail.



Rocktop Trail

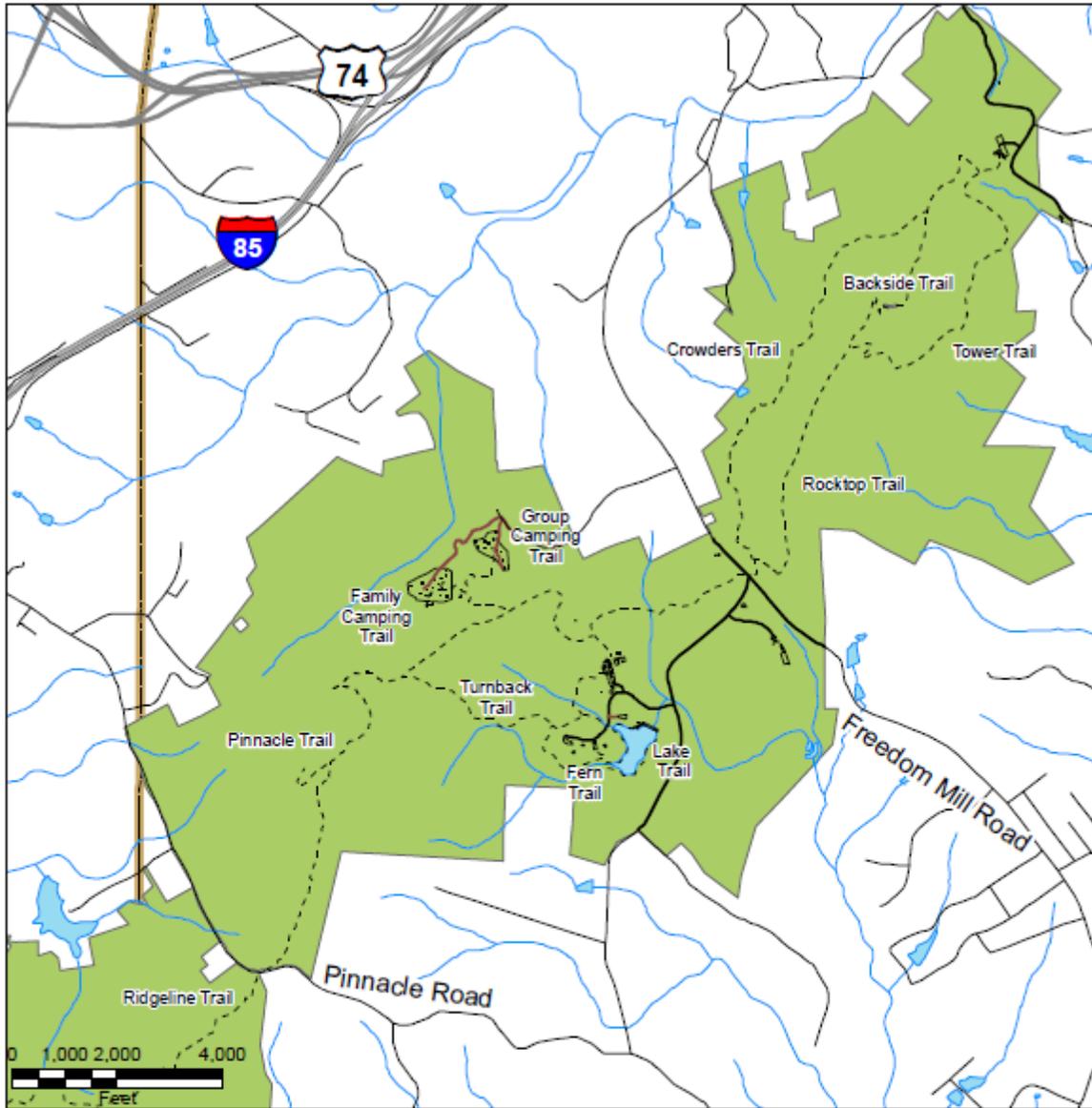
Tower Trail: This strenuous 1.80 mile (one-way) trail begins at the Linwood Access Area and ends at the radio towers on Crowder's Mountain. The trail is an old roadbed that begins with a gentle climb that becomes quite steep towards the end.



Turnback Trail

Turnback Trail: This moderate 1.20 mile (one-way) trail begins at the southeast corner of the visitor center parking lot and ends at the Pinnacle Trail 0.7 - miles from the summit of King's Pinnacle. The trail gives alternate hiking opportunities for both the Pinnacle and Fern trails.

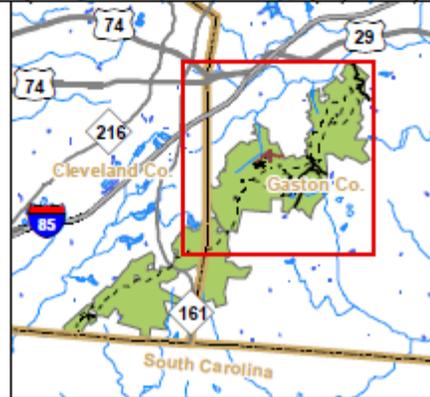
TRAIL INVENTORY - NORTH
 CROWDERS MOUNTAIN STATE PARK



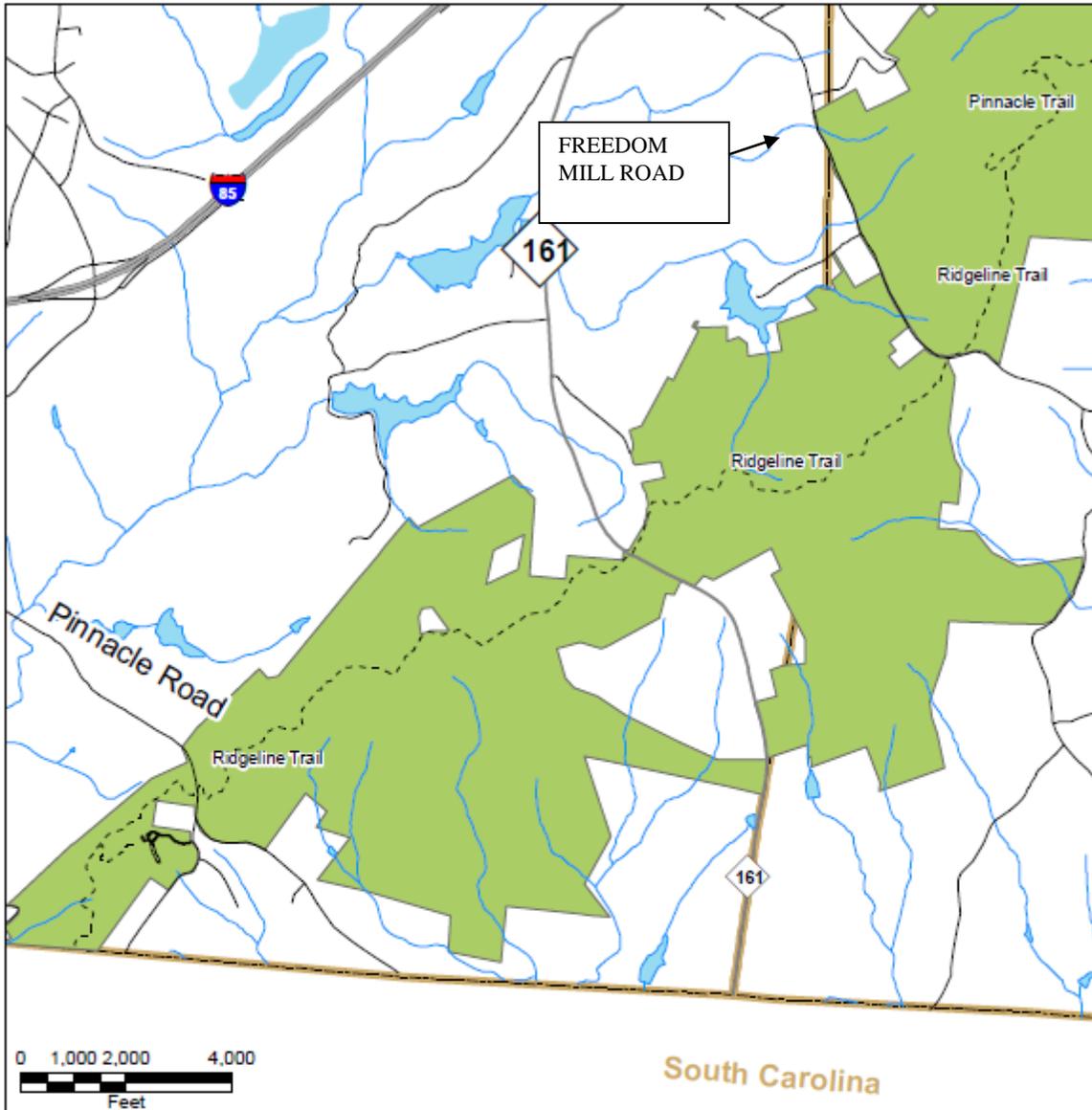
Crowders Mountain
 State Park
 Trail Inventory

Northern Area
 January 2017

- Existing Trail
- Road - Paved
- Road - Unpaved
- Existing Facilities
- State Parks Unit



TRAIL INVENTORY-SOUTH
CROWDERS MOUNTAIN STATE PARK

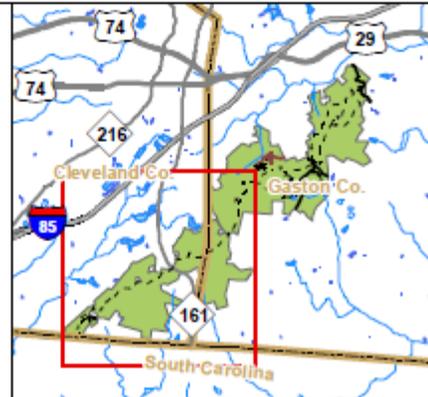


Crowders Mountain
State Park
Trail Inventory

Southern Area
January 2017

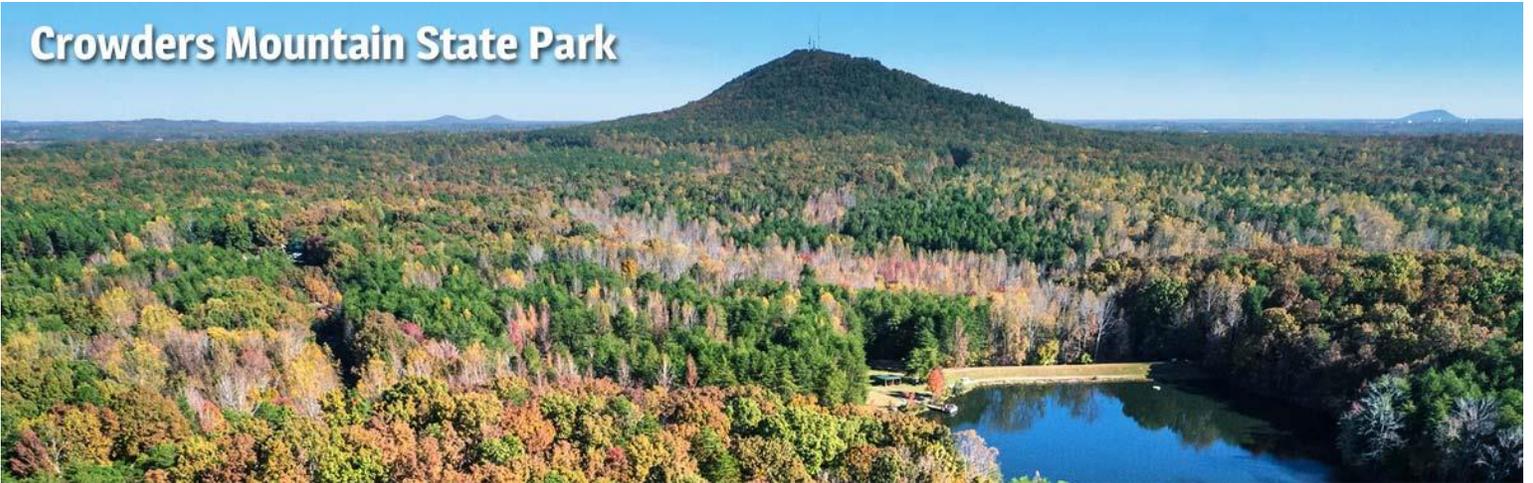


- Existing Trail
- Road - Paved
- Road - Unpaved
- Existing Facilities
- State Parks Unit

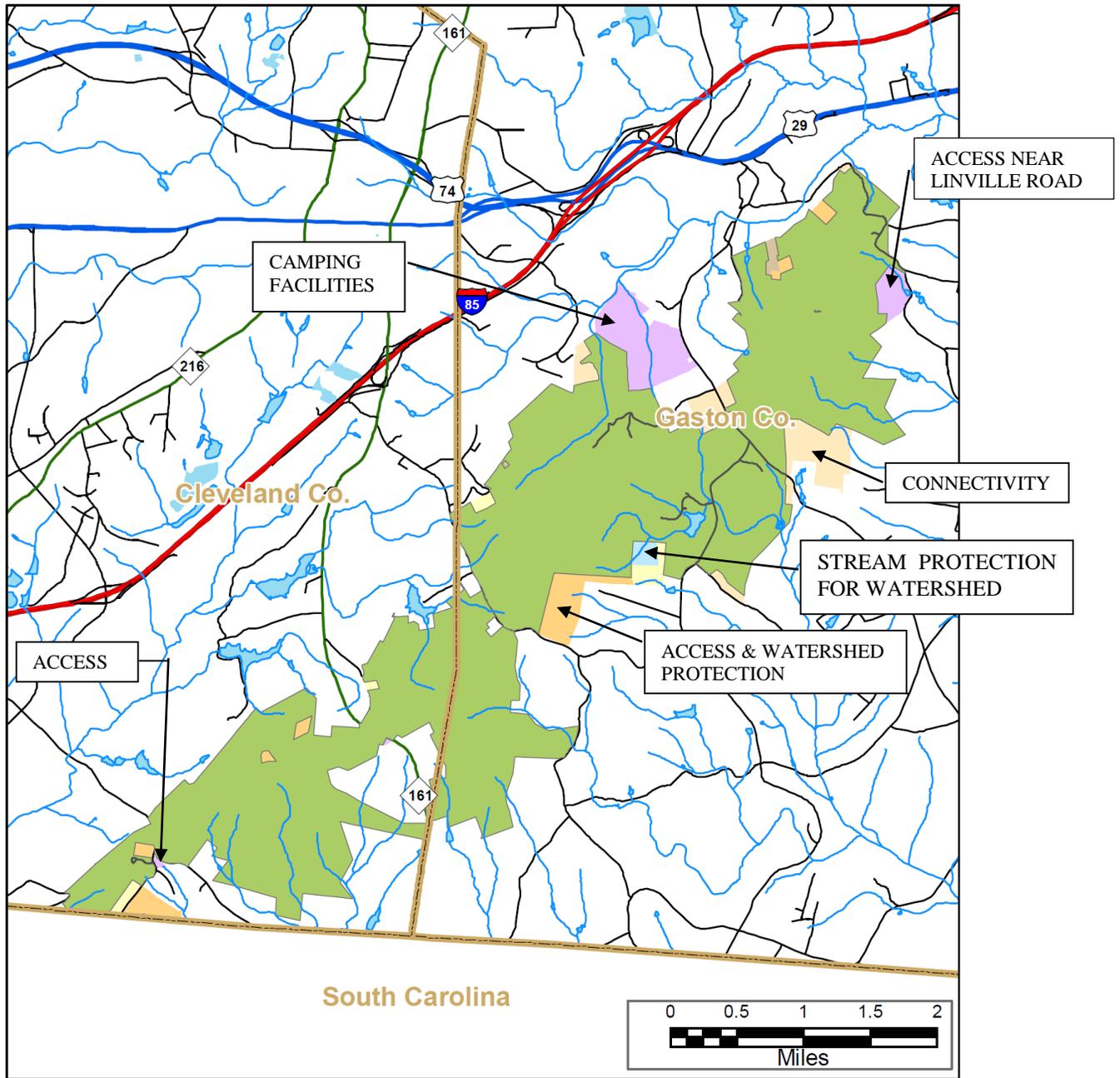


IV. PLANNING

Crowders Mountain State Park



LAND PROTECTION PLAN
CROWDERS MOUNTAIN STATE PARK



Crowders Mountain SP

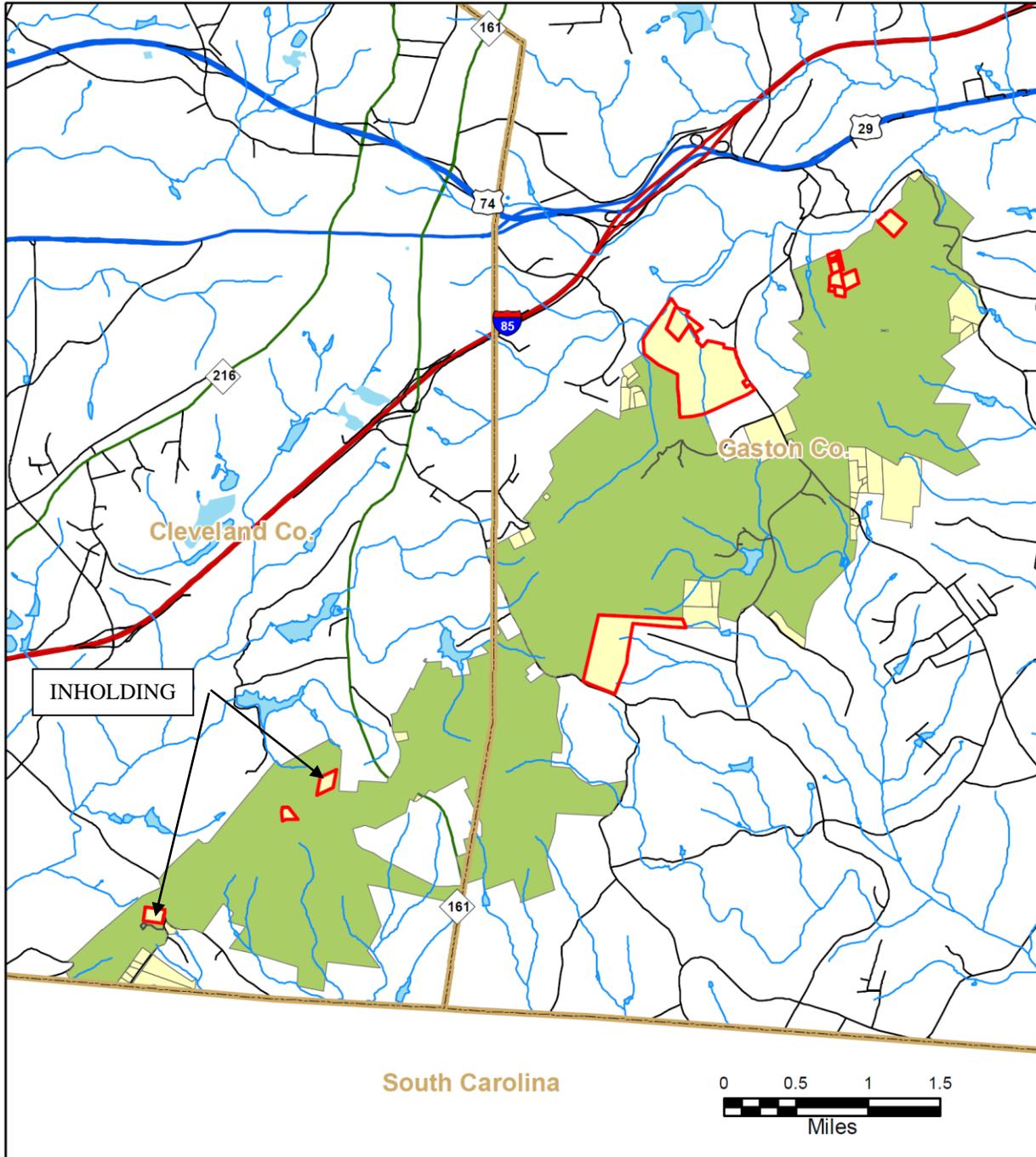


August 2016

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|--|---|
| State Parks Unit | Other Conservation Land |
| Land Protection Plan | Federal |
| Primary resource protection | State |
| Inholding | Other |
| Scenic protection | |
| Water quality protection | |
| Facilities development | |
| Buffer | |



LAND PROTECTION PLAN- CRITICAL ACRES
CROWDERS MOUNTAIN STATE PARK



Crowders Mountain SP



PROJECT EVALUATION PROGRAM LIST
CROWDERS MOUNTAIN STATE PARK

Project	Project Title	Cost
1	Crowders Pinnacle Turn Back Trail	\$1,221,251
2	Crowders Rock Top Trail	\$1,149,337
3	Linwood Road Parking Lot Expansion	\$114,716
4	Lake Improvements	\$1,328,343
5	Dredge Shorts Lake	\$750,000
6	Maintenance Area Improvements	\$2,019,280
7	Renovate 3 Ranger Residences	\$276,902
8	Purchase/Construct Boulders ranger residence	\$250,000
9	Expanded parking and Improved access (Shorts Lake)	\$750,000
10	Campground expansion	\$1,014,125
TOTAL		\$15,623,954

** Estimated project cost does not include contingencies, design fee, nor escalation.

1. Crowders Pinnacle Turn Back Trail

This project will renovate and make improvements to approximately three (3) miles of hiking trail connecting the visitor center to the summit of Kings Pinnacle. Heavy use and 20 percent slopes have caused severe erosion and washout in places. Improvements will include: rock/boulder steps to complete the final 325 feet vertical grade change, which is labor intensive and expensive. Some trail alternate routes may be necessary based on constraints of the park. This trail will provide emergency access routes to get from the top down to the Visitor Center.

2. Crowders Rock Top Trail

This project will make approximately 3 miles of general trail improvements that will repair and maintain existing park trail. The rocky trail has suffered from overuse and lack of maintenance. The 336 steps will need to be replaced with rock due to erosion and extreme usage. The improvements, which may include some re-routing of the trail, will protect the natural resources of the park while providing safe hiking for park visitors.

3. Linwood Road Parking Lot Expansion

The Linwood Road Access also has parking capacity problems. Its 69 marked spaces and 40 gravel spaces are insufficient for busy weekends and holidays. This project will clear and grade one acre and expand the number of parking spaces by minimum of 115 overflow spaces. Gravel will be considered due to storm water and cost issues along with standard asphalt paving.

4. Lake Improvements

Lake improvements scope of work includes: one (1) mile universal trail using granite screenings, a boathouse to store ten (10) canoes, an ADA accessible canoe launch, 15 scattered picnic sites with tables and grills and construction of a universal restroom building with outdoor changing area. Utilities include: water and sewer and electrical service extension from Gaston County. Vehicular circulation pattern will maximize

parking spaces depending on opportunities and constraints.

5. Dredge Shorts Lake

Shorts Lake needs to be dredged. The silt buildup prevents canoe navigation. This is a low hazard dam structure.

6. Maintenance Area Improvements

Improvements to the maintenance area are needed in order to protect the investment of equipment and to provide adequate workspace for the expansion of the park. Some equipment is currently stored outside and needs to be covered to prevent damage. Maintenance improvements include widening the maintenance 1,200-foot-long access road, clearing and grubbing two (2) acres, paving the parking lot, constructing a six-bay vehicle storage building and a standard park warehouse, 6' high chain-link, security fencing, and a standard mechanical shop.

7. Renovate 3 Ranger Residences

This project would renovate (3) ranger residences so that they would meet State building code and division standards of three (3) bedrooms and two (2) bathrooms.

8. Purchase/Construct Boulders Ranger Residence

A fourth residence will be built or purchased in the Boulders Access area due to the remoteness from the other areas of the park. The ranger residence would establish security in an isolated area.

9. Expanded Parking and Improved access (Shorts Lake)

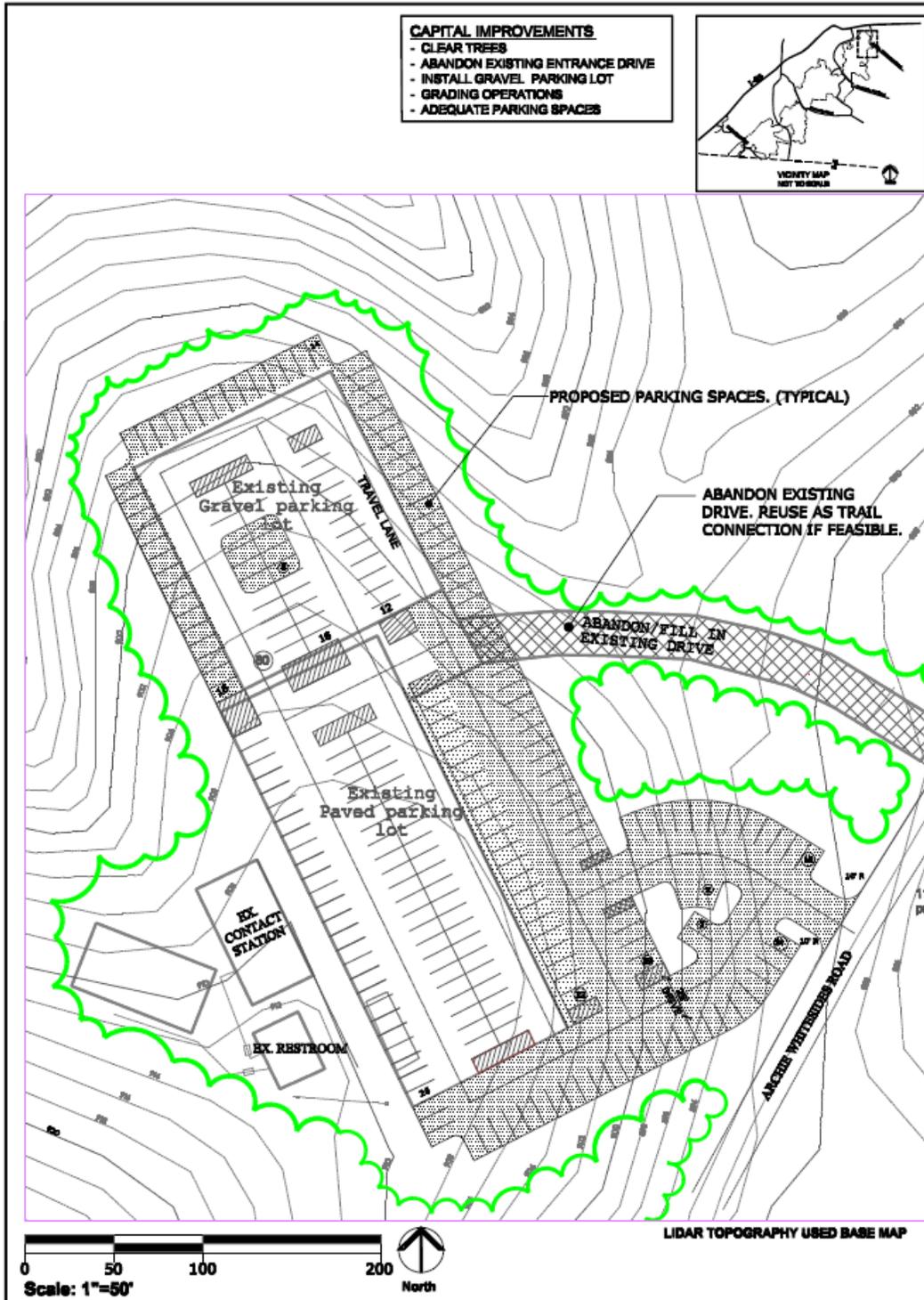
Additional parking spaces will be constructed in areas that will minimize grading and clearing. The accessible toilet building should be centrally located between the parking, picnic areas, the canoe storage launch area and an accessible trail. Typically, the parking lot is full on weekends.

10. Campground Expansion

The proposed campground facilities will provide 24-hour access off Unity Church Road on the east side of the park.

Scope of work includes: Internal 25' wide, paved road (2, 200 lin. Ft.), 13 RV sites (Drive in) with one-way loop road connections, 25 Tent and trailer (walk in), 7 Primitive group camping area, universal shower house, septic field, dump station, trail connections within campground and electrical, sewer and water connections. Staff will determine if the area has adequate facilities prior to design and construction.

PROJECT #3: LINWOOD ROAD PARKING LOT EXPANSION
 CROWDERS MOUNTAIN STATE PARK



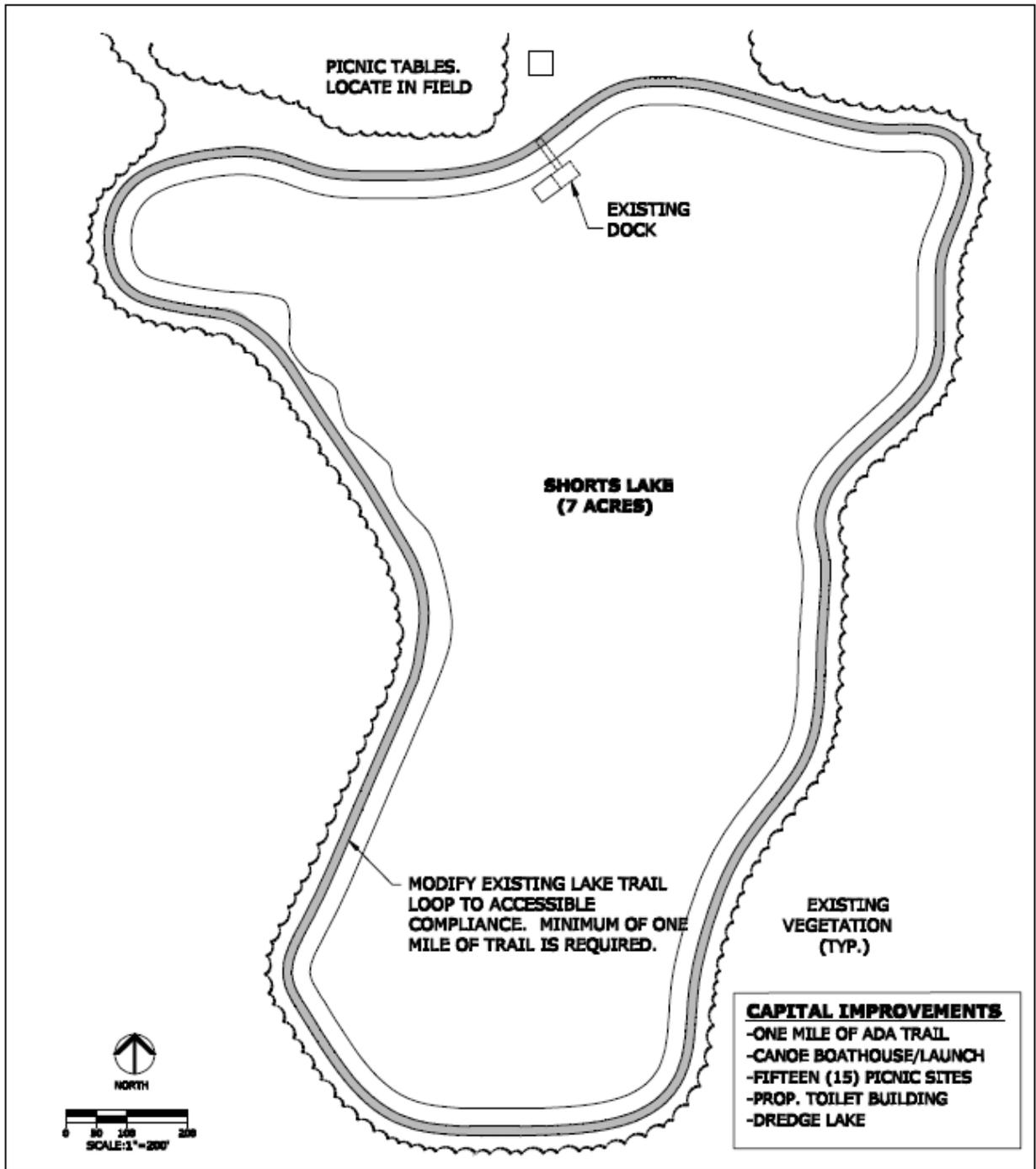
REV. JAN. 17 2017
 Date: JULY 2016
 Drawn By: CR

Crowders State Park

Linwood Road Parking Lot Expansion

 N.C. Division of Parks and Recreation
 Mail Service Center 1615
 Raleigh, N.C. 27699-1615

PROJECT #4: LAKE IMPROVEMENTS
 CROWDERS MOUNTAIN STATE PARK

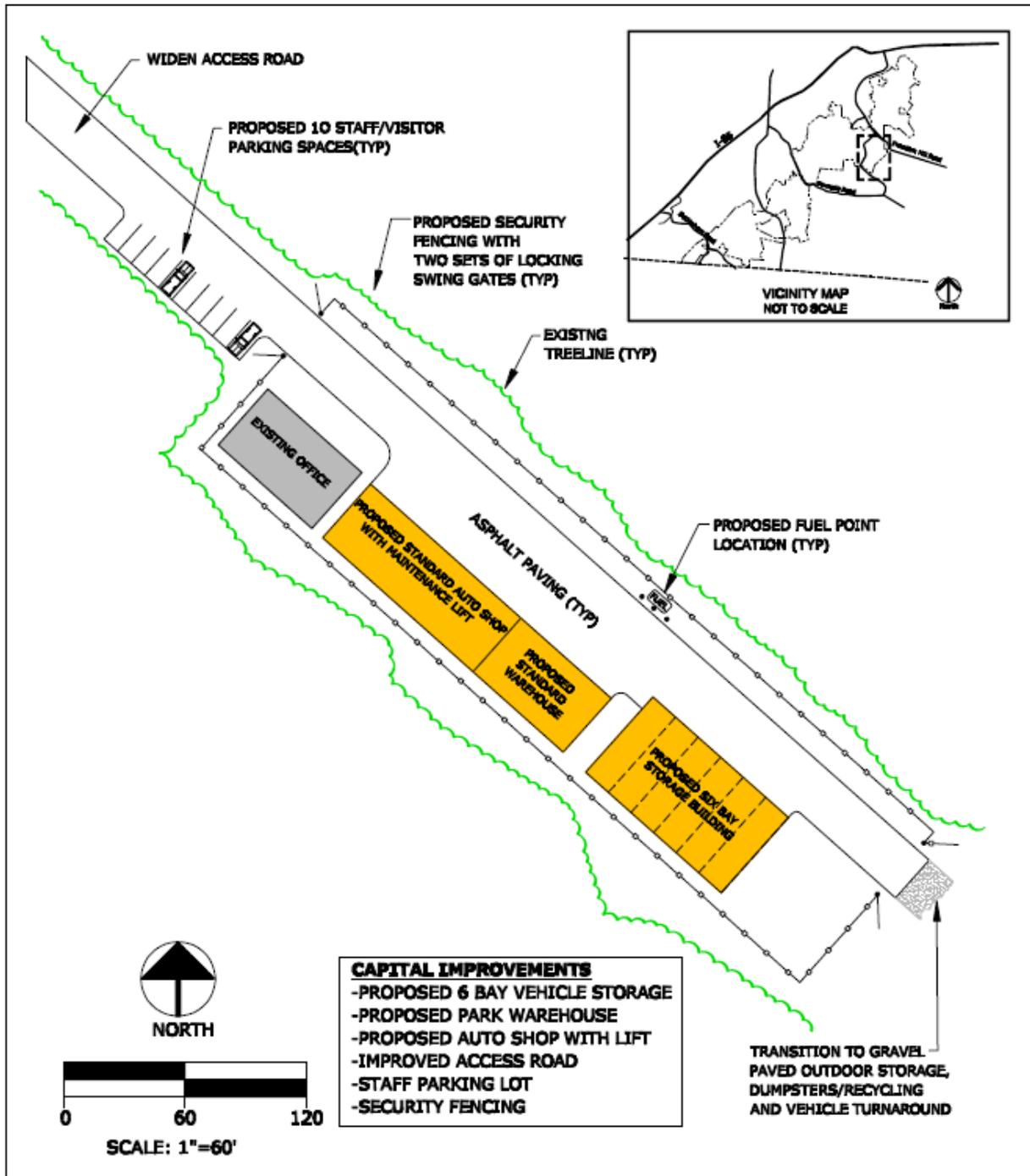


OCT 2015,
 Date: MARCH 2016 -
 Drawn By: CR

Crowders Mountain State Park
Shorts Lake Improvements

N.C. Division of Parks and
 Recreation
 Mail Service Center 1615
 Raleigh, N.C. 27609-1615

PROJECT # 6: MAINTENANCE AREA IMPROVEMENTS
CROWDERS MOUNTAIN STATE PARK



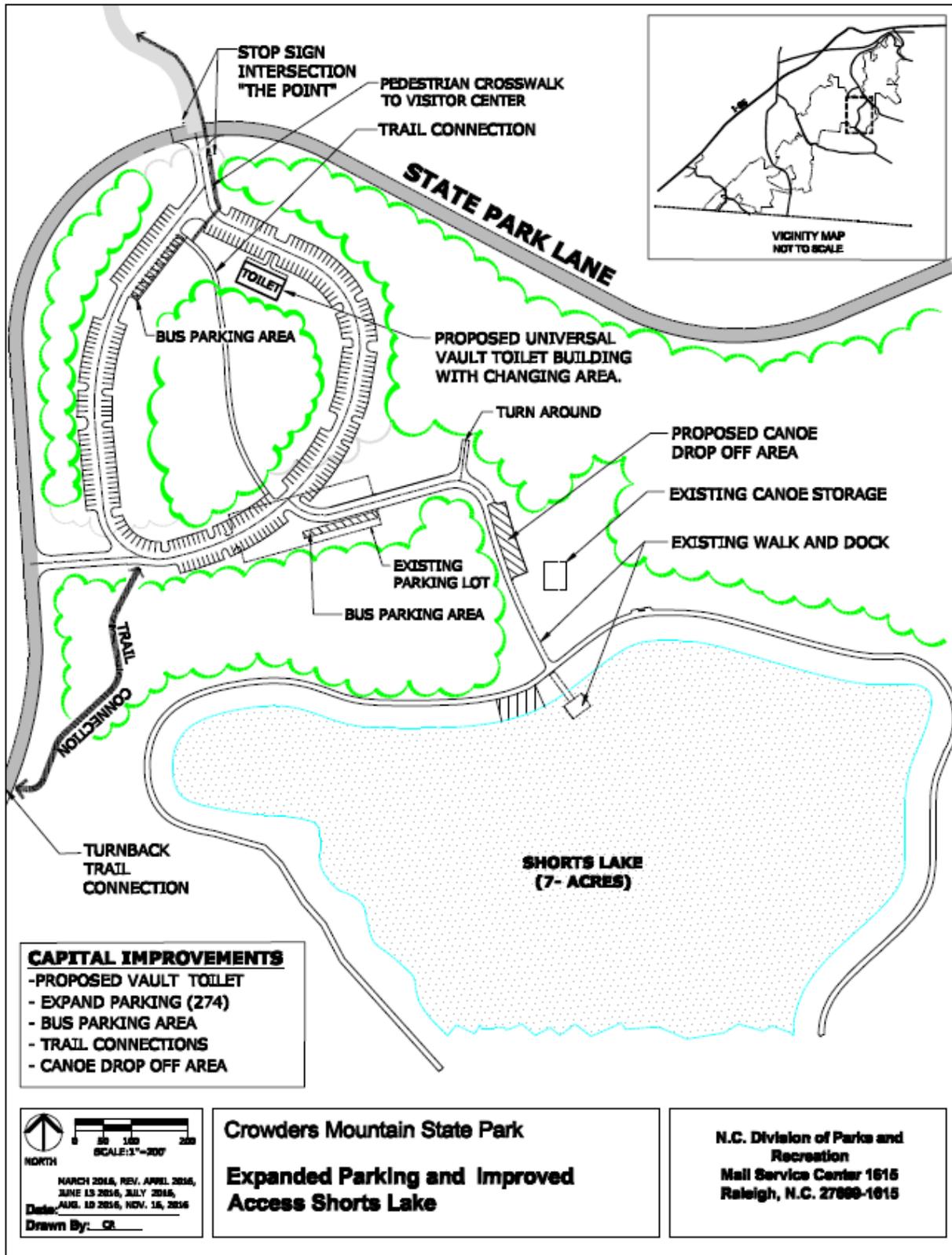

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 Date: SEPT. 2011
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Crowders Mountain State Park

Maintenance Area Improvements

N.C. Division of Parks and Recreation
Mail Service Center 1615
Raleigh, N.C. 27699-1615

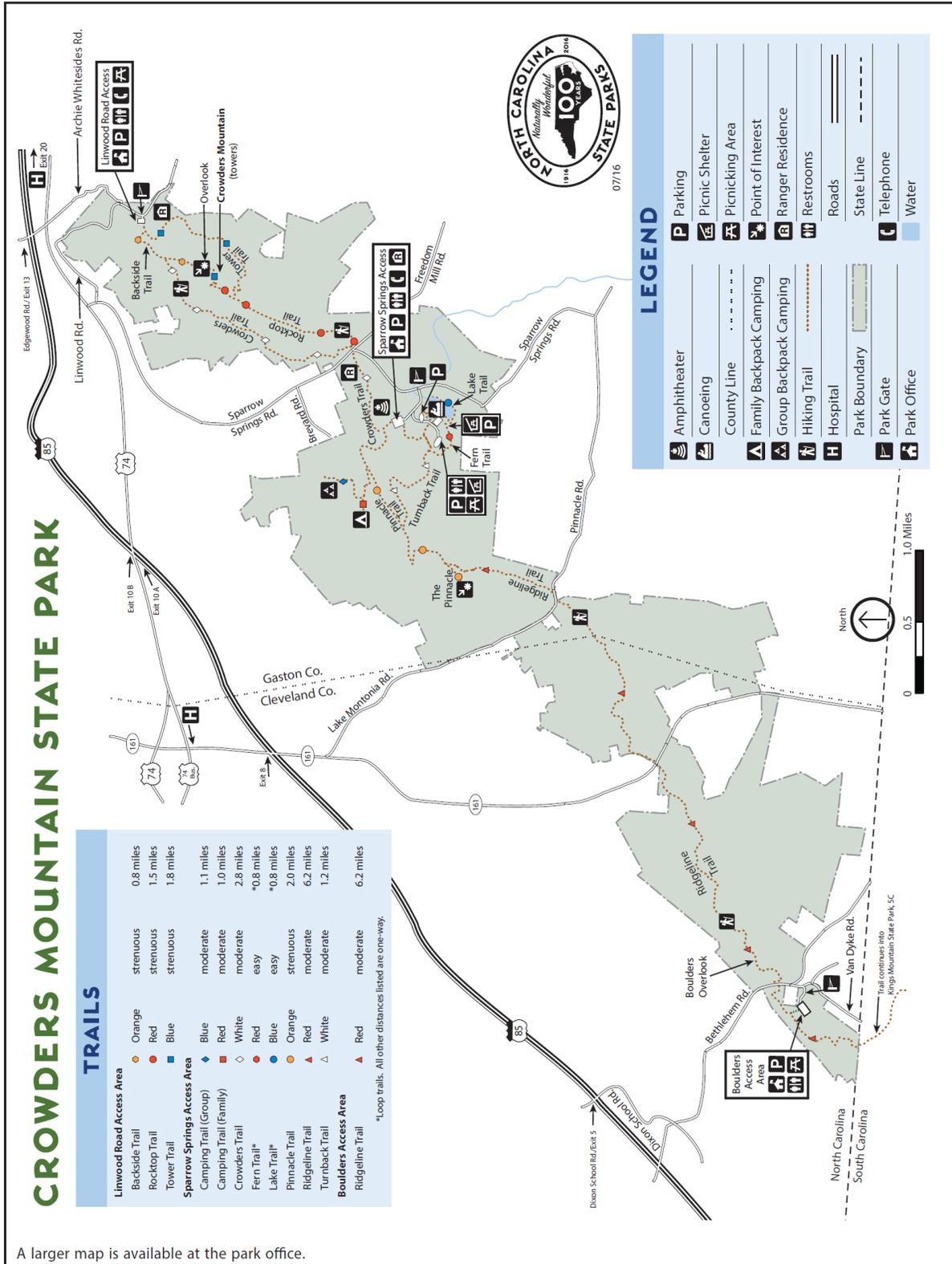
PROJECT #9: EXPANDED PARKING AND IMPROVED ACCESS (SHORTS LAKE).
CROWDERS MOUNTAIN STATE PARK



PROJECT # 10: CAMPGROUND EXPANSION CROWDERS MOUNTAIN STATE PARK



PARK MAP
CROWDERS MOUNTAIN STATE PARK



A larger map is available at the park office.