



Protected Species Assessment
Enoree Development Site
Enoree, Spartanburg Co., SC
S&ME Project No. 4261-19-083

PREPARED FOR:

Luck Companies
Post Office Box 29682
Richmond, VA 23242

PREPARED BY:

S&ME, Inc.
134 Suber Road
Columbia, SC 29210

April 7, 2021



April 7, 2021

Luck Companies
Post Office Box 29682
Richmond, Virginia 23242

Attention: Mr. Bruce Smith
brucesmith@luckcompanies.com

Reference: **Protected Species Assessment**
Enoree Development Site
Enoree, Spartanburg County, South Carolina
S&ME Project No.4261-19-083

Dear Mr. Smith:

S&ME, Inc. (S&ME) is pleased to submit our Protected Species Assessment for the above-referenced project located in Spartanburg County, South Carolina. This work was performed in general accordance with S&ME Proposal Number 421900438, dated April 17, 2019, and our Agreement for Services.

S&ME appreciates the opportunity to be of service to you by performing this Protected Species Assessment for this project. Please contact us at (803) 561-9024 with questions regarding this report or if you require additional information.

Sincerely,

S&ME, Inc.

A handwritten signature in cursive script that reads "James Trotter".

James Trotter
Biologist
jtrotter@smeinc.com

A handwritten signature in cursive script that reads "Chris Daves".

Chris Daves, P.W.S.
Senior Scientist
cdaves@smeinc.com



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1.0 Project Background

This Protected Species Assessment has been conducted to assess the potential for the presence of protected species on the site in preparation for proposed development. The site is being proposed for future mining/quarry operations. S&ME is requesting the technical assistance (in the form of a written Response Letter) of the U.S. Fish and Wildlife Service (USFWS) as to whether site development would likely result in “take” as defined under Section 9 of the Endangered Species Act (ESA).

The approximate 396-acre site is located adjacent to Old Rock Quarry Road (now closed within site) and west of Frontier Road and Interstate 26 (I-26) near Enoree, Spartanburg County, South Carolina as shown on **Exhibits 1-4** in **Appendix I**. Portions of the site have historically been used for mining (vermiculite and other rock) purposes. Two ponds on the eastern and south-central portions of the site indicate past quarry pits. Mining operations were ceased in the 1950s, and the vermiculite mining areas were reclaimed in the mid-1990s.

2.0 Site and Habitat Descriptions

The site is located in southern Spartanburg County within the Southern Outer Piedmont/Piedmont ecoregion of South Carolina. The site habitats consisted of riparian mixed hardwood woodland, mixed hardwood woodland, planted pines, floodplain hardwoods woodland, secondary growth woodland, and aquatic features (streams, wetlands, and ponds).

The properties adjacent to the site consist of forestland, pastureland, and rural residential parcels. Please refer to **Exhibit 3** and the site photographs in **Appendix I** for depictions of the predominant habitat types located on the site.

2.1 Riparian Mixed Hardwood Woodland

Riparian mixed hardwood woodland was observed adjacent to the tributaries on the site (Photographs 1-3). Dominant overstory species observed along the various streams included sweetgum (*Liquidambar styraciflua*), tulip poplar (*Liriodendron tulipifera*), red maple (*Acer rubrum*), southern red oak (*Quercus falcata*), white oak (*Q. alba*), eastern red cedar (*Juniperus virginiana*), and American beech (*Fagus grandifolia*). Understory species consisted of those of the canopy dominants, American holly (*Ilex opaca*), and flowering dogwood (*Cornus florida*). Woody vine and groundcover species observed included muscadine (*Vitis rotundifolia*), Japanese honeysuckle (*Lonicera japonica*), yellow jessamine (*Gelsemium sempervirens*), roundleaf greenbrier (*Smilax rotundifolia*), Christmas fern (*Polystichum acrostichoides*), rattlesnake orchid (*Goodyera pubescens*), crane fly orchid (*Tipularia discolor*), spotted wintergreen (*Chimaphila maculata*), ebony spleenwort (*Asplenium platyneuron*), wild pansy (*Viola bicolor*), and partridgeberry (*Mitchella repens*).

2.2 Mixed Hardwood Woodland

Mixed hardwood woodland was observed in various locations on the site (Photographs 4-8). Similar species observed in the riparian mixed hardwood woodland were also observed. Additional species included yellow buckeye (*Aesculus flava*), mayapple (*Podophyllum peltatum*), and bloodroot (*Sanguinaria canadensis*).



2.3 Planted Pines

Planted pines were observed on the northern and western portions of the site (Photographs 9-11). The pine stands observed were approximately 20-25 years in age and averaged approximately 60 feet in height. Average diameter-at-breast-height (DBH) was 12 to 14 inches. The dominant overstory species was loblolly pine (*Pinus taeda*). The understory included sweetgum, tree-of-heaven (*Ailanthus altissima*), American holly, and black cherry (*Prunus serotina*). Woody vine and ground cover species included muscadine and ebony spleenwort.

2.4 Floodplain Hardwood Woodland

Floodplain hardwood woodland (Photographs 12-13) was observed on the northern and western portions of the site adjacent to the major streams. Dominant overstory species observed included tulip poplar, red maple, sweetgum, black walnut (*Juglans nigra*), American sycamore (*Platanus occidentalis*), southern hackberry (*Celtis laevigata*), and river birch (*Betula nigra*). The understory species consisted of those of the canopy dominants, ironwood (*Carpinus caroliniana*), American holly, black cherry, Chinese privet (*Ligustrum sinense*), loblolly pine, American elm (*Ulmus americana*), American beech, eastern red cedar, and yellow buckeye. Woody vine and groundcover species observed included muscadine, Japanese honeysuckle, supplejack (*Berchemia scandens*), roundleaf greenbrier, crossvine (*Bignonia capreolata*), Christmas fern, may apple, bedstraw (*Galium aparine*), Japanese stiltgrass (*Microstegium vimineum*), partridgeberry, wild garlic (*Allium vineale*), giant cane (*Arundinaria gigantea*), violet wood-sorrel (*Oxalis violacea*), henbit (*Lamium* spp.), and false rue-anemone (*Isopyrum biternatum*).

2.5 Secondary Growth Woodland

Secondary growth woodland (Photographs 14-16) was observed on the disturbed areas throughout the site. Dominant sapling and shrub species observed included sweetgum, eastern red cedar, loblolly pine, and water oak. Woody vine and groundcover species observed included yellow jessamine, Japanese honeysuckle, roundleaf greenbrier, and blackberry (*Rubus* spp.).

2.6 Aquatic Features

The site contained numerous aquatic features (Photographs 17-22) including streams, wetlands, and ponds. These features were delineated in 2019 in conjunction with a Preliminary Jurisdictional Determination (SAC-2019-01546) issued by the U.S. Army Corps of Engineers (USACE) on November 7, 2019.

Perennial and intermittent/seasonal streams (17,071 linear feet total) ranged from three to 20 feet in width and had sandy, gravel, cobble, and boulder substrates. Due to past land management activities, including silviculture, agriculture, and mining, many of the on-site streams were incised, had eroding banks, and had large amounts of sediment in them. Wetlands (Photographs 23-24) (1.58 acres total) on the site included seepage, beaver impoundments, and riparian forested types. Two ponds (former quarry pits) (Photographs 25-26) were also observed on the eastern and south-central portions of the site.



2.7 Site Soils

S&ME reviewed the U.S. Department of Agriculture (USDA) Soil Conservation Service’s Soil Survey of Spartanburg County and the USDA Natural Resources Conservation Service’s (NRCS) Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/>), which depict the soil types underlying the site and the surrounding area. These sources depicted the site as being underlain by the following soils:

Table 2-1 Soil Descriptions

Soils Series	Drainage	Location	pH
Cecil Sandy Clay Loam (CeB2) 2-6 percent slopes	Well	Along summits, shoulders, and backslopes.	4.5-6.0
Cecil Sandy Clay Loam (CeC2) 6-10 percent slopes	Well	Along backslopes and shoulders.	4.5-6.0
Cecil Clay Loam (CfB3) 2-6 percent slopes	Well	Along shoulders and backslopes.	4.5-6.5
Cecil-Bethlehem Complex (CmE2) 15-25 percent slopes	Well	Along backslopes and shoulders.	4.5-6.0
Pacolet Sandy Loam (PaE) 15-25 percent slopes	Well	Along backslopes and shoulders.	4.5-6.5
Madison Sandy Clay Loam (MaC2) 6-10 percent slopes	Well	Along backslopes and shoulders.	4.5-6.0
Pacolet Sandy Clay Loam (PcD2) 10-15 percent slopes	Well	Along backslopes and shoulders.	4.5-6.5
Toccoa Fine Sandy Loam (ToA) 0-2 percent slopes	Well	Along floodplains and drainageways.	5.1-6.5
Udorthents, loamy (UaE) 6-20 percent slopes	Well	Areas altered by cut, fill, shaping; typically borrow pits, landfills, or cut/fill land.	4.5-6.0

3.0 Methodology

S&ME personnel reviewed the South Carolina Department of Natural Resources (SCDNR) and the USFWS websites to determine those species that are currently listed as federally protected (threatened or endangered) in Spartanburg County. The results of this search, including identified protected species and preferred habitat served as the basis of the field review and are presented in **Table 4-1**.



SCDNR maintains a database of elements of occurrence for protected species in the state of South Carolina. A search of this database did not reveal the known presence of federally protected species (occurrences) on or immediately adjacent to the site. Supporting information was researched for the purpose of identifying soil types, vegetative communities, and possible drainage features in the study area. The supporting information reviewed included aerial photography, topographic quadrangle maps, soil survey sheets, land use information, and data from the National Wetlands Inventory.

S&ME also researched *Hexastylis* species county distribution on the University of South Carolina’s A.C. Moore Herbarium – South Carolina Plant Atlas website.

S&ME Biologists Chris Daves, P.W.S., Jacob Foose, Ron Walker, Chris Handley, and James Trotter performed the multiple field reviews on the following dates:

- ◆ April 6, 2021 (Chris Daves, Will Trotter, Chris Handley)
- ◆ February 24, 2021 (Chris Daves, Will Trotter)
- ◆ May 21, 2019 (Jacob Foose, Ron Walker)
- ◆ May 14, 2019 (Chris Daves, Jacob Foose, Ron Walker)

The information obtained from supporting documentation was integrated with the field review to identify potential areas of preferred habitat of protected species. Portions of the site that matched descriptions of preferred habitat for protected species listed in **Table 4-1** were considered to be potential habitat for the respective protected species. These areas were subsequently field reviewed to confirm the presence/absence of the respective species.

4.0 Federally Protected Species

Descriptions of the species and their respective federal status are identified in **Table 4-1** and in **Appendix II**. The SCDNR and USFWS websites identified the following federally listed species for Spartanburg County:

Table 4-1 Federally Protected Flora and Fauna Summary

Species	Listing	Habitat
Northern Long-Eared Bat <i>Myotis septentrionalis</i>	T	Caves and abandoned mines (winter hibernacula). In summer, underneath bark or in cavities or crevices of trees with loose or exfoliating bark, with diameter at breast height (DBH) greater than three inches.
Dwarf-Flowered Heartleaf <i>Hexastylis naniflora</i>	T	Bluffs, hillsides, ravines, and boggy areas adjacent to streams in Piedmont hardwood forests; Prefers Pacolet, Madison, or Musella soils. Flowers mid-March to late May/early June.
Bald Eagle <i>Haliaeetus leucocephalus</i>	BGEPA	Coastlines, rivers, large lakes which provide adequate feeding grounds.

T = Threatened

BGEPA = Bald and Golden Eagle Protection Act



4.1 Northern Long-Eared Bat

BIOLOGICAL DETERMINATION: MAY AFFECT, NOT LIKELY TO ADVERSELY AFFECT

Northern long-eared bat is a medium-sized bat approximately three to 3.7 inches, with a wingspan of nine to 10 inches. Fur color ranges from medium to dark brown on the back and tawny to pale brown on the underside. It is distinguished by its long ears in relation to other bats in the genus *Myotis*, which means mouse-eared. Northern long-eared bats use caves and abandoned mines as winter hibernacula. In summer, the bat will roost in small colonies or alone underneath bark or in cavities or crevices of both live trees and dead trees. The USFWS considers any live or dead tree with loose or exfoliating bark with a diameter at breast height (DBH) greater than three inches to be potential roosting habitat.

The site contained forested areas with trees with a DBH larger than three inches, and also exhibited loose, creviced, or exfoliating bark (Photograph 27). Snags were also observed. These trees could potentially provide summer roosting habitat for this species. The site does not contain suitable winter hibernacula habitat as there were no caves. The site does contain abandoned mines, but the former mines areas were open pit and are currently ponds. Slopes surrounding the ponds did not contain caves or opening to support winter hibernacula.

S&ME submitted a scoping e-mail to Mr. Joe Lemeris with SCDNR Heritage Trust Program regarding northern long-eared bat occurrences on or in the vicinity of the site. The SCDNR response letter (**Appendix II**), dated March 3, 2021, indicated there are no known federal or state threatened or endangered species including the northern long-eared bat within two miles of the site. No known locations of the bat are within one-quarter (0.25) mile from known hibernacula, winter roosts, or within 150 feet from known maternity roost trees.

The proposed project appears to meet the criteria for the 4(d) rule of the ESA and the nationwide programmatic biological opinion for the northern long-eared bat; any associated incidental take is therefore exempt. A consistency letter from the USFWS included in **Appendix III**.

At this time, the scheduling of tree clearing activities for this project has yet to be determined. Based our understanding of current guidance, if clearing is conducted outside the May 15 to August 15 window (approximate pup season), potential impacts to the northern long-eared bat can be reduced. Depending on the project schedule, a concerted effort to clear the trees outside of pup season should be made.

4.2 Dwarf-Flowered Heartleaf

BIOLOGICAL DETERMINATION: NO EFFECT

Dwarf-flowered heartleaf is a perennial, evergreen herb. Its leathery leaves are round, or heart shaped. Light green reticulation often occurs along the leaf veins. Flowering occurs from mid-March to late May/early June. Its beige to dark brown flowers are the smallest in the *Hexastylis* genus. Flowers are solitary and grow on a short stalk extending from the base of the leaves. The habitat of the dwarf-flowered heartleaf includes acidic, sandy loam soils along bluffs, hillsides, ravines, and boggy areas adjacent to streams in hardwood forests of the Piedmont. The species appears to prefer north-facing slopes. More specifically, it is endemic to the upper Piedmont of North and South Carolina. Soil type (Pacolet, Madison, and Musella soils) appears to be the most important habitat requirement.



Review of the USDA soils information (**Exhibit 4**) depicted Madison and Pacolet soils listed throughout the site, often adjacent to on-site streams. These soils are often associated with dwarf-flowered heartleaf. North-facing slopes are also located on the site. Although favorable soils and landscape position were located on the site, dwarf-flowered heartleaf was not observed during our site reconnaissance which was conducted during the flowering season. The only species of *Hexastylis* observed on the site was arrowleaf (*Hexastylis arifolia*). Refer to Photographs 28-30 and **Exhibit 3** for depictions and locations of arrowleaf.

Accordingly, future development of the site is not expected to impact this species.

4.3 Bald Eagle

BIOLOGICAL DETERMINATION: NO IMPACT

This large raptor has characteristic adult plumage consisting of a white head and tail with a dark brown body. Juvenile eagles are completely dark brown and do not fully develop the majestic white head and tail until the fifth or sixth year. Adults average about three feet from head to tail, weigh approximately 10 to 12 pounds and have a wingspread that can reach seven feet. Generally, female bald eagles are larger than the males. The typical nest is constructed of large sticks and is lined with soft materials such as pine needles and grasses. The nests are very large, measuring up to six feet across and weighing hundreds of pounds. Nesting and feeding sites are generally in the vicinity of large bodies of open water (coastlines, rivers, large lakes).

The site does not contain suitable nesting habitat for the bald eagle. There are no coastlines, rivers, or large lakes on or immediately adjacent to the site considered suitable habitat for the bald eagle. No nests or individuals were observed during the field survey. Accordingly, future development of the site is not expected to impact this species.

5.0 Qualifications

The field survey was led by Chris Daves of S&ME. Mr. Daves is a Senior Scientist biologist and natural resources project manager with over 20 years of experience in environmental consulting. Mr. Daves is proficient in conducting wetland delineations, environmental permitting activities, and habitat assessments, including protected species surveys. He is a Professional Wetland Scientist (PWS) and holds a B.S. degree in Biology from Wofford College and a Master's degree in Earth and Environmental Resources Management from the University of South Carolina.



6.0 Summary and Conclusions

Based on the literature review, habitat assessment, and pedestrian field review of the site, the following conclusions are given regarding federally listed species in Spartanburg County:

- ◆ Potential summer roosting habitat for the northern long-eared bat was observed within the forested areas of the site. Snags were also observed. These trees had loose, exfoliating, or creviced bark over three inches DBH which could provide summer roosting habitat for the northern long-eared bat. Per SCDNR consultation, there are no known winter hibernacula or summer roosting trees located within one-quarter mile radius of the site and no maternity roost trees within 150 feet.

Based on the 2019 USFWS Clearance Letter for Species and Habitat Assessments, blanket concurrence from the USFWS is granted for *may affect, but not likely to adversely affect* determinations for northern long-eared bat if proposed work occurs more than one-quarter mile from known hibernacula, winter roosts, or is further than 150 feet from known maternity roost trees. Copies of the USFWS Clearance Letter and a consistency letter are included in **Appendix III**. No further consultation with the USFWS is necessary.

- ◆ Although favorable soils and landscape position for dwarf-flowered heartleaf were observed on the site, dwarf-flowered heartleaf was not observed during our site reconnaissance which was conducted during the flowering season. Our opinion is that proposed development of the site will have *no effect* on this species. Since this assessment indicated there will be no effect or impact, the proposed project qualifies to use the USFWS Clearance Letter (**Appendix III**).

No further action is recommended at this time.

7.0 References

The following sources were referenced during the course of this assessment:

- ◆ SCDNR. Natural Heritage Program: <https://schtportal.dnr.sc.gov/portal/apps/sites/#/natural-heritage-program>.
- ◆ SCDNR. Natural Heritage Program. Response Letter dated March 3, 2021.
- ◆ SCDNR. Rare, Threatened, and Endangered Species Inventory: <https://experience.arcgis.com/experience/af61ba156d054cc7b3e27d09a0c35c0f>.
- ◆ SCDNR: Bald Eagle Locations: <http://www.dnr.sc.gov/wildlife/baldeagle/locations.html>.
- ◆ University of South Carolina – A.C. Moore Herbarium South Carolina Plant Atlas: <http://herbarium.biol.sc.edu//scplantatlas.html>.
- ◆ USACE. Preliminary Jurisdictional Determination (SAC-2019-01546), dated November 7, 2019.
- ◆ USFWS: South Carolina List of At-Risk, Candidate, Endangered, and Threatened Species by County: <https://www.fws.gov/southeast/pdf/fact-sheet/south-carolina-species-list-by-county.pdf>.
- ◆ USFWS. Information for Planning and Consultation (IPaC): <https://ecos.fws.gov/ipac/>.
- ◆ USFWS. <https://www.fws.gov/southeast/charleston/project-planning/>.
- ◆ USFWS.2016. Nationwide Programmatic Biological Opinion for the Northern Long-Eared Bat: <https://www.fws.gov/Midwest/endangered/mammals/nleb/pdf/FRnlebFinal4dRule14Jan2016.pdf>.



Protected Species Assessment

Enoree Development Site

Enoree, Spartanburg County, South Carolina

S&ME Project No. 4261-19-083

- ◆ USFWS. 2016. Key to the Northern Long-Eared Bat 4(d) Rule for Federal Activities.
- ◆ USFWS. 2016. Key to the Northern Long-Eared Bat 4(d) Rule for Non-Federal Activities.
- ◆ USFWS. 2019. Clearance Letter for Species and Habitat Assessments, dated May 30, 2019.
- ◆ USFWS. NLEB Consistency Letter for Enoree Quarry, dated March 3, 2021.
- ◆ U.S. Department of Agriculture – National Resources Conservation Service Web Soil Survey:
<http://websoilsurvey.nrcs.usda.gov/app/>.
- ◆ USDA. 1968. Soil Survey of Spartanburg County, South Carolina.

Appendices

Appendix I – Exhibits and Site Photographs


Drawing Path: T:\ENV\Projects\2019\4261-19-083 Luck Companies_Enoree Hannah Site_Enoree(GIST&E Mapping 2021)\mxd\Enoree Development Site Vicinity Exhibit.mxd plotted by chandley 04-07-2021

REFERENCE:
PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.

APPROXIMATE SITE LOCATION
-81.9441, 34.6740

Exit 41
SC 92

0 2,000 4,000 FEET

 **Approximate Boundary**



Vicinity Exhibit

Enoree Development Site +/- 396 Acres

Enoree, Spartanburg County, South Carolina

Source: World Street Map

SCALE:
1" = 2,000'

DATE:
4-7-21

PROJECT NUMBER
4261-19-083

EXHIBIT NO.

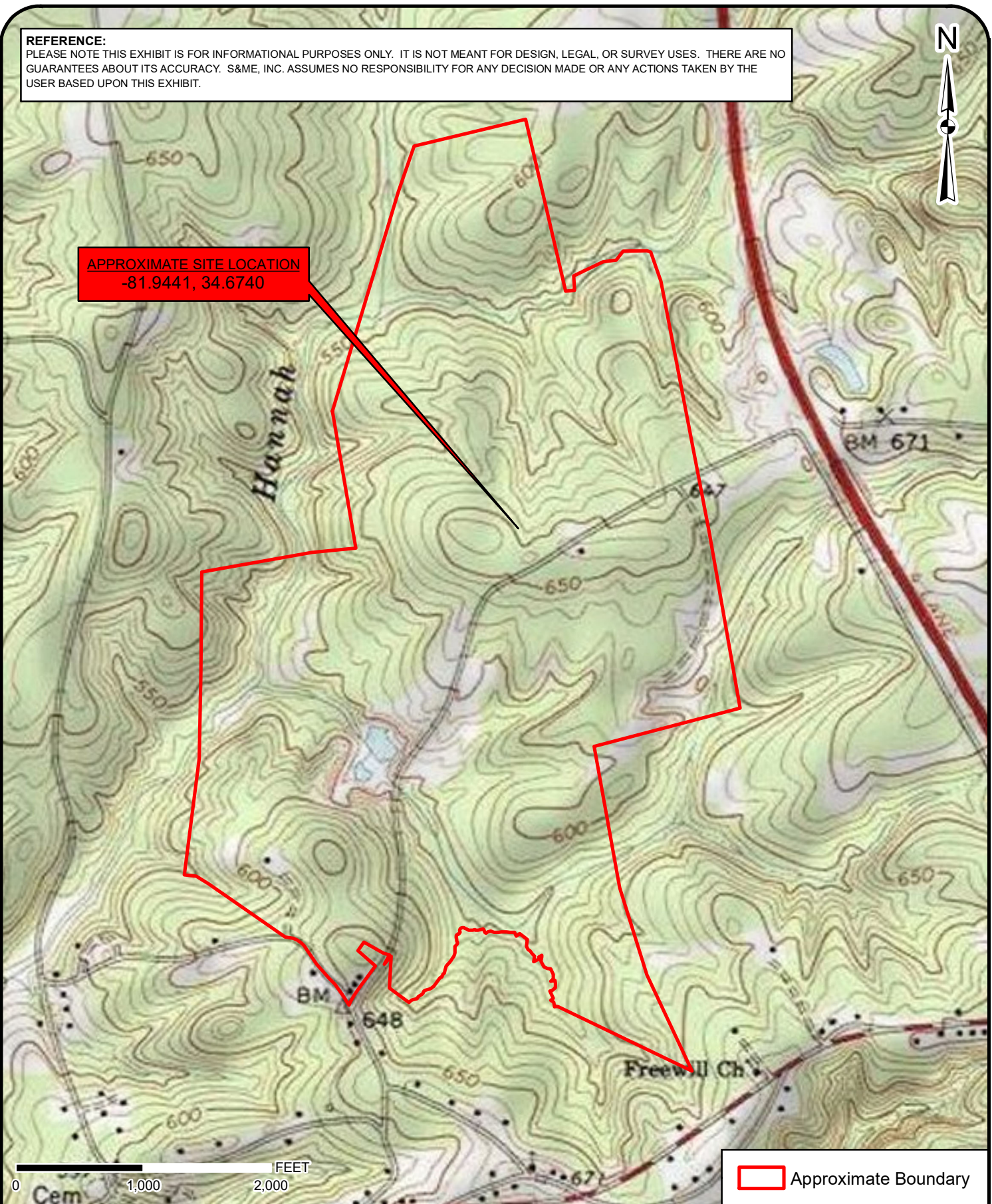
1

REFERENCE:

PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
-81.9441, 34.6740



 Approximate Boundary

SCALE:
1" = 1,000'
DATE:
4-7-21
PROJECT NUMBER
4261-19-083

EXHIBIT NO.

2

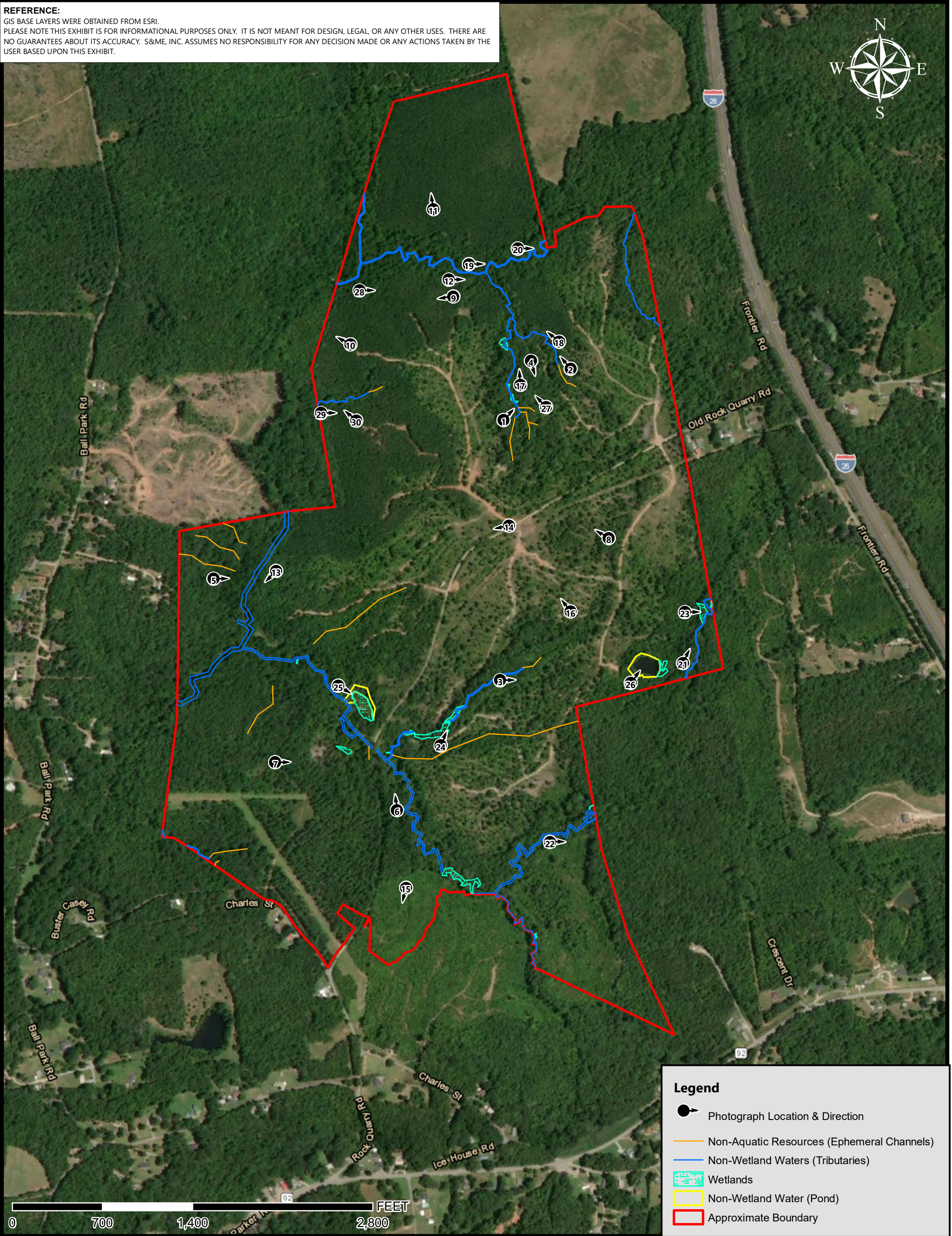


Topographic Exhibit

Enoree Development Site +/- 396 Acres

Enoree, Spartanburg County, South Carolina
Source: USGS 7.5-Minute Topo Quad Enoree, SC 1969

REFERENCE:
 GIS BASE LAYERS WERE OBTAINED FROM ESRI.
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



Legend

-  Photograph Location & Direction
-  Non-Aquatic Resources (Ephemeral Channels)
-  Non-Wetland Waters (Tributaries)
-  Wetlands
-  Non-Wetland Water (Pond)
-  Approximate Boundary

SCALE: 1 inch = 700 feet

DATE: 4/7/2021

DRAWN BY: CCH

PROJECT NO:
4261-19-083



Aerial Exhibit
 Enoree Development Site +/- 396 Acres
 Enoree, Spartanburg County, South Carolina
 Source: World Imagery 2019

EXHIBIT
NO.

3

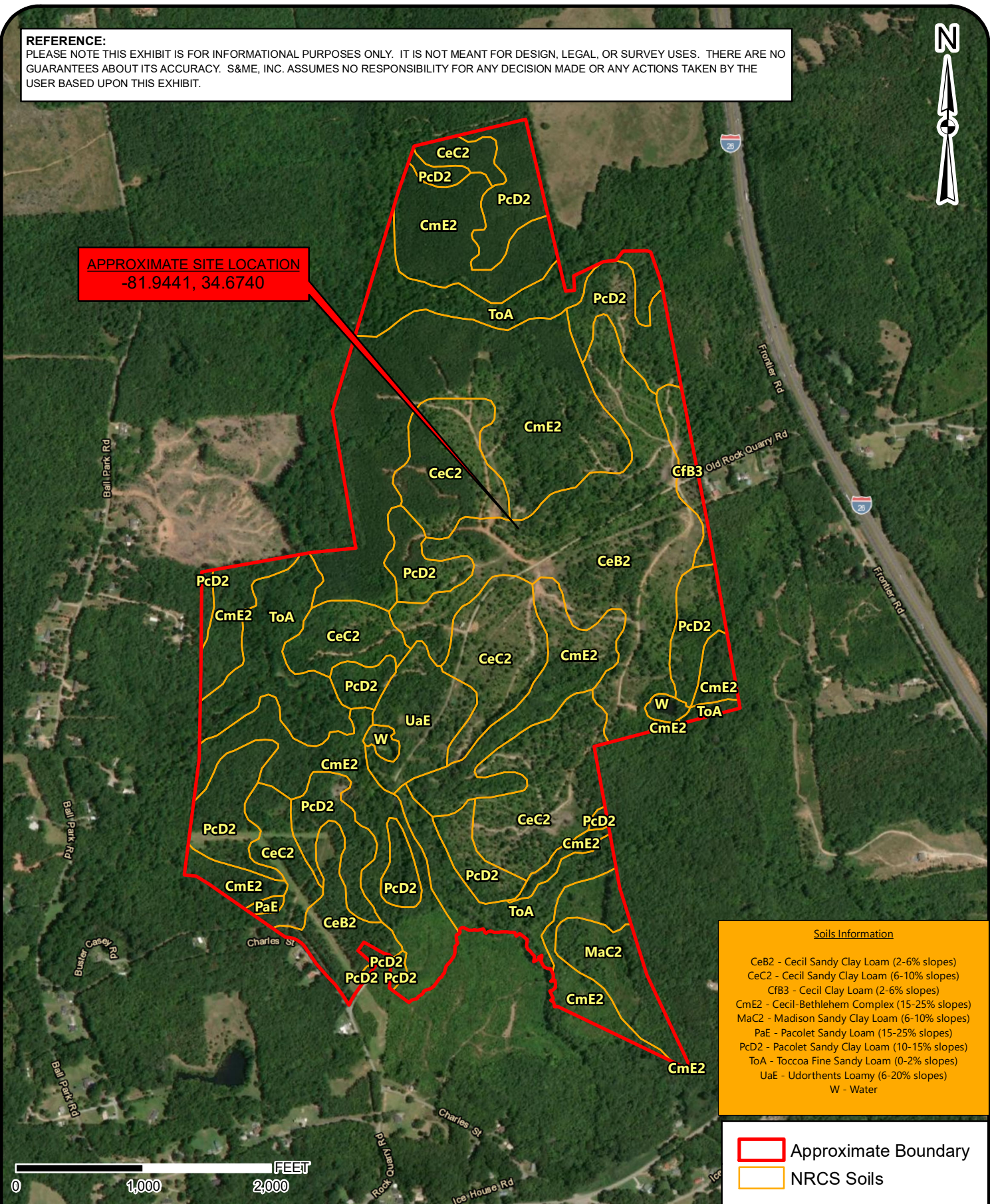
Drawing Path: T:\ENV\Projects\2019\4261-19-083 Luck Companies_Enoree Hannah Site_Enoree\GIS\T&E Mapping 2021\mxds\Enoree Development Site Aerial Exhibit.mxd plotted by chandley 04-07-2021

REFERENCE:



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APPROXIMATE SITE LOCATION
-81.9441, 34.6740



Soils Information	
CeB2	- Cecil Sandy Clay Loam (2-6% slopes)
CeC2	- Cecil Sandy Clay Loam (6-10% slopes)
CfB3	- Cecil Clay Loam (2-6% slopes)
CmE2	- Cecil-Bethlehem Complex (15-25% slopes)
MaC2	- Madison Sandy Clay Loam (6-10% slopes)
PaE	- Pacolet Sandy Loam (15-25% slopes)
PcD2	- Pacolet Sandy Clay Loam (10-15% slopes)
ToA	- Toccoa Fine Sandy Loam (0-2% slopes)
UaE	- Udorthents Loamy (6-20% slopes)
W	- Water

	Approximate Boundary
	NRCS Soils

SCALE: 1" = 1,000'	EXHIBIT NO. 4
DATE: 4-7-21	
PROJECT NUMBER 4261-19-083	



Soils Exhibit

Enoree Development Site +/- 396 Acres

Enoree, Spartanburg County, South Carolina
Source: World Imagery 2019 & NRCS (Web Soil Survey)

Drawing Path: T:\ENV\Projects\2019\4261-19-083 Luck Companies_Enoree Hannah Site_Enoree\GIS\T&E Mapping 2021\mxds\Enoree Development Site Soils Exhibit.mxd plotted by chandley 04-07-2021



1 Riparian mixed hardwood woodland located on northern portion of site.



2 Riparian mixed hardwood woodland located on northern portion of site. View of slopes adjacent to stream.



3 Riparian mixed hardwood woodland located on southern portion of site.



4 Mixed hardwood woodland located on northern portion of site.





5 Mixed hardwood woodland located on southwestern portion of site. View of north-facing slope.



6 Mixed hardwood woodland located on southern portion of site.



7 Mixed hardwood woodland with a few scattered pines located on the southwestern portion of site.



8 Mixed hardwood woodland located on eastern portion of site.





9 Planted pines located on northern portion of site.



10 Planted pines located on northwest portion of site.



11 Planted pines located on the far northern portion of site.



12 Floodplain woodland located on the northern portion of site.





13 Floodplain woodland and stream located on western portion of site.



14 Cutover/secondary growth woodland located on north-central portion of site.



15 Secondary growth woodland located on southern portion of site.



16 Secondary growth woodland located on eastern portion of site.





17 Intermittent stream located on the northern portion of site.



18 Intermittent stream located on northern portion of site.



19 Perennial stream located on northern portion of site.



20 Perennial stream located on northern portion of site. Impaired and deeply incised banks (typical of streams throughout site).





21 Intermittent tributary located on the eastern portion of the site. Severely eroded banks.



22 Perennial tributary located on the southeastern portion of the site.



23 Wetland located on the eastern portion of the site.



24 Wetland located on the south-central portion of the site. Beaver dam can be observed in center of photo.





25 Pond observed on the southern portion of the site. Beaver dam observed in foreground of photo.



26 Pond located on the eastern portion of the site.



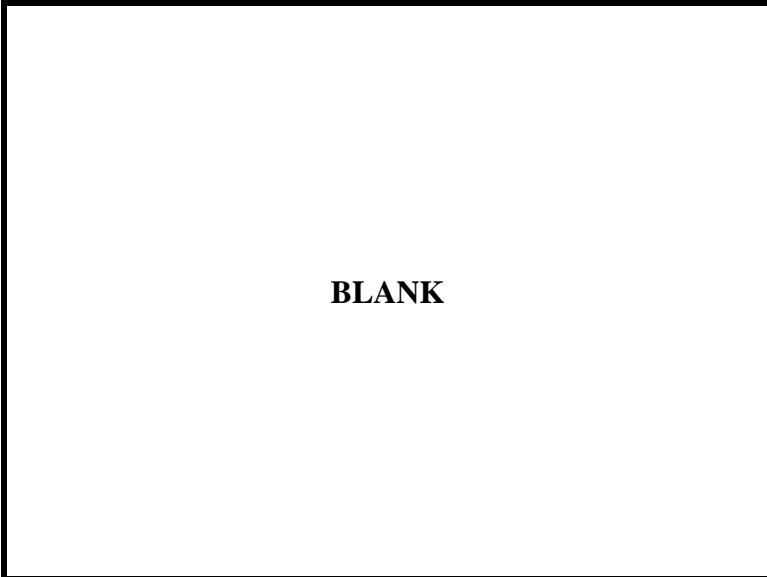
27 Typical view of potential bat habitat located on the northern portion of the site. White oak trees with scaly bark were located throughout the mixed hardwood woodland on the site.



28 Dwarf-flowered heartleaf (*Hexastylis arifolia*) observed on the northern portion of the site. Flower can be observed.



29 Dwarf-flowered heartleaf (*Hexastylis arifolia*) observed on the northern portion of the site. Flower can be observed.

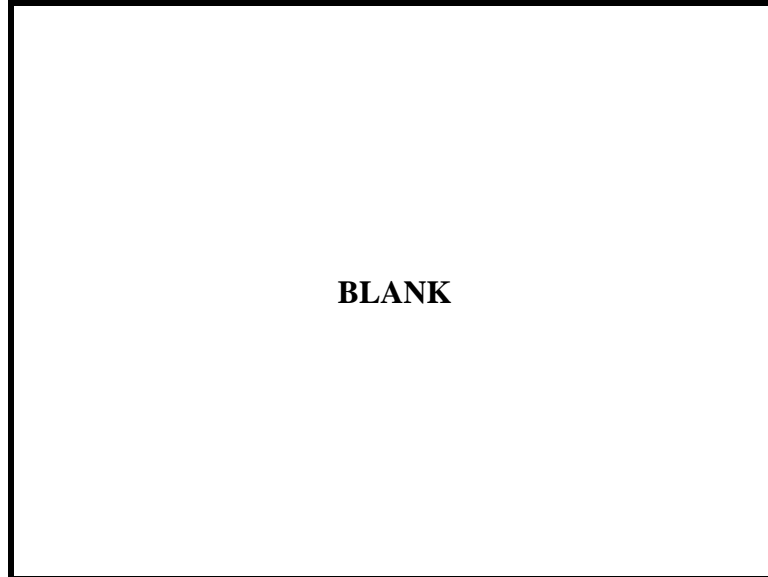


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30 Dwarf-flowered heartleaf (*Hexastylis arifolia*) observed on the northern portion of the site. Flower can be observed.



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Appendix II – County Species Lists from USFWS and SCDNR

SPARTANBURG COUNTY

CATEGORY	COMMON NAME/STATUS	SCIENTIFIC NAME	SURVEY WINDOW/ TIME PERIOD	COMMENTS
Amphibians	None Found			
Birds	Golden-winged warbler (ARS)	<i>Vermivora chrysoptera</i>	April-July (nesting surveys)	Spring/Fall migration; variable throughout State
Crustaceans	Broad River spiny crayfish (ARS)	<i>Cambarus spicatus</i>	November-April	
Fishes	None Found			
Insects	Monarch butterfly (ARS)	<i>Danaus plexippus</i>	August-December	Overwinter populations departs: March-April
Mammals	Little brown bat (ARS)	<i>Myotis lucifugus</i>	Year round	Found in trees, rock crevices, and under bridges
	Northern long-eared bat (T)	<i>Myotis septentrionalis</i>	Year round	Winter surveys not as successful
	Tri-colored bat (ARS)	<i>Perimyotis subflavus</i>	Year round	Found in mines and caves in the winter
Mollusks	None Found			
Plants	Dwarf-flowered heartleaf (T)	<i>Hexastylis naniflora</i>	March-May	
Reptiles	None Found			

- * Contact National Marine Fisheries Service (NMFS) for more information on this species.
- ** The U.S. Fish and Wildlife Service (FWS) and NMFS share jurisdiction of this species.
- ARS Species that the FWS has been petitioned to list and for which a positive 90-day finding has been issued (listing may be warranted); information is provided only for conservation actions as no Federal protections currently exist.
- ARS* Species that are either former Candidate Species or are emerging conservation priority species.
- BGEPA Federally protected under the Bald and Golden Eagle Protection Act
- C FWS or NMFS has on file sufficient information on biological vulnerability and threat(s) to support proposals to list these species.
- CH Critical Habitat
- E Federally Endangered
- P or P – CH Proposed for listing or critical habitat in the Federal Register
- S/A Federally protected due to similarity of appearance to a listed species
- T Federally Threatened

These lists should be used only as a guideline, not as the final authority. The lists include known occurrences and areas where the species has a high possibility of occurring. Records are updated as deemed necessary and may differ from earlier lists.

For a list of State endangered, threatened, and species of concern, please visit <https://www.dnr.sc.gov/species/index.html>.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218
<http://www.fws.gov/charleston/>

In Reply Refer To:

March 03, 2021

Consultation Code: 04ES1000-2021-SLI-0461

Event Code: 04ES1000-2021-E-01054

Project Name: Enoree Quarry

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

<http://>

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Carolina Ecological Services

176 Croghan Spur Road, Suite 200

Charleston, SC 29407-7558

(843) 727-4707

Project Summary

Consultation Code: 04ES1000-2021-SLI-0461

Event Code: 04ES1000-2021-E-01054

Project Name: Enoree Quarry

Project Type: MINING

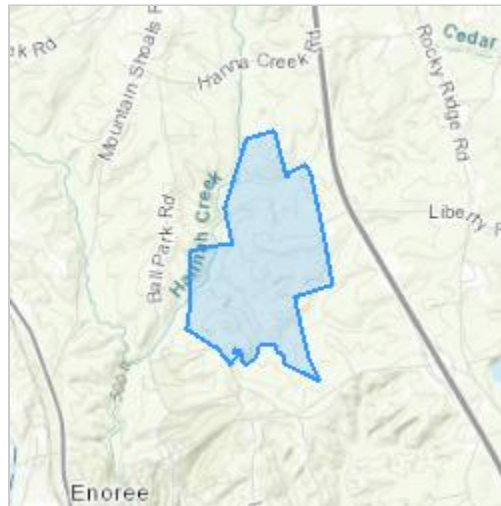
Project Description: 396 acre site located in Enoree, Spartanburg County, South Carolina.

Reason for request of information is due diligence.

Project Location:

Approximate location of the project can be viewed in Google Maps: [https://](https://www.google.com/maps/@34.6726162,-81.94560610588319,14z)

www.google.com/maps/@34.6726162,-81.94560610588319,14z



Counties: Spartanburg County, South Carolina

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Flowering Plants

NAME	STATUS
Dwarf-flowered Heartleaf <i>Hexastylis naniflora</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2458	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical](#)

[Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Rare, Threatened, and Endangered Species of South Carolina - by County

The lists below indicate what species have been reported to the Heritage Trust Program as occurring in each county. They are not a complete listing of what actually exists, as no complete survey of the state has ever been done.

Spartanburg County

Animals

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Cambarus spicatus	Broad River Spiny Crayfish	ARS*: Risk, priority	--	G3	S3
Danaus plexippus	Monarch Butterfly	ARS*: Risk, Priority	--	G4	SNR
Microtus pennsylvanicus	Meadow Vole	--	--	G5	S3?
Mustela vison	Mink	--	--	G5	S4
Perimyotis subflavus	Tricolored Bat	ARS*: Risk, priority	--	G2G3	S1S2
Vermivora chrysoptera	Golden-winged Warbler	ARS*: Risk, priority	--	G4	SNA

Plants

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Aconitum uncinatum	Blue Monkshood	--	--	G4	S2
Circaea lutetiana ssp. canadensis	Enchanter's Nightshade	--	--	G5T5	S3
Cypripedium pubescens	Large Yellow Lady's-slipper	--	--	G5T5	S3
Fothergilla major	Mountain Witch-alder	--	--	G3	S2

Gaultheria procumbens	Teaberry	--	--	G5	S3
Hackelia virginiana	Virginia Stickseed	--	--	G5	S1
Helianthus laevigatus	Smooth Sunflower	--	--	G4	S2
Helianthus porteri	Porter's Goldeneye	--	--	G4	S1
Hexastylis naniflora	Dwarf-flowered Heartleaf	LT: Threatened	--	G3	S3
Isoetes piedmontana	Piedmont Quillwort	--	--	G4	S2
Juglans cinerea	Butternut	--	--	G4	S3
Juncus georgianus	Georgia Rush	--	--	G4	S2
Juniperus communis	Ground Juniper	--	--	G5	SNR
Lonicera flava	Yellow Honeysuckle	--	--	G5?	S2
Lygodium palmatum	Climbing Fern	--	--	G4	S3
Melanthium virginicum	Virginia Bunchflower	--	--	G5	S2
Minuartia uniflora	One-flower Stitchwort	--	--	G4	S3
Monotropsis odorata	Sweet Pinesap	--	--	G3	S2
Nestronia umbellula	Nestronia	--	--	G4	S3
Rhododendron eastmanii	May White	--	--	G2	S2
Solidago bicolor	White Goldenrod	--	--	G5	S2

For additional information about rare, threatened, and endangered species or questions about these lists, please contact [Anna Smith](#).

Environmental Review

- [Office of Environmental Programs](#)
- [Bald Eagle Nest Data](#)
- [Planning & Conservation](#)

[Phone Numbers](#) | [Accessibility](#) | [FOIA](#) | [Privacy Policy](#) | [Report Waste or Abuse to SC Inspector General](#) |
 South Carolina Department of Natural Resources - Rembert C. Dennis Building
 1000 Assembly Street, Columbia, SC 29201
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South Carolina Department of Natural Resources



PO Box 167
Columbia, SC 29202
(803) 734-1396
speciesreview@dnr.sc.gov

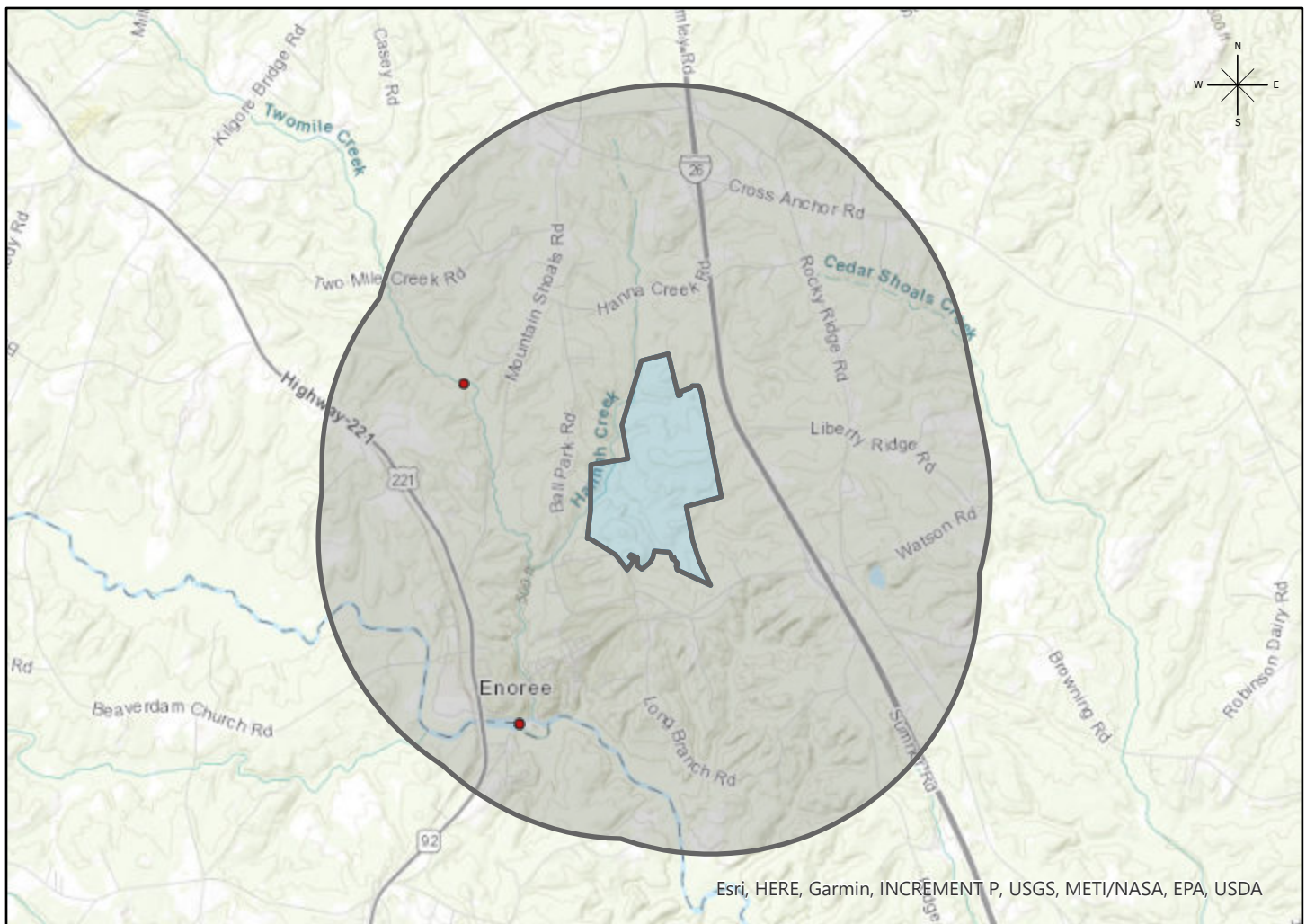
Robert H. Boyles, Jr.
Director

Emily C. Cope
Deputy Director for
Wildlife and Freshwater Fisheries

Requested on Wednesday, March 3, 2021 by Chris Handley.

Re: Request for Threatened and Endangered Species Consultation
S&ME - Enoree Quarry
Mine
Spartanburg County, South Carolina

The South Carolina Department of Natural Resources (SCDNR) has received your request for threatened and endangered species consultation of the above named project in Spartanburg County, South Carolina. The following map depicts the project area and a 2 mile buffer surrounding:



Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

0 0.5 1 2 Miles

South Carolina Department of Natural Resources



Robert H. Boyles, Jr.

Director

Emily C. Cope

Deputy Director for

Wildlife and Freshwater Fisheries

This report includes the following items:

- A - A report for species which intersect the project area
- B - A report for species which intersect the buffer around the project area
- C - A list of best management practices relevant to species near to or within the project area
- D - A list of best management practices relevant to the project type
- E - Instructions to submit new species observation records to the SC Natural Heritage Program

The technical comments outlined in this report are submitted to speak to the general impacts of the activities as described through inquiry by parties outside the South Carolina Department of Natural Resources. These technical comments are submitted as guidance to be considered and are not submitted as final agency comments that might be related to any unspecified local, state or federal permit, certification or license applications that may be needed by any applicant or their contractors, consultants or agents presently under review or not yet made available for public review. In accordance with its policy 600.01, Comments on Projects Under Department Review, the South Carolina Department of Natural Resources, reserves the right to comment on any permit, certification or license application that may be published by any regulatory agency which may incorporate, directly or by reference, these technical comments.

Interested parties are to understand that SCDNR may provide a final agency position to regulatory agencies if any local, state or federal permit, certification or license applications may be needed by any applicant or their contractors, consultants or agents. For further information regarding comments and input from SCDNR on your project, please contact our Office of Environmental Programs by emailing environmental@dnr.sc.gov or by visiting www.dnr.sc.gov/environmental. Pursuant to Section 7 of the Endangered Species Act, requests for formal letters of concurrence with regards to federally listed species should be directed to the USFWS.

Should you have any questions or need more information, please do not hesitate to contact our office by email at speciesreview@dnr.sc.gov or by phone at 803-734-1396.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Lemeris, Jr.", written in a cursive style.

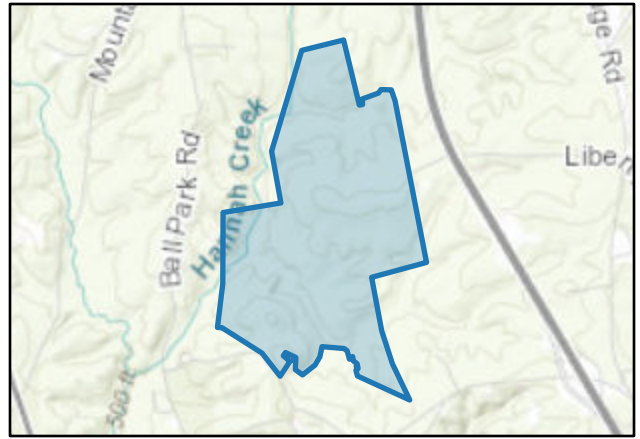
Joseph Lemeris, Jr.
Heritage Trust Program
SC Department of Natural Resources

A. Project Area - Species Report

There are 0 tracked species records found within the project footprint. The following table outlines occurrences found within the project footprint (if any), sorted by listing status and species name. Please keep in mind that this information is derived from existing databases and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. You can find more information about global and state rank status definitions by visiting Natureserve's web page. Please note that certain sensitive species found on site may be listed in this table but are not represented on the map. Please contact speciesreview@dnr.sc.gov should you have further questions related to sensitive species found within the project area.



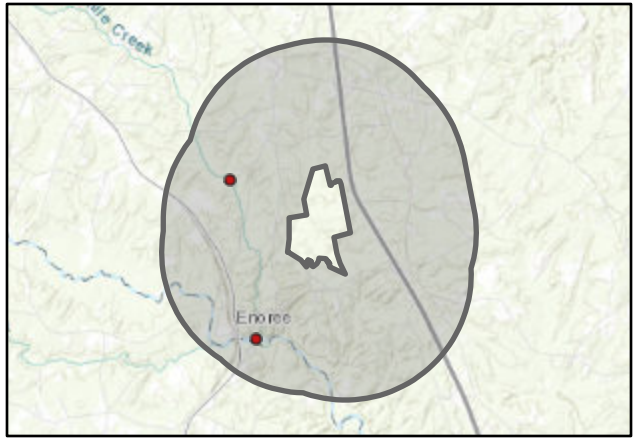
Map Credits: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA



No records for species of concern are found within the project area

B. Buffer Area - Species Report

The following table outlines rare, threatened or endangered species found within 2 miles of the project footprint, arranged in order of protection status and species name. Please keep in mind that this information is derived from existing databases and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. You can find more information about global and state rank status definitions by visiting Natureserve's web page. Please note that certain sensitive species found within the buffer area may be listed in this table but are not represented on the map.



Map Credits: Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

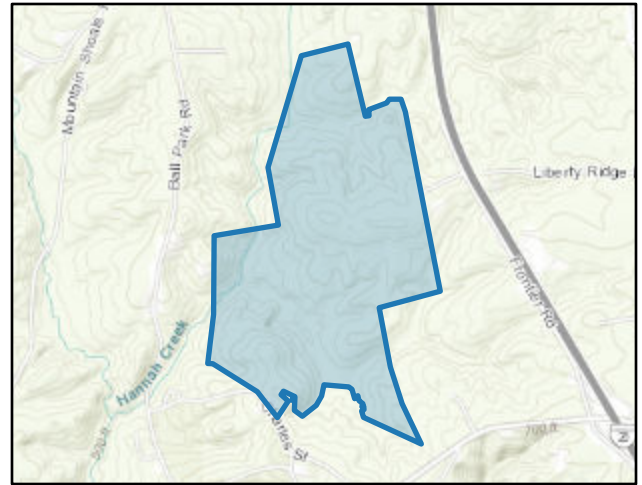
Scientific Name	Common Name	G Rank	S Rank	Fed. Status	State Status	SWAP Priority	Last Obs. Date
<i>Etheostoma thalassinum</i>	Seagreen Darter	G4	S3S4	Not Applicable	Not Applicable	High	2004-09-01
<i>Somatogyrus virginicus</i>	Panhandle Pebblesnail	G2G3	SNR	Not Applicable	Not Applicable	High	2010-07-20

C. Species Best Management Practices (1 of 1)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to species of concern which may be found on or near to the project area. Please contact speciesreview@dnr.sc.gov should you have further questions with regard to survey methods, consultation, or other species-related concerns.



Map Credits: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA



Cavity- and tree-roosting bat species including the federally threatened northern long-eared bat (*Myotis septentrionalis*), state-endangered Rafinesque's big-eared bat (*Corynorhinus rafinesquii*), and the federally at-risk tricolored bat (*Perimyotis subflavus*) have been known to occur in the county of the proposed site. As a conservation measure, it is recommended that any tree clearing activities be conducted during the inactive season for Northern long-eared bat (November 15th through March 31st) to avoid negative impacts to the species. If any of the above species are found on-site, please contact the USFWS and SCDNR.

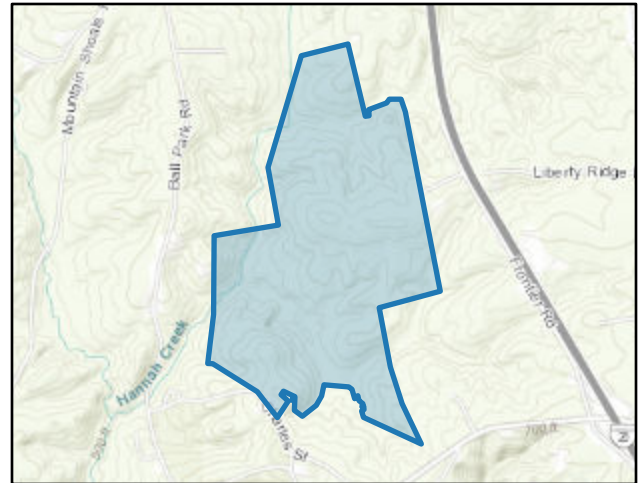
Species in the above table with SWAP priorities of High, Highest or Moderate are designated as having conservation priority under the South Carolina State Wildlife Action Plan (SWAP). SWAP species are those species of greatest conservation need not traditionally covered under any federal funded programs. Species are listed in the SWAP because they are rare or designated as at-risk due to knowledge deficiencies; species common in South Carolina but listed rare or declining elsewhere; or species that serve as indicators of detrimental environmental conditions. SCDNR recommends that appropriate measures should be taken to minimize or avoid impacts to the aforementioned species of concern.

D. Project Best Management Practices (1 of 2)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to natural resources within or surrounding the project area. Please contact our Office of Environmental Programs at environmental@dnr.sc.gov should you have further questions with regard to best management practices related to this project area.



Map Credits: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA



Review of available data, National Wetlands Inventory and hydric soils, indicate that wetlands or waters of the United States are present within your project area. These areas may require a permit from the U.S. Army Corps of Engineers (USACE), as well as a compensatory mitigation plan. SCDNR advises that you consult with the USACE Regulatory to determine if jurisdictional wetlands are present and if a permit and mitigation is required for any activities impacting these areas. For more information, please visit their website at www.sac.usace.army.mil/Missions/Regulatory. Additionally, a 401 Water Quality Certification may also be required from the SC Department of Health & Environmental Control. For more information, please visit their website at <https://www.scdhec.gov/environment/water-quality/water-quality-certification-section-401-clean-water-act>.

If this project is associated with the Federal Government and the project area is or once was used as farmland, we recommend that consultation occur with the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS) per the Farmland Protection Policy Act; areas of the site are classified as prime farmland or farmland of statewide importance.

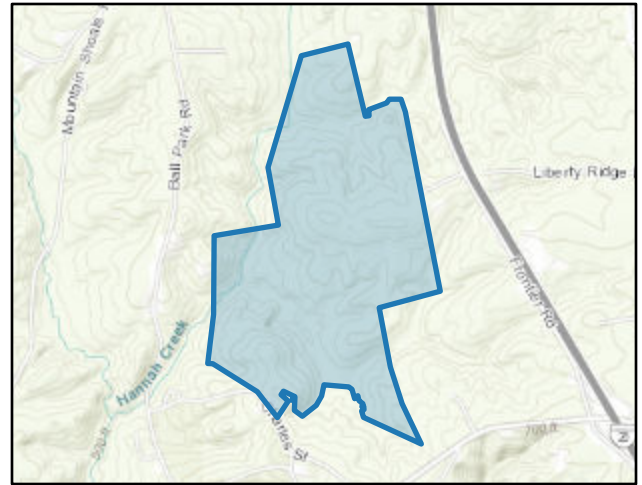
- All necessary measures must be taken to prevent oil, tar, trash and other pollutants from entering the adjacent offsite areas/wetlands/water.
- Once the project is initiated, it must be carried to completion in an expeditious manner to minimize the period of disturbance to the environment.
- Upon project completion, all disturbed areas must be permanently stabilized with vegetative cover (preferable), riprap or other erosion control methods as appropriate.
- The project must be in compliance with any applicable floodplain, stormwater, land disturbance, shoreline management guidance or riparian buffer ordinances.
- Prior to beginning any land disturbing activity, appropriate erosion and siltation control measures (e.g. silt fences or barriers) must be in place and maintained in a functioning capacity until the area is permanently stabilized.
- Materials used for erosion control (e.g., hay bales or straw mulch) will be certified as weed free by the supplier.
- Inspecting and ensuring the maintenance of temporary erosion control measures at least:
 - a. on a daily basis in areas of active construction or equipment operation;
 - b. on a weekly basis in areas with no construction or equipment operation; and
 - c. within 24 hours of each 0.5 inch of rainfall.
- Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification, or as soon as conditions allow if compliance with this time frame would result in greater environmental impacts.
- Land disturbing activities must avoid encroachment into any wetland areas (outside the permitted impact area). Wetlands that are unavoidably impacted must be appropriately mitigated.
- Your project may require a Stormwater Permit from the SC Department of Health & Environmental Control, please visit <https://www.scdhec.gov/environment/water-quality/stormwater>

D. Project Best Management Practices (2 of 2)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to natural resources within or surrounding the project area. Please contact our Office of Environmental Programs at environmental@dnr.sc.gov should you have further questions with regard to best management practices related to this project area.



Map Credits: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

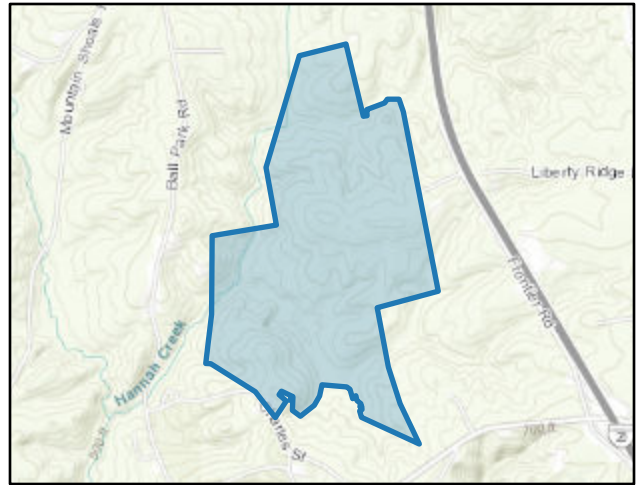


- If clearing must occur, riparian vegetation within wetlands and waters of the U.S. must be conducted manually and low growing, woody vegetation and shrubs must be left intact to maintain bank stability and reduce erosion.
- Construction activities must avoid and minimize, to the greatest extent practicable, disturbance of woody shoreline vegetation within the project area. Removal of vegetation should be limited to only what is necessary for construction of the proposed structures.
- Where necessary to remove vegetation, supplemental plantings should be installed following completion of the project. These plantings should consist of appropriate native species for this ecoregion.
- Review of available data, National Hydrography Dataset, indicates that streams or waters of the United States are present within your project area. These areas may require a permit from the U.S. Army Corps of Engineers (USACE), as well as a compensatory mitigation plan. SCDNR advises that you consult with the USACE Regulatory to determine if jurisdictional waters are present and if a permit and mitigation is required for any activities impacting these areas. For more information, please visit their website at www.sac.usace.army.mil/Missions/Regulatory. Additionally, a 401 Water Quality Certification or a State Navigable Waters permit may also be required from the SC Department of Health & Environmental Control. For more information, please visit the following websites:
 - <https://www.scdhec.gov/environment/water-quality/water-quality-certification-section-401-clean-water-act>
 - <https://www.scdhec.gov/environment/water-quality/navigable-waters>
- Excavation/Construction activities must not occur during fish spawning season from March through June due to its negative impacts on eggs and reproduction activities.
- If clearing must occur, riparian vegetation within wetlands and waters of the U.S. must be conducted manually and low growing, woody vegetation and shrubs must be left intact to maintain bank stability and reduce erosion.
- Construction activities must avoid and minimize, to the greatest extent practicable, disturbance of woody shoreline vegetation within the project area. Removal of vegetation should be limited to only what is necessary for construction of the proposed structures.
- Where necessary to remove vegetation, supplemental plantings should be installed following completion of the project. These plantings should consist of appropriate native species for this ecoregion.

E. Instructions for Submitting Species Observations

The SC Natural Heritage Dataset relies on continuous monitoring and surveying for species of concern throughout the state. Any records of species of concern found within this project area would greatly benefit the quality and comprehensiveness of the statewide dataset for rare, threatened and endangered species. Below are instructions for how to download the SC Natural Heritage Occurrence Reporting Form through the Survey123 App.

Map Credits: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA



Instructions for accessing the SC Natural Heritage Occurrence Reporting Form

For use in a browser (on your desktop/PC):

- 1) Follow <http://bit.ly/scht-reporting-form-point>
- 2) Select 'Open in browser'
- 3) The form will open and you can begin entering data!

This method of access will also work on a browser on a mobile device, but only when connected to the internet. To use the form in the field without relying on data/internet access, follow the steps below.

For use on a smartphone or tablet using the field app:

- 1) Download the Survey123 App from the Google Play store or the Apple Store. This app is free to download. Allow the app to use your location.
- 2) No need to sign in. However, you will need to provide the app with our Heritage Trust GIS portal web address. You will only need to do this once: (this is a known bug with ESRI's software, and future releases of the form should not require the below steps. Bear with us in the meantime!).
 - a. Tap 'Sign in'
 - b. Tap the settings (gear symbol) in the upper right corner
 - c. Tap 'Add Portal'
 - d. After the 'https://', type schtportal.dnr.sc.gov/portal
 - e. Tap 'Add Portal'
 - f. Tap the back-arrow icon (upper left corner) twice to return to the main sign in page.
- 3) Use the camera app (or other QR Reader app) to scan the QR code on this page from your smartphone or tablet. Click on the 'Open in the Survey123 field app'. This will prompt a window to allow Survey123 to download the SC Natural Heritage Occurrence Reporting Form. Select 'Open.'
- 4) The form will automatically open in Survey123, and you can begin entering data! This form will stay loaded in the app on your device until you manually delete it, and you can submit as many records as you like.



Appendix III – USFWS Clearance Letter/NLEB Consistency Letter



United States Department of the Interior



FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218
<http://www.fws.gov/charleston/>

In Reply Refer To:

March 03, 2021

Consultation code: 04ES1000-2021-TA-0461

Event Code: 04ES1000-2021-E-01051

Project Name: Enoree Quarry

Subject: Verification letter for the 'Enoree Quarry' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Will Trotter:

The U.S. Fish and Wildlife Service (Service) received on March 03, 2021 your effects determination for the 'Enoree Quarry' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"^[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Dwarf-flowered Heartleaf Hexastylis naniflora Threatened

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

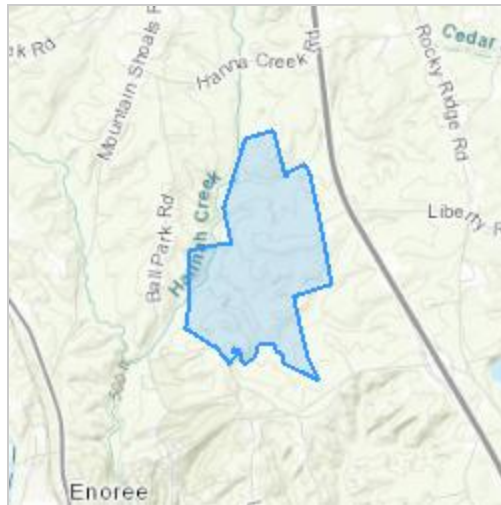
Enoree Quarry

2. Description

The following description was provided for the project 'Enoree Quarry':

396 acre site located in Enoree, Spartanburg County, South Carolina. Reason for request of information is due diligence.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.6726162,-81.94560610588319,14z>



Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may

affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?
Yes
2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")
No
3. Will your activity purposefully **Take** northern long-eared bats?
No
4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?
Automatically answered
No
5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?
No
 7. Will the action involve Tree Removal?
Yes
-

8. Will the action only remove hazardous trees for the protection of human life or property?

No

9. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

10. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

375

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

375

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0



Protected Species Assessment
Enoree Quarry Additional Site (105.1 Acres)
Enoree, Spartanburg Co., SC
S&ME Project No. 210009

PREPARED FOR:

Luck Companies
Post Office Box 29682
Richmond, VA 23242

PREPARED BY:

S&ME, Inc.
134 Suber Road
Columbia, SC 29210

March 5, 2021



March 5, 2021

Luck Companies
Post Office Box 29682
Richmond, Virginia 23242

Attention: Mr. Bruce Smith
brucesmith@luckcompanies.com

Reference: **Protected Species Assessment**
Enoree Quarry Additional Site (105.1 Acres)
Enoree, Spartanburg County, South Carolina
S&ME Project No. 210009

Dear Mr. Smith:

S&ME, Inc. (S&ME) is pleased to submit our Protected Species Assessment for the above-referenced project located in Spartanburg County, South Carolina. This work was performed in general accordance with S&ME Proposal Number 210009, dated January 5, 2021, and our Agreement for Services.

S&ME appreciates the opportunity to be of service to you by performing this Protected Species Assessment for this project. Please contact us at (803) 561-9024 with questions regarding this report or if you require additional information.

Sincerely,

S&ME, Inc.

A handwritten signature in cursive script that reads "James Trotter".

James Trotter
Biologist
jtrotter@smeinc.com

A handwritten signature in cursive script that reads "Chris Daves".

Chris Daves, P.W.S.
Senior Scientist
cdaves@smeinc.com



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Appendices

Appendix I – Exhibits and Site Photographs

Appendix II – County Species Lists from USFWS and SCDNR

Appendix III – USFWS Clearance Letter/NLEB Consistency Letter



1.0 Project Background

This Protected Species Assessment has been conducted to assess the potential for the presence of protected species on the site in preparation for proposed development. The site is being proposed for future mining/quarry operations. S&ME is requesting the technical assistance (in the form of a written Response Letter) of the U.S. Fish and Wildlife Service (USFWS) as to whether site development would likely result in “take” as defined under Section 9 of the Endangered Species Act (ESA).

The approximate 105.1.1-acre site is located south of Hanna Creek Road and west of Interstate 26 (I-26) near Enoree, Spartanburg County, South Carolina as shown on **Exhibits 1-4** in **Appendix I**.

2.0 Site and Habitat Descriptions

The site is located in southern Spartanburg County within the Southern Outer Piedmont/Piedmont ecoregion of South Carolina. The site is a cattle farm and consists of mixed hardwood woodland, open fields, aquatic features (wetlands and tributaries), and riparian mixed hardwood woodland. The properties adjacent to the site consist of forestland, I-26, and rural residential parcels. Please refer to **Exhibit 3** and the site photographs in **Appendix I** for depictions of the predominant habitat types located on the site.

2.1 Mixed Hardwood Woodland

Mixed hardwood woodland was observed in various locations on the site (Photographs 1-2). Dominant overstory species observed included sweet gum (*Liquidambar styraciflua*), water oak (*Quercus nigra*), eastern red cedar (*Juniperus virginiana*), red maple (*Acer rubrum*), eastern hophornbeam (*Ostrya virginiana*), and American beech (*Fagus grandifolia*). The understory species consisted of those of the canopy dominants and American holly (*Ilex opaca*), flowering dogwood (*Cornus florida*), and Chinese privet (*Ligustrum sinense*). Woody vine and groundcover species observed included muscadine (*Vitis rotundifolia*), Japanese honeysuckle (*Lonicera japonica*), poison ivy (*Toxicodendron radicans*), cranefly orchid (*Tipularia discolor*), and wild garlic (*Allium vineale*).

2.2 Open Fields

Open fields were observed in the central and northern portions of the site (Photographs 3-4). Dominant groundcover species observed included fescue (*Festuca* spp.), dog fennel (*Eupatorium capillifolium*), and broomsedge (*Andropogon virginicus*).

2.3 Aquatic Features

The site contained numerous aquatic features including wetlands and tributaries (Photographs 5-8). A forested wetland was observed near the tributary on the southern portion of the site. The wetland is classified as a toe-of-slope, riparian wetland. Perennial and intermittent/seasonal tributaries ranged from two to 12 feet in width and had sandy, gravel, cobble, and boulder substrates.



2.4 Riparian Mixed Hardwood Woodland

Riparian mixed hardwood woodland was observed adjacent to the tributaries located on the eastern and southern portions of the site (Photographs 9-10).

Dominant overstory species observed along the various tributaries included sweet gum, tulip poplar (*Liriodendron tulipifera*), eastern red cedar, American sycamore (*Platanus occidentalis*), American beech, and northern red oak (*Q. rubra*). Understory species consisted of those of the canopy dominants and flowering dogwood and ironwood (*Carpinus caroliniana*). Woody vine and groundcover species included muscadine, crossvine (*Bignonia capreolata*), roundleaf greenbrier (*Smilax rotundifolia*), Christmas fern (*Polystichum acrostichoides*), partridgeberry (*Mitchella repens*), wild garlic, crane-fly orchid, and round-lobed liverleaf (*Hepatica americana*).

3.0 Methodology

S&ME personnel reviewed the South Carolina Department of Natural Resources (SCDNR) and the USFWS websites to determine those species that are currently listed as federally protected (threatened or endangered) in Spartanburg County. The results of this search, including identified protected species and preferred habitat served as the basis of the field review and are presented in **Table 4-1**.

SCDNR maintains a database of elements of occurrence for protected species in the state of South Carolina. A search of this database did not reveal the known presence of federally protected species (occurrences) on or immediately adjacent to the site. Supporting information was researched for the purpose of identifying soil types, vegetative communities, and possible drainage features in the study area. The supporting information reviewed included aerial photography, topographic quadrangle maps, soil survey sheets, land use information, and data from the National Wetlands Inventory.

S&ME Biologists Chris Daves, P.W.S. and James Trotter performed the field review on January 25 and February 24, 2021. The information obtained from supporting documentation was integrated with the field review to identify potential areas of preferred habitat of protected species. Portions of the site that matched descriptions of preferred habitat for protected species listed in **Table 4-1** were considered to be potential habitat for the respective protected species. These areas were subsequently field reviewed to confirm the presence/absence of the respective species.



4.0 Federally Protected Species

Descriptions of the species and their respective federal status are identified in **Table 4-1** and in **Appendix II**. The SCDNR and USFWS websites identified the following federally listed species for Spartanburg County:

Table 4-1 Federally Protected Flora and Fauna Summary

Species	Listing	Habitat
Northern Long-Eared Bat <i>Myotis septentrionalis</i>	T	Caves and abandoned mines (winter hibernacula). In summer, underneath bark or in cavities or crevices of trees with loose or exfoliating bark, with diameter at breast height (DBH) greater than three inches.
Dwarf-Flowered Heartleaf <i>Hexastylis naniflora</i>	T	Bluffs, hillsides, ravines, and boggy areas adjacent to streams in Piedmont hardwood forests; Prefers Pacolet, Madison, or Musella soils. Flowers mid-March to late May/early June.
Bald Eagle <i>Haliaeetus leucocephalus</i>	BGEPA	Coastlines, rivers, large lakes which provide adequate feeding grounds.

T = Threatened

BGEPA = Bald and Golden Eagle Protection Act

4.1 Northern Long-Eared Bat

BIOLOGICAL DETERMINATION: MAY AFFECT, NOT LIKELY TO ADVERSELY AFFECT

Northern long-eared bat is a medium-sized bat approximately three to 3.7 inches, with a wingspan of nine to 10 inches. Fur color ranges from medium to dark brown on the back and tawny to pale brown on the underside. It is distinguished by its long ears in relation to other bats in the genus *Myotis*, which means mouse-eared. Northern long-eared bats use caves and abandoned mines as winter hibernacula. In summer, the bat will roost in small colonies or alone underneath bark or in cavities or crevices of both live trees and dead trees. The USFWS considers any live or dead tree with loose or exfoliating bark with a diameter at breast height (DBH) greater than three inches to be potential roosting habitat.

The site contained forested areas (mixed hardwood woodland and riparian mixed hardwood woodland) with trees with a DBH larger than three inches, and also exhibited loose, creviced, or exfoliating bark. Snags were also observed. These trees could potentially provide summer roosting habitat for this species. The site does not contain suitable winter hibernacula habitat as there were no caves or abandoned mines.

S&ME submitted a scoping e-mail to Mr. Joe Lemeris with SCDNR Heritage Trust Program regarding northern long-eared bat occurrences on or in the vicinity of the site. The SCDNR response letter (**Appendix II**), dated January 15, 2021, indicated there are no known federal or state threatened or endangered species including the northern long-eared bat within two miles of the site. No known locations of the bat are within one-quarter (0.25) mile from known hibernacula, winter roosts, or within 150 feet from known maternity roost trees.



The proposed project appears to meet the criteria for the 4(d) rule of the ESA and the nationwide programmatic biological opinion for the northern long-eared bat; any associated incidental take is therefore exempt. A consistency letter from the USFWS included in **Appendix III**.

At this time, the scheduling of tree clearing activities for this project has yet to be determined. Based on our understanding of current guidance, if clearing is conducted outside the May 15 to August 15 window (approximate pup season), potential impacts to the northern long-eared bat can be reduced. Depending on the project schedule, a concerted effort to clear the trees outside of pup season should be made.

4.2 Dwarf-Flowered Heartleaf

BIOLOGICAL DETERMINATION: NO EFFECT

Dwarf-flowered heartleaf is a perennial, evergreen herb. Its leathery leaves are round, or heart shaped. Light green reticulation often occurs along the leaf veins. Flowering occurs from mid-March to late May/early June. Its beige to dark brown flowers are the smallest in the *Hexastylis* genus. Flowers are solitary and grow on a short stalk extending from the base of the leaves. The habitat of the dwarf-flowered heartleaf includes acidic, sandy loam soils along bluffs, hillsides, ravines, and boggy areas adjacent to streams in hardwood forests of the Piedmont. The species appears to prefer north-facing slopes. More specifically, it is endemic to the upper Piedmont of North and South Carolina. Soil type (Pacolet, Madison, and Musella soils) appears to be the most important habitat requirement.

Review of the USDA soils information (**Exhibit 4**) indicated Madison and Pacolet soils are listed for the southern, eastern, and western portions of the site adjacent to the on-site tributaries. These soils are often associated with dwarf-flowered heartleaf. North-facing slopes are also located on the site. Although favorable soils and landscape position were observed on the site, no species of *Hexastylis* were observed during our site reconnaissance. Accordingly, future development of the site is not expected to impact this species.

4.3 Bald Eagle

BIOLOGICAL DETERMINATION: NO IMPACT

This large raptor has characteristic adult plumage consisting of a white head and tail with a dark brown body. Juvenile eagles are completely dark brown and do not fully develop the majestic white head and tail until the fifth or sixth year. Adults average about three feet from head to tail, weigh approximately 10 to 12 pounds and have a wingspread that can reach seven feet. Generally, female bald eagles are larger than the males. The typical nest is constructed of large sticks and is lined with soft materials such as pine needles and grasses. The nests are very large, measuring up to six feet across and weighing hundreds of pounds. Nesting and feeding sites are generally in the vicinity of large bodies of open water (coastlines, rivers, large lakes).

The site does not contain suitable nesting habitat for the bald eagle. There are no coastlines, rivers, or large lakes on or immediately adjacent to the site considered suitable habitat for the bald eagle. No nests or individuals were observed during the field survey. Accordingly, future development of the site is not expected to impact this species.



5.0 Qualifications

The field survey was led by Chris Daves of S&ME. Mr. Daves is a Senior Scientist biologist and natural resources project manager with over 20 years of experience in environmental consulting. Mr. Daves is proficient in conducting wetland delineations, environmental permitting activities, and habitat assessments, including protected species surveys. He is a Professional Wetland Scientist (PWS) and holds a B.S. degree in Biology from Wofford College and a Master's degree in Earth and Environmental Resources Management from the University of South Carolina.

6.0 Summary and Conclusions

Based on the literature review, habitat assessment, and pedestrian field review of the site, the following conclusions are given regarding federally listed species in Spartanburg County:

- ◆ Potential summer roosting habitat for the northern long-eared bat was observed within the forested areas of the site. These trees had loose, exfoliating, or creviced bark over three inches DBH which could provide summer roosting habitat for the northern long-eared bat. Per SCDNR consultation, there are no known winter hibernacula or summer roosting trees located within one-quarter mile radius of the site and no maternity roost trees within 150 feet.

Based on the 2019 USFWS Clearance Letter for Species and Habitat Assessments, blanket concurrence from the USFWS is granted for *may affect, but not likely to adversely affect* determinations for northern long-eared bat if proposed work occurs more than one-quarter mile from known hibernacula, winter roosts, or is further than 150 feet from known maternity roost trees. Copies of the USFWS Clearance Letter and a consistency letter are included in **Appendix III**. No further consultation with the USFWS is necessary.

- ◆ Although favorable soils and landscape position for dwarf-flowered heartleaf were observed on the site, no species of *Hexastylis* were observed during our site reconnaissance. Our opinion is that proposed development of the site will have *no effect* on this species. Since this assessment indicated there will be no effect or impact, the proposed project qualifies to use the USFWS Clearance Letter.
- ◆ The site does not provide suitable habitat for bald eagle. Our opinion is that proposed development of the site will have no impact on this species.

No further action is recommended at this time.



7.0 References

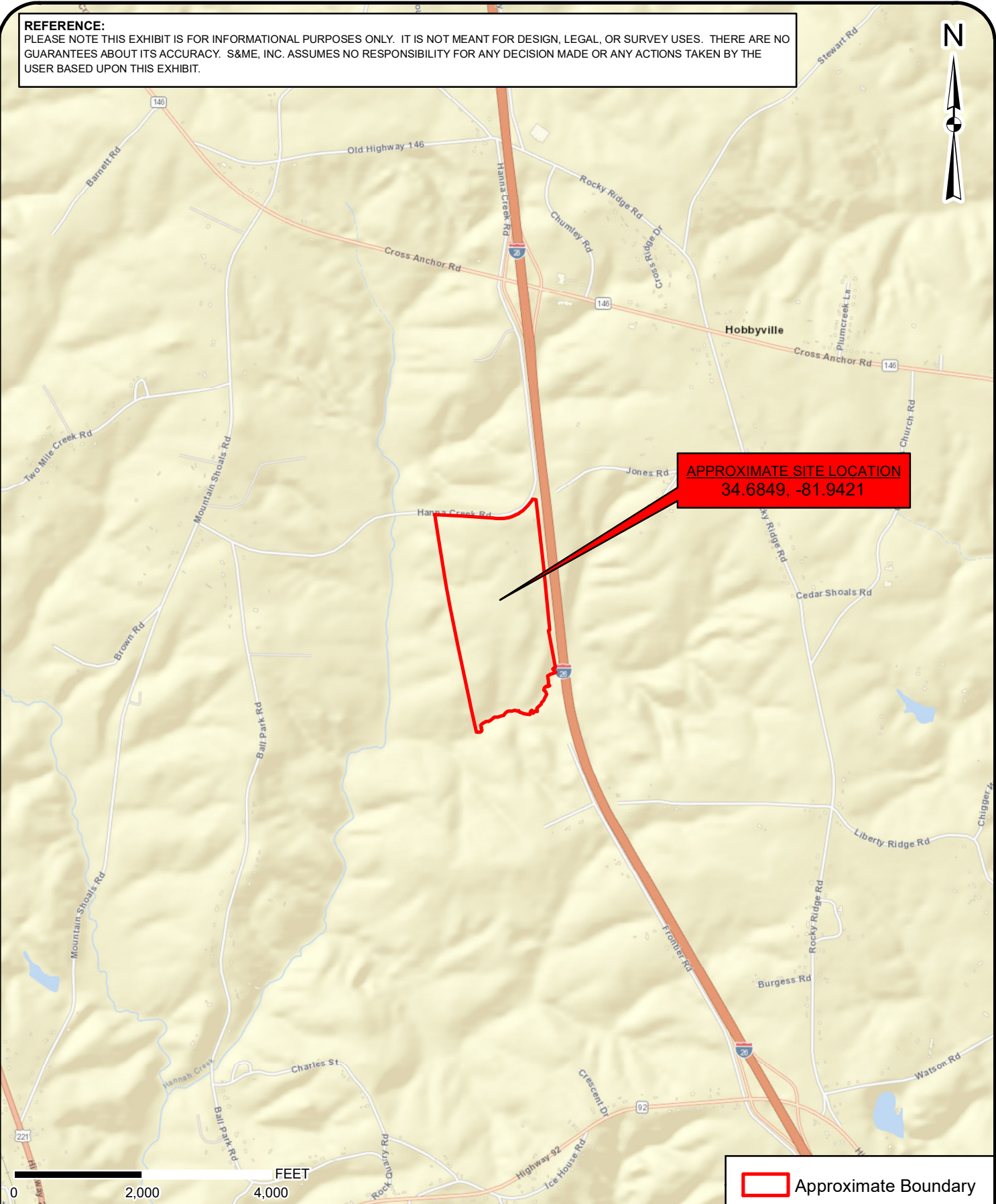
The following sources were referenced during the course of this assessment:

- ◆ SCDNR. Natural Heritage Program: <https://schtportal.dnr.sc.gov/portal/apps/sites/#/natural-heritage-program>.
- ◆ SCDNR. Natural Heritage Program. Response Letter dated January 15, 2021.
- ◆ SCDNR. Rare, Threatened, and Endangered Species Inventory: <https://experience.arcgis.com/experience/af61ba156d054cc7b3e27d09a0c35c0f>.
- ◆ SCDNR: Bald Eagle Locations: <http://www.dnr.sc.gov/wildlife/baldeagle/locations.html>.
- ◆ USFWS: South Carolina List of At-Risk, Candidate, Endangered, and Threatened Species by County: <https://www.fws.gov/southeast/pdf/fact-sheet/south-carolina-species-list-by-county.pdf>.
- ◆ USFWS. Information for Planning and Consultation (IPaC): <https://ecos.fws.gov/ipac/>.
- ◆ USFWS. <https://www.fws.gov/southeast/charleston/project-planning/>.
- ◆ USFWS.2016. Nationwide Programmatic Biological Opinion for the Northern Long-Eared Bat: <https://www.fws.gov/Midwest/endangered/mammals/nleb/pdf/FRnlebFinal4dRule14Jan2016.pdf>.
- ◆ USFWS. 2016. Key to the Northern Long-Eared Bat 4(d) Rule for Federal Activities.
- ◆ USFWS. 2016. Key to the Northern Long-Eared Bat 4(d) Rule for Non-Federal Activities.
- ◆ USFWS. 2019. Clearance Letter for Species and Habitat Assessments, dated May 30, 2019.
- ◆ USFWS. Consistency Letter for Enoree Quarry Additional Site dated February 26, 2021.
- ◆ U.S. Department of Agriculture – National Resources Conservation Service Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/>.

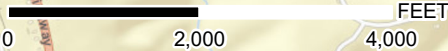
Appendices


Appendix I – Exhibits and Site Photographs

REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
 34.6849, -81.9421



 **Approximate Boundary**



Vicinity Exhibit

Enoree Quarry Additional Site +/- 105.1 Acres

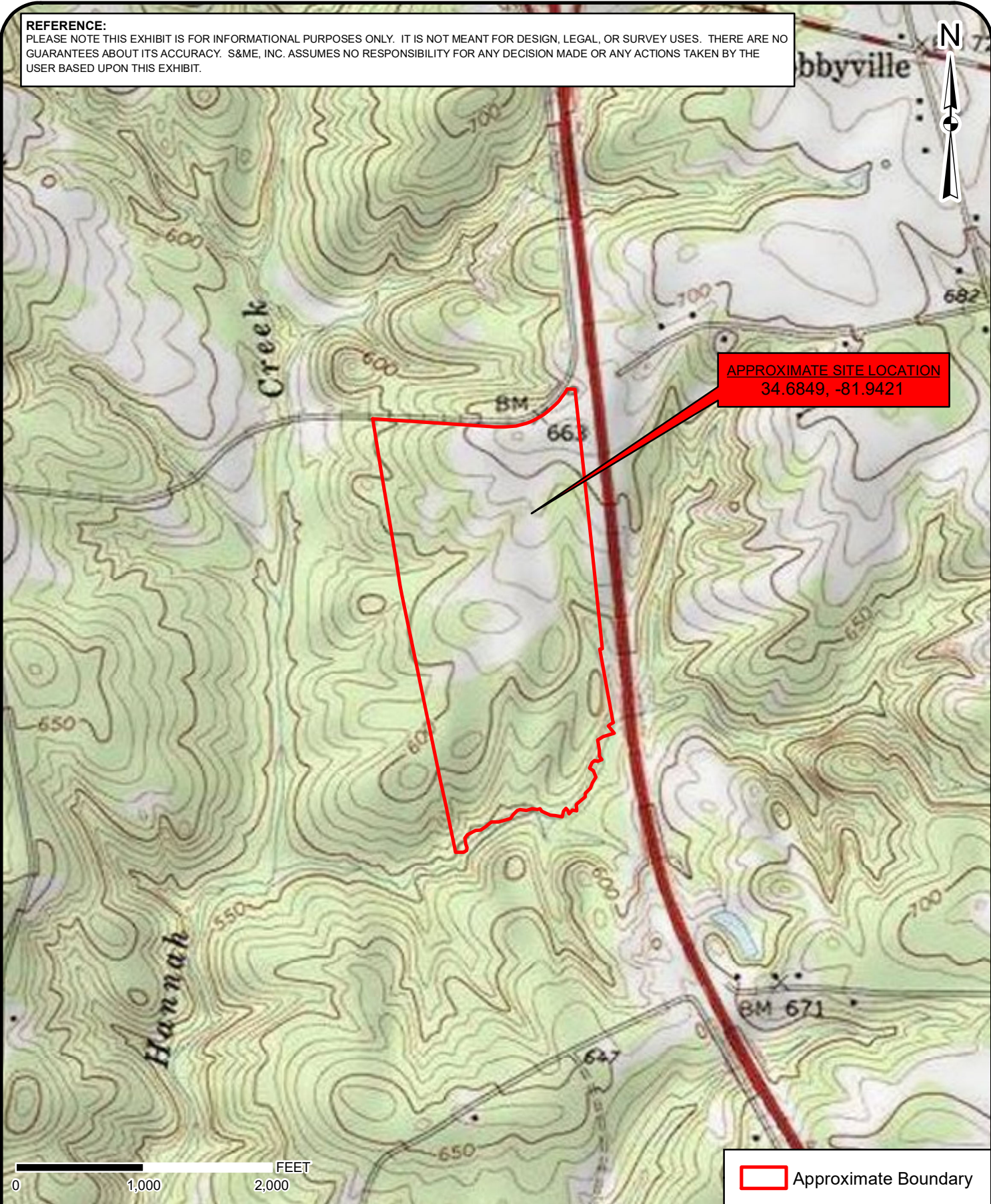
Enoree, Spartanburg County, South Carolina

Source: World Street Map

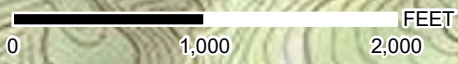
SCALE:
 1" = 2,000'
 DATE:
 3-3-21
 PROJECT NUMBER
 210009


EXHIBIT NO.
1

REFERENCE:
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APPROXIMATE SITE LOCATION
 34.6849, -81.9421



 **Approximate Boundary**



Topographic Exhibit
 Enoree Quarry Additional Site +/- 105.1 Acres
 Enoree, Spartanburg County, South Carolina
 Source: USGS 7.5-Minute Topo Quad Enoree, SC 1969

SCALE:
 1" = 1,000'
 DATE:
 3-3-21
 PROJECT NUMBER
 210009

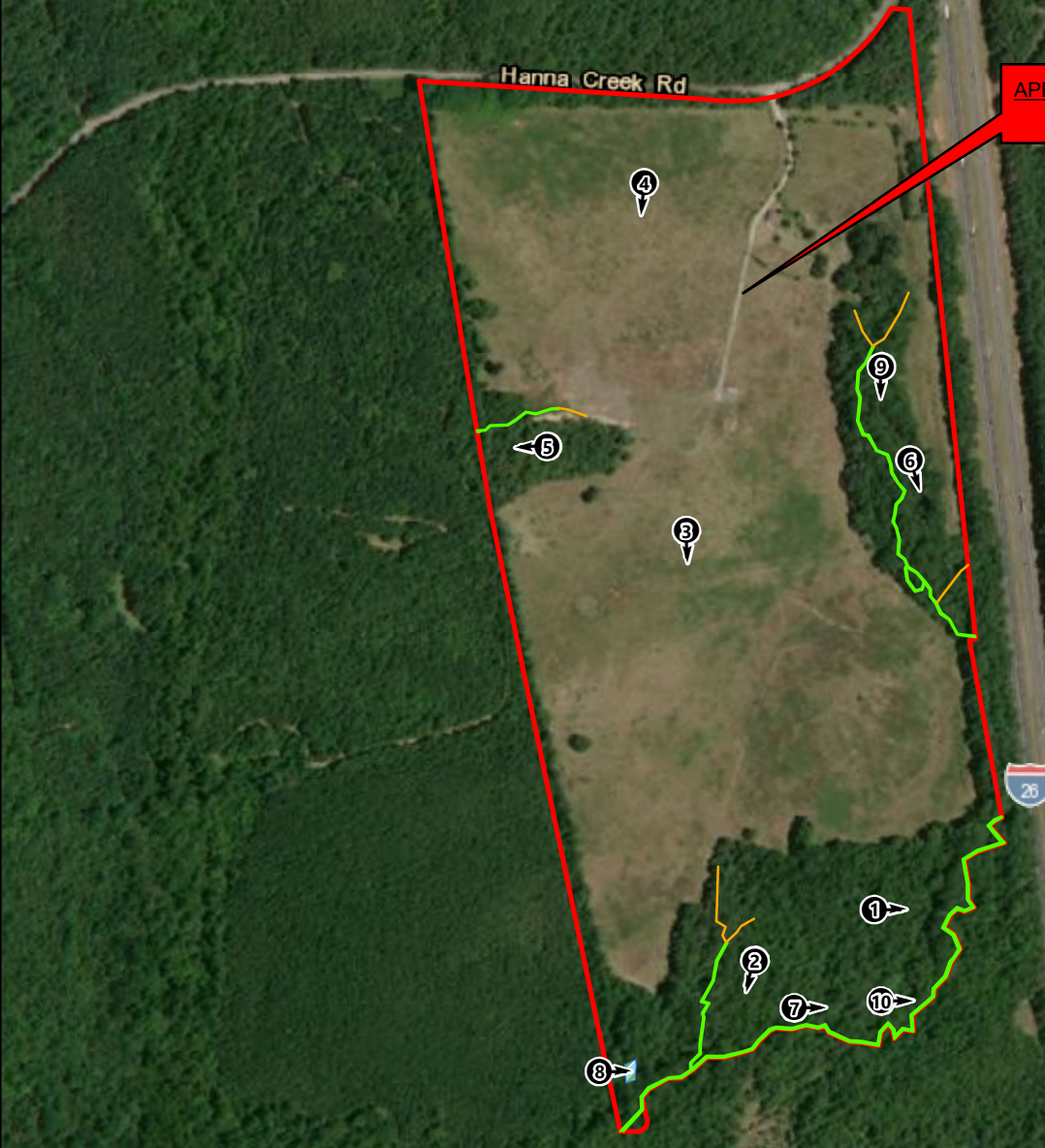
EXHIBIT NO.
2






REFERENCE:

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APPROXIMATE SITE LOCATION
34.6849, -81.9421



-  Photograph Location & Direction
-  Non-Jurisdictional Feature Ephemeral Drainage (b)(3) Excluded Water
-  Jurisdictional Tributaries (a)(2) Waters
-  Jurisdictional Wetland (a)(4) Water
-  Approximate Boundary



Aerial Exhibit

Enoree Quarry Additional Site +/- 105.1 Acres

Enoree, Spartanburg County, South Carolina

Source: World Imagery 2019

SCALE:
1" = 600'

DATE:
3-3-21

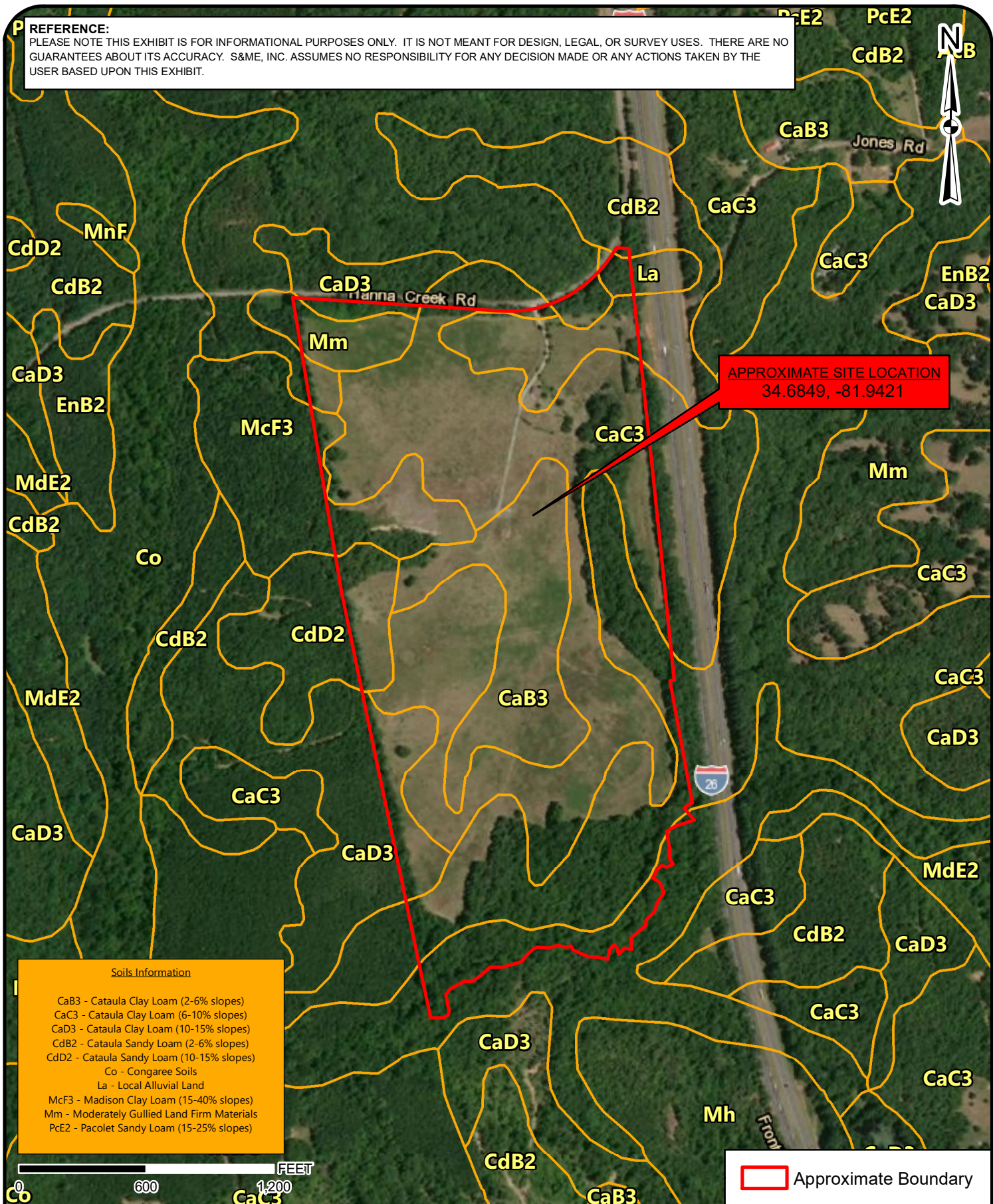
PROJECT NUMBER
210009

EXHIBIT NO.

3

Drawing Path: T:\ENVA\Projects\2021\210009 Luck Companies_Enoree Quarry Additional Site_Enoree\GIS\mxd\Enoree Site T&E Aerial.mxd plotted by chandley 03-03-2021

REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
 34.6849, -81.9421

Soils Information	
CaB3	- Cataula Clay Loam (2-6% slopes)
CaC3	- Cataula Clay Loam (6-10% slopes)
CaD3	- Cataula Clay Loam (10-15% slopes)
CdB2	- Cataula Sandy Loam (2-6% slopes)
CdD2	- Cataula Sandy Loam (10-15% slopes)
Co	- Congaree Soils
La	- Local Alluvial Land
McF3	- Madison Clay Loam (15-40% slopes)
Mm	- Moderately Gullied Land Firm Materials
PcE2	- Pacolet Sandy Loam (15-25% slopes)



Approximate Boundary

SCALE: 1" = 600'	4
DATE: 3-3-21	
PROJECT NUMBER 210009	

Drawing Path: T:\ENVA\Projects\2021\210009 Luck Companies_Enoree Quarry Additional Site_Enoree\GIS\mxd\Enoree Quarry Soils Exhibit.mxd plotted by chandley 03-03-2021



Soils Exhibit

Enoree Quarry Additional Site +/- 105.1 Acres

Enoree, Spartanburg County, South Carolina
 Source: World Imagery 2019 & SCDNR (Soils Data)



1 Mixed hardwood forestland on the southeastern portion of the site.



2 Mixed hardwood forestland on the southwestern portion of the site.



3 Open fields on the central portion of the site.



4 Open fields on the northern portion of the site.





5 Seasonal stream located on the central-western portion of the site.



6 Seasonal stream located on the central-eastern portion of the site.



7 Perennial stream located on the southern portion of the site.

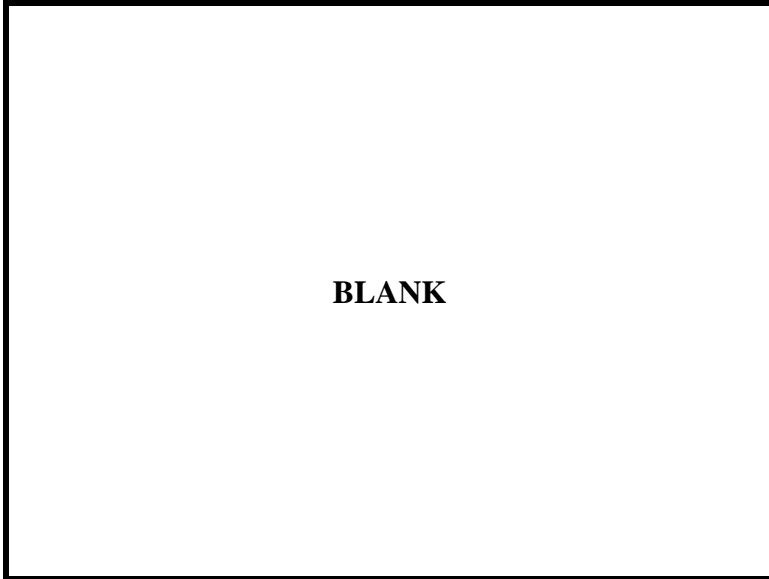


8 Wetland on the southwestern portion of the site.





9 Riparian mixed hardwoods adjacent to seasonal stream on the eastern portion of the site.

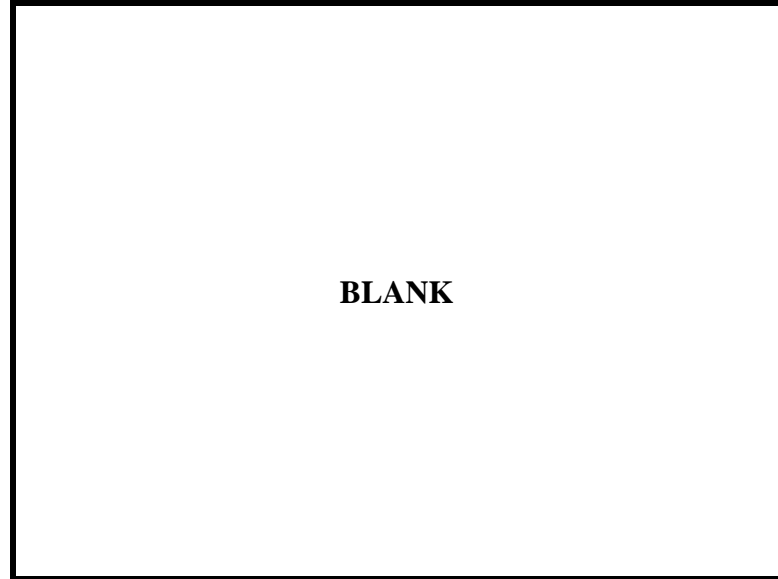


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11



10 Riparian mixed hardwoods adjacent to perennial stream on the southern portion of the site.



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12



Appendix II – County Species Lists from USFWS and SCDNR

SPARTANBURG COUNTY

CATEGORY	COMMON NAME/STATUS	SCIENTIFIC NAME	SURVEY WINDOW/ TIME PERIOD	COMMENTS
Amphibians	None Found			
Birds	Golden-winged warbler (ARS)	<i>Vermivora chrysoptera</i>	April-July (nesting surveys)	Spring/Fall migration; variable throughout State
Crustaceans	Broad River spiny crayfish (ARS)	<i>Cambarus spicatus</i>	November-April	
Fishes	None Found			
Insects	Monarch butterfly (ARS)	<i>Danaus plexippus</i>	August-December	Overwinter populations departs: March-April
Mammals	Little brown bat (ARS)	<i>Myotis lucifugus</i>	Year round	Found in trees, rock crevices, and under bridges
	Northern long-eared bat (T)	<i>Myotis septentrionalis</i>	Year round	Winter surveys not as successful
	Tri-colored bat (ARS)	<i>Perimyotis subflavus</i>	Year round	Found in mines and caves in the winter
Mollusks	None Found			
Plants	Dwarf-flowered heartleaf (T)	<i>Hexastylis naniflora</i>	March-May	
Reptiles	None Found			

* Contact National Marine Fisheries Service (NMFS) for more information on this species.

** The U.S. Fish and Wildlife Service (FWS) and NMFS share jurisdiction of this species.

ARS Species that the FWS has been petitioned to list and for which a positive 90-day finding has been issued (listing may be warranted); information is provided only for conservation actions as no Federal protections currently exist.

ARS* Species that are either former Candidate Species or are emerging conservation priority species.

BGEPA Federally protected under the Bald and Golden Eagle Protection Act

C FWS or NMFS has on file sufficient information on biological vulnerability and threat(s) to support proposals to list these species.

CH Critical Habitat

E Federally Endangered

P or P – CH Proposed for listing or critical habitat in the Federal Register

S/A Federally protected due to similarity of appearance to a listed species

T Federally Threatened

These lists should be used only as a guideline, not as the final authority. The lists include known occurrences and areas where the species has a high possibility of occurring. Records are updated as deemed necessary and may differ from earlier lists.

For a list of State endangered, threatened, and species of concern, please visit <https://www.dnr.sc.gov/species/index.html>.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218
<http://www.fws.gov/charleston/>

In Reply Refer To:

January 13, 2021

Consultation Code: 04ES1000-2021-SLI-0274

Event Code: 04ES1000-2021-E-00643

Project Name: Enoree Quarry Additional Site (105.1 Acres)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

[http://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Carolina Ecological Services

176 Croghan Spur Road, Suite 200

Charleston, SC 29407-7558

(843) 727-4707

Project Summary

Consultation Code: 04ES1000-2021-SLI-0274

Event Code: 04ES1000-2021-E-00643

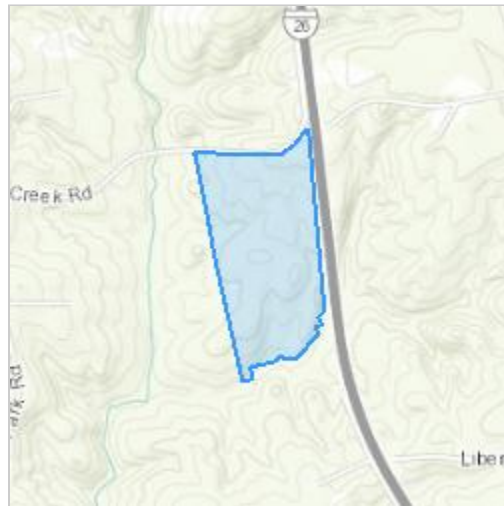
Project Name: Enoree Quarry Additional Site (105.1 Acres)

Project Type: MINING

Project Description: 105.1 Acre site located in Enoree, Spartanburg County, South Carolina.
Reason for request of information is due diligence.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.684375349999996,-81.94191472256597,14z>



Counties: Spartanburg County, South Carolina

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Flowering Plants

NAME	STATUS
Dwarf-flowered Heartleaf <i>Hexastylis naniflora</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2458	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical](#)

[Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

South Carolina Department of Natural Resources



PO Box 167
Columbia, SC 29202
(803) 734-1396
speciesreview@dnr.sc.gov

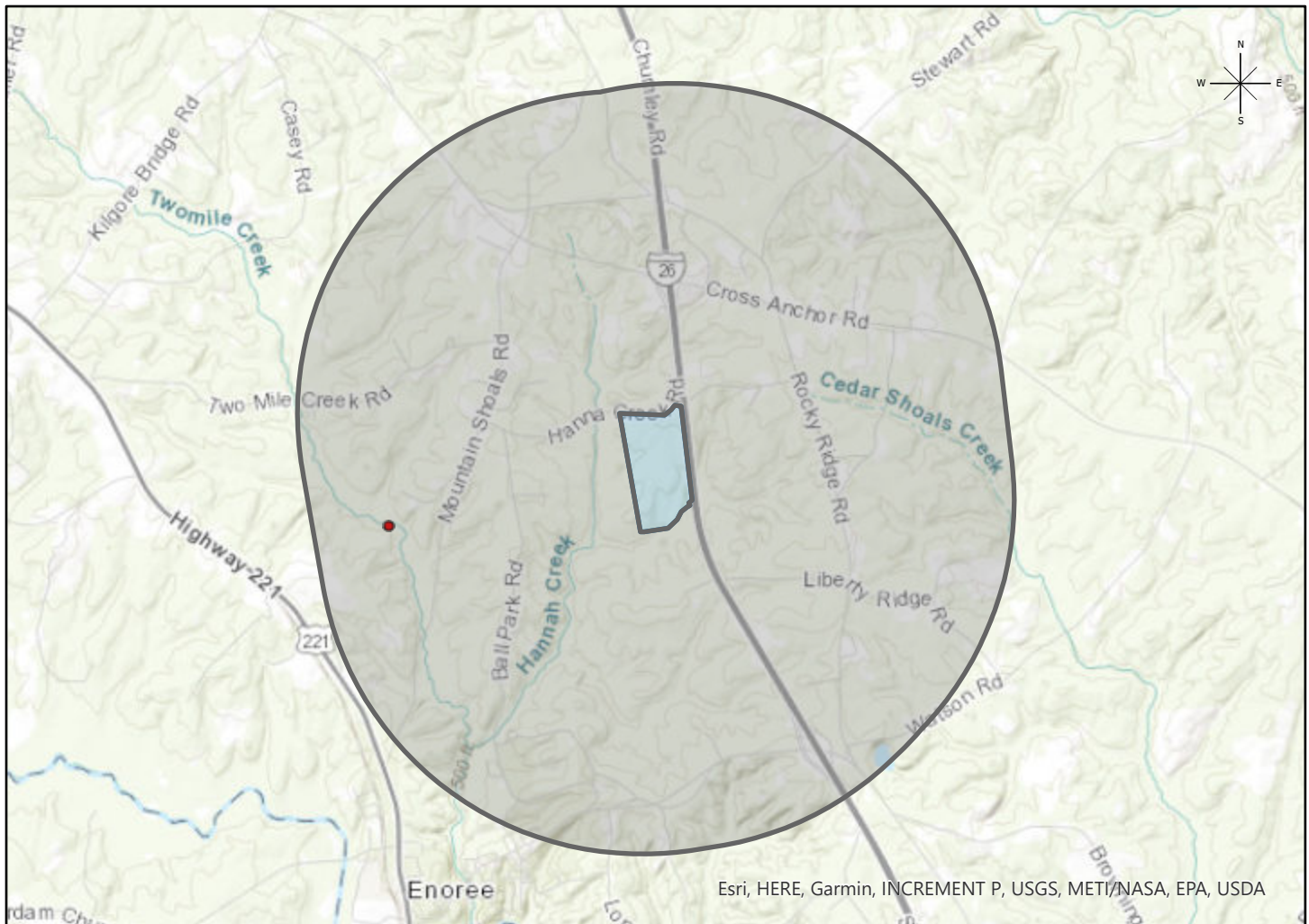
Robert H. Boyles, Jr.
Director

Emily C. Cope
Deputy Director for
Wildlife and Freshwater Fisheries

Requested on Friday, January 15, 2021 by Chris Handley.

Re: Request for Threatened and Endangered Species Consultation
S&ME - Enoree Quarry Additional Site
Mine
Spartanburg County, South Carolina

The South Carolina Department of Natural Resources (SCDNR) has received your request for threatened and endangered species consultation of the above named project in Spartanburg County, South Carolina. The following map depicts the project area and a 2 mile buffer surrounding:



0 0.4 0.8 1.6 Miles

South Carolina Department of Natural Resources



Robert H. Boyles, Jr.

Director

Emily C. Cope

Deputy Director for

Wildlife and Freshwater Fisheries

This report includes the following items:

- A - A report for species which intersect the project area
- B - A report for species which intersect the buffer around the project area
- C - A list of best management practices relevant to species near to or within the project area
- D - A list of best management practices relevant to the project type
- E - Instructions to submit new species observation records to the SC Natural Heritage Program

The technical comments outlined in this report are submitted to speak to the general impacts of the activities as described through inquiry by parties outside the South Carolina Department of Natural Resources. These technical comments are submitted as guidance to be considered and are not submitted as final agency comments that might be related to any unspecified local, state or federal permit, certification or license applications that may be needed by any applicant or their contractors, consultants or agents presently under review or not yet made available for public review. In accordance with its policy 600.01, Comments on Projects Under Department Review, the South Carolina Department of Natural Resources, reserves the right to comment on any permit, certification or license application that may be published by any regulatory agency which may incorporate, directly or by reference, these technical comments.

Interested parties are to understand that SCDNR may provide a final agency position to regulatory agencies if any local, state or federal permit, certification or license applications may be needed by any applicant or their contractors, consultants or agents. For further information regarding comments and input from SCDNR on your project, please contact our Office of Environmental Programs by emailing environmental@dnr.sc.gov or by visiting www.dnr.sc.gov/environmental. Pursuant to Section 7 of the Endangered Species Act, requests for formal letters of concurrence with regards to federally listed species should be directed to the USFWS.

Should you have any questions or need more information, please do not hesitate to contact our office by email at speciesreview@dnr.sc.gov or by phone at 803-734-1396.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Lemeris, Jr.", written in a cursive style.

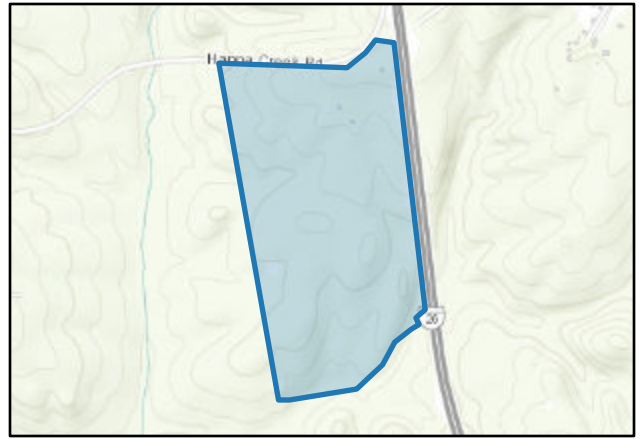
Joseph Lemeris, Jr.
Heritage Trust Program
SC Department of Natural Resources

A. Project Area - Species Report

There are 0 tracked species records found within the project footprint. The following table outlines occurrences found within the project footprint (if any), sorted by listing status and species name. Please keep in mind that this information is derived from existing databases and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. You can find more information about global and state rank status definitions by visiting Natureserve's web page. Please note that certain sensitive species found on site may be listed in this table but are not represented on the map. Please contact speciesreview@dnr.sc.gov should you have further questions related to sensitive species found within the project area.



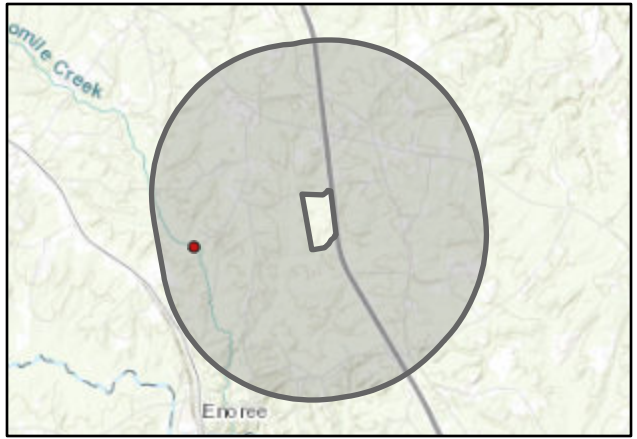
Map Credits: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA



No records for species of concern are found within the project area

B. Buffer Area - Species Report

The following table outlines rare, threatened or endangered species found within 2 miles of the project footprint, arranged in order of protection status and species name. Please keep in mind that this information is derived from existing databases and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. You can find more information about global and state rank status definitions by visiting Natureserve's web page. Please note that certain sensitive species found within the buffer area may be listed in this table but are not represented on the map.



Map Credits: Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

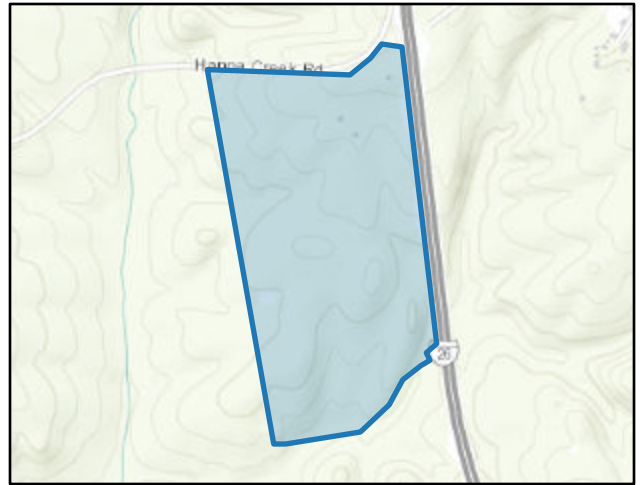
Scientific Name	Common Name	G Rank	S Rank	Fed. Status	State Status	SWAP Priority	Last Obs. Date
<i>Etheostoma thalassinum</i>	Seagreen Darter	G4	S3S4	Not Applicable	Not Applicable	High	2004-09-01

C. Species Best Management Practices (1 of 1)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to species of concern which may be found on or near to the project area. Please contact speciesreview@dnr.sc.gov should you have further questions with regard to survey methods, consultation, or other species-related concerns.



Map Credits: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA



Cavity- and tree-roosting bat species including the federally threatened northern long-eared bat (*Myotis septentrionalis*), state-endangered Rafinesque's big-eared bat (*Corynorhinus rafinesquii*), and the federally at-risk tricolored bat (*Perimyotis subflavus*) have been known to occur in the county of the proposed site. As a conservation measure, it is recommended that any tree clearing activities be conducted during the inactive season for Northern long-eared bat (November 15th through March 31st) to avoid negative impacts to the species. If any of the above species are found on-site, please contact the USFWS and SCDNR.

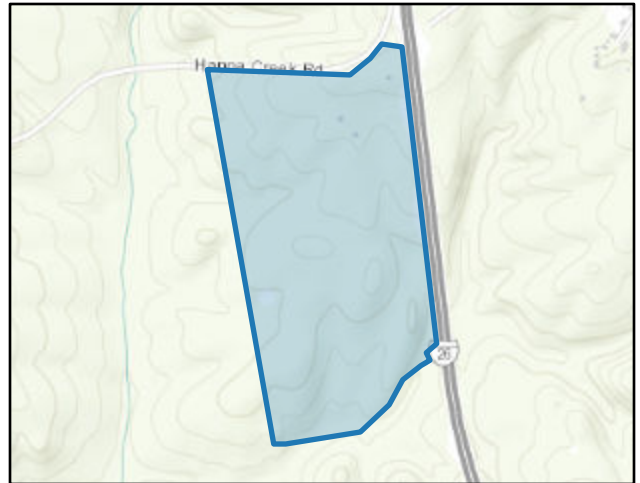
Species in the above table with SWAP priorities of High, Highest or Moderate are designated as having conservation priority under the South Carolina State Wildlife Action Plan (SWAP). SWAP species are those species of greatest conservation need not traditionally covered under any federal funded programs. Species are listed in the SWAP because they are rare or designated as at-risk due to knowledge deficiencies; species common in South Carolina but listed rare or declining elsewhere; or species that serve as indicators of detrimental environmental conditions. SCDNR recommends that appropriate measures should be taken to minimize or avoid impacts to the aforementioned species of concern.

D. Project Best Management Practices (1 of 2)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to natural resources within or surrounding the project area. Please contact our Office of Environmental Programs at environmental@dnr.sc.gov should you have further questions with regard to best management practices related to this project area.



Map Credits: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA



Review of available data, National Wetlands Inventory and hydric soils, indicate that wetlands or waters of the United States are present within your project area. These areas may require a permit from the U.S. Army Corps of Engineers (USACE), as well as a compensatory mitigation plan. SCDNR advises that you consult with the USACE Regulatory to determine if jurisdictional wetlands are present and if a permit and mitigation is required for any activities impacting these areas. For more information, please visit their website at www.sac.usace.army.mil/Missions/Regulatory. Additionally, a 401 Water Quality Certification may also be required from the SC Department of Health & Environmental Control. For more information, please visit their website at <https://www.scdhec.gov/environment/water-quality/water-quality-certification-section-401-clean-water-act>.

If this project is associated with the Federal Government and the project area is or once was used as farmland, we recommend that consultation occur with the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS) per the Farmland Protection Policy Act; areas of the site are classified as prime farmland or farmland of statewide importance.

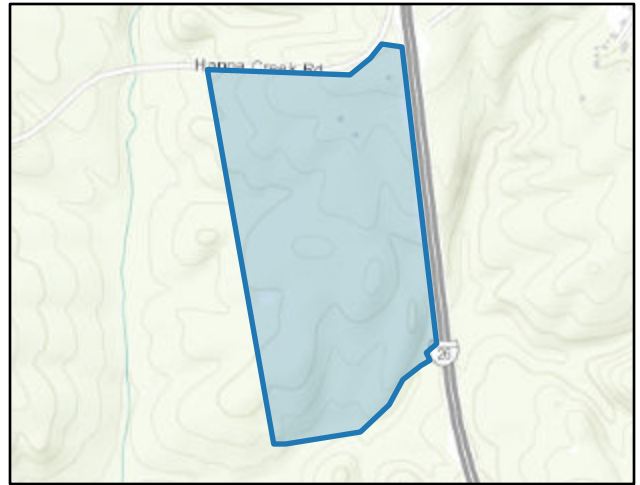
- All necessary measures must be taken to prevent oil, tar, trash and other pollutants from entering the adjacent offsite areas/wetlands/water.
- Once the project is initiated, it must be carried to completion in an expeditious manner to minimize the period of disturbance to the environment.
- Upon project completion, all disturbed areas must be permanently stabilized with vegetative cover (preferable), riprap or other erosion control methods as appropriate.
- The project must be in compliance with any applicable floodplain, stormwater, land disturbance, shoreline management guidance or riparian buffer ordinances.
- Prior to beginning any land disturbing activity, appropriate erosion and siltation control measures (e.g. silt fences or barriers) must be in place and maintained in a functioning capacity until the area is permanently stabilized.
- Materials used for erosion control (e.g., hay bales or straw mulch) will be certified as weed free by the supplier.
- Inspecting and ensuring the maintenance of temporary erosion control measures at least:
 - a. on a daily basis in areas of active construction or equipment operation;
 - b. on a weekly basis in areas with no construction or equipment operation; and
 - c. within 24 hours of each 0.5 inch of rainfall.
- Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification, or as soon as conditions allow if compliance with this time frame would result in greater environmental impacts.
- Land disturbing activities must avoid encroachment into any wetland areas (outside the permitted impact area). Wetlands that are unavoidably impacted must be appropriately mitigated.
- Your project may require a Stormwater Permit from the SC Department of Health & Environmental Control, please visit <https://www.scdhec.gov/environment/water-quality/stormwater>

D. Project Best Management Practices (2 of 2)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to natural resources within or surrounding the project area. Please contact our Office of Environmental Programs at environmental@dnr.sc.gov should you have further questions with regard to best management practices related to this project area.



Map Credits: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

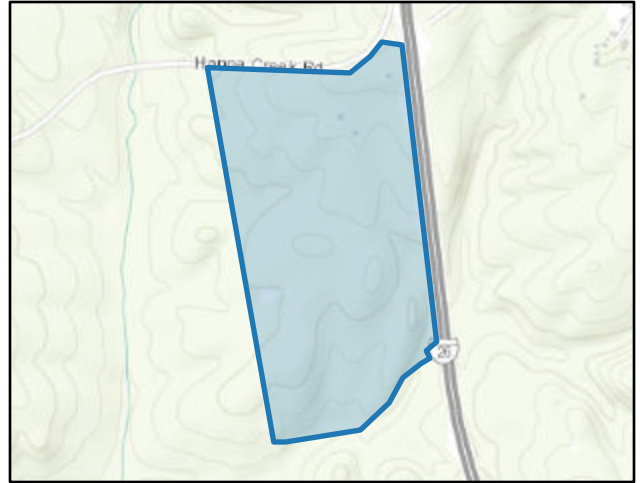


- If clearing must occur, riparian vegetation within wetlands and waters of the U.S. must be conducted manually and low growing, woody vegetation and shrubs must be left intact to maintain bank stability and reduce erosion.
 - Construction activities must avoid and minimize, to the greatest extent practicable, disturbance of woody shoreline vegetation within the project area. Removal of vegetation should be limited to only what is necessary for construction of the proposed structures.
 - Where necessary to remove vegetation, supplemental plantings should be installed following completion of the project. These plantings should consist of appropriate native species for this ecoregion.
-
- Review of available data, National Hydrography Dataset, indicates that streams or waters of the United States are present within your project area. These areas may require a permit from the U.S. Army Corps of Engineers (USACE), as well as a compensatory mitigation plan. SCDNR advises that you consult with the USACE Regulatory to determine if jurisdictional waters are present and if a permit and mitigation is required for any activities impacting these areas. For more information, please visit their website at www.sac.usace.army.mil/Missions/Regulatory. Additionally, a 401 Water Quality Certification or a State Navigable Waters permit may also be required from the SC Department of Health & Environmental Control. For more information, please visit the following websites:
 - <https://www.scdhec.gov/environment/water-quality/water-quality-certification-section-401-clean-water-act>
 - <https://www.scdhec.gov/environment/water-quality/navigable-waters>
 - Excavation/Construction activities must not occur during fish spawning season from March through June due to its negative impacts on eggs and reproduction activities.
 - If clearing must occur, riparian vegetation within wetlands and waters of the U.S. must be conducted manually and low growing, woody vegetation and shrubs must be left intact to maintain bank stability and reduce erosion.
 - Construction activities must avoid and minimize, to the greatest extent practicable, disturbance of woody shoreline vegetation within the project area. Removal of vegetation should be limited to only what is necessary for construction of the proposed structures.
 - Where necessary to remove vegetation, supplemental plantings should be installed following completion of the project. These plantings should consist of appropriate native species for this ecoregion.

E. Instructions for Submitting Species Observations

The SC Natural Heritage Dataset relies on continuous monitoring and surveying for species of concern throughout the state. Any records of species of concern found within this project area would greatly benefit the quality and comprehensiveness of the statewide dataset for rare, threatened and endangered species. Below are instructions for how to download the SC Natural Heritage Occurrence Reporting Form through the Survey123 App.

Map Credits: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA



Instructions for accessing the SC Natural Heritage Occurrence Reporting Form

For use in a browser (on your desktop/PC):

- 1) Follow <http://bit.ly/scht-reporting-form-point>
- 2) Select 'Open in browser'
- 3) The form will open and you can begin entering data!

This method of access will also work on a browser on a mobile device, but only when connected to the internet. To use the form in the field without relying on data/internet access, follow the steps below.

For use on a smartphone or tablet using the field app:

- 1) Download the Survey123 App from the Google Play store or the Apple Store. This app is free to download. Allow the app to use your location.
- 2) No need to sign in. However, you will need to provide the app with our Heritage Trust GIS portal web address. You will only need to do this once: (this is a known bug with ESRI's software, and future releases of the form should not require the below steps. Bear with us in the meantime!).
 - a. Tap 'Sign in'
 - b. Tap the settings (gear symbol) in the upper right corner
 - c. Tap 'Add Portal'
 - d. After the 'https://', type schtportal.dnr.sc.gov/portal
 - e. Tap 'Add Portal'
 - f. Tap the back-arrow icon (upper left corner) twice to return to the main sign in page.
- 3) Use the camera app (or other QR Reader app) to scan the QR code on this page from your smartphone or tablet. Click on the 'Open in the Survey123 field app'. This will prompt a window to allow Survey123 to download the SC Natural Heritage Occurrence Reporting Form. Select 'Open.'
- 4) The form will automatically open in Survey123, and you can begin entering data! This form will stay loaded in the app on your device until you manually delete it, and you can submit as many records as you like.



Rare, Threatened, and Endangered Species of South Carolina - by County

The lists below indicate what species have been reported to the Heritage Trust Program as occurring in each county. They are not a complete listing of what actually exists, as no complete survey of the state has ever been done.

Spartanburg County

Animals

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Cambarus spicatus	Broad River Spiny Crayfish	ARS*: Risk, priority	--	G3	S3
Danaus plexippus	Monarch Butterfly	ARS*: Risk, Priority	--	G4	SNR
Microtus pennsylvanicus	Meadow Vole	--	--	G5	S3?
Mustela vison	Mink	--	--	G5	S4
Perimyotis subflavus	Tricolored Bat	ARS*: Risk, priority	--	G2G3	S1S2
Vermivora chrysoptera	Golden-winged Warbler	ARS*: Risk, priority	--	G4	SNA

Plants

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Aconitum uncinatum	Blue Monkshood	--	--	G4	S2
Circaea lutetiana ssp. canadensis	Enchanter's Nightshade	--	--	G5T5	S3
Cypripedium pubescens	Large Yellow Lady's-slipper	--	--	G5T5	S3
Fothergilla major	Mountain Witch-alder	--	--	G3	S2

Gaultheria procumbens	Teaberry	--	--	G5	S3
Hackelia virginiana	Virginia Stickseed	--	--	G5	S1
Helianthus laevigatus	Smooth Sunflower	--	--	G4	S2
Helianthus porteri	Porter's Goldeneye	--	--	G4	S1
Hexastylis naniflora	Dwarf-flowered Heartleaf	LT: Threatened	--	G3	S3
Isoetes piedmontana	Piedmont Quillwort	--	--	G4	S2
Juglans cinerea	Butternut	--	--	G4	S3
Juncus georgianus	Georgia Rush	--	--	G4	S2
Juniperus communis	Ground Juniper	--	--	G5	SNR
Lonicera flava	Yellow Honeysuckle	--	--	G5?	S2
Lygodium palmatum	Climbing Fern	--	--	G4	S3
Melanthium virginicum	Virginia Bunchflower	--	--	G5	S2
Minuartia uniflora	One-flower Stitchwort	--	--	G4	S3
Monotropsis odorata	Sweet Pinesap	--	--	G3	S2
Nestronia umbellula	Nestronia	--	--	G4	S3
Rhododendron eastmanii	May White	--	--	G2	S2
Solidago bicolor	White Goldenrod	--	--	G5	S2

For additional information about rare, threatened, and endangered species or questions about these lists, please contact [Anna Smith](#).

Environmental Review

- [Office of Environmental Programs](#)
- [Bald Eagle Nest Data](#)
- [Planning & Conservation](#)

[Phone Numbers](#) | [Accessibility](#) | [FOIA](#) | [Privacy Policy](#) | [Report Waste or Abuse to SC Inspector General](#) |
 South Carolina Department of Natural Resources - Rembert C. Dennis Building
 1000 Assembly Street, Columbia, SC 29201
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Appendix III – USFWS Clearance Letter/NLEB Consistency Letter



United States Department of the Interior
FISH AND WILDLIFE SERVICE
176 Croghan Spur Road, Suite 200
Charleston, South Carolina 29407
May 30, 2019



U.S. Fish and Wildlife Service Clearance Letter for Species and Habitat Assessments

The U.S. Fish and Wildlife Service (Service) is one of two lead Federal Agencies mandated with the protection and conservation of Federal trust resources, including threatened and endangered (T&E) species and designated critical habitat as listed under the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) (ESA). Development of lands in South Carolina have the potential to impact federally protected species. Accordingly, obligations under the ESA, National Environmental Policy Act (NEPA), Clean Water Act (CWA), Federal Power Act (FPA), and other laws, require project proponents to perform an environmental impact review prior to performing work on the site. These projects may include a wide variety of activities including, but not limited to, residential or commercial developments, energy production, power transmission, transportation, infrastructure repair, maintenance, or reconstruction of existing facilities on previously developed land.

Project applicants, or their designated representatives, may perform initial species assessments in advance of specific development proposals to determine the presence of T&E species and designated critical habitat that are protected under the ESA. These reviews are purposely speculative and do not include specific project or site development plans. Many of these speculative proposals are for previously developed or disturbed lands such as pasture lands, agricultural fields, or abandoned industrial facilities. Due to historical uses and existing conditions, these sites often do not contain suitable habitat to support T&E species. Therefore, an assessment may conclude that any future development of the site would have no effect to T&E species or adversely modify designated critical habitat. If the applicant, or their designee, determines there is no effect or impact to federally protected species or designated critical habitat, no further action is required under the ESA.

Clearance to Proceed

For all sites with potential projects that have no effect or impact upon federally protected species or designated critical habitat, no further coordination with the Service is necessary at this time. This letter may be downloaded and serve as the Service's concurrence or agreement to the conclusions of the species assessment. Any protected species survey or assessment conducted for the property should be included with this letter when submitting the project to Federal permitting agencies. Due to obligations under the ESA potential impacts must be reconsidered if: (1) new information reveals impacts of this identified action may affect any listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner which was not considered in this assessment; or (3) a new species is listed or critical habitat is designated that may be affected by the identified action.

Please note this Clearance Letter applies only to assessments in South Carolina but may not be used to satisfy section 7 requirements for projects that have already been completed or currently under construction.

If suitable habitat for T&E species or designated critical habitat occurs on, or nearby, the project site, a determination of no effect/impact may not be appropriate. In these cases, direct consultation requests with the Service should be initiated. Additional coordination with the Service may also be required if the potential project requires an evaluation under another resource law such as, but not limited to, NEPA, CWA, FPA, and the Coastal Zone Management Act.

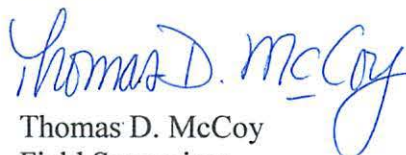
Northern Long-eared Bat Consideration

The Service issued a nationwide programmatic biological opinion (PBO) for the northern long-eared bat (*Myotis septentrionalis*, NLEB) on January 5, 2016. The PBO was issued pursuant to section 7(a)(2) of the ESA to address impacts that Federal actions may have on this species. In addition, the Service published a final 4(d) rule on January 14, 2016, which details special consultation provisions for Federal actions that may affect the NLEB. Briefly, the PBO and the 4(d) rule allow for "incidental" take of the NLEB throughout its range under certain conditions. Take is defined in section 3 of the ESA as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Further, incidental take is defined as take that results from, but is not the purpose of, carrying out an otherwise lawful activity. Under the PBO and 4(d) rule, all incidental take of the NLEB is exempted from the ESA's take prohibitions under certain conditions. However, incidental take is prohibited within one quarter mile from known hibernacula and winter roost, or within 150 feet from a known maternity roost tree during the months of June and July.

In consideration of known hibernacula, winter roosts, and maternity roost tree locations in South Carolina, this letter hereby offers blanket concurrence for a may affect, but is not likely to adversely affect determination for the NLEB if the proposed work occurs more than one quarter mile from known hibernacula, winter roosts, or is further than 150 feet from a known maternity roost trees. If an activity falls within one-quarter mile of hibernacula or winter roost or within 150 feet of a maternity roost tree additional consultation with the Service will be required. As a conservation measure for all projects it is recommended that all tree clearing activities be conducted during the NLEB inactive season of November 15th to March 31st of any given year.

The Service appreciates your cooperation in the protection of federally listed species and their habitats in South Carolina.

Sincerely,


Thomas D. McCoy
Field Supervisor

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].



United States Department of the Interior



FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218
<http://www.fws.gov/charleston/>

IPaC Record Locator: 271-99716816

February 26, 2021

Subject: Consistency letter for the 'Enoree Quarry Additional Site (105.1 Acres)' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Will Trotter:

The U.S. Fish and Wildlife Service (Service) received on February 26, 2021 your effects determination for the 'Enoree Quarry Additional Site (105.1 Acres)' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause “take”^[1] of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action’s effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Dwarf-flowered Heartleaf *Hexastylis naniflora* Threatened

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Enoree Quarry Additional Site (105.1 Acres)

2. Description

The following description was provided for the project 'Enoree Quarry Additional Site (105.1 Acres)':

105.1 Acre site located in Enoree, Spartanburg County, South Carolina. Reason for request of information is due diligence.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.684375349999996,-81.94191472256597,14z>



Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

No

2. Will your activity purposefully **Take** northern long-eared bats?

No

3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

6. Will the action involve Tree Removal?

Yes

7. Will the action only remove hazardous trees for the protection of human life or property?

No

8. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

9. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

90

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

90

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0



Protected Species Assessment
Rice Site
Enoree, Spartanburg Co., SC
S&ME Project No. 210741

PREPARED FOR:

Luck Companies
Post Office Box 29682
Richmond, VA 23242

PREPARED BY:

S&ME, Inc.
134 Suber Road
Columbia, SC 29210

February 26, 2021



February 26, 2021

Luck Companies
Post Office Box 29682
Richmond, Virginia 23242

Attention: Mr. Bruce Smith
brucesmith@luckcompanies.com

Reference: **Protected Species Assessment
Rice Site**
Enoree, Spartanburg County, South Carolina
S&ME Project No. 210741

Dear Mr. Smith:

S&ME, Inc. (S&ME) is pleased to submit our Protected Species Assessment for the above-referenced project located in Spartanburg County, South Carolina. This work was performed in general accordance with S&ME Proposal Number 210741, dated January 22, 2021, and our Agreement for Services.

S&ME appreciates the opportunity to be of service to you by performing this Protected Species Assessment for this project. Please contact us at (803) 561-9024 with questions regarding this report or if you require additional information.

Sincerely,

S&ME, Inc.

A handwritten signature in cursive script that reads "James Trotter".

James Trotter
Biologist
jtrotter@smeinc.com

A handwritten signature in cursive script that reads "Chris Daves".

Chris Daves, P.W.S.
Senior Scientist
cdaves@smeinc.com



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1.0 Project Background

This Protected Species Assessment has been conducted to assess the potential for the presence of protected species on the site in preparation for proposed development. The site is being proposed for future mining/quarry operations. S&ME is requesting the technical assistance (in the form of a written Response Letter) of the U.S. Fish and Wildlife Service (USFWS) as to whether site development would likely result in “take” as defined under Section 9 of the Endangered Species Act (ESA).

The approximate 6.77-acre site is located north of Parker Road near Enoree, Spartanburg County, South Carolina as shown on **Exhibits 1-4** in **Appendix I**.

2.0 Site and Habitat Descriptions

The site is located in southern Spartanburg County within the Southern Outer Piedmont/Piedmont ecoregion of South Carolina. The site consists of mixed hardwood woodland, pine-mixed hardwood woodland, ruderal communities, and aquatic features (tributaries). The properties adjacent to the site consist of forestland and rural residential parcels. Please refer to **Exhibit 3** and the site photographs in **Appendix I** for depictions of the predominant habitat types located on the site.

2.1 Mixed Hardwood Woodland

Mixed hardwood woodland was observed throughout the site (Photographs 1-2). Dominant overstory species observed included white oak (*Quercus alba*), southern red oak (*Q. falcata*), and sweet gum (*Liquidambar styraciflua*). Understory species consisted of those of the canopy dominants and American holly (*Ilex opaca*), American beech (*Fagus grandifolia*), and eastern red cedar (*Juniperus virginiana*). Woody vine and groundcover species observed included muscadine (*Vitis rotundifolia*), cranefly orchid (*Tipularia discolor*), Japanese honeysuckle (*Lonicera japonica*), Christmas fern (*Polystichum acrostichoides*), spotted wintergreen (*Chimaphila maculata*), and running cedar (*Diphasiastrum digitatum*).

2.2 Pine-Mixed Hardwood Woodland

Pine-mixed hardwood woodland was observed interspersed within the larger mixed hardwood woodland (Photographs 3-4). Dominant overstory species observed included white oak, southern red oak, sweet gum, and Virginia pine (*Pinus virginiana*). The Virginia pines observed were approximately 20-25 years in age and averaged approximately 60-65 feet in height. Average diameter-at-breast-height (DBH) was 10-12 inches. Understory species consisted of those of the canopy dominants and American holly, American beech, and eastern red cedar. Woody vine and groundcover species included muscadine, Japanese honeysuckle, cranefly orchid, Christmas fern, spotted wintergreen, and ground pine.

Streamside riparian mixed hardwoods were observed adjacent to the tributary located on the central portion of the site (Photographs 5-6). Dominant overstory species observed included American beech and sweet gum. Understory species observed included those of the canopy dominants and American holly and flowering dogwood



(*Cornus florida*). Woody vine and groundcover species included muscadine, Christmas fern, round-lobed liverleaf (*Hepatica americana*), cranefly orchid, partridgeberry (*Mitchella repens*), and spotted wintergreen.

2.3 Ruderal Communities

Ruderal communities were observed adjacent to ephemeral drainages (ravines) on the northern portion of the site and along the powerline easement on the southern portion of the site (Photographs 7-8). Dominant species observed on the ravines included kudzu (*Pueraria montana*), Japanese honeysuckle, Chinese privet (*Ligustrum sinense*), and blackberry (*Rubus* spp.). Dominant species observed on the powerline easement included kudzu, Japanese honeysuckle, and broomsedge (*Andropogon virginicus*).

2.4 Aquatic Features

The site contained numerous aquatic features including a seasonal tributary and several ephemeral drainages (Photographs 9-10). The seasonal tributary ranged from two to four feet in width and had sandy, gravel, cobble, and boulder substrates. Species observed along the tributary included those described in the riparian habitat.

3.0 Methodology

S&ME personnel reviewed the South Carolina Department of Natural Resources (SCDNR) and the USFWS websites to determine those species that are currently listed as federally protected (threatened or endangered) in Spartanburg County. The results of this search, including identified protected species and preferred habitat served as the basis of the field review and are presented in **Table 4-1**.

SCDNR maintains a database of elements of occurrence for protected species in the state of South Carolina. A search of this database did not reveal the known presence of federally protected species (occurrences) on or immediately adjacent to the site. Supporting information was researched for the purpose of identifying soil types, vegetative communities, and possible drainage features in the study area. The supporting information reviewed included aerial photography, topographic quadrangle maps, soil survey sheets, land use information, and data from the National Wetlands Inventory.

S&ME Biologists Chris Daves, P.W.S. and James Trotter performed the field review on February 24, 2021. The information obtained from supporting documentation was integrated with the field review to identify potential areas of preferred habitat of protected species. Portions of the site that matched descriptions of preferred habitat for protected species listed in **Table 4-1** were considered to be potential habitat for the respective protected species. These areas were subsequently field reviewed to confirm the presence/absence of the respective species.



4.0 Federally Protected Species

Descriptions of the species and their respective federal status are identified in **Table 4-1** and in **Appendix II**. The SCDNR and USFWS websites identified the following federally listed species for Spartanburg County:

Table 4-1 Federally Protected Flora and Fauna Summary

Species	Listing	Habitat
Northern Long-Eared Bat <i>Myotis septentrionalis</i>	T	Caves and abandoned mines (winter hibernacula). In summer, underneath bark or in cavities or crevices of trees with loose or exfoliating bark, with diameter at breast height (DBH) greater than three inches.
Dwarf-Flowered Heartleaf <i>Hexastylis naniflora</i>	T	Bluffs, hillsides, ravines, and boggy areas adjacent to streams in Piedmont hardwood forests; Prefers Pacolet, Madison, or Musella soils. Flowers mid-March to late May/early June.
Bald Eagle <i>Haliaeetus leucocephalus</i>	BGEPA	Coastlines, rivers, large lakes which provide adequate feeding grounds.

T = Threatened

BGEPA = Bald and Golden Eagle Protection Act

4.1 Northern Long-Eared Bat

BIOLOGICAL DETERMINATION: MAY AFFECT, NOT LIKELY TO ADVERSELY AFFECT

Northern long-eared bat is a medium-sized bat approximately three to 3.7 inches, with a wingspan of nine to 10 inches. Fur color ranges from medium to dark brown on the back and tawny to pale brown on the underside. It is distinguished by its long ears in relation to other bats in the genus *Myotis*, which means mouse-eared. Northern long-eared bats use caves and abandoned mines as winter hibernacula. In summer, the bat will roost in small colonies or alone underneath bark or in cavities or crevices of both live trees and dead trees. The USFWS considers any live or dead tree with loose or exfoliating bark with a diameter at breast height (DBH) greater than three inches to be potential roosting habitat.

The site contained forested areas (mixed hardwood woodland and pine-mixed hardwood wooded) with trees with a DBH larger than three inches, and also exhibited loose, creviced, or exfoliating bark. Snags were also observed. These trees could potentially provide summer roosting habitat for this species. The site does not contain suitable winter hibernacula habitat as there were no caves or abandoned mines.

S&ME submitted a scoping e-mail to Mr. Joe Lemeris with SCDNR Heritage Trust Program regarding northern long-eared bat occurrences on or in the vicinity of the site. The SCDNR response letter (**Appendix II**), dated February 22, 2021, indicated there are no known federal or state threatened or endangered species including the northern long-eared bat within two miles of the site. No known locations of the bat are within one-quarter (0.25) mile from known hibernacula, winter roosts, or within 150 feet from known maternity roost trees.



The proposed project appears to meet the criteria for the 4(d) rule of the ESA and the nationwide programmatic biological opinion for the northern long-eared bat; any associated incidental take is therefore exempt. A consistency letter from the USFWS included in **Appendix III**.

At this time, the scheduling of tree clearing activities for this project has yet to be determined. Based on our understanding of current guidance, if clearing is conducted outside the May 15 to August 15 window (approximate pup season), potential impacts to the northern long-eared bat can be reduced. Depending on the project schedule, a concerted effort to clear the trees outside of pup season should be made.

4.2 Dwarf-Flowered Heartleaf

BIOLOGICAL DETERMINATION: NO EFFECT

Dwarf-flowered heartleaf is a perennial, evergreen herb. Its leathery leaves are round, or heart shaped. Light green reticulation often occurs along the leaf veins. Flowering occurs from mid-March to late May/early June. Its beige to dark brown flowers are the smallest in the *Hexastylis* genus. Flowers are solitary and grow on a short stalk extending from the base of the leaves. The habitat of the dwarf-flowered heartleaf includes acidic, sandy loam soils along bluffs, hillsides, ravines, and boggy areas adjacent to streams in hardwood forests of the Piedmont. The species appears to prefer north-facing slopes. More specifically, it is endemic to the upper Piedmont of North and South Carolina. Soil type (Pacolet, Madison, and Musella soils) appears to be the most important habitat requirement.

Review of the USDA soils information (**Exhibit 4**) indicated Madison soils are listed for the northern portion of the site. These soils are often associated with dwarf-flowered heartleaf. North-facing slopes are also located on the site. Although favorable soils and landscape position were observed on the site, no species of *Hexastylis* were observed during our site reconnaissance. Accordingly, future development of the site is not expected to impact this species.

4.3 Bald Eagle

BIOLOGICAL DETERMINATION: NO IMPACT

This large raptor has characteristic adult plumage consisting of a white head and tail with a dark brown body. Juvenile eagles are completely dark brown and do not fully develop the majestic white head and tail until the fifth or sixth year. Adults average about three feet from head to tail, weigh approximately 10 to 12 pounds and have a wingspread that can reach seven feet. Generally, female bald eagles are larger than the males. The typical nest is constructed of large sticks and is lined with soft materials such as pine needles and grasses. The nests are very large, measuring up to six feet across and weighing hundreds of pounds. Nesting and feeding sites are generally in the vicinity of large bodies of open water (coastlines, rivers, large lakes).

The site does not contain suitable nesting habitat for the bald eagle. There are no coastlines, rivers, or large lakes on or immediately adjacent to the site considered suitable habitat for the bald eagle. No nests or individuals were observed during the field survey. Accordingly, future development of the site is not expected to impact this species.



5.0 Qualifications

The field survey was led by Chris Daves of S&ME. Mr. Daves is a Senior Scientist with over 20 years of experience in environmental consulting. Mr. Daves is proficient in conducting wetland delineations, environmental permitting activities, and habitat assessments, including protected species surveys. He is a Professional Wetland Scientist (PWS) and holds a B.S. degree in Biology from Wofford College and a Master's degree in Earth and Environmental Resources Management from the University of South Carolina.

6.0 Summary and Conclusions

Based on the literature review, habitat assessment, and pedestrian field review of the site, the following conclusions are given regarding federally listed species in Spartanburg County:

- ◆ Potential summer roosting habitat for the northern long-eared bat was observed within the forested areas of the site. These trees had loose, exfoliating, or creviced bark over three inches DBH which could provide summer roosting habitat for the northern long-eared bat. Per SCDNR consultation, there are no known winter hibernacula or summer roosting trees located within one-quarter mile radius of the site and no maternity roost trees within 150 feet.

Based on the 2019 USFWS Clearance Letter for Species and Habitat Assessments, blanket concurrence from the USFWS is granted for *may affect, but not likely to adversely affect* determinations for northern long-eared bat if proposed work occurs more than one-quarter mile from known hibernacula, winter roosts, or is further than 150 feet from known maternity roost trees. Copies of the USFWS Clearance Letter and a consistency letter are included in **Appendix III**. No further consultation with the USFWS is necessary.

- ◆ Although favorable soils and landscape position for dwarf-flowered heartleaf were observed on the site, no species of *Hexastylis* were observed during our site reconnaissance. Our opinion is that proposed development of the site will have *no effect* on this species. Since this assessment indicated there will be no effect or impact, the proposed project qualifies to use the USFWS Clearance Letter.
- ◆ The site does not provide suitable habitat for bald eagle. Our opinion is that proposed development of the site will have no impact on this species.

No further action is recommended at this time.



7.0 References

The following sources were referenced during the course of this assessment:

- ◆ SCDNR. Natural Heritage Program: <https://schtportal.dnr.sc.gov/portal/apps/sites/#/natural-heritage-program>.
- ◆ SCDNR. Natural Heritage Program. Response Letter dated February 22, 2021.
- ◆ SCDNR. Rare, Threatened, and Endangered Species Inventory: <https://experience.arcgis.com/experience/af61ba156d054cc7b3e27d09a0c35c0f>.
- ◆ SCDNR: Bald Eagle Locations: <http://www.dnr.sc.gov/wildlife/baldeagle/locations.html>.
- ◆ USFWS: South Carolina List of At-Risk, Candidate, Endangered, and Threatened Species by County: <https://www.fws.gov/southeast/pdf/fact-sheet/south-carolina-species-list-by-county.pdf>.
- ◆ USFWS. Information for Planning and Consultation (IPaC): <https://ecos.fws.gov/ipac/>.
- ◆ USFWS. <https://www.fws.gov/southeast/charleston/project-planning/>.
- ◆ USFWS.2016. Nationwide Programmatic Biological Opinion for the Northern Long-Eared Bat: <https://www.fws.gov/Midwest/endangered/mammals/nleb/pdf/FRnlebFinal4dRule14Jan2016.pdf>.
- ◆ USFWS. 2016. Key to the Northern Long-Eared Bat 4(d) Rule for Federal Activities.
- ◆ USFWS. 2016. Key to the Northern Long-Eared Bat 4(d) Rule for Non-Federal Activities.
- ◆ USFWS. 2019. Clearance Letter for Species and Habitat Assessments, dated May 30, 2019.
- ◆ USFWS. Consistency Letter for Rice Site dated February 25, 2021.
- ◆ U.S. Department of Agriculture – National Resources Conservation Service Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/>.

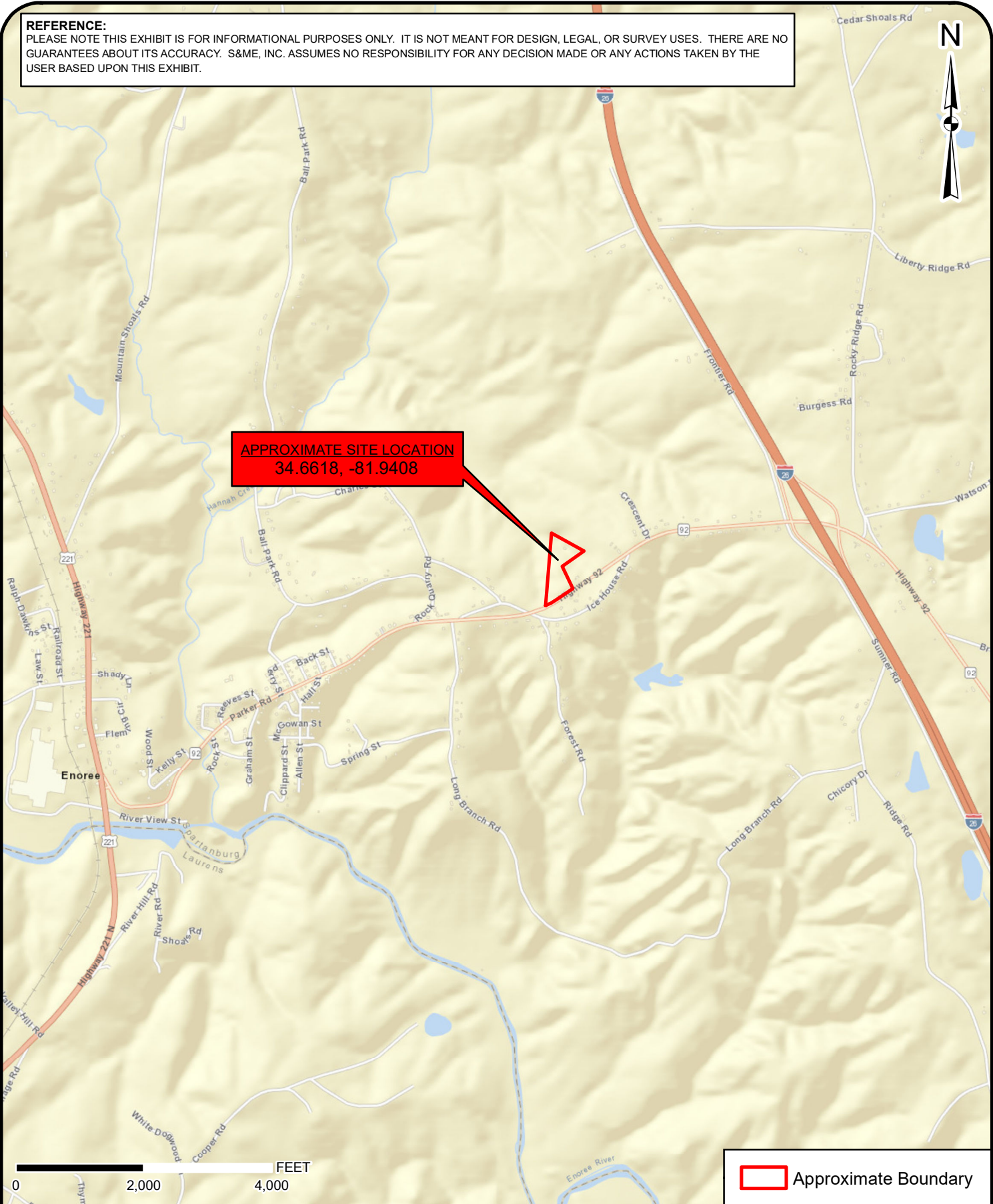
Appendices

Appendix I – Exhibits and Site Photographs

REFERENCE:
 PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
 34.6618, -81.9408



 Approximate Boundary

SCALE:
 1" = 2,000'
 DATE:
 2-9-21
 PROJECT NUMBER
 210741

EXHIBIT NO.
1



Vicinity Exhibit
 Rice Site +/- 6.77 Acres

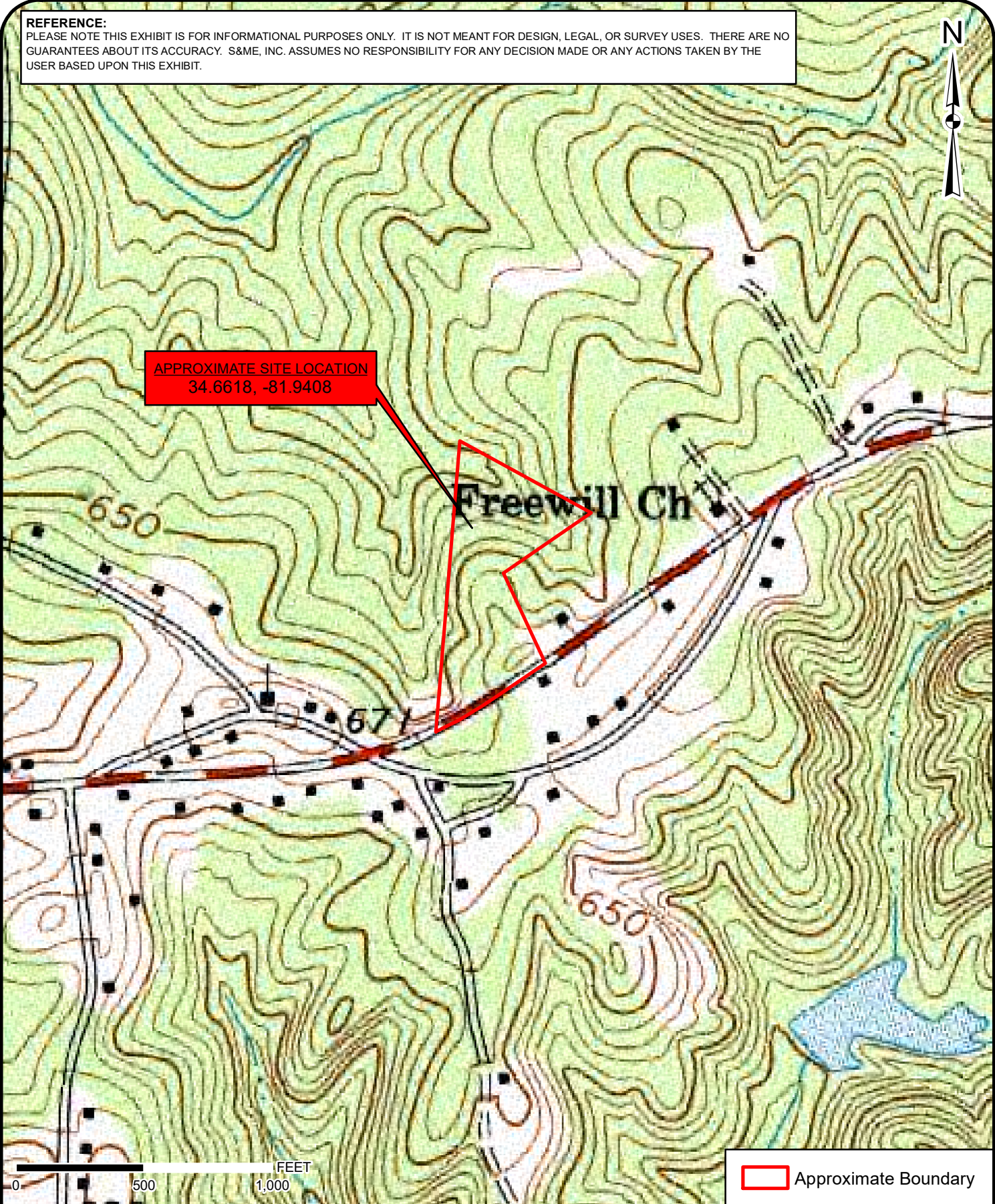
Enoree, Spartanburg County, South Carolina
 Source: World Street Map

Drawing Path: T:\ENVA\Projects\2021\210741 Luck Companies_Rice Site_Enoree_Sc\GIS\mxd\A\Rice Site Vicinity Exhibit.mxd plotted by chandley 02-09-2021

REFERENCE:
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APPROXIMATE SITE LOCATION
 34.6618, -81.9408



Approximate Boundary

SCALE:
 1" = 500'

DATE:
 2-9-21

PROJECT NUMBER
 210741

EXHIBIT NO.

2



Topographic Exhibit

Rice Site +/- 6.77 Acres

Enoree, Spartanburg County, South Carolina
 Source: USGS 7.5-Minute Topo Quad Enoree, SC 1969

REFERENCE:

PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
34.6618, -81.9408



- Photograph Locations & Direction
- Non-Jurisdictional Feature Ephemeral Drainage (b)(3) Excluded Water
- Jurisdictional Tributary (a)(2) Water
- Approximate Boundary

Drawing Path: T:\ENV\Projects\2021\210741 Luck Companies_Rice Site_Enoree, SC\GIS\mxd\Aerial Exhibit.mxd plotted by chandley 02-25-2021



Aerial Exhibit

Rice Site +/- 6.77 Acres

Enoree, Spartanburg County, South Carolina
Source: World Imagery 2019

SCALE:
1" = 200'
DATE:
2-25-21
PROJECT NUMBER
210741

EXHIBIT NO.

3

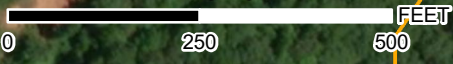
REFERENCE:

PLEASE NOTE THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR SURVEY USES. THERE ARE NO GUARANTEES ABOUT ITS ACCURACY. S&ME, INC. ASSUMES NO RESPONSIBILITY FOR ANY DECISION MADE OR ANY ACTIONS TAKEN BY THE USER BASED UPON THIS EXHIBIT.



APPROXIMATE SITE LOCATION
34.6618, -81.9408

Soils Information
CaC3 - Cataula Clay Loam (6-10% slopes)
CdB2 - Cataula Sandy Loam (2-6% slopes)
McF3 - Madison Clay Loam (15-40% slopes)



 Approximate Boundary



Soils Exhibit

Rice Site +/- 6.77 Acres

Enoree, Spartanburg County, South Carolina

Source: World Imagery 2019 & SCDNR (Soils Data)

SCALE:
1" = 250'

DATE:
2-9-21

PROJECT NUMBER
210741

EXHIBIT NO.

4



1 Mixed hardwoods on southeastern portion of the site.



2 Mixed hardwoods on central portion of site.



3 Pine-mixed hardwoods on northern portion of site.



4 Pine-mixed hardwoods on eastern-central portion of site.





5 Riparian mixed hardwoods on western-central portion of site.



6 Riparian hardwoods on the central portion of the site.



7 Ruderal community (powerline easement) located on the southeastern portion of the site.

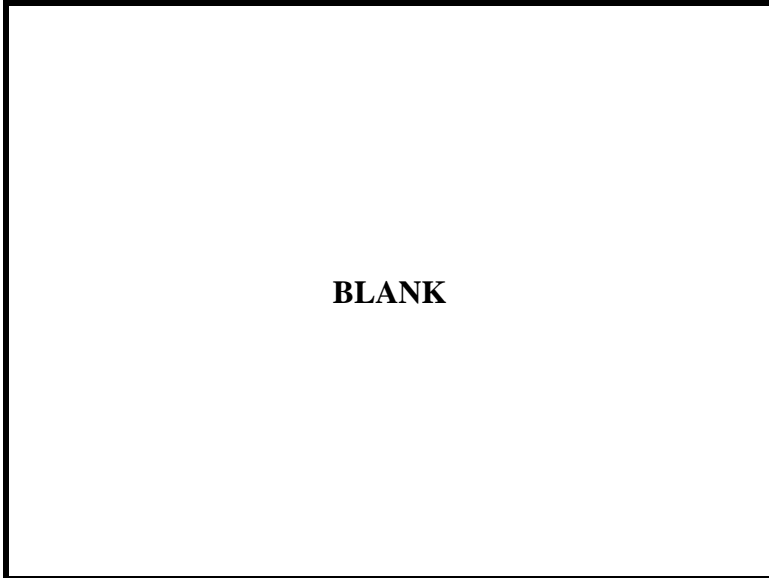


8 Ruderal community located on ravines on the northern portion of the site.





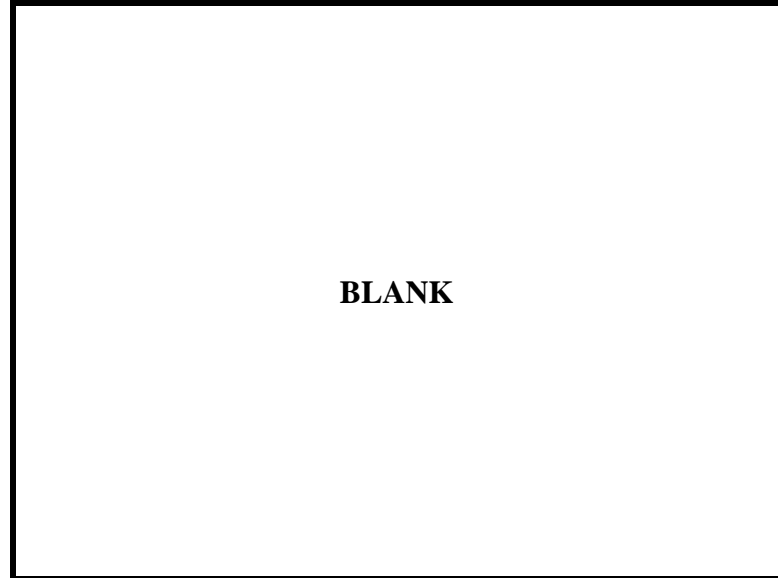
9 Seasonal stream located on the central portion of the site.



11



10 Seasonal stream located on the central-northern portion of site.



12



Appendix II – County Species Lists from USFWS and SCDNR

SPARTANBURG COUNTY

CATEGORY	COMMON NAME/STATUS	SCIENTIFIC NAME	SURVEY WINDOW/ TIME PERIOD	COMMENTS
Amphibians	None Found			
Birds	Golden-winged warbler (ARS)	<i>Vermivora chrysoptera</i>	April-July (nesting surveys)	Spring/Fall migration; variable throughout State
Crustaceans	Broad River spiny crayfish (ARS)	<i>Cambarus spicatus</i>	November-April	
Fishes	None Found			
Insects	Monarch butterfly (ARS)	<i>Danaus plexippus</i>	August-December	Overwinter populations departs: March-April
Mammals	Little brown bat (ARS)	<i>Myotis lucifugus</i>	Year round	Found in trees, rock crevices, and under bridges
	Northern long-eared bat (T)	<i>Myotis septentrionalis</i>	Year round	Winter surveys not as successful
	Tri-colored bat (ARS)	<i>Perimyotis subflavus</i>	Year round	Found in mines and caves in the winter
Mollusks	None Found			
Plants	Dwarf-flowered heartleaf (T)	<i>Hexastylis naniflora</i>	March-May	
Reptiles	None Found			

* Contact National Marine Fisheries Service (NMFS) for more information on this species.

** The U.S. Fish and Wildlife Service (FWS) and NMFS share jurisdiction of this species.

ARS Species that the FWS has been petitioned to list and for which a positive 90-day finding has been issued (listing may be warranted); information is provided only for conservation actions as no Federal protections currently exist.

ARS* Species that are either former Candidate Species or are emerging conservation priority species.

BGEPA Federally protected under the Bald and Golden Eagle Protection Act

C FWS or NMFS has on file sufficient information on biological vulnerability and threat(s) to support proposals to list these species.

CH Critical Habitat

E Federally Endangered

P or P – CH Proposed for listing or critical habitat in the Federal Register

S/A Federally protected due to similarity of appearance to a listed species

T Federally Threatened

These lists should be used only as a guideline, not as the final authority. The lists include known occurrences and areas where the species has a high possibility of occurring. Records are updated as deemed necessary and may differ from earlier lists.

For a list of State endangered, threatened, and species of concern, please visit <https://www.dnr.sc.gov/species/index.html>.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218
<http://www.fws.gov/charleston/>

In Reply Refer To:

February 22, 2021

Consultation Code: 04ES1000-2021-SLI-0419

Event Code: 04ES1000-2021-E-00966

Project Name: Rice Site

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

<http://>

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Carolina Ecological Services

176 Croghan Spur Road, Suite 200

Charleston, SC 29407-7558

(843) 727-4707

Project Summary

Consultation Code: 04ES1000-2021-SLI-0419

Event Code: 04ES1000-2021-E-00966

Project Name: Rice Site

Project Type: MINING

Project Description: 6.77 acre site located in Enoree, Spartanburg County, South Carolina.
Reason for request of information is due diligence.

Project Location:

Approximate location of the project can be viewed in Google Maps: [https://](https://www.google.com/maps/@34.6614624,-81.94091911046095,14z)

www.google.com/maps/@34.6614624,-81.94091911046095,14z



Counties: Spartanburg County, South Carolina

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Flowering Plants

NAME	STATUS
Dwarf-flowered Heartleaf <i>Hexastylis naniflora</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2458	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical](#)

[Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

South Carolina Department of Natural Resources



PO Box 167
Columbia, SC 29202
(803) 734-1396
speciesreview@dnr.sc.gov

Robert H. Boyles, Jr.

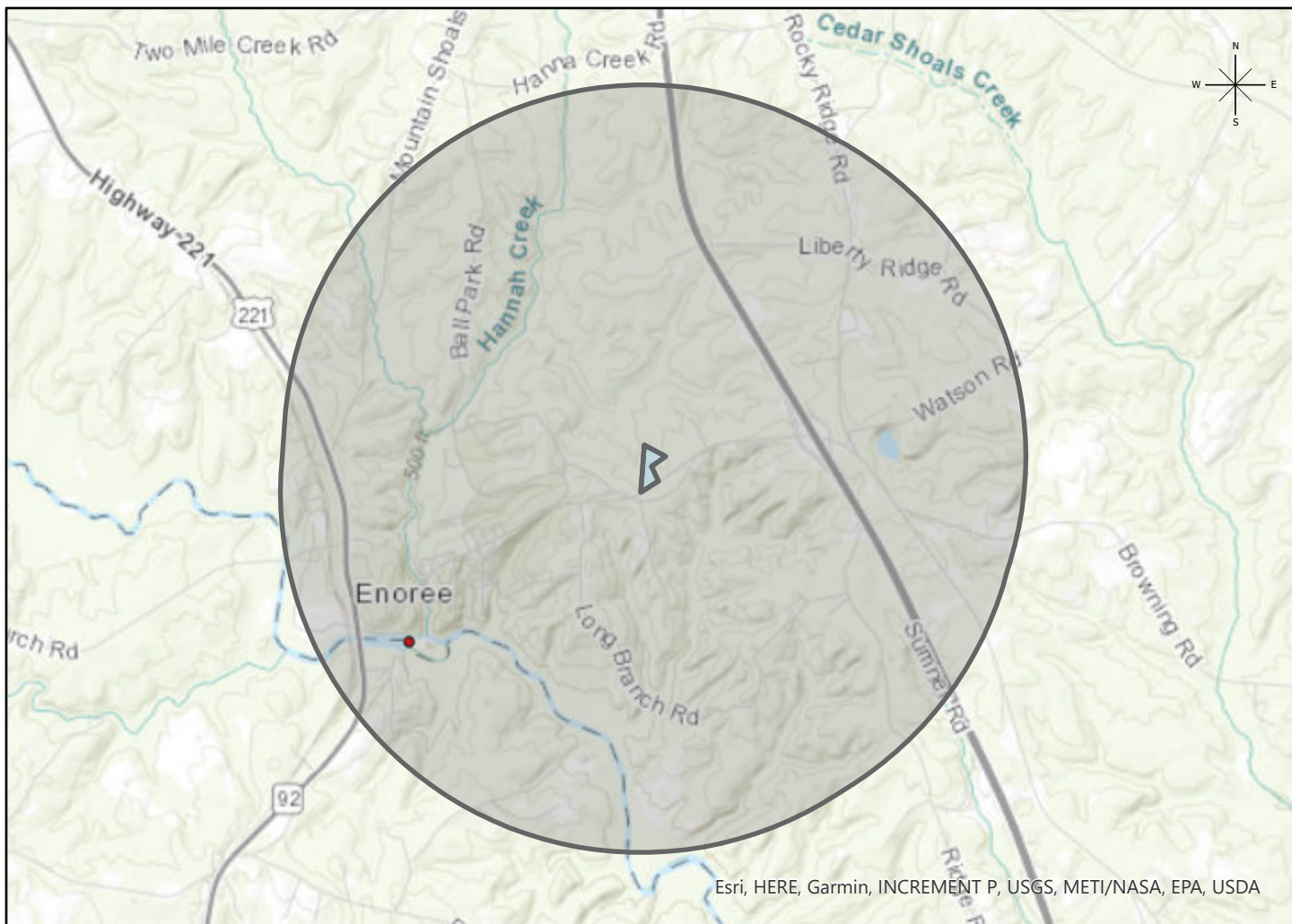
Director

Emily C. Cope
Deputy Director for
Wildlife and Freshwater Fisheries

Requested on Monday, February 22, 2021 by Chris Handley.

Re: Request for Threatened and Endangered Species Consultation
S&ME - Rice Site
Mine
Spartanburg County, South Carolina

The South Carolina Department of Natural Resources (SCDNR) has received your request for threatened and endangered species consultation of the above named project in Spartanburg County, South Carolina. The following map depicts the project area and a 2 mile buffer surrounding:



0 0.35 0.7 1.4 Miles

South Carolina Department of Natural Resources



Robert H. Boyles, Jr.

Director

Emily C. Cope

Deputy Director for

Wildlife and Freshwater Fisheries

This report includes the following items:

- A - A report for species which intersect the project area
- B - A report for species which intersect the buffer around the project area
- C - A list of best management practices relevant to species near to or within the project area
- D - A list of best management practices relevant to the project type
- E - Instructions to submit new species observation records to the SC Natural Heritage Program

The technical comments outlined in this report are submitted to speak to the general impacts of the activities as described through inquiry by parties outside the South Carolina Department of Natural Resources. These technical comments are submitted as guidance to be considered and are not submitted as final agency comments that might be related to any unspecified local, state or federal permit, certification or license applications that may be needed by any applicant or their contractors, consultants or agents presently under review or not yet made available for public review. In accordance with its policy 600.01, Comments on Projects Under Department Review, the South Carolina Department of Natural Resources, reserves the right to comment on any permit, certification or license application that may be published by any regulatory agency which may incorporate, directly or by reference, these technical comments.

Interested parties are to understand that SCDNR may provide a final agency position to regulatory agencies if any local, state or federal permit, certification or license applications may be needed by any applicant or their contractors, consultants or agents. For further information regarding comments and input from SCDNR on your project, please contact our Office of Environmental Programs by emailing environmental@dnr.sc.gov or by visiting www.dnr.sc.gov/environmental. Pursuant to Section 7 of the Endangered Species Act, requests for formal letters of concurrence with regards to federally listed species should be directed to the USFWS.

Should you have any questions or need more information, please do not hesitate to contact our office by email at speciesreview@dnr.sc.gov or by phone at 803-734-1396.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Lemeris, Jr.", written in a cursive style.

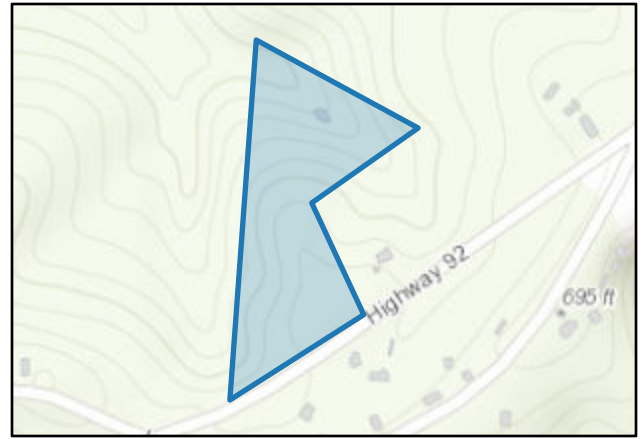
Joseph Lemeris, Jr.
Heritage Trust Program
SC Department of Natural Resources

A. Project Area - Species Report

There are 0 tracked species records found within the project foot print. The following table outlines occurrences found within the project footprint (if any), sorted by listing status and species name. Please keep in mind that this information is derived from existing databases and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. You can find more information about global and state rank status definitions by visiting Natureserve's web page. Please note that certain sensitive species found on site may be listed in this table but are not represented on the map. Please contact speciesreview@dnr.sc.gov should you have further questions related to sensitive species found within the project area.



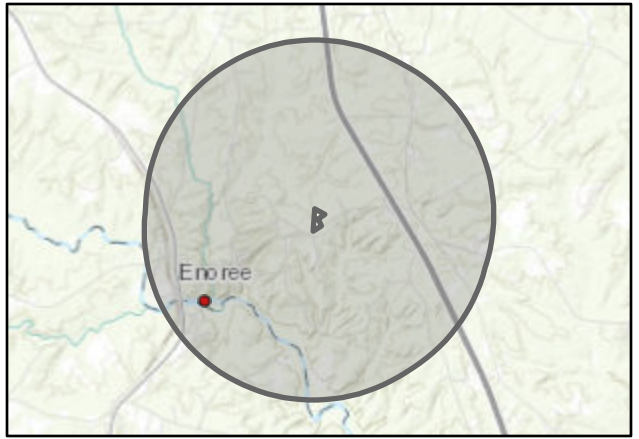
Map Credits: Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA



No records for species of concern are found within the project area

B. Buffer Area - Species Report

The following table outlines rare, threatened or endangered species found within 2 miles of the project footprint, arranged in order of protection status and species name. Please keep in mind that this information is derived from existing databases and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. You can find more information about global and state rank status definitions by visiting Natureserve's web page. Please note that certain sensitive species found within the buffer area may be listed in this table but are not represented on the map.



Map Credits: Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

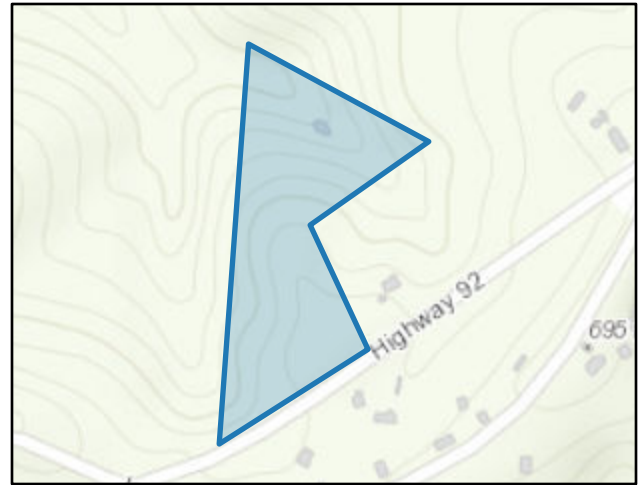
Scientific Name	Common Name	G Rank	S Rank	Fed. Status	State Status	SWAP Priority	Last Obs. Date
<i>Somatogyrus virginicus</i>	Panhandle Pebblesnail	G2G3	SNR	Not Applicable	Not Applicable	High	2010-07-20

C. Species Best Management Practices (1 of 1)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to species of concern which may be found on or near to the project area. Please contact speciesreview@dnr.sc.gov should you have further questions with regard to survey methods, consultation, or other species-related concerns.



Map Credits: Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA



Cavity- and tree-roosting bat species including the federally threatened northern long-eared bat (*Myotis septentrionalis*), state-endangered Rafinesque's big-eared bat (*Corynorhinus rafinesquii*), and the federally at-risk tricolored bat (*Perimyotis subflavus*) have been known to occur in the county of the proposed site. As a conservation measure, it is recommended that any tree clearing activities be conducted during the inactive season for Northern long-eared bat (November 15th through March 31st) to avoid negative impacts to the species. If any of the above species are found on-site, please contact the USFWS and SCDNR.

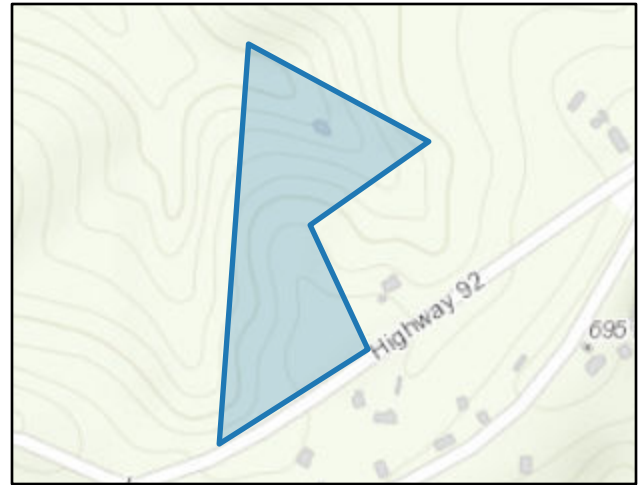
Species in the above table with SWAP priorities of High, Highest or Moderate are designated as having conservation priority under the South Carolina State Wildlife Action Plan (SWAP). SWAP species are those species of greatest conservation need not traditionally covered under any federal funded programs. Species are listed in the SWAP because they are rare or designated as at-risk due to knowledge deficiencies; species common in South Carolina but listed rare or declining elsewhere; or species that serve as indicators of detrimental environmental conditions. SCDNR recommends that appropriate measures should be taken to minimize or avoid impacts to the aforementioned species of concern.

D. Project Best Management Practices (1 of 1)

SCDNR offers the following comments and best management practices (BMPs) regarding this project's potential impacts to natural resources within or surrounding the project area. Please contact our Office of Environmental Programs at environmental@dnr.sc.gov should you have further questions with regard to best management practices related to this project area.



Map Credits: Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA



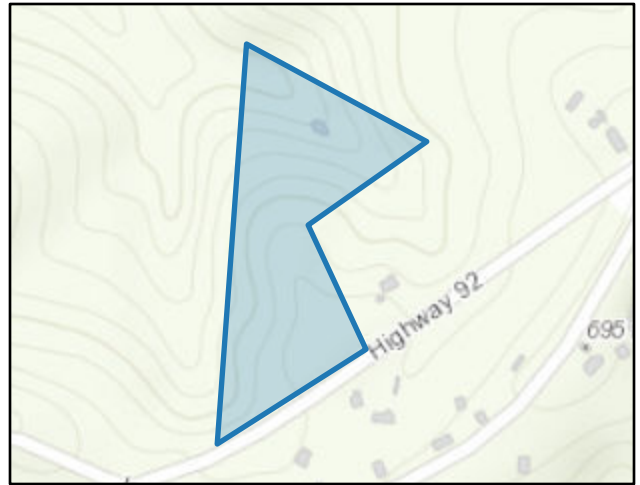
If this project is associated with the Federal Government and the project area is or once was used as farmland, we recommend that consultation occur with the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS) per the Farmland Protection Policy Act; areas of the site are classified as prime farmland or farmland of statewide importance.

- All necessary measures must be taken to prevent oil, tar, trash and other pollutants from entering the adjacent offsite areas/wetlands/water.
- Once the project is initiated, it must be carried to completion in an expeditious manner to minimize the period of disturbance to the environment.
- Upon project completion, all disturbed areas must be permanently stabilized with vegetative cover (preferable), riprap or other erosion control methods as appropriate.
- The project must be in compliance with any applicable floodplain, stormwater, land disturbance, shoreline management guidance or riparian buffer ordinances.
- Prior to beginning any land disturbing activity, appropriate erosion and siltation control measures (e.g. silt fences or barriers) must be in place and maintained in a functioning capacity until the area is permanently stabilized.
- Materials used for erosion control (e.g., hay bales or straw mulch) will be certified as weed free by the supplier.
- Inspecting and ensuring the maintenance of temporary erosion control measures at least:
 - a. on a daily basis in areas of active construction or equipment operation;
 - b. on a weekly basis in areas with no construction or equipment operation; and
 - c. within 24 hours of each 0.5 inch of rainfall.
- Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification, or as soon as conditions allow if compliance with this time frame would result in greater environmental impacts.
- Land disturbing activities must avoid encroachment into any wetland areas (outside the permitted impact area). Wetlands that are unavoidably impacted must be appropriately mitigated.
- Your project may require a Stormwater Permit from the SC Department of Health & Environmental Control, please visit <https://www.scdhec.gov/environment/water-quality/stormwater>

E. Instructions for Submitting Species Observations

The SC Natural Heritage Dataset relies on continuous monitoring and surveying for species of concern throughout the state. Any records of species of concern found within this project area would greatly benefit the quality and comprehensiveness of the statewide dataset for rare, threatened and endangered species. Below are instructions for how to download the SC Natural Heritage Occurrence Reporting Form through the Survey123 App.

Map Credits: Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA



Instructions for accessing the SC Natural Heritage Occurrence Reporting Form

For use in a browser (on your desktop/PC):

- 1) Follow <http://bit.ly/scht-reporting-form-point>
- 2) Select 'Open in browser'
- 3) The form will open and you can begin entering data!

This method of access will also work on a browser on a mobile device, but only when connected to the internet. To use the form in the field without relying on data/internet access, follow the steps below.

For use on a smartphone or tablet using the field app:

- 1) Download the Survey123 App from the Google Play store or the Apple Store. This app is free to download. Allow the app to use your location.
- 2) No need to sign in. However, you will need to provide the app with our Heritage Trust GIS portal web address. You will only need to do this once: (this is a known bug with ESRI's software, and future releases of the form should not require the below steps. Bear with us in the meantime!).
 - a. Tap 'Sign in'
 - b. Tap the settings (gear symbol) in the upper right corner
 - c. Tap 'Add Portal'
 - d. After the 'https://', type schtportal.dnr.sc.gov/portal
 - e. Tap 'Add Portal'
 - f. Tap the back-arrow icon (upper left corner) twice to return to the main sign in page.
- 3) Use the camera app (or other QR Reader app) to scan the QR code on this page from your smartphone or tablet. Click on the 'Open in the Survey123 field app'. This will prompt a window to allow Survey123 to download the SC Natural Heritage Occurrence Reporting Form. Select 'Open.'
- 4) The form will automatically open in Survey123, and you can begin entering data! This form will stay loaded in the app on your device until you manually delete it, and you can submit as many records as you like.



Rare, Threatened, and Endangered Species of South Carolina - by County

The lists below indicate what species have been reported to the Heritage Trust Program as occurring in each county. They are not a complete listing of what actually exists, as no complete survey of the state has ever been done.

Spartanburg County

Animals

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Cambarus spicatus</i>	Broad River Spiny Crayfish	ARS*: Risk, priority	--	G3	S3
<i>Danaus plexippus</i>	Monarch Butterfly	ARS*: Risk, Priority	--	G4	SNR
<i>Microtus pennsylvanicus</i>	Meadow Vole	--	--	G5	S3?
<i>Mustela vison</i>	Mink	--	--	G5	S4
<i>Perimyotis subflavus</i>	Tricolored Bat	ARS*: Risk, priority	--	G2G3	S1S2
<i>Vermivora chrysoptera</i>	Golden-winged Warbler	ARS*: Risk, priority	--	G4	SNA

Plants

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Aconitum uncinatum</i>	Blue Monkshood	--	--	G4	S2
<i>Circaea lutetiana</i> ssp. <i>canadensis</i>	Enchanter's Nightshade	--	--	G5T5	S3
<i>Cypripedium pubescens</i>	Large Yellow Lady's-slipper	--	--	G5T5	S3
<i>Fothergilla major</i>	Mountain Witch-alder	--	--	G3	S2

Gaultheria procumbens	Teaberry	--	--	G5	S3
Hackelia virginiana	Virginia Stickseed	--	--	G5	S1
Helianthus laevigatus	Smooth Sunflower	--	--	G4	S2
Helianthus porteri	Porter's Goldeneye	--	--	G4	S1
Hexastylis naniflora	Dwarf-flowered Heartleaf	LT: Threatened	--	G3	S3
Isoetes piedmontana	Piedmont Quillwort	--	--	G4	S2
Juglans cinerea	Butternut	--	--	G4	S3
Juncus georgianus	Georgia Rush	--	--	G4	S2
Juniperus communis	Ground Juniper	--	--	G5	SNR
Lonicera flava	Yellow Honeysuckle	--	--	G5?	S2
Lygodium palmatum	Climbing Fern	--	--	G4	S3
Melanthium virginicum	Virginia Bunchflower	--	--	G5	S2
Minuartia uniflora	One-flower Stitchwort	--	--	G4	S3
Monotropsis odorata	Sweet Pinesap	--	--	G3	S2
Nestronia umbellula	Nestronia	--	--	G4	S3
Rhododendron eastmanii	May White	--	--	G2	S2
Solidago bicolor	White Goldenrod	--	--	G5	S2

For additional information about rare, threatened, and endangered species or questions about these lists, please contact [Anna Smith](#).

Environmental Review

- [Office of Environmental Programs](#)
- [Bald Eagle Nest Data](#)
- [Planning & Conservation](#)

[Phone Numbers](#) | [Accessibility](#) | [FOIA](#) | [Privacy Policy](#) | [Report Waste or Abuse to SC Inspector General](#) |
 South Carolina Department of Natural Resources - Rembert C. Dennis Building
 1000 Assembly Street, Columbia, SC 29201
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Appendix III – USFWS Clearance Letter



United States Department of the Interior
FISH AND WILDLIFE SERVICE
176 Croghan Spur Road, Suite 200
Charleston, South Carolina 29407
May 30, 2019



U.S. Fish and Wildlife Service Clearance Letter for Species and Habitat Assessments

The U.S. Fish and Wildlife Service (Service) is one of two lead Federal Agencies mandated with the protection and conservation of Federal trust resources, including threatened and endangered (T&E) species and designated critical habitat as listed under the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*) (ESA). Development of lands in South Carolina have the potential to impact federally protected species. Accordingly, obligations under the ESA, National Environmental Policy Act (NEPA), Clean Water Act (CWA), Federal Power Act (FPA), and other laws, require project proponents to perform an environmental impact review prior to performing work on the site. These projects may include a wide variety of activities including, but not limited to, residential or commercial developments, energy production, power transmission, transportation, infrastructure repair, maintenance, or reconstruction of existing facilities on previously developed land.

Project applicants, or their designated representatives, may perform initial species assessments in advance of specific development proposals to determine the presence of T&E species and designated critical habitat that are protected under the ESA. These reviews are purposely speculative and do not include specific project or site development plans. Many of these speculative proposals are for previously developed or disturbed lands such as pasture lands, agricultural fields, or abandoned industrial facilities. Due to historical uses and existing conditions, these sites often do not contain suitable habitat to support T&E species. Therefore, an assessment may conclude that any future development of the site would have no effect to T&E species or adversely modify designated critical habitat. If the applicant, or their designee, determines there is no effect or impact to federally protected species or designated critical habitat, no further action is required under the ESA.

Clearance to Proceed

For all sites with potential projects that have no effect or impact upon federally protected species or designated critical habitat, no further coordination with the Service is necessary at this time. This letter may be downloaded and serve as the Service's concurrence or agreement to the conclusions of the species assessment. Any protected species survey or assessment conducted for the property should be included with this letter when submitting the project to Federal permitting agencies. Due to obligations under the ESA potential impacts must be reconsidered if: (1) new information reveals impacts of this identified action may affect any listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner which was not considered in this assessment; or (3) a new species is listed or critical habitat is designated that may be affected by the identified action.

Please note this Clearance Letter applies only to assessments in South Carolina but may not be used to satisfy section 7 requirements for projects that have already been completed or currently under construction.

If suitable habitat for T&E species or designated critical habitat occurs on, or nearby, the project site, a determination of no effect/impact may not be appropriate. In these cases, direct consultation requests with the Service should be initiated. Additional coordination with the Service may also be required if the potential project requires an evaluation under another resource law such as, but not limited to, NEPA, CWA, FPA, and the Coastal Zone Management Act.

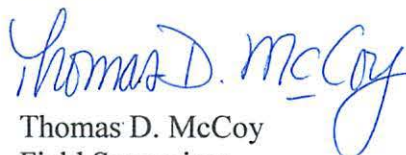
Northern Long-eared Bat Consideration

The Service issued a nationwide programmatic biological opinion (PBO) for the northern long-eared bat (*Myotis septentrionalis*, NLEB) on January 5, 2016. The PBO was issued pursuant to section 7(a)(2) of the ESA to address impacts that Federal actions may have on this species. In addition, the Service published a final 4(d) rule on January 14, 2016, which details special consultation provisions for Federal actions that may affect the NLEB. Briefly, the PBO and the 4(d) rule allow for "incidental" take of the NLEB throughout its range under certain conditions. Take is defined in section 3 of the ESA as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Further, incidental take is defined as take that results from, but is not the purpose of, carrying out an otherwise lawful activity. Under the PBO and 4(d) rule, all incidental take of the NLEB is exempted from the ESA's take prohibitions under certain conditions. However, incidental take is prohibited within one quarter mile from known hibernacula and winter roost, or within 150 feet from a known maternity roost tree during the months of June and July.

In consideration of known hibernacula, winter roosts, and maternity roost tree locations in South Carolina, this letter hereby offers blanket concurrence for a may affect, but is not likely to adversely affect determination for the NLEB if the proposed work occurs more than one quarter mile from known hibernacula, winter roosts, or is further than 150 feet from a known maternity roost trees. If an activity falls within one-quarter mile of hibernacula or winter roost or within 150 feet of a maternity roost tree additional consultation with the Service will be required. As a conservation measure for all projects it is recommended that all tree clearing activities be conducted during the NLEB inactive season of November 15th to March 31st of any given year.

The Service appreciates your cooperation in the protection of federally listed species and their habitats in South Carolina.

Sincerely,


Thomas D. McCoy
Field Supervisor

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].



United States Department of the Interior



FISH AND WILDLIFE SERVICE
South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218
<http://www.fws.gov/charleston/>

IPaC Record Locator: 631-99675916

February 25, 2021

Subject: Consistency letter for the 'Rice Site' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Will Trotter:

The U.S. Fish and Wildlife Service (Service) received on February 25, 2021 your effects determination for the 'Rice Site' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause “take”^[1] of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action’s effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Dwarf-flowered Heartleaf *Hexastylis naniflora* Threatened

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Rice Site

2. Description

The following description was provided for the project 'Rice Site':

6.77 acre site located in Enoree, Spartanburg County, South Carolina. Reason for request of information is due diligence.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.6614624,-81.94091911046095,14z>



Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

No

2. Will your activity purposefully **Take** northern long-eared bats?

No

3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

6. Will the action involve Tree Removal?

Yes

7. Will the action only remove hazardous trees for the protection of human life or property?

No

8. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

9. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

6

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

6

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0
