

# Pigeon Pond Management Plan

January 2019

Frank Davis  
SC Registered Forester #1915  
Sabine & Waters Inc.

**THIS MANAGEMENT PLAN DOES NOT REPLACE GRANTEE'S OR REGULATORY  
THIRD PARTIES' RELIANCE ON THE CONSERVATION EASEMENT AND THE PIGEON  
POND MITIGATION BANKING INSTRUMENT AS THE AUTHORITATIVE DOCUMENTS  
FOR CONTROLLING AND LIMITING THE USES ON THE PROPERTY.**

## General Property Description

This property management plan is for an approximately 1,424 acre property located near Cross, SC, known as the Pigeon Pond Mitigation Bank. The property is protected by a conservation easement held by the Lord Berkeley Conservation Trust and has been used as wetland mitigation bank approved by the US Army Corps of Engineers. The majority of the property is a Carolina Bay but also contains some pine timber. The property will be managed in perpetuity for native wetland habitat and minor recreational purposes allowed under the easement.

Prescribed Fire In Upland Buffers: Fire is a natural part of the Southern Coastal Plain ecosystem. It occurred naturally before habitation by man from lightning strikes, and many of the now endangered plant and animal communities evolved with fire. The exclusion of fire from the natural system is one of the reasons some of these communities are endangered. In the *uplands*, the use of prescribed burning on the property will reduce the risk of catastrophic wildfire, and will also stimulate the growth of native grasses and other early successional vegetation that has many values to wildlife. Prescribed fire will lead to much higher diversity of native species throughout the property and will help control unwanted understory species. Younger stands of planted hardwood will need dormant cold season fires to avoid unwanted impacts on the desired hardwood species. Established upland pine stands can withstand more intense growing season fire to help to control woody understory plants and increase native grasses and forbs. Care should be taken when conducting prescribed fire to not negatively impact overstory pine and hardwood. **All prescribed fire burn plans and burn areas in the *upland buffers* must be approved by the USACE and Lord Berkeley Conservation Trust prior to any prescribed fire being implemented.**

Prescribed Fire in Wetlands: **Prescribed fire in the *wetlands* is prohibited.**

Food Plots: **The existing power line right-of-way may be planted as a wildlife food plot, but no other food plots may be cleared or created.** Continued seasonal planting of the power line will be beneficial for both game and non-game species, and would help promote specie diversity across the property. Care should be taken to minimize soil disturbance when conducting related planting activities in the right-of-way.

Trails and Roads: The creation of pedestrian and ATV trails, and maintenance of existing roads will improve access to the property, which will in turn aid LBCT's annual monitoring activities and the owner's utility of the property. However, any new trails should be constructed to avoid any material impact to the wetlands or the natural flow of water throughout the property and maintained principally by mechanically controlling vegetation. Trails should be designed in such a way as to minimize impacts to existing or planted tree species. Trails should also be the minimum width possible and should not include the addition of materials (dirt, rocks, fill, etc) except where needed at select bridge crossings and as approved by the Corps. **The location, nature and scope of all pedestrian trails and/or bridges proposed to be constructed must be pre-approved by LBCT and the USACE.**

Bridges: There are several breaches in old dikes/roads throughout the Carolina Bay area that were installed as part of the wetland mitigation plan, which have compromised road access to many areas of the property. These breaches should be bridged by building a piling bridge capable of supporting an ATV. These bridges should be constructed above the height of average flood waters to decrease the chances of them failing in the event of a flood. These bridges must not add any fill to the wetland areas or impact the hydrology throughout the wetlands and streams systems. **The location, nature and scope of all pedestrian trails and/or bridges proposed to be constructed must be pre-approved by LBCT and the USACE.**

Timber Management: Very little future timber management will occur on the property. The conservation easement does allow for a timber harvest of the pine timber in the upland areas of the property (Stand #3) to facilitate reforestation of longleaf pine (*Pinus palustris*). **Any timber harvesting should be done under the supervision of a SC Registered Forester and must strictly adhere to a forest management plan that meets or exceeds SC Best Management Practices (BMPs), and is pre-approved by LBCT and the Corps of Engineers.** Timber harvesting may also be necessary in the form of a salvage harvest in the event of a natural disaster or other act of God. These acts can include, but are not limited to: wildfire, forest pest outbreaks, disease outbreaks, hurricanes and tornadoes. In the event of such an occurrence it will be left to the discretion of an SC Registered Forester and the USACE to determine the necessity of these harvests.

## **Timber Stands**

### **Stand 1**

Stand one is an approximately 1,074 acre Carolina bay. The area has the elliptical shape and soil types consistent with a typical Carolina bay. The dominant species in the stand include loblolly bay (*Gordonia lasianthus*), red bay (*Persea borbonia*), tupelo (*Nyssa biflora*), cypress (*Taxodium distichum*), fetterbush (*Lyonia lucidia*), greenbrier (*Smilax laurifolia*), and red maple (*Acer rubrum*). This area will be managed in perpetuity as a natural Carolina bay, with minimal, if any, management taking place here.

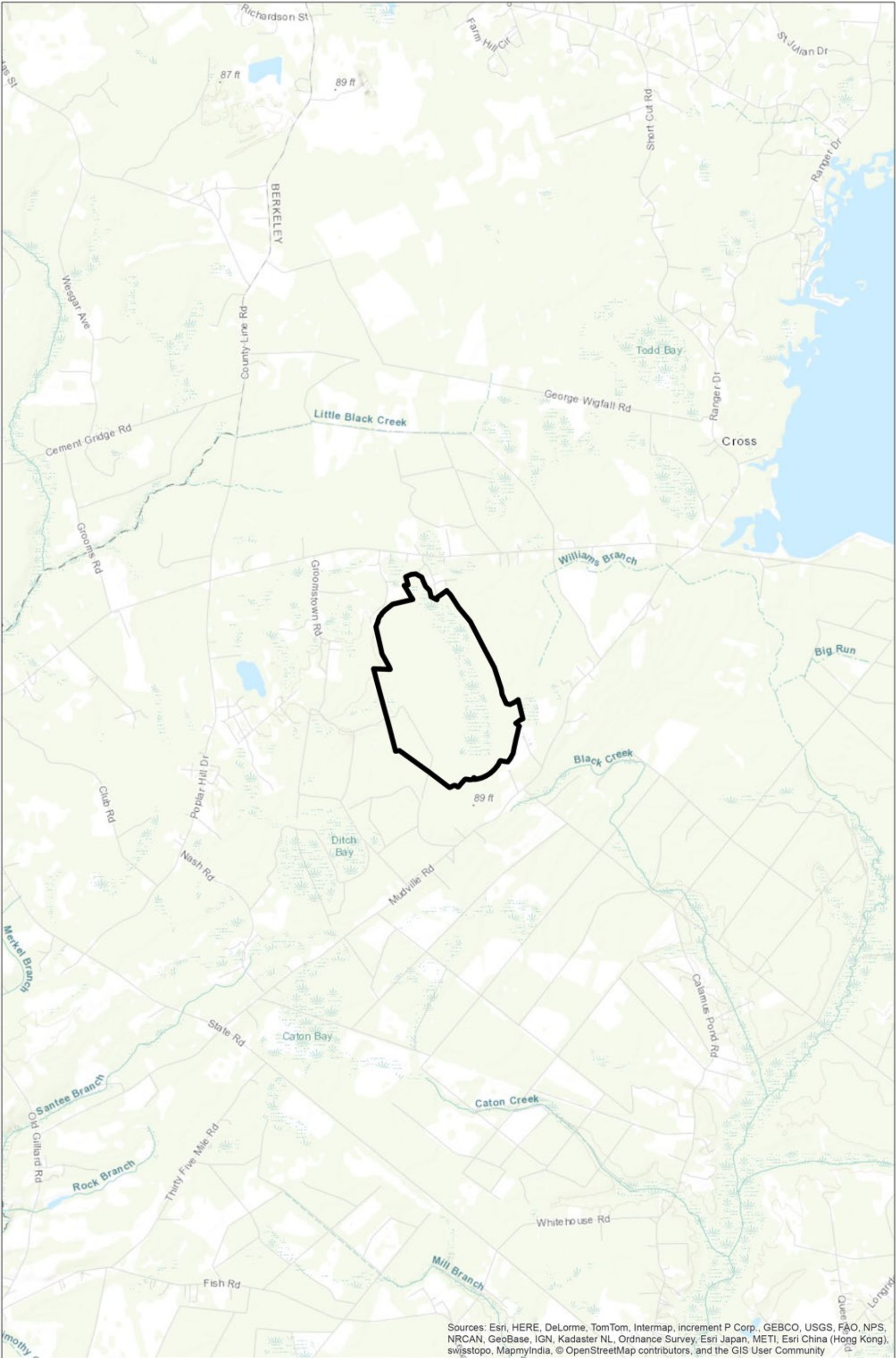
### **Stand 2**

Stand two contains approximately 320 acres (171 wetlands, 149 uplands) that has been planted with native hardwoods. This area was previously loblolly pine plantation and was converted to native hardwood as part of the wetland mitigation plan. This area will be managed in perpetuity as a native hardwood stand. The 149 acres of uplands will benefit from prescribed fire once the hardwood species are mature enough to withstand it but prescribed fire should be avoided in the 171 acres of wetlands.

### **Stand 3**

Stand three contains approximately 30 acres that is primarily a planted pine stand with some mixed hardwood. The area is dominated by loblolly pine (*Pinus taeda*). This stand was planted for industrial timber management prior to the wetland mitigation work on the property. The stand contains understory species including wax myrtle (*Morella cerifera*), ink berry (*Ilex glabra*), fetterbush, water oak (*Quercus nigra*), red maple, and willow oak (*Quercus phellos*). The mitigation plan calls for one timber harvest to take place in portions of this stand to remove all of the loblolly pine from the stand. These areas will then be reforested with longleaf pine (*Pinus palustris*). The longleaf pine will be planted at approximately 545 trees per acre and will need to be burned on a two- to three-year rotation following planting.





Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

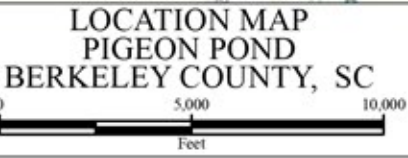
EXTERNAL SOURCES: ESRI ONLINE TOPO BASEMAP, BERKELEY COUNTY GIS PARCEL

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Sabine & Waters, Inc.  
Environmental Land Management Consultants  
PO Box 1072 Summerville, SC 29484  
843.871.5383 (phone) 843.871.2050 (fax)  
<http://www.sabine.net>

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**REVISED: 8/2/2018**



**LEGEND**

PROPERTY BOUNDARY: +/- 1424 AC

Long: -80.216539 W  
Lat: 33.261510 N





EXTERNAL SOURCES: NAIP 2017 TRUE COLOR AERIAL, U.S. CENSUS ROADS, BERKELEY COUNTY GIS PARCEL.

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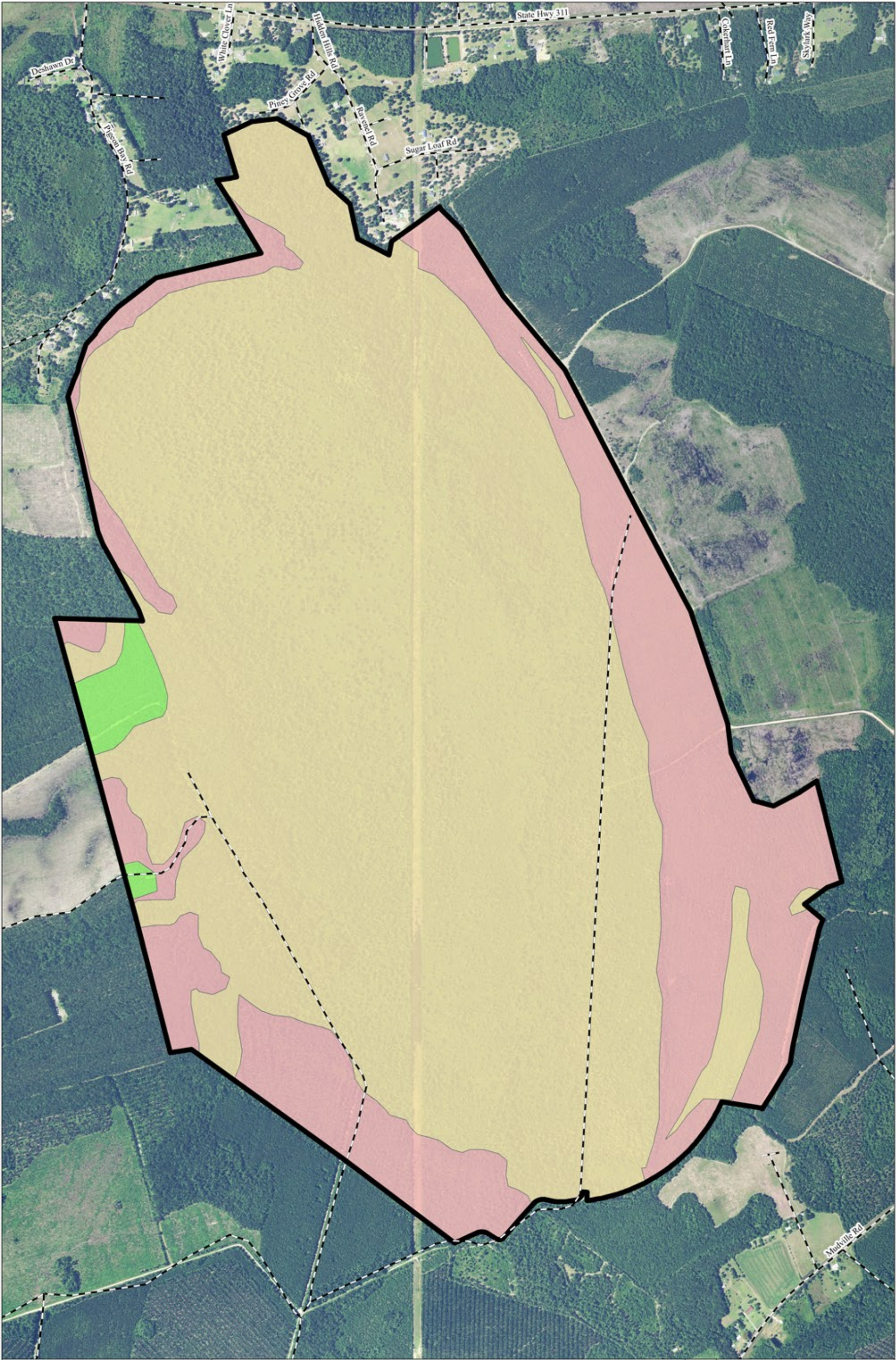
**SITE MAP - TMS# 098-00-00-017**  
**PIGEON POND**  
**BERKELEY COUNTY, SC**

0 950 1,900  
Feet

**LEGEND**

- PROPERTY BOUNDARY: +/- 1424 AC
- ROADS





EXTERNAL SOURCES: NAIP 2017 TRUE COLOR AERIAL, U.S. CENSUS ROADS, BERKELEY COUNTY GIS PARCEL

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Environmental Land Management Consultants  
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**STANDS MAP  
PIGEON POND  
BERKELEY COUNTY, SC**

0 950 1,900  
Feet

LEGEND	
	PROPERTY BOUNDARY: +/- 1424 AC
	STAND 1: 1074 AC
	STAND 2: 320 AC
	STAND 3: 30 AC
	ROADS





Stand	Acreage
1	1074
2	320
3	30

EXTERNAL SOURCES: NAD 2011 TRUE COLOR AERIAL, U.S. CENSUS ROADS, BERKELEY COUNTY GIS PARCEL

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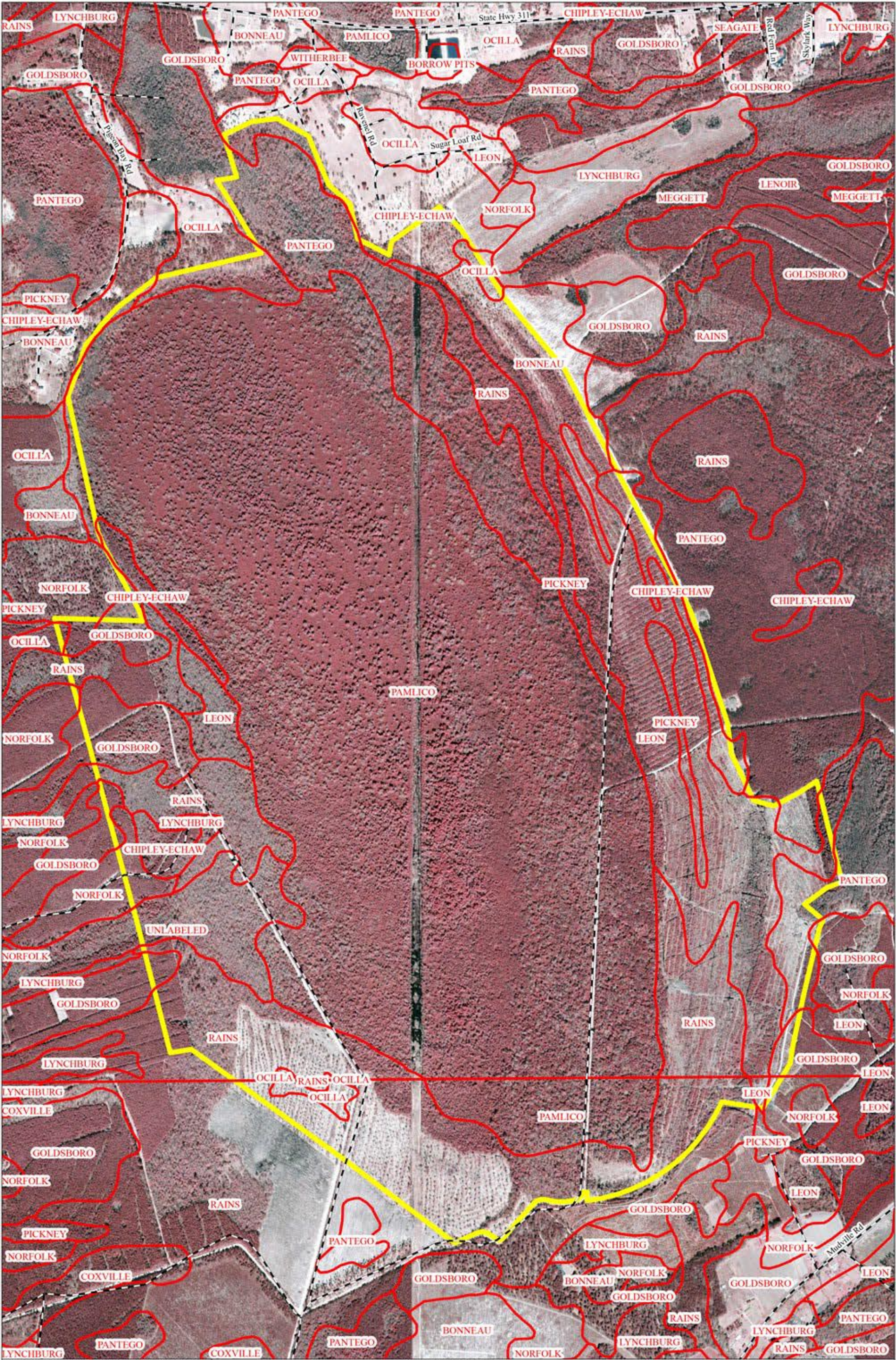
**STANDS MAP  
PIGEON POND  
BERKELEY COUNTY, SC**

0 950 1,900  
Feet

**LEGEND**

- PROPERTY BOUNDARY: +/- 1424 AC
- STANDS
- ROADS





EXTERNAL SOURCES: SCNDR 2006 INPAVED AERIAL, U.S. CENSUS ROADS, BERKELEY COUNTY GIS PARCEL, NRCS SOIL SURVEY

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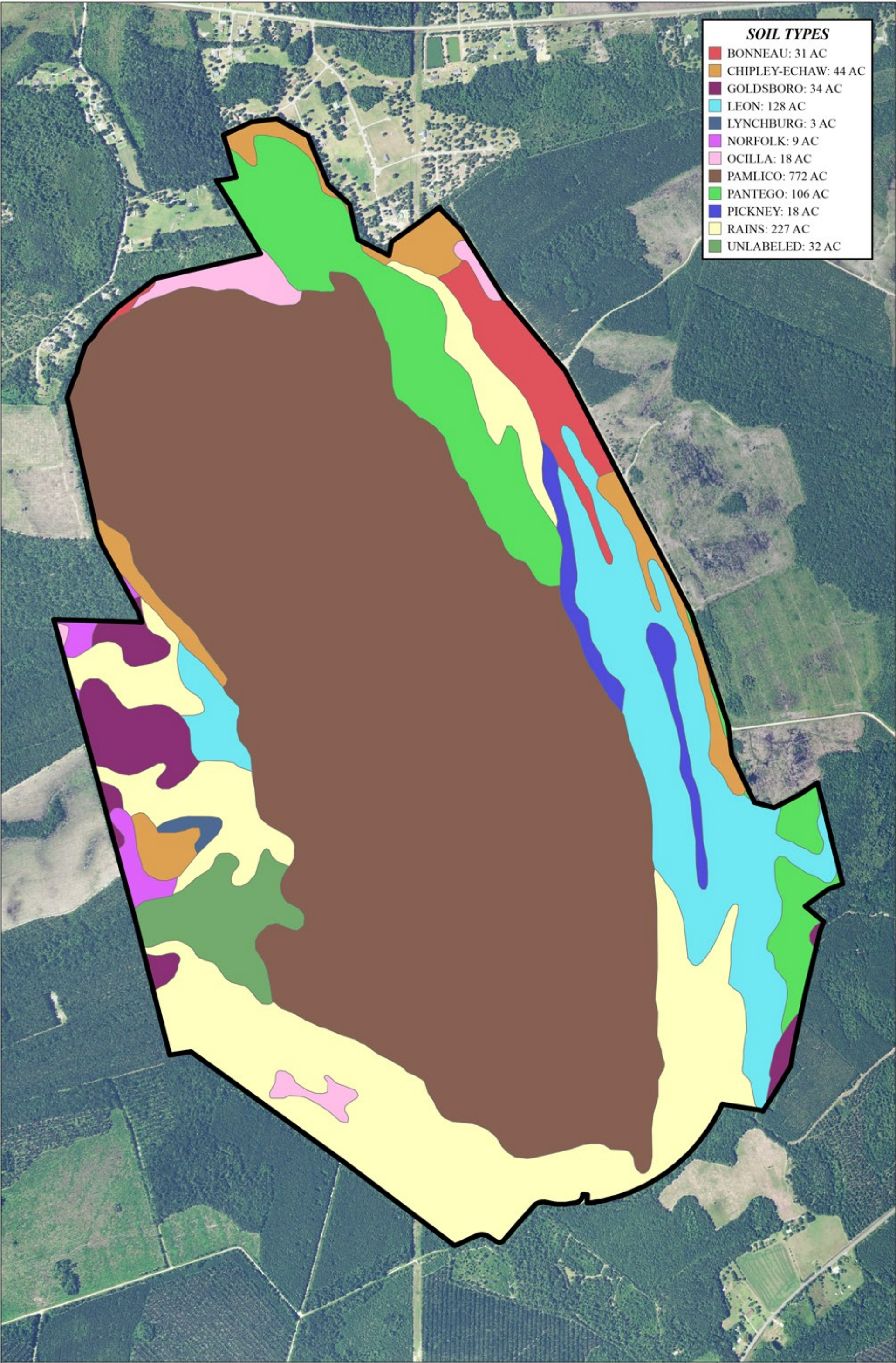
**MAPPED SOILS  
PIGEON POND  
BERKELEY COUNTY, SC**

0 950 1,900  
Feet

**LEGEND**

- PROPERTY BOUNDARY: +/- 1424 AC
- SOILS
- ROADS





SOIL TYPES	
BONNEAU:	31 AC
CHIPLEY-ECHAW:	44 AC
GOLDSBORO:	34 AC
LEON:	128 AC
LYNCHBURG:	3 AC
NORFOLK:	9 AC
OCILLA:	18 AC
PAMLICO:	772 AC
PANTEGO:	106 AC
PICKNEY:	18 AC
RAINS:	227 AC
UNLABELED:	32 AC

EXTERNAL SOURCES: NAIP 2017 TRUE COLOR AERIAL, U.S. CENSUS ROADS, BERKELEY COUNTY GIS PARCEL, NRCS SOIL SURVEY

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MAPPED SOILS  
PIGEON POND  
BERKELEY COUNTY, SC

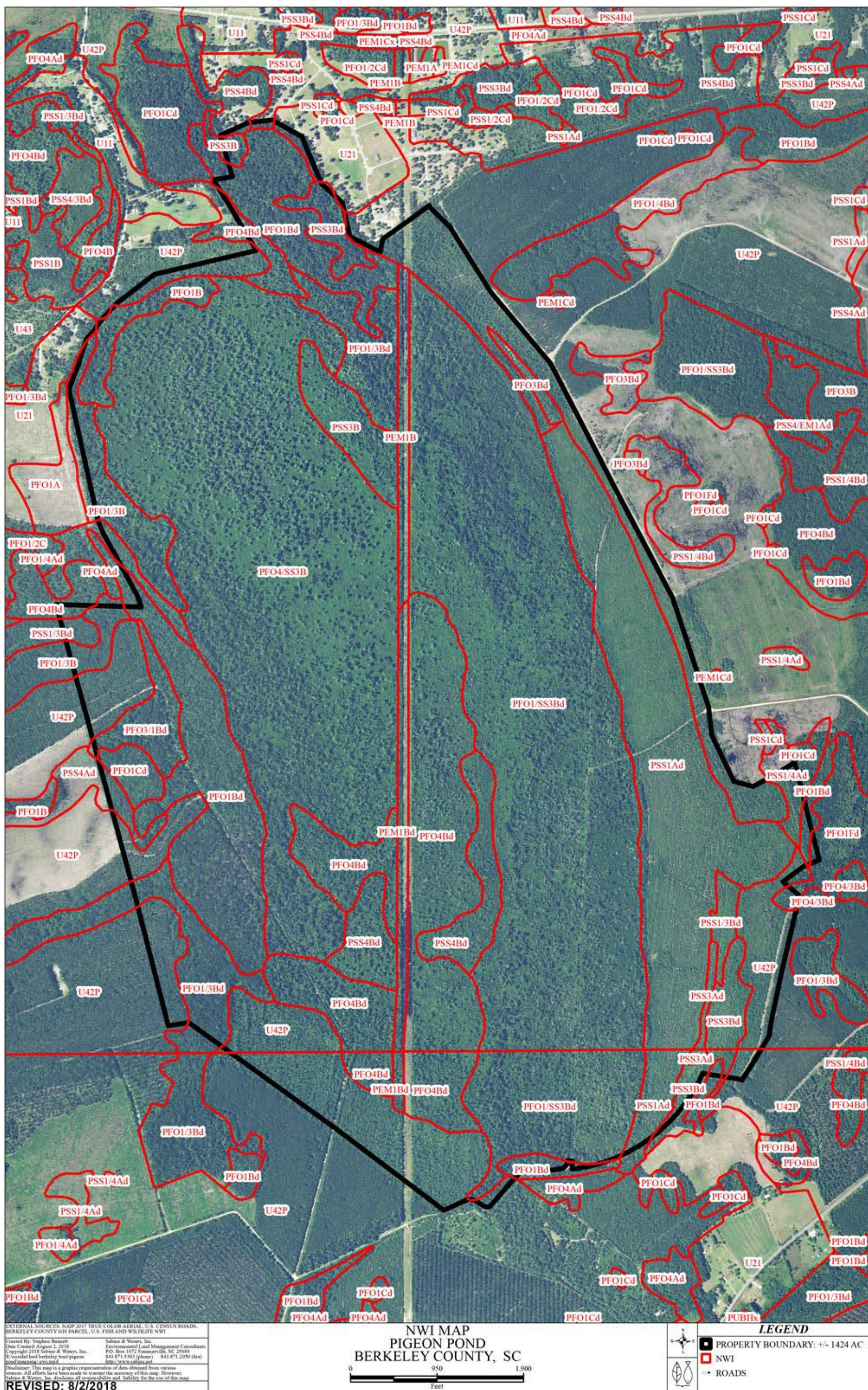
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**LEGEND**

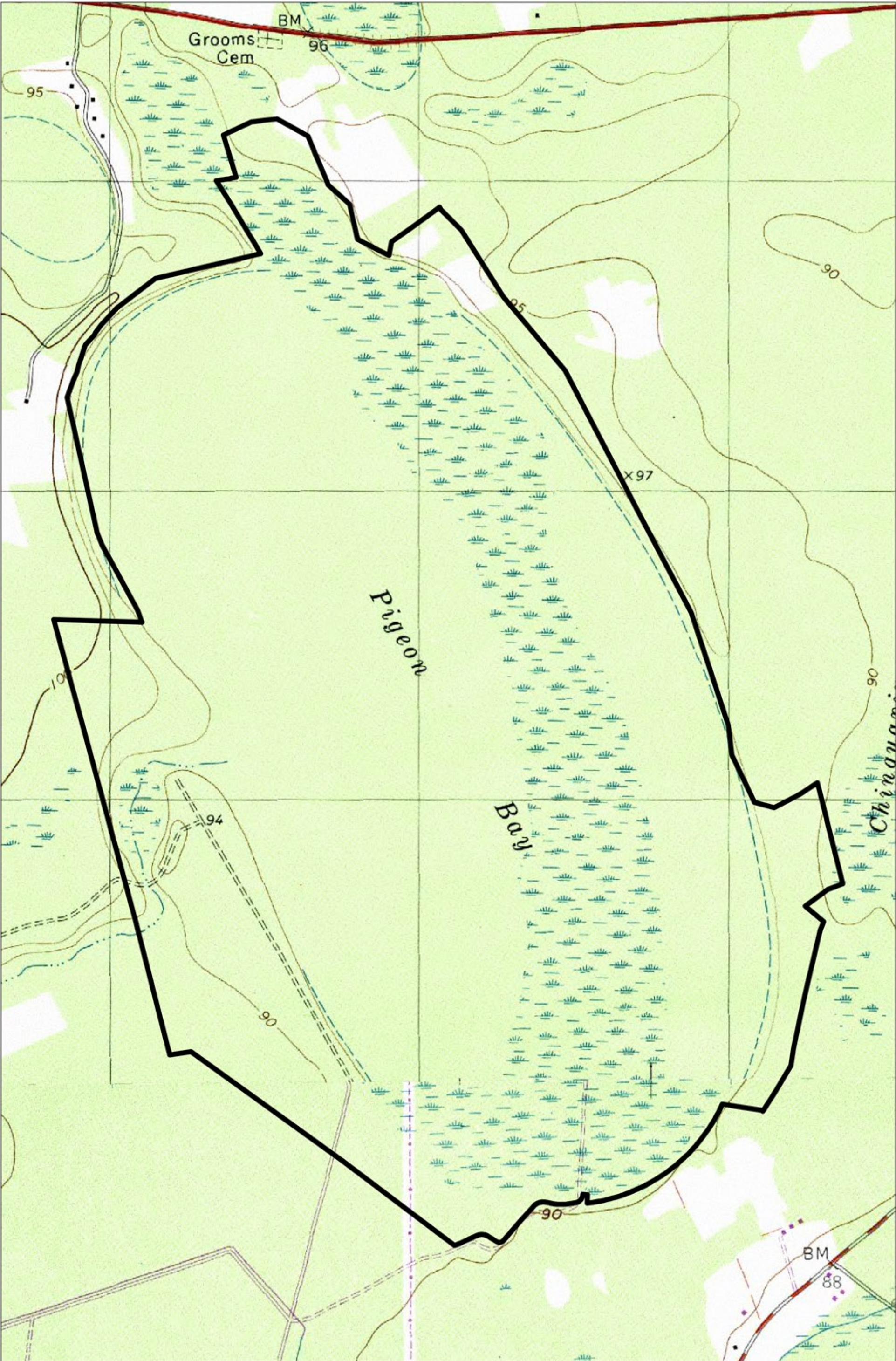
PROPERTY BOUNDARY: +/- 1424 AC

ROADS









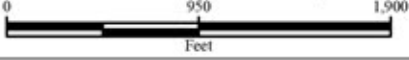
EXTERNAL SOURCES: USGS TOPO CROSS & SUMMERVILLE NW QUAD, BERKELEY COUNTY GIS PARCEL, U.S. FISH AND WILDLIFE NW1

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**REVISED: 8/2/2018**

**TOPOGRAPHIC MAP - CROSS AND SUMMERVILLE NW QUADS**  
**PIGEON POND**  
**BERKELEY COUNTY, SC**



**LEGEND**

PROPERTY BOUNDARY: +/- 1424 AC





EXTERNAL SOURCES: NAIP 2017 TRUE COLOR AERIAL, U.S. CENSUS ROADS, BERKELEY COUNTY GIS PARCEL

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**REVISED: 10/10/2018**

**PROPOSED BRIDGE LOCATIONS  
PIGEON POND  
BERKELEY COUNTY, SC**

0 950 1,900  
Feet

LEGEND	
	PROPOSED BRIDGE LOCATIONS
	PROPERTY BOUNDARY: +/- 1424 AC
	ROADS