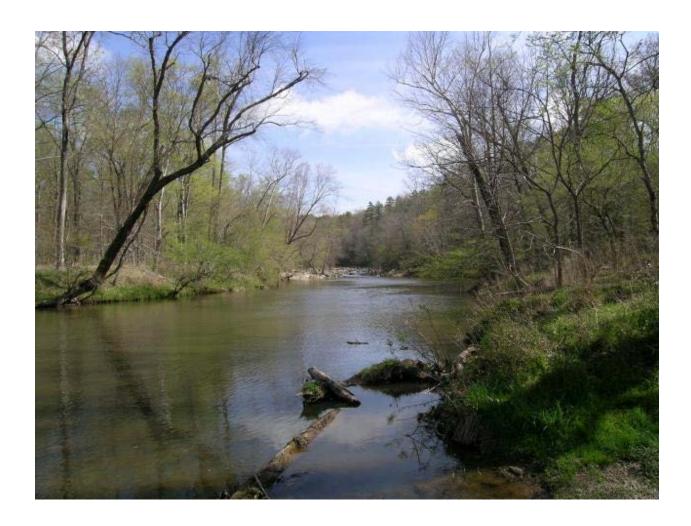
Eno River State Park General Management Plan



North Carolina Department of Natural and Cultural Resources

Division of Parks and Recreation

Piedmont Region

SEPTEMBER 2017



I. MISSION AND PURPOSE

MISSION STATEMENT:

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 archaeologic, geologic, biologic, scenic and recreational resources. These resources are part of the heritage of the people of this State. The heritage of a people should be preserved and managed by those people for their use and for the use of their visitors and descendants.

PARK PURPOSE:

The Park was created in part to preserve the Eno River Valley from a proposed dam and reservoir. The Association for the Preservation of the Eno River Valley and proposed that the park be created.

A majority of the park is now a dedicated nature preserve. The Association has continued its park advocacy and assistance with acquisition of additional park lands.

With the abundance of pools, riffles, and rocky bars, the river itself is the most significant biological feature in the Eno River State Park. Along with the diversity of aquatic habitats, the relatively undisturbed vegetated corridor provides excellent protection for the water quality of the Eno River. Because of these unique features, several rare animals are found, including: the Atlantic pigtoe (*Fusconia masoni*), Neuse River waterdog (*Necturus lewisi*), and Roanoke bass (*Ambloplites cavifrons*).



II. HISTORY

Archaeology tells us that men first walked trails along the Eno River long before recorded history. Indians of the Eno, Shakori, and Occoneechee tribes lived along the river when the first European explorers passed through. Some of the tribes merged in the late 17th century and established a village near present day Durham. Settlers moved in during the mid-1700's to set up farms and gristmills. More than 30 mills were located along the Eno River corridor.

The Eno River area has developed since establishment of the state park. Although much of the character along the river remains unchanged, many residential subdivisions have been developed nearby. The development construction is greater and most visible in the eastern portion of the valley near Durham and in areas within proximity of Interstate 85, US 70, and Town of Hillsborough.

Efforts to establish a state park along the Eno River began in 1965 in response to the City of Durham recommending to build a reservoir in the river valley. A group of concerned citizens led a campaign to save the Eno and formed the Association for the Preservation of the Eno River Valley. The Association proposed establishment of a state park and in May of 1972, the State Board of Conservation and Development approved the idea. Durham subsequently dropped its efforts to construct the reservoir, and in August 1973, the first parcel of land was acquired with assistance from the Association and Nature Conservancy.

In 1994, the N.C. General Assembly passed a bill that allowed the Division of Parks and Recreation to apply to the Natural Heritage Trust Fund and other sources for funds to acquire Occoneechee Mountain (Chapter 324, Section 26.8D). Occoneechee Mountain, located adjacent to Hillsborough, is operated as a satellite park of Eno River State Park. In May 1995, the Division of Parks and Recreation received a grant from the N.C. Natural Heritage Trust Fund to purchase 96 acres, and in January 1998 the State acquired 59 acres, the first land parcel at Occoneechee Mountain.

Since that time, land acquisition at Occoneechee Mountain and Eno River has continued. In addition to using grant funds from the North Carolina Natural Heritage Trust Fund, the Land and Water Conservation Fund, and the Parks and Recreation Trust Fund, the Division of Parks and Recreation also has received funding from the Ecosystem Enhancement Program. All four funding sources were used to acquire the 815-acre Eno Farms Inc. property, also known as the 'Eno Wilderness'.

Eno River Association continues to actively support the park. In recent years, Eno River Festival attendance has grown to 30,000, and profits from the festival continue to be used for land acquisition at the park.



III. THEMES AND INVENTORY

Themes

The significant archeological, geologic, scenic, recreational and biological resources of North Carolina should be represented in the State Park system. These resources, as cited in the State Parks Act, are divided into subcategories called resource "themes". There have been 108 themes identified that should be protected to preserve representative examples of unique resources. For this GMP only themes that are of high significance to this Park (or SRA) are shown.

Eno River State Park Theme Table

Theme Type	Theme	Eno River Signifi cance	State Parks System Representation
Archeological/Historic	Cemetery	High	Adequate
Archeological/Historic	Mills	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	Trail/Path	High	Adequate
Archeological/Prehistoric	Village	High	Moderate
Archeological/Standing Structure	Rural-Domestic	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 Floodplains	High	Moderate
Biological	Piedmont Upland Pools and Depressions	High	Moderate
Biological	Upland Seepages and Spray Cliffs	Moderate	Moderate
Geological	Cliffs	High	Adequate
Geological	Dissected Uplands	High	Adequate
Geological	Fluvial Depositional Features	High	Moderate
Geological	Gorges, Rapids, Waterfalls	High	Adequate
Geological	Intrusions	High	Adequate
Geological	Volcanic Features	High	Adequate
Scenic	Caves/Cliffs	High	Little
Scenic	Forests	High	Moderate
Scenic	Islands	High	Little
Scenic	Meadows/Grass lands	High	Little
Scenic	Rivers	High	Little
Scenic	Rock Outcrops	Moderate High	
Scenic	Scenic Vistas	High	Moderate
Scenic	White Water Streams	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.



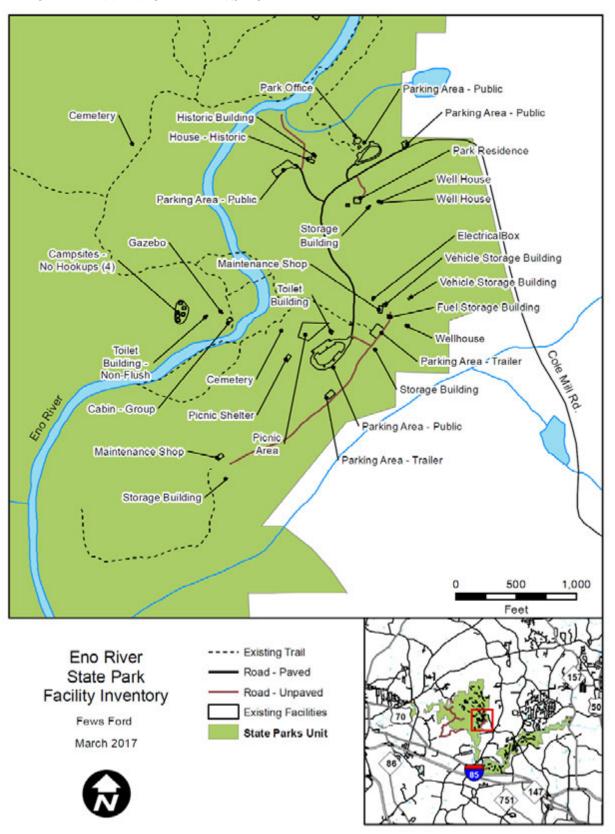
Occoneechee Mountain State Natural Area Theme Table

Theme Type	Theme	Occoneechee Significance	State Parks System Representation
Biological	Low Elevation Cliffs and Rock Outcrops	High	Moderate
Biological	Piedmont and Coastal Plain Oak Forests	High	Adequate
Biological	Piedmont and Mountain Glades and Barrens	High	Little
Scenic	Caves/Cliffs	High	Little
Scenic	Rivers	High	Little
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.

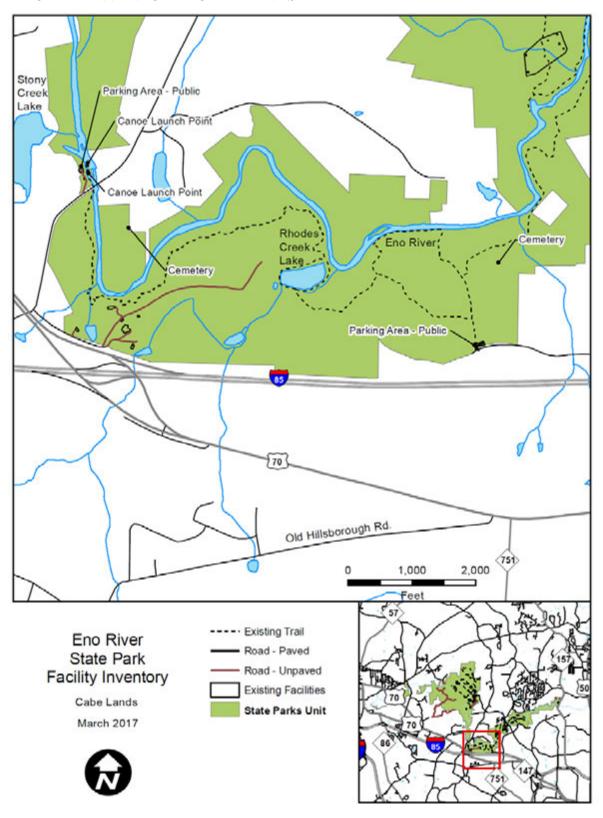


FACILITY INVENTORY - FEWS FORD



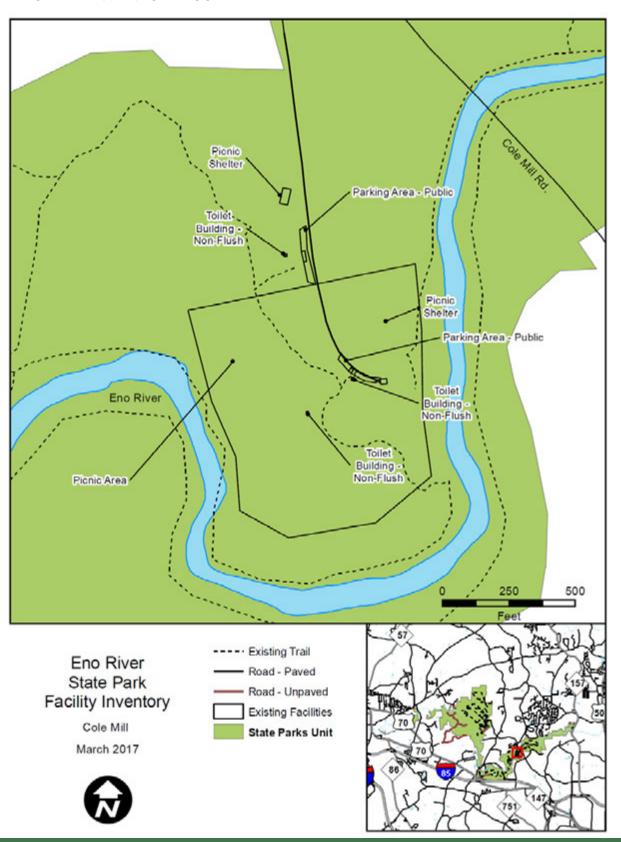


FACILITY INVENTORY - CABE LANDS



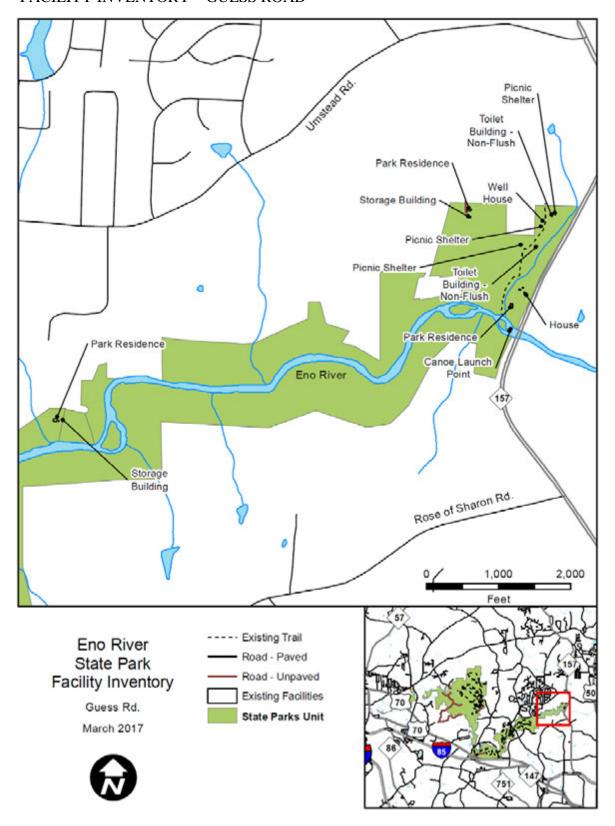


FACILITY INVENTORY- COLE MILL



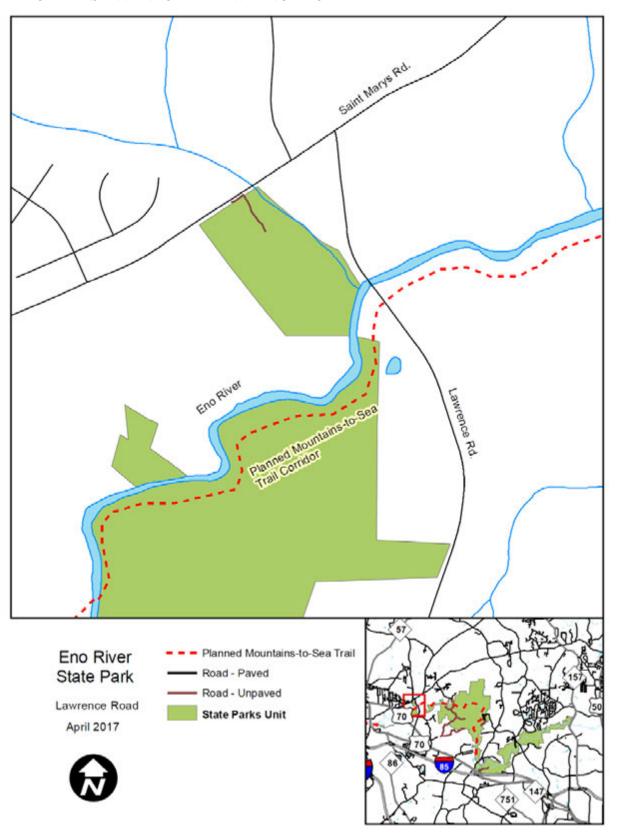


FACILITY INVENTORY - GUESS ROAD





FACILITIES INVENTORY - LAWRENCE ROAD





Trails Inventory	Hiking	Equestrian	Multi-Use	Mtn Bike
Back Pack Camp Trail	0.27			
Bobbit Hole Trail	1.48			
Buckquarter Creek Trail	1.50			
Cabe Lands Trail	1.20			
Cole Mill Trail	1.00			
Cox Mountain Trail	3.75			
Dunnegan Trail	1.80			
Eno Trace Trail	1.00			
Fanny's Ford Trail	1.00			
Guess Road Trail	0.04			
Holden Mill Trail	2.60			
Horse Trail	0.39		0.39	
Laurel Bluffs Trail	6.10			
Mountains-to-Sea Trail	7.80			
Open Air Camp	0.34			
Pea Creek Trail	1.30			
*Piedmont Trail	0.28	0.28		
Pump Station Trail	1.50			
Quarry Trail	0.80			
*Ridge Trail	1.27	1.27		
*Shakori Trail	1.04	1.04		
to canoe launch	0.08			
to Fews Ford	0.06			
to Park Office	0.02			
Eno River SP Totals (miles)	36.62	2.59	0.39	
Neighborhood Connections				
Continental neighborhood connection	0.14			
Dumont neighborhood connection	0.15			
*Knight Trail	0.27	0.27		
November neighborhood connection	0.08			
Sterling neighborhood connection	0.10			
Wilderness neighborhood connection	0.13			
Total Neighborhood connections (miles)	1.22	0.27		

^{*}These trails exit the park and enter private property with permission only



TRAIL INVENTORY

<u>Back Pack Camp Trail:</u> The Back Pack Camp Trail is a 0.27-mile trail within the Fews Ford access area.

<u>Bobbit Hole Trail:</u> The Bobbie Hole Trail is a 1.48-mile section up river, intersecting the western section of Cole Mill Trail twice. A short spur at the southern end of the Bobbit

Hole loop dead ends at the hole. This section links the Durham to the Orange County section.

<u>Buckquarter Creek Trail:</u> Beginning at the parking lot for the Piper-Cox Museum, the Buckquarter Creek Trail is a 1.50-mile loop trail which goes up the Eno River at Fews Ford. A staircase takes visitors to a view of the Eno River rapids down below. Holden Mill loop and the Ridge Trail branch off from the Buckquarter Creek Trail.



Buckquarter Creek

Cabe Lands Trail: The Cabe Lands Trail is 1.20-miles long and passes through the few

remains of the stone foundations of the Cabe Mill. The stretch of the river is area is known as Cabe's Gorge.

<u>Cole Mill Trail</u>: The 1.00-mile round-trip trail begins at the Cole Mill picnic area from either end of the parking lot. Most of this loop trail is an easy hike along the river with a short climb through the upland forest.



Cole Mill Trail

<u>Cox Mountain Trail:</u> The Cox Mountain Trail is a 3.75-mile trail which passes a picnic area and crosses the suspension foot bridge. The trail goes up 270 feet in elevation from the river to the hilltop. When getting closer to Cox Mountain, the trail can get steep. The trail connects to Fanny's Ford Trail.

<u>Dunnagan Trail</u>: This 1.80-mile loop trail is accessed from the Pea Creek Trail by crossing the Pea Creek on a footbridge. This trail is a loop with an easy ³/₄ mile on the river and the remainder paralleling the river on the adjacent ridge.

<u>Eno Trace Trail</u>: This 1 mile trail has several information kiosks pointing out wildlife. There is a short set of steps and one section of the trail follows alongside the river.



Dunnagan Trail

<u>Fanny's Ford Trail</u>: The Fanny's Ford Trail is a 1- mile loop and is mostly made up of flat ground and gentle hills. The trail is around the Cox Mountain trail, and at one point passes through the Few Mill's race.



<u>Guess Road Trail</u>: The Guess Road Trail is a 0.04-mile segment along the western side of Guess Road along the Bowling Creek.

<u>Holden Mill Trail</u>: The Holden Mill Trail is a combination of two loops and is 2.60 miles long located in the Few's Ford access. The larger eastern loop follows the river bank for almost a mile, before climbing a 250-foot rise in elevation. The smaller loop is a hike around the remains of Holden's Mill.



Holden Mill Trail

<u>Horse Trail:</u> The Horse Trail is a 0.39-mile trail that leads to the Eno River in the Few's Ford section.

<u>Knight Trail (Neighborhood connection)</u>: The Knight Trail is a total of 0.52 miles of neighborhood connections located off Pleasant Green Road and Knight Drive within the Few's Ford access. The Knight Trail turns east off Ridge Trail and goes up a steep hill 0.34-mile to the park boundary. 0.27 miles are located on park property.

<u>Laurel Bluffs Trail</u>: The Laurel Bluffs Trail is a 6.10-mile one-way trail which starts at an intersection with the Pump Station Trail and goes east along the Eno River corridor to Guess Road. The trail passes the chimney and





Laurel Bluffs Trail

foundation of an old hunting lodge, the mostly-intact Guess Mill Dam, enters the mill race and comes out at the chimney at the Guess Mill site.

Mountains to Sea Trail: The Mountains-to-Sea State Trail (MST) will eventually comprise 1,077 miles that will span the State of North Carolina, connecting the Great Smoky Mountains with the Outer Banks. Currently there are 7.80 miles of this trail in Eno River State Park, connecting Pleasant Green Access (in the western part of the park) with West Point on the Eno City Park trails (at Guess Road). The trail is located on the south side of the Eno River.

<u>Open Air Camp</u>: The Open Air Camp Trail is a 0.34-mile long hiking trail located off Highway 157 in the eastern trail section.

<u>Pea Creek Trail:</u> The Pea Creek Trail starts at the south end of the Cole Mill parking lot. The 1.30-mile trail follows the river under the Cole Mill Road Bridge, eventually intersecting with a short loop that follows the river and crosses Pea Creek, and returns through the upland forest.

<u>Piedmont Trail:</u> The Piedmont Trail is 0.28-mile trail within a utility right-of-way for equestrians and hikers which links to the Knight Trail. This trail exits the park near Montford Road and Knight Drive.



<u>Pump Station Trail:</u> The Pump Station Trail is a 1.50 mile trail best known as the "spring wildflower" trail. It begins at the Nancy Rhodes Creek Bridge on Rivermont Road. The foundations of the first water pumping station in Durham is a destination located near the river at the northeast section of the loop trail.

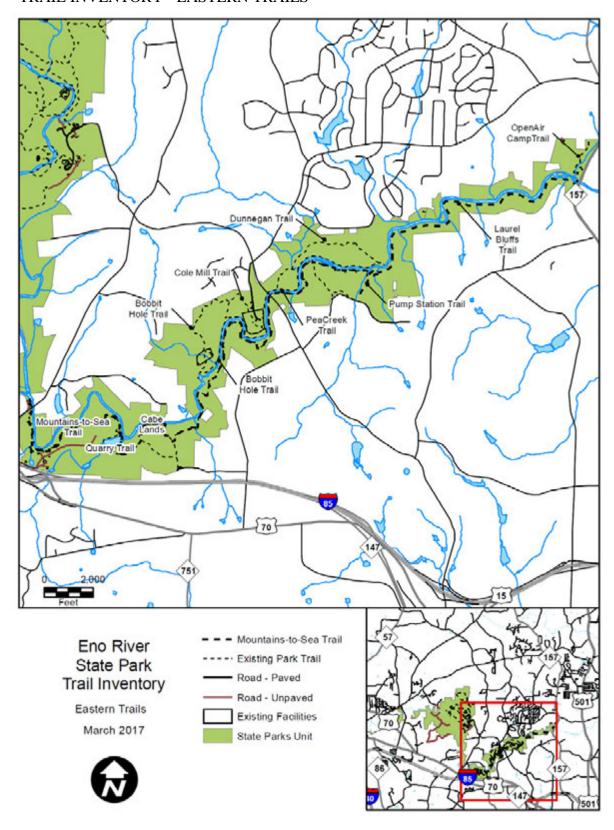
Quarry Trail: The Eno Quarry Trail is a 0.42-mile loop trail in the Cabelands access around a 4-acre pond. In the 1960s, stone was removed from the Eno Quarry Trail to provide rock to construct Interstate 85. There are openings on the bank suitable for fishing.

<u>Ridge Trail (neighborhood connection):</u> The Ridge Trail is a 1.27-mile-long trail for equestrians and hikers which starts at an intersection with the Buckquarter Creek Trail and provides access to the Shakori and Knight trails. This trail can be combined with Shakori Trail to make a loop. The Ridge Trail is part of the old Ridge Road to Roxboro. Hikers may see what remains of three 19th century homes along this route.

<u>Shakori Trail (neighborhood connection):</u> The Shakori Trail, located in the Few's Ford section, is a 1.04-mile long equestrian and hiking trail which intersects with the Ridge Trail at the south and northwest ends. Users can view the remains of a 19th-century house and an old saw mill site. There is a 200-foot elevation change.

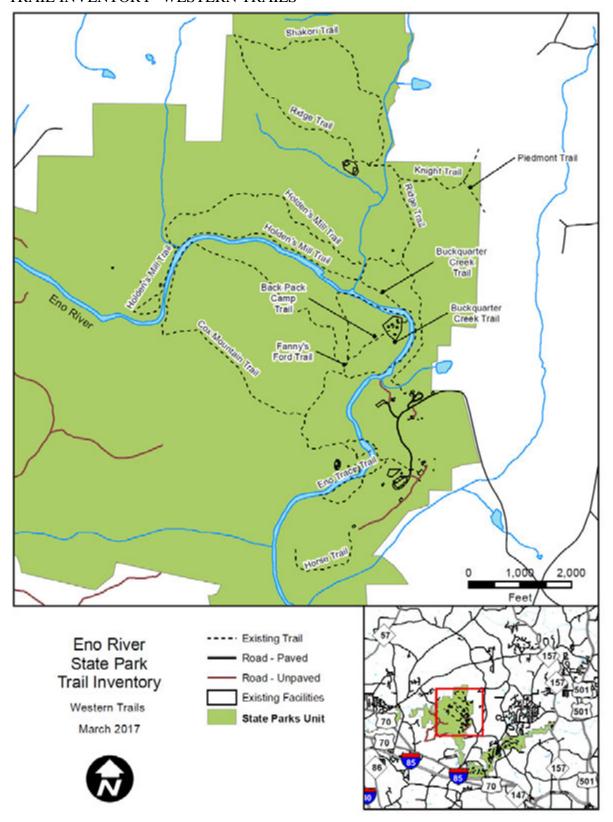


TRAIL INVENTORY - EASTERN TRAILS





TRAIL INVENTORY -WESTERN TRAILS



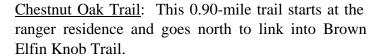


TRAIL INVENTORY - OCCONEECHEE MOUNTAIN STATE NATURAL AREA

Trails Inventory	Hiking	Equestrian	Mtn Bike	Multi- use
Brown Elfin Knob				
Trail	0.10			
Chestnut Oak Trail	0.90			
Occoneechee Mtn.				
Loop Trail	2.20			
Overlook Trail	0.15			
Total Trails (in miles)	3.35			

TRAILS:

Brown Elfin Knob Trail: 0.10 miles, side trips on the Brown Elfin Knob and Overlook trails and the summit road take you through mature oak forest and to high scenic views.



Occoneechee Mountain Loop Trail: This 2.20-mile loop around Occoneechee Mountain is an intensive hike over steep terrain and along the Eno River corridor.

Overlook Trail: Trips on the Brown Elfin Knob and Overlook trails, and the summit road provide a 0.10 mile walk thru mature oak forest and provide elevated scenic views.



Chestnut Oak Trail



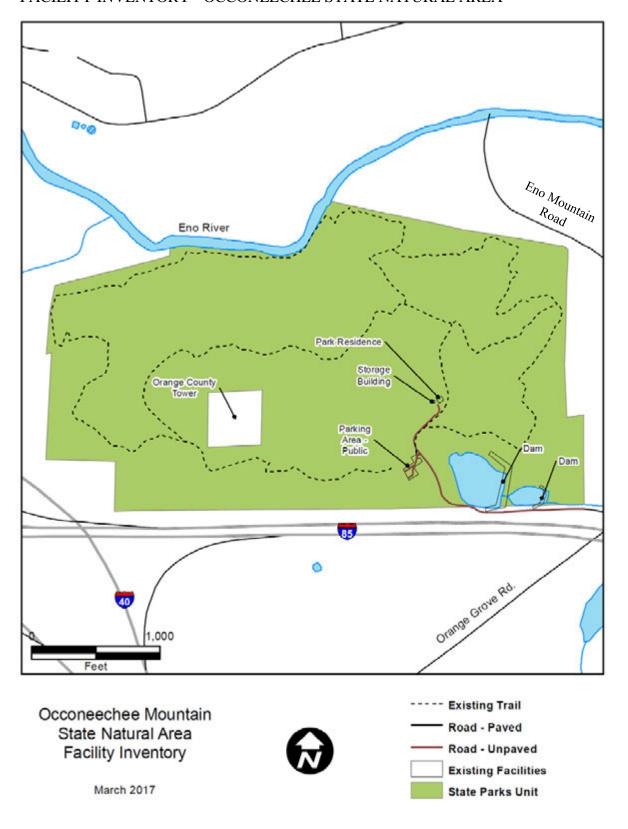
Views from Overlook at Summit



Occoneechee Mountain Loop Trail

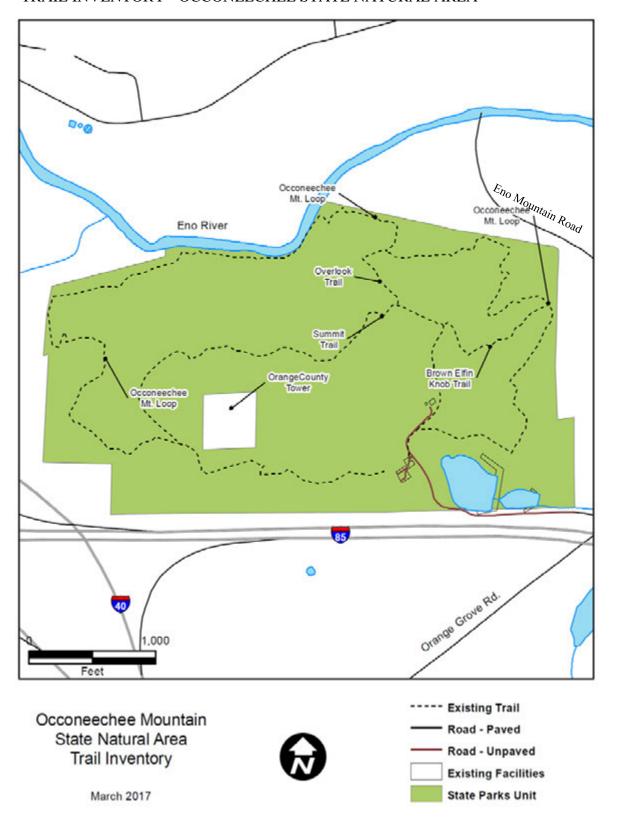


FACILITY INVENTORY - OCCONEECHEE STATE NATURAL AREA



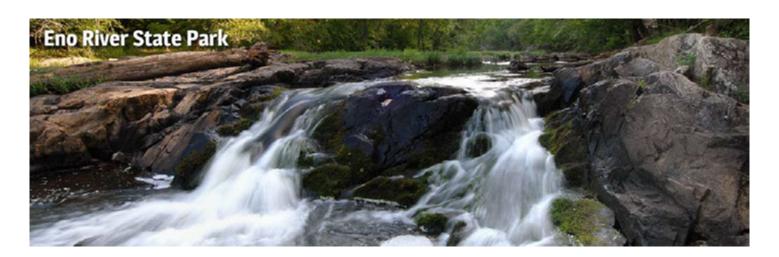


TRAIL INVENTORY - OCCONEECHEE STATE NATURAL AREA





IV. PLANNING









Eno River Piper Cox House Restrooms



LAND PROTECTION FOR STATE PARKS

To achieve the highest level of connectivity between park properties already owned by the State of North Carolina, further acquisition of land is expected to take place. Additional land will ensure the maximum protection of natural resources, scenic preservation, outdoor recreation and public access. Each park has several tracts of land that have been distinguished as a future need or a critical need for the park. The following map shows Land Acquisition needs for Eno River State Park.



Lawrence Road Access Area



Occoneechee access property needed near



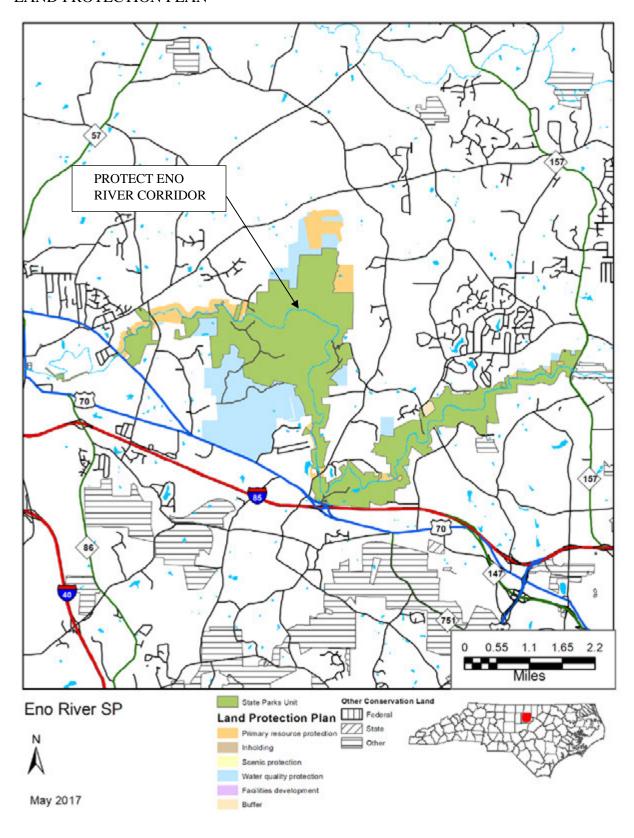
Existing assisted living development adjacent to Occoneechee SNA



Access to Eno River access and natural resources protection at Occoneechee SNA

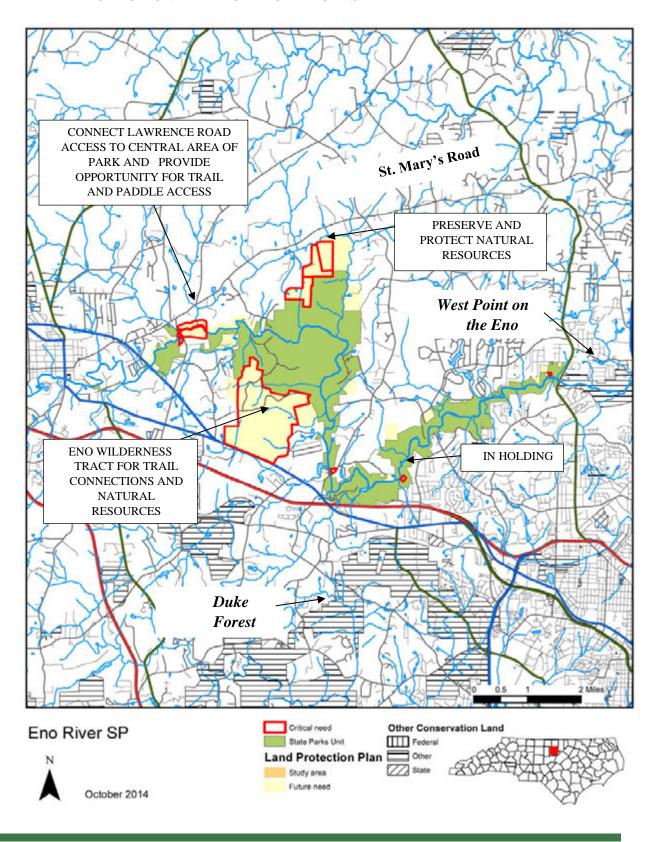


LAND PROTECTION PLAN



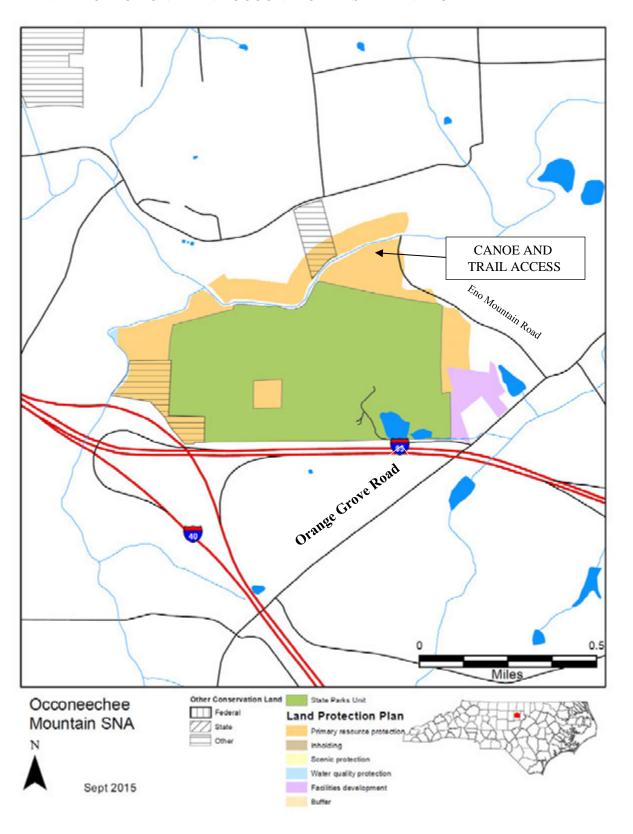


LAND PROTECTION PLAN- CRITICAL ACRES



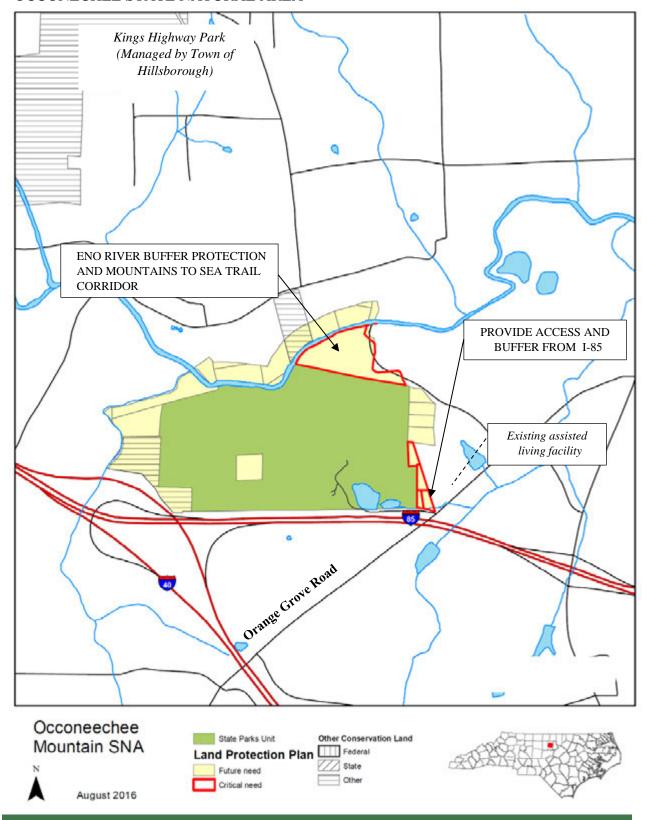


LAND PROTECTION PLAN - OCCONEECHEE STATE NATURAL AREA





LAND PROTECTION PLAN-CRITICAL ACRES OCCONECHEE STATE NATURAL AREA





PROJECT LIST

Project	Project Title	Conceptual
		Cost
1	Maintenance Area Improvements	\$785,000
2	Contact Station/Office renovation/Maintenance	\$3,255,000
3	Occoneechee Mountain Improvements	\$688,000
4	Access Development at Pleasant Green Substation	\$806,000
5	Access Development at Pumpstation Trailhead	\$364,000
6	Access Development at Cabelands	\$243,000
7	L-Access Development at Lawrence Road	\$501,000
8	Piper Cox House Exhibits	\$460,000
TOTAL		\$7,102,000

^{**} Planning estimated project cost does not include contingencies, design fee, nor escalation.

1. Maintenance Area Improvements

The current maintenance facilities do not adequately meet park needs. The existing facilities consist primarily of an old cinder block structure and numerous storage sheds around the park. This scattering of facilities and equipment reduces efficiency and effectiveness for park staff. Having equipment stored around the park also poses a concern for the safety of visitors as well as the security of the equipment. Mini warehouse modular buildings are needed for storage.

Fews Ford Maintenance Compound

This project proposes to improve and expand the existing maintenance area at Few's Ford. Proposed buildings include: warehouse building, chain link security fence. a flammable storage shed, fueling station, waste station, equipment storage, a maintenance and 20 designated parking spaces for campers. Infrastructure improvements include: waterline extensions, a septic system, paving access road and maintenance yard. To accommodate the proposed improvements, the existing vehicle shed and maintenance building will be removed.



2. Contact Station/Office renovation/Maintenance The Contact Station will remain at the Cole Mill Road entrance to be centrally located within the heart of the park. This location is adjacent to the Eno River, provides easy access to the trail system, near the historic Piper Cox House, and other day -use amenities including swinging bridge, a picnic shelter, picnic area, and toilet building. The proposed 3,500 square feet contact center with a large deck overlooking Eno River, multi-purpose room, superintendent's office, office

staff room, classroom, restrooms, lobby, would provide space for both visitors and staff as the park continues to rapidly grow. This larger facility will allow for improved visitor

interactions by providing additional parking, gathering spaces for educational sessions, and expanded environmental exhibits. There will also be increased opportunities for concessions, and expanded office space for staff.

Scope of work includes: building, infrastructure, including water, sewer, electrical, paving and trail connections will be coordinated.







Swinging Bridge

View from top of hill

3. Occoneechee Mountain Improvements

This project proposes to re-route the access road into Occoneechee Mountain State Natural Area because of the probable widening of Highway 85 by the N.C. Department of Transportation (NCDOT). The widening project is likely to negatively impact, if not eliminate, the existing access road. Re-routing the access road may require the purchase of additional land or the acquisition of the appropriate access easements.

The scope of work includes: re-routing the access road to the north side of the pond, improving the picnic area, regrading and constructing adequate parking spaces and a water distribution system. A fishing pier with an adequate parking spaces and path would be designed and constructed on the north side of the western most pond.



Occoneechee Mountain Access needed



Location of Proposed Fishing Pier



Existing Vault Toilet



Existing Entrance Road Alignment



Existing Parking Lot

4. Access Development at Pleasant Green Substation

This project proposes to update the existing access to facility standards found in other areas of the park. The existing gravel parking area is confined by the river and the electrical substation managed by Duke Energy. Since space is limited in this parking area, maximizing the parking with minimal disturbance is needed. By paving and marking the existing 28 space parking lot, the maximum parking can be provided. This should also alleviate overcrowding issues at this site and minimize impacts to resources.

Scope of work includes: a vault toilet, formalized parking, a pedestrian bridge for the Mountains to Sea Trail connection, and an interpretive loop trail leading from the parking area up to Stone Creek Falls



Location of Bridge



Mountains to Sea Trail Corridor



Proposed Pedestrian Bridge



5. Access Development at Cabelands

The existing parking area for the access off Howe Street is a small gravel lot. There are no markings or other indicators to designate parking spaces. The lack of identifiable parking spaces causes confusion and traffic congestion during high occupancy times. Asphalt paving and designated parking spaces in the existing parking area (with 45 spaces) should reduce maintenance costs and help staff maintain the carrying capacity for this access, minimizing impacts to the resource. A vault toilet and a main entrance sign will be installed for site amenities.

6. Access Development at Pump Station Trail Head

Currently, the Pump Station Trail head does not have a parking area and visitors must parallel park along Rivermont Road to access the existing trails. To cross Nancy Rhodes Creek, visitors traverse the shoulder of the existing vehicular bridge. Since there is no designated parking area for this access, this project would create an off road, secured parking area and trail connections to provide a safe experience for park visitors.

The scope of work includes: The design and construction of a paved parking area with a gate, information kiosk, universal vault toilet and a bike rack. A pedestrian bridge would need to be constructed over Nancy Rhodes Creek to provide visitors with a safer alternative than using the vehicle bridge. Portions of the existing Pump Station Trail should be realigned to provide access from the proposed parking area to the proposed bridge. Proposed directional signs may installed to help guide visitors through the trail realignments.

7. L-Access Development at Lawrence Road

Before this project can be undertaken, land needs to be acquired between the river and Lawrence Road. This project would create paddle trail access 4 miles upriver of Fews Ford, which is an ideal length for paddlers. This section of river is a destination area with scenic views, a dozen or more rapids and provides opportunities for interpretation of river ecology and cultural history. This project would also provide access and adequate parking for the Mountains-to-Sea Trail corridor along the south side of the river.



Lawrence Road- Eno River Access

The scope of work includes: a gated access road, gravel trailhead parking area with approximately 75 spaces, a paddle launch area, a vault toilet outside of floodplain, information kiosk, signs, exhibits and Mountains to Sea trail corridor.



8. Piper Cox House Exhibits

This project plans to enhance exhibits about the cultural history of the Piper-Cox House for interpretation purposes.

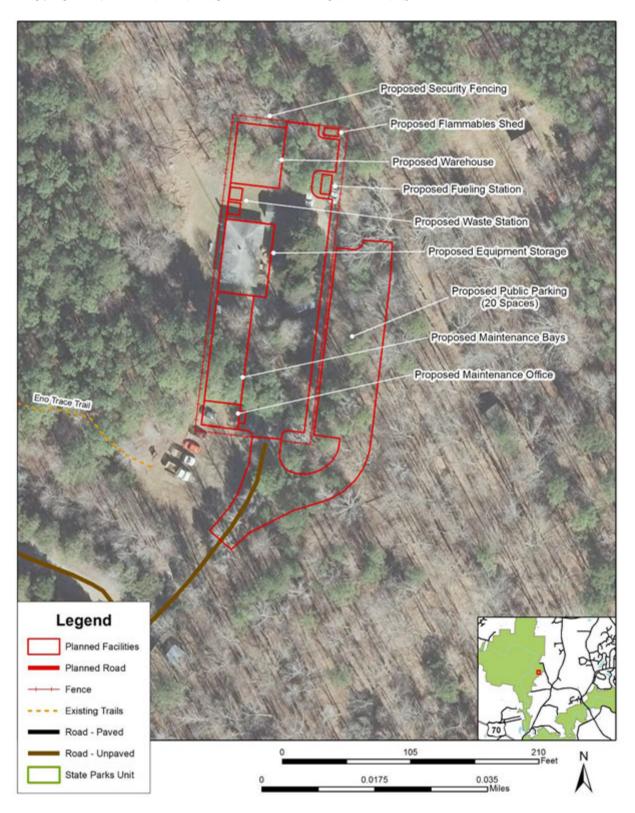
Scope of work includes: trail connection, the design, fabrication and installation of interior and exterior signs/exhibits, split rail fencing (as needed), and maintenance repairs to the structure (as needed). A spur trail will connect the Piper Cox house to the existing office.



Historical Piper Cox House



PROJECT #1: MAINTENANCE AREA IMPROVEMENTS





PROJECT #1: EXISTING CONDITIONS -MAINTENANCE AREA



Existing Parking Lot area



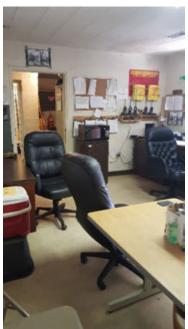
Existing Fueling Station



Existing Parking Lot area



Interior flammable storage area



Interior office area



Interior equipment storage



PROJECT #1: MAINTENANCE AREA -PROPOSED FACILIITES



Maintenance Shop- Exterior



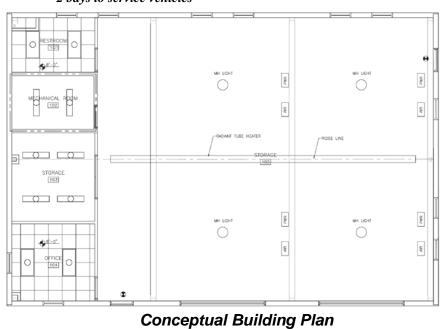
Workspace



2 bays to service vehicles



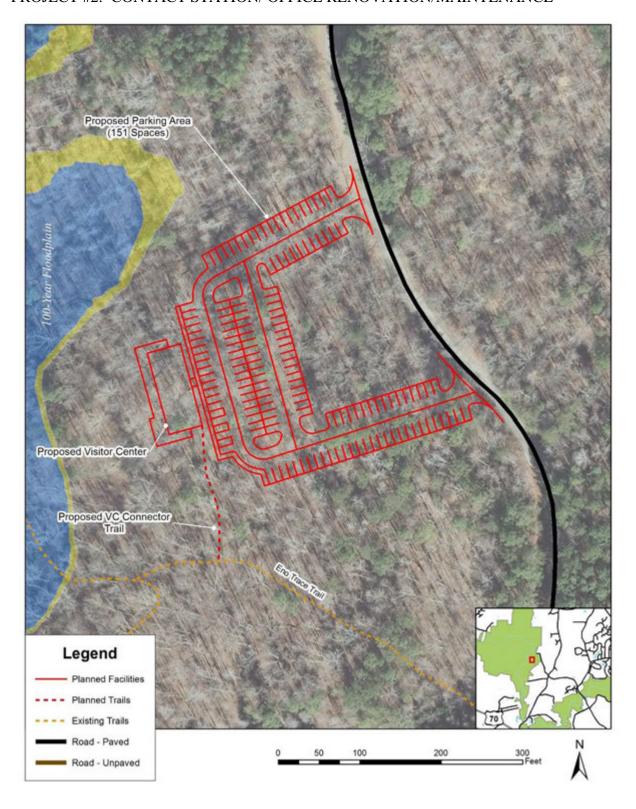
Storage area



GENERAL MANAGEMENT PLAN – ENO RIVER STATE PARK

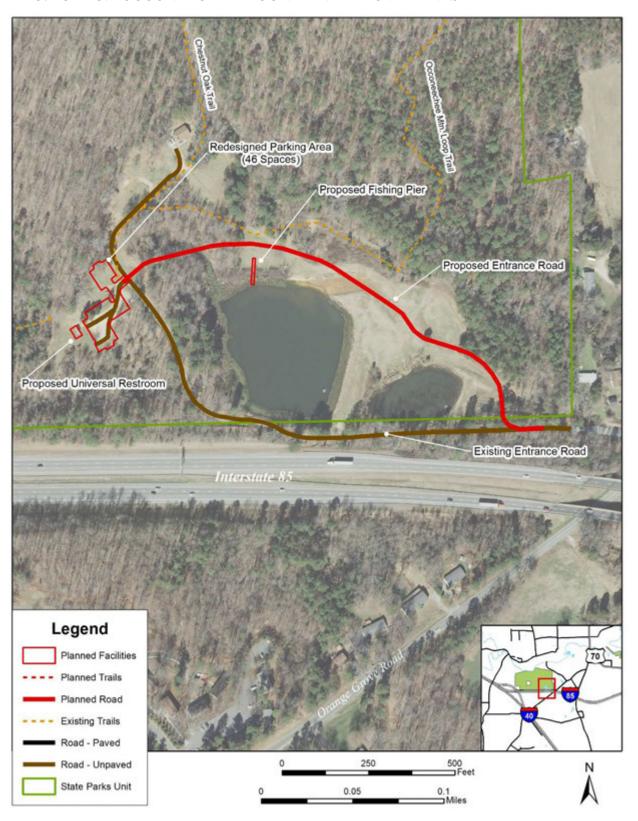


PROJECT #2: CONTACT STATION/ OFFICE RENOVATION/MAINTENANCE



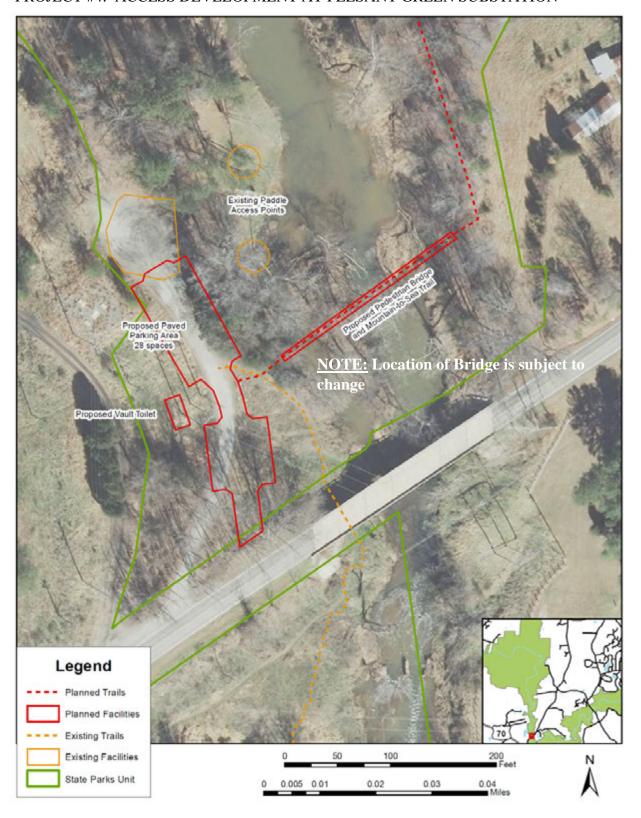


PROJECT # 3: OCCONEECHEE MOUNTAIN IMPROVEMENTS



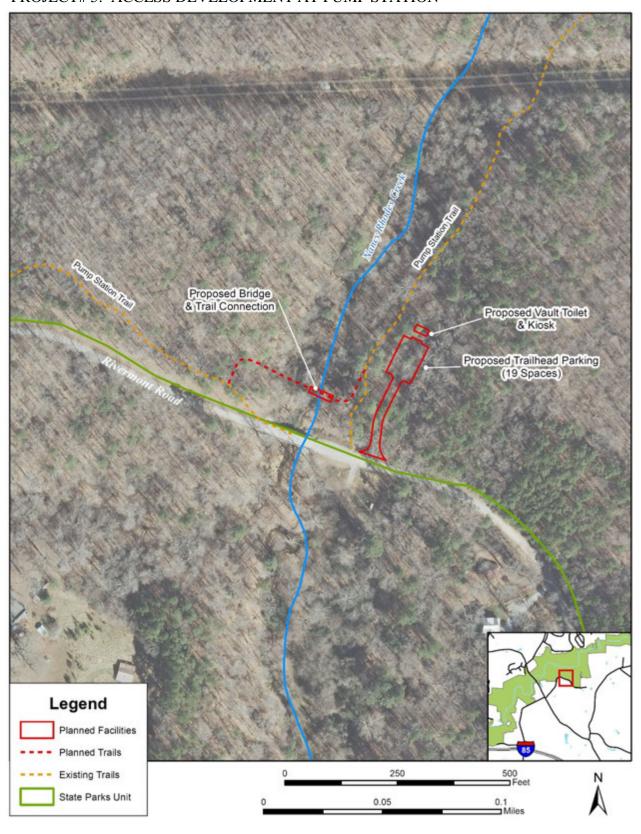


PROJECT #4: ACCESS DEVELOPMENT AT PLESANT GREEN SUBSTATION





PROJECT# 5: ACCESS DEVELOPMENT AT PUMP STATION





PROJECT #6: ACCESS DEVELOPMENT FOR CABELANDS





PROJECT #7: L-ACCESS DEVELOPMENT AT LAWRENCE ROAD



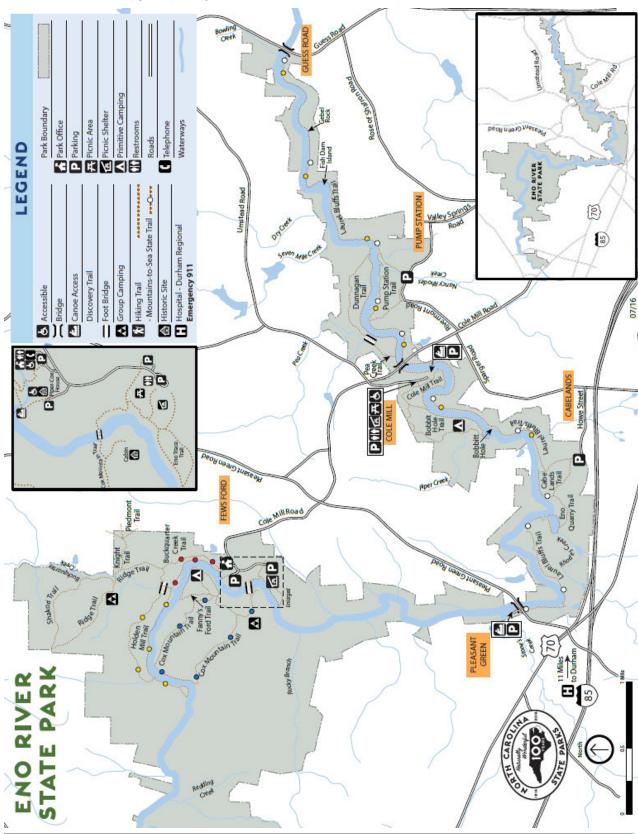


PROJECT # 8: PIPER COX HOUSE EXHIBITS





PARK MAP – ENO RIVER STATE PARK





PARK MAP - OCCONEECHEE MOUNTAIN STATE NATURAL AREA

