

Pettigrew State Park General Management Plan



North Carolina Department of Natural and Cultural Resources

Division of Parks and Recreation

Coastal Region

JULY 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 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:

Pettigrew State Park provides important habitat for unique and varied biological resources. Lake Phelps is a registered natural area, and the lake was designated an *Outstanding Resource Water* by the N.C. Division of Water Quality in 2000. In contrast to the typical acidic lakes of eastern North Carolina, it contains abundant fish, including the Lake Phelps killifish (*Fundulus vaccamensis*), found only in Lake Phelps. The vegetated shoreline of the lake contains a complex of zones, ranging from the Bald cypress (*Taxodium distichum*) and hardwood forest in the registered natural area on the north shore, to the marshy herb fringe and pocosins on the south side. This variation is typical of a Natural Lake Shoreline Community, although the effects of human disturbance are apparent in many areas. The forests and pocosins are remnants of community types that were once widespread, but have now been largely replaced by agricultural uses. Aquatic plant species of particular note are the Seven-Angled

Pipewort (*Eriocaulon aquaticum*), Leafless Watermilfoil (*Myriophyllum tenellum*), and Northeastern Bladderwort (*Utricularia resupinata*). The old-growth trees include several state champions. Diverse animal life includes the Black Bear (*Ursus americanus*) and the Bald Eagle (*Haliaeetus leucocephalus*). The Red Wolf (*Canis rufus*) lives in and around the park. The Scuppernon River region provides a unique habitat of common plants and animals, but also for rare and endangered species such as: Atlantic White Cedar (*Chamaecyparis thyoides*), Roughleaf Dogwood (*Cornus asperifolia*), Red-Cockaded Woodpecker (*Picoides borealis*), and American Alligator (*Alligator mississippiensis*).

Pettigrew State Park has outstanding prehistoric and historic archaeological resources. A significant number of large, well-preserved dugout canoes over 1,500 years old have been found, including the second oldest discovered in the nation (4,400 years old). A variety of pottery has been found in and around Lake Phelps. The park offers the opportunity to study the plantation life of the 19th Century. Confederate General James Johnston Pettigrew, named after the park, was

born and buried here.

The lake offers high quality fishing and varied water recreation in an uncrowded setting. Other recreational activities include: hiking, biking, nature study, camping, and picnicking. Dark skies within a remote area offer exceptional conditions for astronomy. Primary interpretive themes focus upon the natural resources of the lake and surrounding forest communities, as well as Native American artifacts and culture. At the Scuppernong River, visitors may enjoy canoeing or kayaking the slow-moving black water river.

Lake Phelps offers outstanding scenic vistas along its extensive undeveloped shoreline. The high canopy forest along the shore rises in contrast to the flat vistas of the lake and nearby agricultural areas. The undeveloped corridor of the Scuppernong River offers views of the river and riparian wetlands. The soil conditions and septic field constraints make it difficult to build in this area.



Pier

Pettigrew exists as a state park so its valuable geologic, biologic, archaeological, recreational, and scenic values can be protected. The Division is charged with preserving these values and providing park experiences that promote pride in and understanding of natural heritage of North Carolina.

II. HISTORY

The North Carolina General Assembly formally recognized the value of Lake Phelps as a public trust resource in 1929. Legislation passed that year declared that all lakes now belonging to the state greater than 50 acres in size shall never be sold but always retained for the use and benefit of all the people of the state. In 1937, the Federal Farm Security Administration acquired the Collins mansion and surrounding land for agricultural, cultural, and recreational purposes. Two years later, the federal government leased 203 acres to the State of North Carolina. Pettigrew State Park was established to enable the State to improve management of the lake and provide for broader and better public use. In 1947, the U.S. Department of Agriculture deeded the previously leased acreage to the State with the restriction that it be used exclusively for state park and public recreation purposes and for lake water-level management. Starting in 2004, land along the nearby Scuppernong River was acquired, adding additional biodiversity and black water river .

While various theories concerning Lake Phelps' formation exist, the origin of the 16,600-acre lake remains unknown. Pettigrew State Park preserves Lake Phelps, the second largest natural lake in the eastern United States between Florida and New York. This important function prevents a major feature of the natural hydrology from being further affected by local land use. While the inherent hydrology of the lake is protected, agricultural manipulation of the region has reduced the watershed of Lake Phelps and potentially limited inflow. (Previously, it is hypothesized, water entered the Lake Phelps system via generalized regional sheet flow. With the introduction of canals and water control structures, input is limited to precipitation.) However, because the lake receives minimal runoff, the lake water acquires minimal pollution. The lake continues to play an important role in the hydrology of the region, including groundwater recharge.

Lake Phelps, the second largest natural lake in North Carolina, is a mystery with big tree forest and offer more than 10,000 year glimpse of human cultures and nature. Formed on a vast peninsula lying between the Albemarle Sound and the Pamlico River, the lake is believed to be more than 38,000 years old. Scientists have puzzled about its mysterious origin and have proposed many hypotheses, including underground springs, movement of wind and waves, meteor showers, peat burn and glacial activity. So far, no single explanation has gained universal acceptance.

Sitting at one of the highest elevations in the area, Lake Phelps has an unusual ecology. The lake is shallow with an average depth of 4.5 feet and a maximum depth of 9 feet. Its waters are clear while most area streams and lakes are murky. Not fed by streams, the lake depends upon rainfall, making it one of the cleanest lakes in North Carolina. Five miles across, Lake Phelps harbors many species of animals that usually do not thrive in such an environment. In addition, the pristine water quality may be the reason for its remarkable capacity to preserve wood.

Artifacts found in the area reveal the presence of Native Americans as early as 8,000 B.C. Archaeologists have uncovered thousands of relics, including intact pots and projectile points. The most fascinating discovery is a collection of 30 dugout canoes, found sunken in the lake. The oldest canoe is about 4,400 years old.

The Native Americans made dugout canoes by burning the interiors of cypress logs and scraping away the charred wood until only the shells remained. Archaeologists believe that the Algonquian Indians, who were seasonal campers in the area, sank their canoes in the shallow water to store and protect them until the next hunting or fishing season.

One of the canoes discovered in Lake Phelps is 36 feet in length, the longest known Native American dugout canoe in the southeastern United States. Another is the second oldest in the nation, radiocarbon dated to 2,400 B.C. Two canoes are on display at the information center. Adequate space is needed to display the artifacts.

Before colonists discovered Lake Phelps in 1755, area residents called the swampy area the Great Eastern Dismal and the Great Alligator Dismal. The wilderness was so fearsome that explorers refused to enter its borders. Tradition maintains that a group of hunters ventured into this "haunt of beasts" to hunt and to look for farmland. Most of the men turned back, but just as the remaining few were about to leave, Benjamin Tarkington climbed a tree and saw the lake a short distance away. His companion, Josiah Phelps, ran into the water while Tarkington was still up in the tree. The first in the water, he claimed the right to name it "Lake Phelps".



Collins House

Josiah Collins, who immigrated to the United States from England, developed the area surrounding Lake Phelps. He and his partners in the Lake Company drained the swamp, transforming the land

into productive agricultural fields and prosperous plantations. In 1787, Collins established Somerset Place, named for his home county of Somersetshire in England. He brought slaves from Africa to dig a six-mile canal connecting Lake Phelps with the Scuppernong River. The canal, a remarkable feat of engineering for its time, served as both a transportation route and a channel for draining the swampland between the river and Lake Phelps. Later, Collins developed an extensive system of canals with locks to irrigate the corn and rice crops in this area.



Somerset Place-Owner's Compound

The Civil War brought an end to the prosperity of Somerset Place. The Collins family sold the property because they were unable to maintain the plantation. The house passed through several owners until the Federal Farm Security Administration acquired it in 1937. Somerset Place is a state historic site occupying eight acres of land within Pettigrew State Park. Visitors can tour historic Somerset Place and sample a taste of cultural life in the antebellum South. The Division of Historical Sites of the N.C. Department of Cultural Resources administers the site.



**Somerset Plantation House-
Collins family home**

Civil War historians will find the grave of one of the great generals of the Confederacy, James Johnston Pettigrew, a mile east of Somerset off the old carriage road. Gen. Pettigrew and his family left an indelible mark upon the history of the State. General Pettigrew led the North Carolina troops charge up Cemetery Ridge to the "high water mark" in the South at the Battle of Gettysburg. The battle later became known as "Pickett's Charge," although General Pettigrew's role was duly important. Pettigrew died just two weeks after his 35th birthday from wounds received during the retreat from battle of General Robert E. Lee. General Pettigrew, and his father and grandfather, are buried in the family cemetery.

Next to Somerset Place is the remains of the former Pettigrew family farm, named "Bonarva." The plantation was built by Pettigrew's grandfather in 1790. The remains of the plantation today include rubble near the carriage road and several large trees planted by the family. However, in the 1830s, Bonarva was nationally recognized as a model of scientific farming and management.

Upon the purchase by the Federal Farm Security Administration, the Collins mansion and surrounding land was incorporated into the Scuppernong Farms Resettlement Project. The State gained control of the land in a 99-year lease with the U.S. Department of Agriculture, and in 1939, Pettigrew became the sixth State Park in North Carolina.

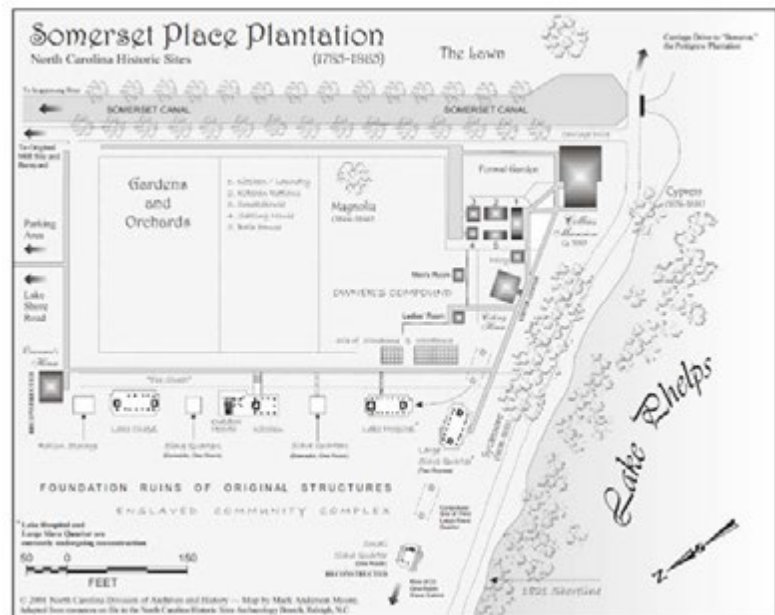


Canoe on Scuppernong River

The Carolina Algonkians used the Scuppernong River for transportation through the dense swamp. Scuppernong is the Algonkian word for “land of the bay trees.” Scuppernong is also the name of a bronze grape originally known as the "big white grape". This variety of the muscadine grape was unique to this area of North Carolina and named for the river. Legends say that Sir Walter Raleigh sought out the grape and planted it on Roanoke Island for the colonists. In 2001, state legislators designated the Scuppernong grape as State Fruit of North Carolina.

The Scuppernong River was the main route for transporting logs, crops and other products to market and import staples during European settlement. Except for the Town of Columbia and several landings, the river remained undeveloped.

In 2002, The Nature Conservancy approached the N.C. Division of Parks and Recreation about preserving the river. The Conservancy owned four tracts on the river and three large tracts were for sale. The Scuppernong River Section of Pettigrew State Park was established in 2004.



Somerset Place Plantation

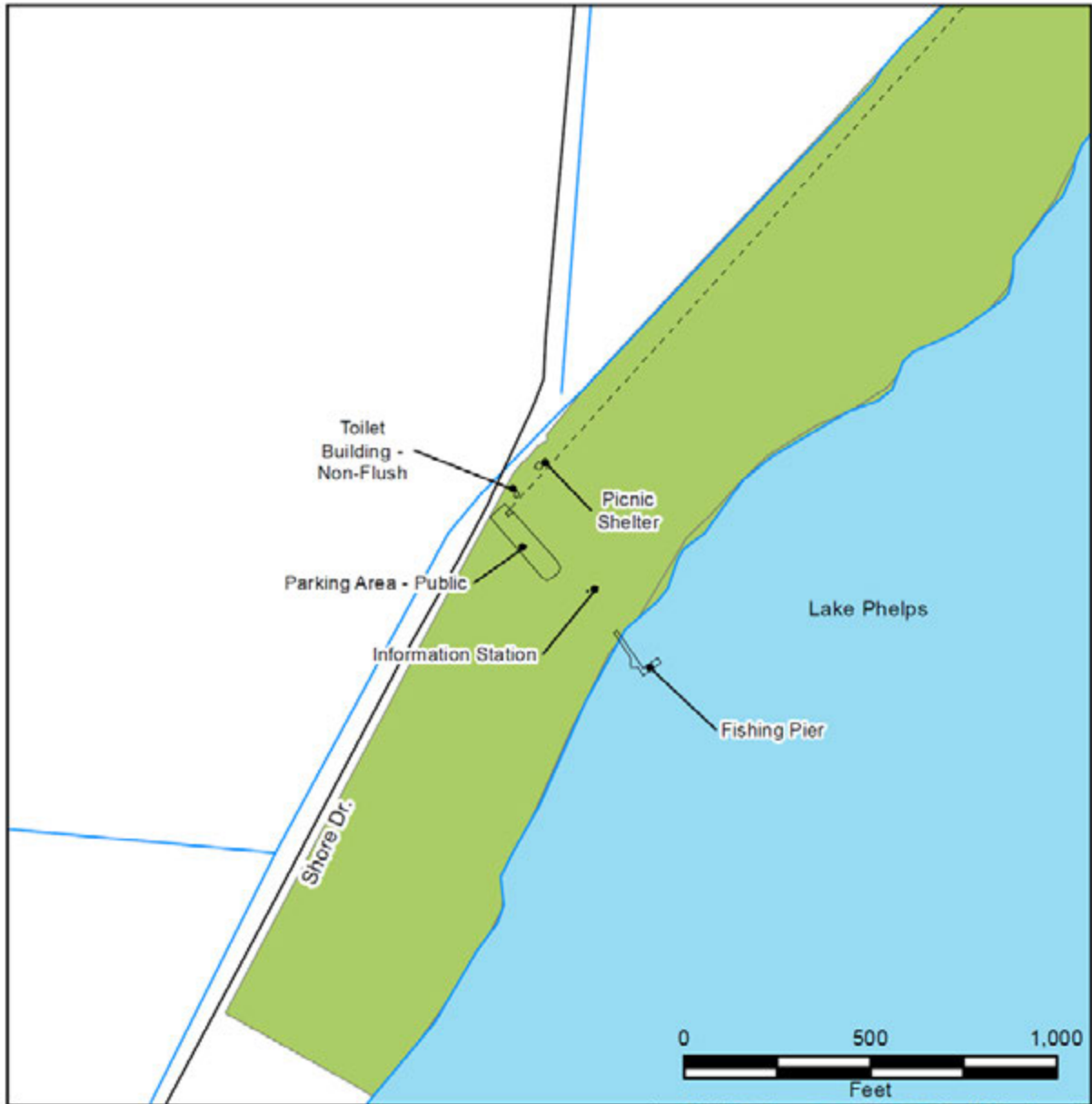
III. THEMES AND INVENTORY

THEME TABLE OF PETTIGREW STATE PARK

Theme Type	Theme	Pettigrew Significance	State Parks System Representation
Archeological/Historic	Underwater	High	Adequate
Archeological/Prehistoric	Campsite/Activity Area	High	Adequate
Archeological/Prehistoric	Underwater	High	Adequate
Archeological/Prehistoric	Village	High	Adequate
Biological	Black water Coastal Plain Floodplains	High	Moderate
Biological	Brown water Coastal Plain Floodplains	Little	Little
Biological	Coastal Plain Non-alluvial Mineral Wetlands	High	Moderate
Biological	Freshwater Tidal Wetlands	High	Moderate
Biological	Natural Lake Communities	High	Moderate
Biological	Peat Dome Pocosins	High	Moderate
Biological	Riverine Aquatic Communities	High	Little
Geological	Carolina Bays	High	Adequate
Geological	Natural Lakes and Ponds	High	Adequate
Geological	Peatlands and Interstream Wetlands	High	Adequate
Scenic	Forests	High	Moderate
Scenic	Islands	High	Little
Scenic	Marshes	High	Moderate
Scenic	Meadows/Grasslands	High	Little
Scenic	Pocosins	High	Moderate
Scenic	Reservoirs/Lakes	High	Moderate
Scenic	Rivers	High	Little
Scenic	Scenic Vistas	High	Moderate
Scenic	Swamps	High	Adequate

*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 - CYPRESS POINT ACCESS
 PETTIGREW STATE PARK



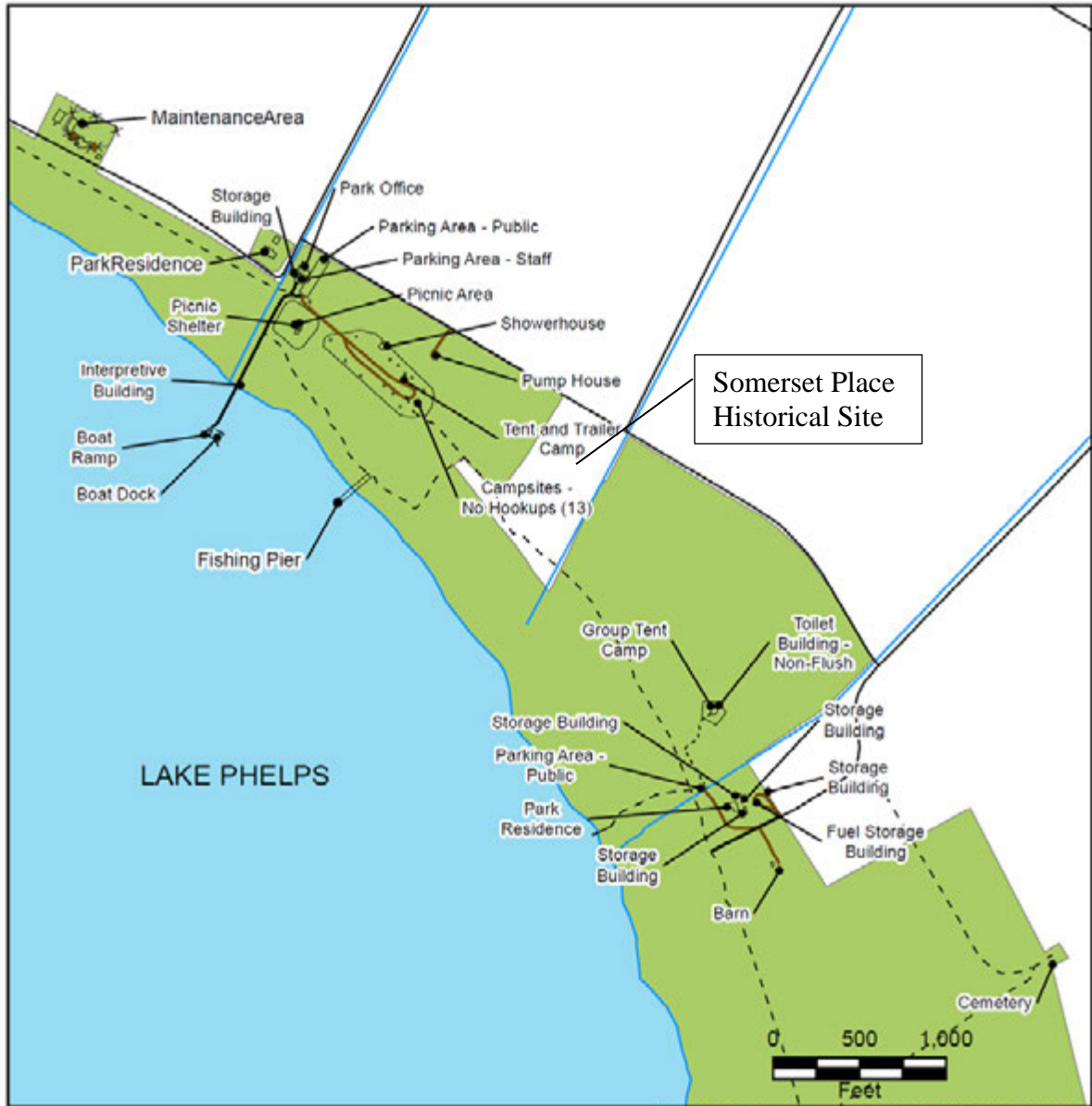
Pettigrew
 State Park
 Facility Inventory
 Cypress Point Access
 February 2017



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



FACILITY INVENTORY- NORTHEAST SECTION
 PETTIGREW STATE PARK



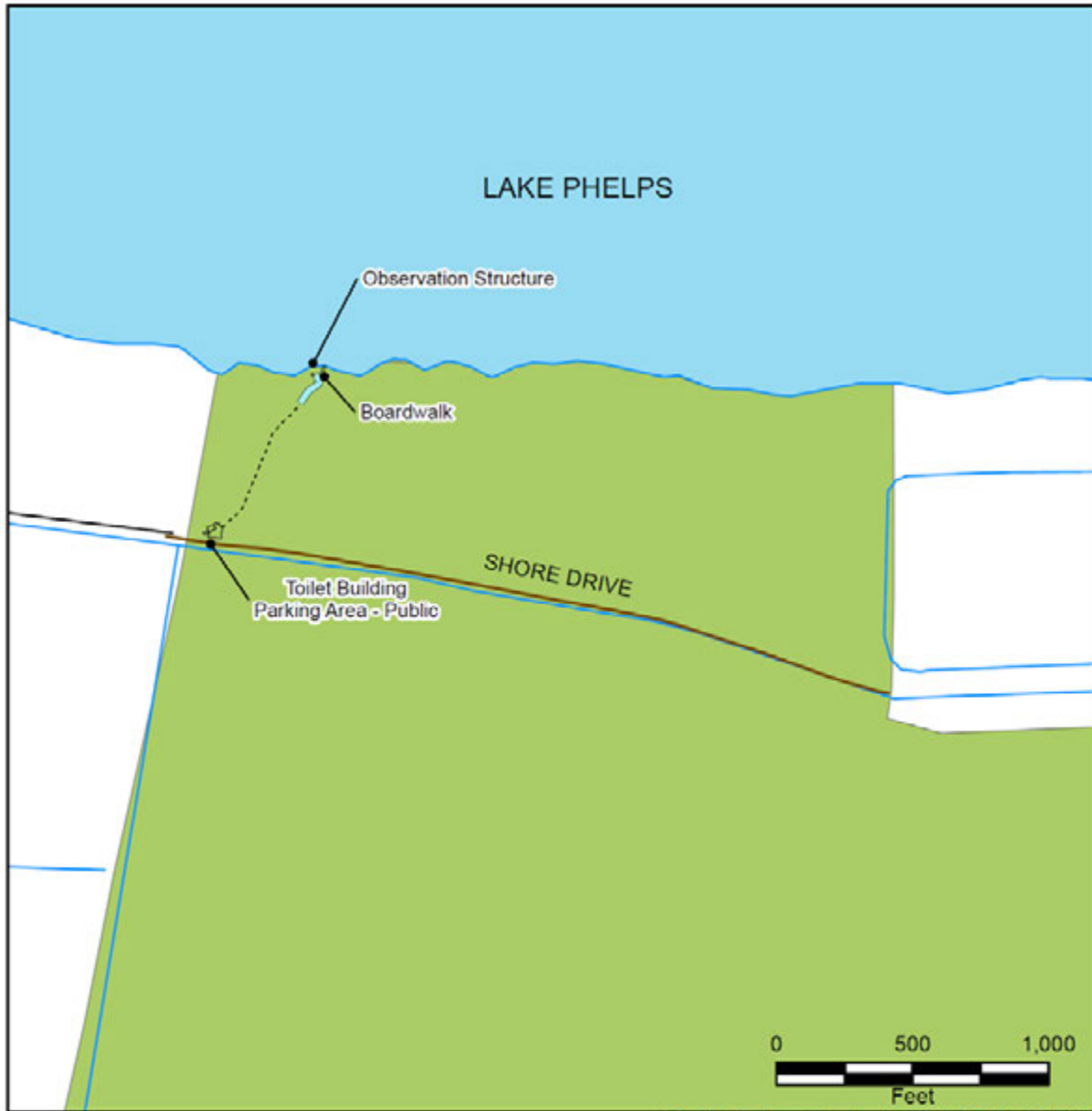
Pettigrew
 State Park
 Facility Inventory
 Northeast Section
 June 2016

Legend

- State Parks Unit
- State Lake



FACILITY INVENTORY - POCOSIN NATURAL AREA
PETTIGREW STATE PARK



Pettigrew
State Park
Facility Inventory
Pocosin Natural Area
June 2016

- Legend**
- State Parks Unit
 - State Lake



TRAIL INVENTORY
 PETTIGREW STATE PARK

Trail Inventory	Hiking	Bike	Canoe	Multi-Use
Bee Tree Trail	1.30			
Bonarva Trail	0.12			
Cemetery Trail	0.34			
Lake Shore Trail	0.25			
Moccasin Trail	4.69	0.32		
Morotoc Trail	4.20			4.19
Paddle Trail				
Lake Phelps Paddle Trail			7.00	
Pettigrew SP Totals (miles)	10.90	0.32	7.00	4.19

TRAILS:

Bee Tree Trail: The former carriage road makes up a portion of the Bee Tree Trail, which begins at the park office. A 1.00-mile section winds past the campground and Somerset Place. After wandering through a sweetgum forest, the trail leads to Bee Tree Overlook, a wooden platform which provides a view of the lake and a place to observe wintering waterfowl. Bonarva and the canal is a short trail leading to Pettigrew Family Cemetery.



Boardwalk

Bonarva Trail: is a 0.12 mile trail that intersects with Bee Tree Trail and leads towards Lake Phelps.

Cemetery Trail: is a 0.34 mile trail that intersects with Bee Tree Trail and goes east towards the Pettigrew Family Cemetery.

Lake Shore Trail: is a 0.25 mile trail intersects with access drive for the boat camp and goes southeast towards the Family Campground.

Moccasin Trail: leads northwest from the park office for 4.69 miles to Moccasin Canal. After traveling through a cypress and hardwood forest, the trail stops at a 350-foot boardwalk, which cuts through a cypress swamp to Moccasin Overlook.

Morotoc Trail: is a 4.20 mile trail that continues from the overlook to Cypress Point.

Pocosin Natural Area has a 50 linear feet trail that leads to an observation tower and carnivorous plant management area.

PADDLE TRAILS:

Lake Phelps Paddle Trail: is located along the edge of Lake Phelps. The blackwater river provides scenic vistas of the area.

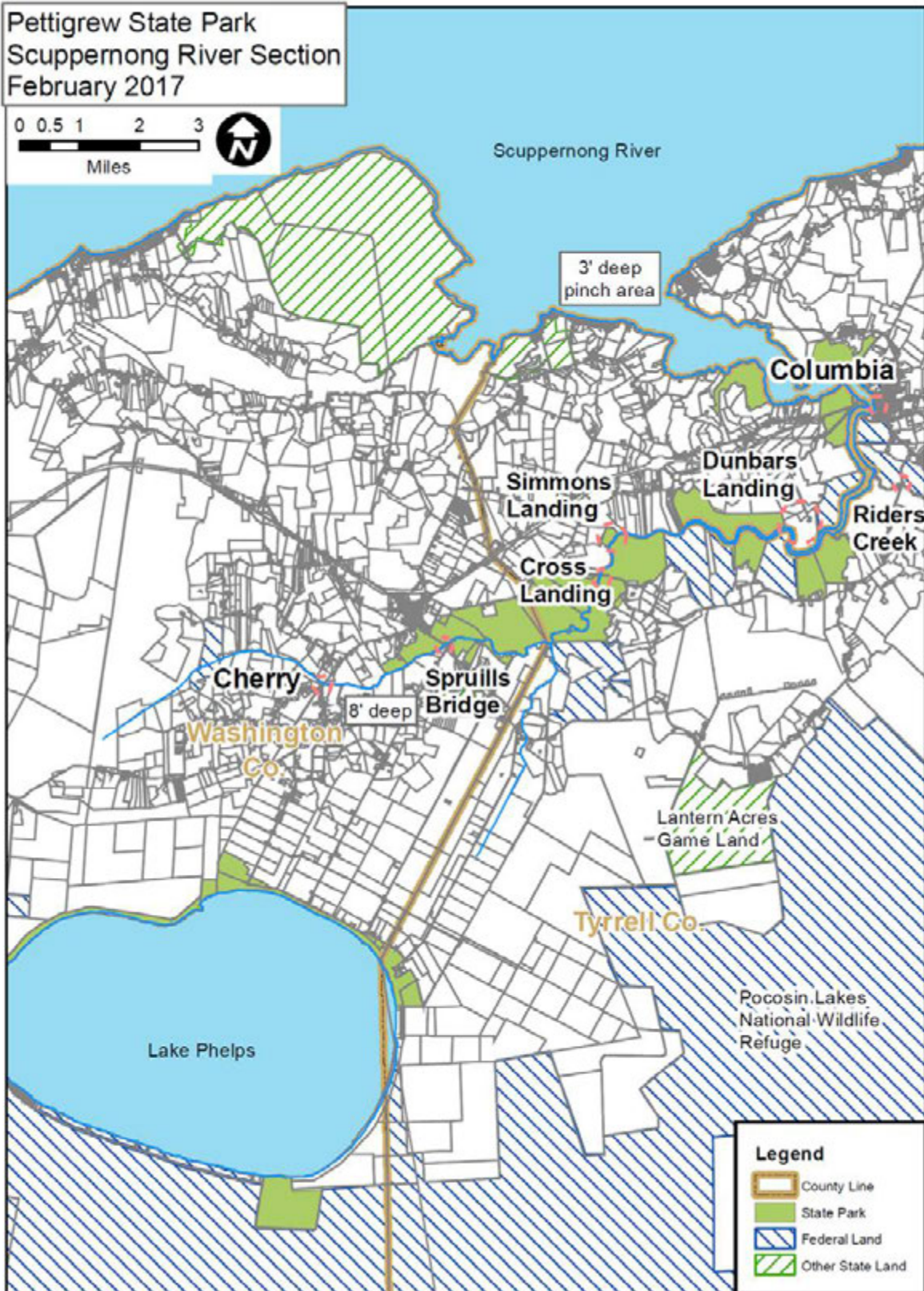
The edge of the lake cypress trees which allow for an opportunity to explore the edge of the lake and see a variety of birds and animals.

Lake Phelps is a large body of water and the canoeist should use caution and pay attention to the weather conditions. The lake can develop rather large waves in a short time if storms pass by.

Boat access areas include the boat ramp at Pettigrew State Park and Cypress Point area located on the western section of the park located off S.R. 1183.

Paddling is allowed along the Scuppernog River, however, the managed land is not a continuous linkage managed by State Parks. Land acquisition plan shows the gaps in the waterway system.

SCUPPERNONG RIVER SECTION
 PETTIGREW STATE PARK



TRAIL INVENTORY - LAKE PHELPS
PETTIGREW STATE PARK



Pettigrew
State Park
Trail Inventory

February 2017



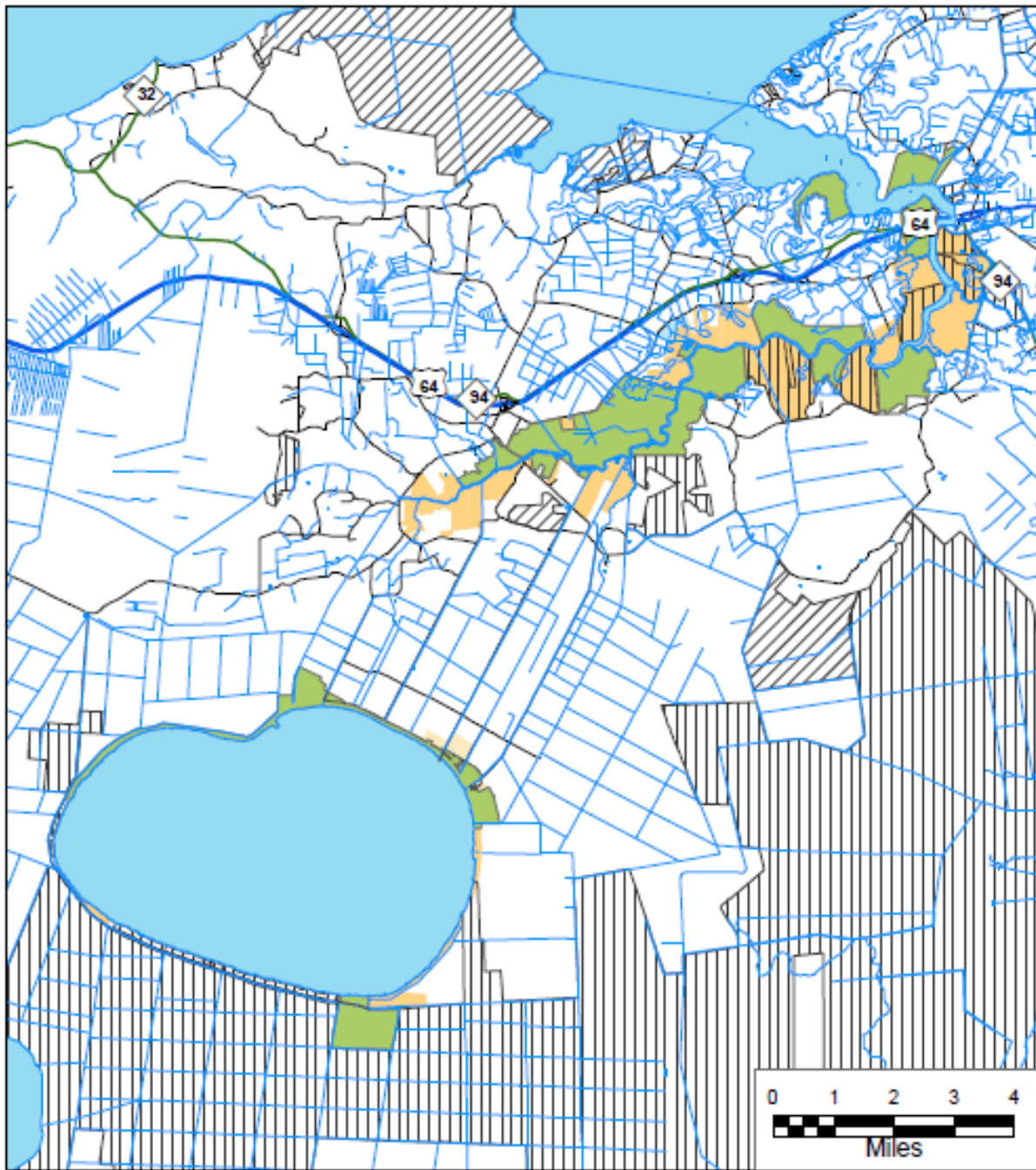
- Existing Trail
- Road - Paved
- Road - Unpaved
- Existing Facilities
- State Parks Unit



IV. PLANNING



LAND PROTECTION PLAN
 PETTIGREW STATE PARK



Pettigrew SP

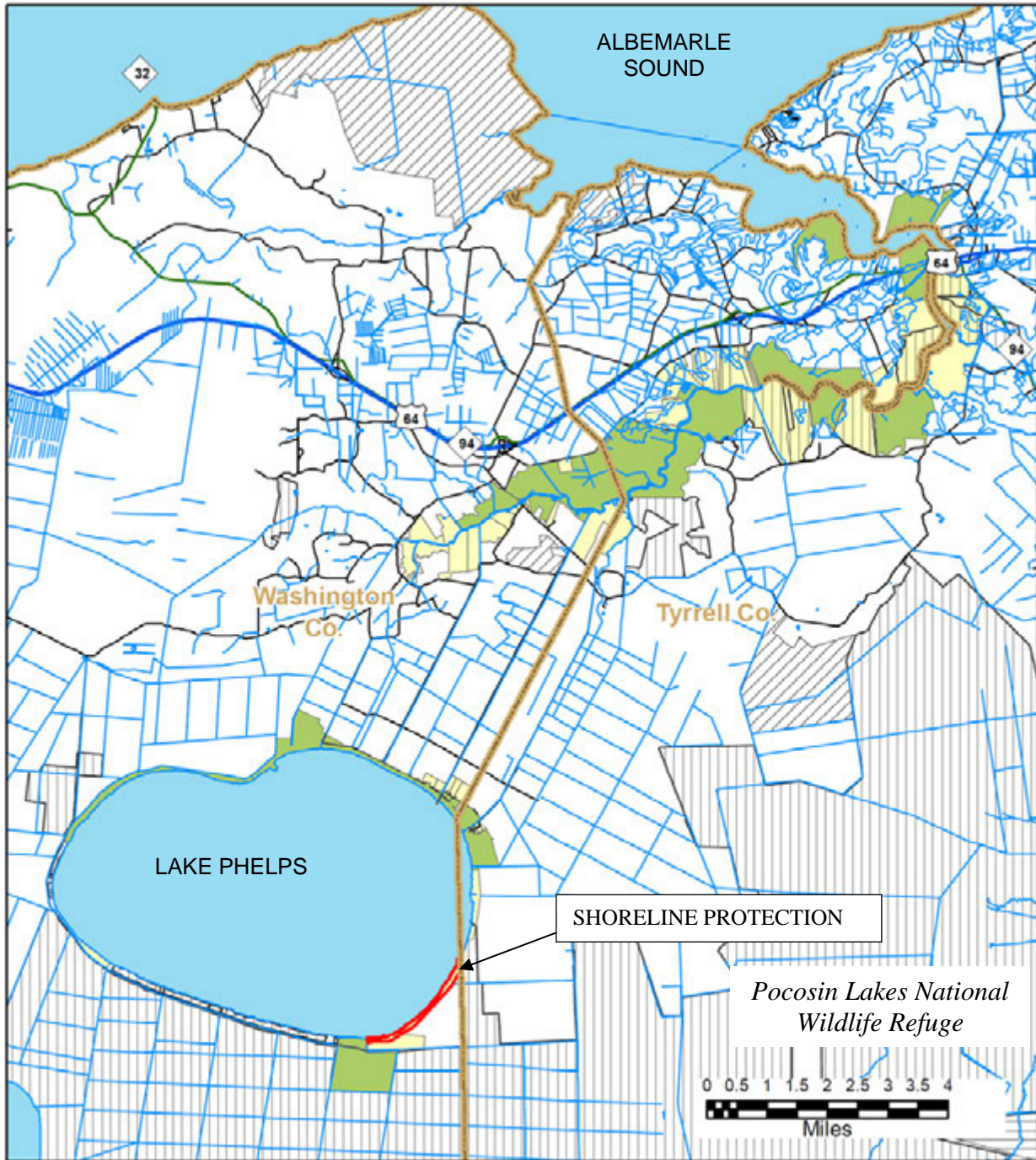


April 2017

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



LAND PROTECTION PLAN-CRITICAL ACRES
 PETTIGREW STATE PARK



Pettigrew SP



August 2016



PROJECT EVALUATION PROGRAM LIST
 PETTIGREW STATE PARK

Project #	Project Title	Cost
1	Proposed Visitor Center /Museum	\$3,295,000
2	Improvements to Existing Family Camp Area	\$1,055,000
TOTAL		\$4,350,000

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

1. Proposed Visitor Center/ Museum

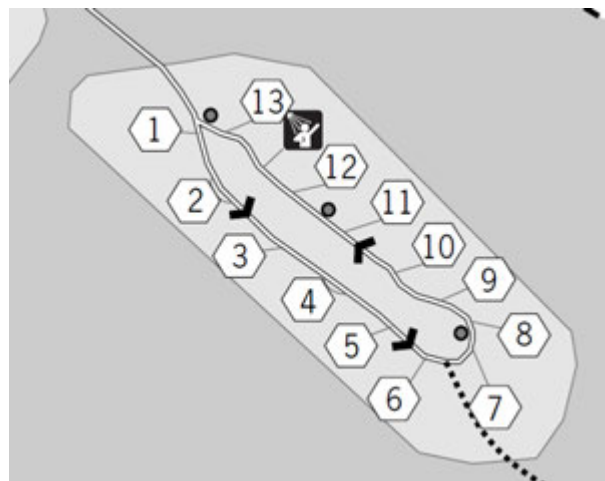
This project includes construction of a 7,000-square-foot visitor center with a universal auditorium, classroom, retail space, staff offices for cultural resources, opportunities for concessions, and an exhibit area large enough to display 4,400-year old Native American dugout canoes found in the lake as well as other exhibits related to the interpretive themes of the park. Regional interest exists for displaying the artifacts found in the lake and explaining the history of the area. The visitor center will allow adequate space for indoor environmental education, space the park currently lacks. It will also allow, Educational programs can be expanded to include times of inclement weather. Infrastructure will include sewer, water and electric service extensions. The building will create an opportunity to partner with the Somerset Place Plantation historical site to welcome visitors to both sites and provide shared facilities.

The existing park office/maintenance building will be renovated into a classroom / small community facility, along with providing universal restrooms. The equipment shelter located behind the existing park office will be demolished.

The day use area: including picnic and boat ramp will use the restrooms in the classroom facility. Parking and road development for the proposed visitor center will have minimal impervious area.

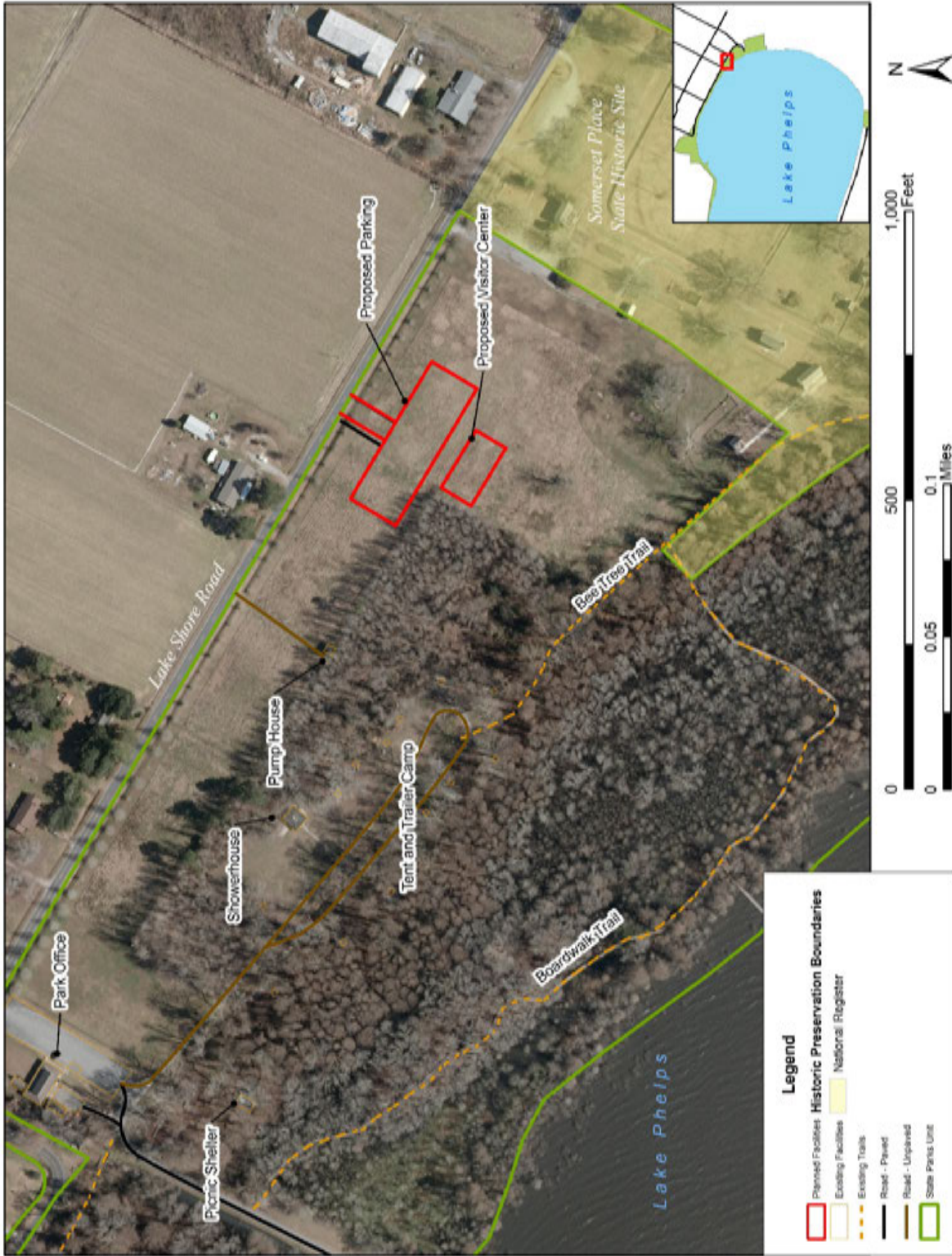
2. Improvements to Existing Family Camp Area

Project scope of work includes: demolishing existing showerhouse and constructing a universal showerhouse. Electrical hookups with 100 amps will be provided at all 13 campsites. Three camper cabins will be constructed with adequate parking.

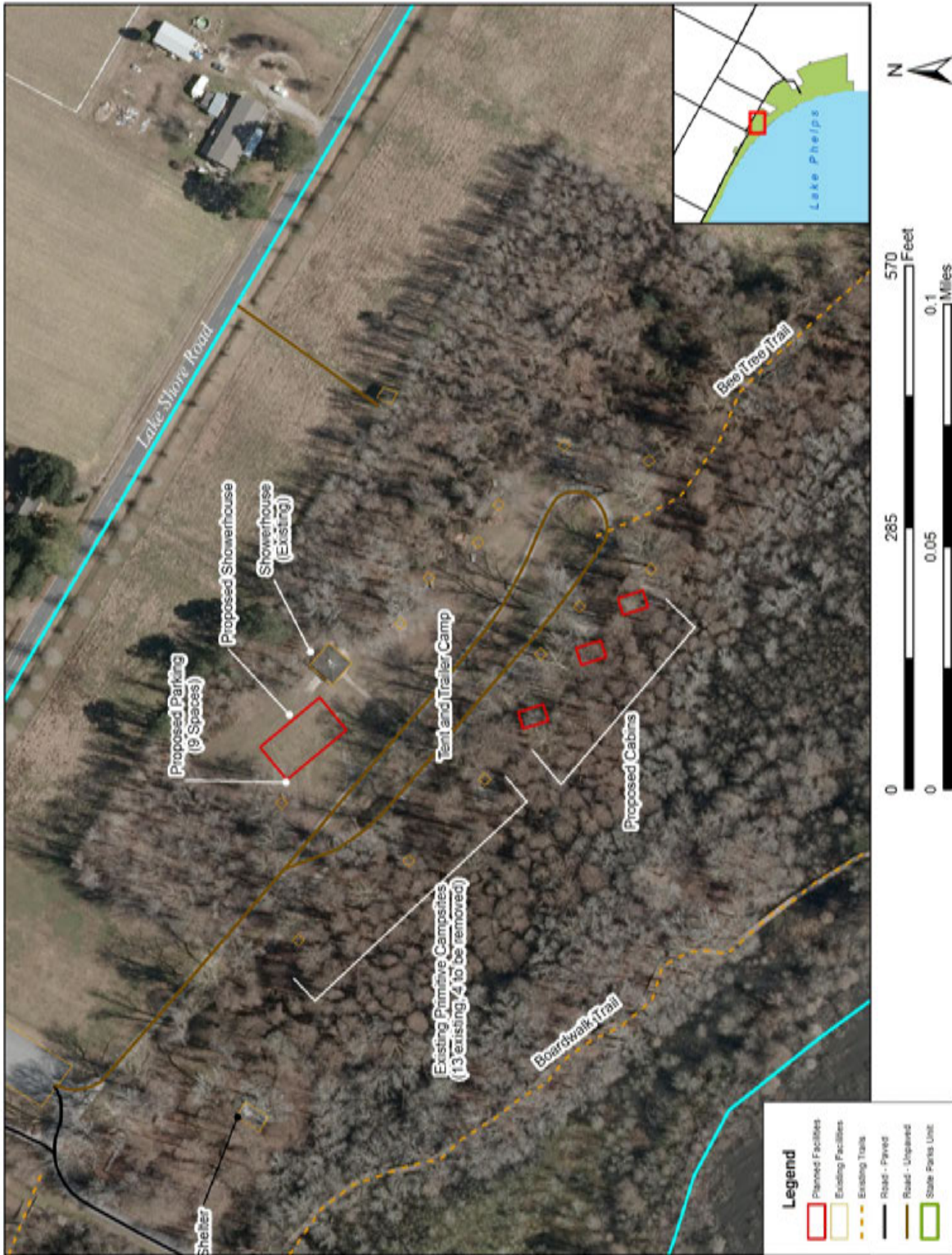


Existing Family Campground

PROJECT #1: PROPOSED VISITOR CENTER/MUSEUM
 PETTIGREW STATE PARK



PROJECT #2: IMPROVEMENTS TO EXISTING FAMILY CAMP AREA
 PETTIGREW STATE PARK



PARK MAP PETTIGREW STATE PARK

