

Biological Evaluation  
Bellevue Road Tract  
Orangeburg, Orangeburg County, South Carolina  
Project No. 01967-26183

PREPARED FOR:

**Alliance Consulting Engineers, Incorporated**  
**Post Office Box 8147**  
**Columbia, South Carolina 29202**

PREPARED BY:

**The Brigman Company**  
**Post office Box 1532**  
**Conway, South Carolina 29526**

**June 8, 2026**



# THE BRIGMAN COMPANY

June 8, 2026

Alliance Consulting Engineers, Inc.  
Post Office Box 8147  
Columbia, South Carolina 29202

Attention: Mr. Ryan Merritt, PE

Reference: **Biological Evaluation**  
**Bellevue Road Tract**  
Orangeburg, Orangeburg County, South Carolina  
Project No. 01967-26183

Dear Mr. Merritt:

The Brigman Company (TBC) is pleased to submit this report detailing our findings for the Bellevue Road Tract (i.e. the Property) located south of and adjacent to the intersection of Bellevue Road and Interstate 26 near the City of Orangeburg, Orangeburg County, South Carolina. This work was performed in accordance with TBC's Professional Services Contract, authorized on April 9, 2026. Photos and observations from the delineation are included in this report. This report and the on-site pedestrian survey have been conducted to assess the potential for the presence of federally protected species or habitat to support federally protected species prior to future development of the Property.

The Property is comprised of a tract of land (Orangeburg County TMS# 208-00-02-002) totaling approximately 161.17 acres. Exhibit 1 of this report presents the approximate location of the Property. The Property is identified on a portion of the U.S. Geological Survey (USGS) 7.5-minute Orangeburg North, SC topographic quadrangle map dated 1980. Exhibit 2 of this report depicts the approximate location of the Property overlaid on the referenced topographic quadrangle.

## Site and Habitat Descriptions

The Property is located in central Orangeburg County within the Inner Coastal Plain Physiographic Province of South Carolina. The USGS topographic quadrangle (Exhibit 2) depicts the Property as wooded land with the run of Little Bull Creek running through the property from roughly northwest to southeast. The surrounding properties consist of undeveloped wooded land and residential properties. Exhibit 3 of this report depicts the Property overlaid on an aerial photograph. The upland areas on the Property are dominated with loblolly pine (*Pinus taeda*) overstory that was thinned around 2023. The mid and understory vegetation consists of dense hardwoods including species such as waster oak (*Quercus nigra*), sweetgum (*Liquidambar styraciflua*), loblolly pine, and red maple (*Acer rubrum*), blackberry (*Rubus* sp.), and muscadine grape (*Vitis rotundifolia*). The wetland areas on the Property are associated with Little Bull Creek, which on the Property has been impacted by beaver dams that have restricted the flow. These areas are dominated by species such as water tupelo (*Nyssa aquatica*), bald cypress (*Taxodium distichum*), swamp chestnut oak (*Q. michauxii*), and willow oak (*Q. phellos*). Mid and understory species include saplings of the overstory and netted chain fern (*Woodwardia aerolata*), cinnamon fern (*Osumnda cinnamomea*), and laurel greenbrier (*Smilax laurifolia*).



## Protected Species

The U.S. Fish & Wildlife Service (USF&WS) *South Carolina List of At-risk, Candidate, Endangered, and Threatened Species – Orangeburg County*, the USF&WS Information for Planning and Conservation (IPaC) website, and the South Carolina Department of Natural Resources (SCDNR) *Rare, Threatened, and Endangered Species and Communities Known to Occur in Orangeburg County, SC* were consulted regarding current federally protected species within Orangeburg County. The information was reviewed prior to conducting the site visit, to determine if known locations of protected species were located on or near the Property. The information was reviewed prior to conducting the site visit, to determine if known locations of protected species were located on or near the Property. The USF&WS database has three (3) federally protected species listed for Orangeburg County, South Carolina and two (2) proposed species.

Common Name	Scientific Name	Survey Window	Status
Tricolored Bat	<i>Perimyotis subflavus</i>	May 15 – August 15	Proposed Endangered
Red-Cockaded Woodpecker	<i>Picoides borealis</i>	March 1 – July 31 (nesting season)	Threatened
Canby's Dropwort	<i>Tiedemannia canbyi</i>	Mid-August -September	Endangered
Southern Hognose Snake	<i>Heterodon simus</i>	Year around	Proposed Threatened
Monarch Butterfly	<i>Danaus plexippus</i>	August-December	Proposed Threatened

The South Carolina State listed species for Orangeburg County that are not included in the federal threatened and endangered species list and **not** dependent on maritime or large riverine systems are listed below, however, while the Bald Eagle is federally protected under the Bald and Golden Eagle Protection Act, it is listed in South Carolina as Threatened.

Common Name	Scientific Name	Survey Window	State Status
Spotted Turtle	<i>Clemmys guttata</i>	February-April	Threatened
Rafinesque's Big-eared Bat	<i>Corynorhinus rafinesquii</i>	Year round	Endangered
Bald Eagle	<i>Haliaeetus leucocephalus</i>	October 1-May 15 (nesting season)	Threatened
Broad-striped Dwarf Siren	<i>Pseudobranchius striatus striatus</i>	Year round	Threatened
Carolina Gopher Frog	<i>Lithobates capito</i>	January-February	Endangered

A pedestrian field review was performed for protected species and suitable habitats to support protected species on June 3, 2026 by Mr. Charles Oates of TBC. The results of the pedestrian field review are included in the following sections of this report, as well as a discussion of the above species, where applicable.



**Plants:**

**No Effect**

Canby's dropwort typically grows in seepage bogs, swampy depressions, and margins of flooded wetlands/ponds. This species flowers in August and September, sometimes lasting until October. Suitable habitat for this species is present on the Property along the margins of the wetlands. However, no specimens were observed during the wetland delineation.

**Vertebrates:**

**No Affect**

*Birds:*

Even though the bald eagle was taken off of the threatened species list, it is still offered protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940. The bald eagle requires mature trees for nesting that are in close proximity to large bodies of water to feed. Site observations revealed that suitable nesting habitat does not exist on the Property. No nests were observed on the Property, nor were any bald eagles observed during the site reconnaissance.

The red-cockaded woodpecker requires mature longleaf pines or loblolly pine with an open understory that does not exceed 15' in height, and evenly spaced trees with an open, park-like stand. Due to height and density of the saplings, suitable nesting or foraging habitat for the red-cockaded woodpecker are not present on the Property.

*Reptiles and Amphibians:*

**No Affect**

South Carolina has listed the Spotted Turtle and the Broad-tailed Madtom as threatened in the state, and the Carolina Gopher Frog as endangered, including Orangeburg County. Suitable habitat for this species is present on the Property along the margins and within the wetland areas.

*Mammals:*

**May Affect**

Rafinesque's Big-eared Bat (*Corynorhinus rafinesquii*) is a state endangered listed species that is noted for its large ears which, when laid back, are about half the length of the animal's body. Rafinesque's big-eared bats inhabit the southeastern United States, west to Louisiana and north to Kentucky and North Carolina. In South Carolina they are permanent residents of the coastal plain and hibernate rather than move south during winter months. Big-eared bats characteristically roost in dilapidated buildings or tree cavities near water. The breeding season in this species extends from late fall to early winter. During this time, both males and females occupy the same roost. For the remainder of the winter and on to early spring, the bats hibernate. In some portions of their range, hibernating bats are found in caves, wells, and similar habitats.

Suitable habitat for Rafinesque's big-eared bat is defined as swamp forests, hardwood or mixed mature bottomlands, maritime forests and black gum (*Nyssa sylvatica*) and water tupelo (*Nyssa aquatica*) stands (Cochran 1999, Hofmann et al. 1999, Lance et al. 2001, Gooding and Langford 2004, Trousdale and Beckett 2005). Suitable habitat for this species is present on the Property.



## **Invertebrate:**

## **No Effect**

### *Insects:*

The Monarch butterfly (*Danaus plexippus*) originates in North America where an eastern and western population undertake extensive migrations. For overwintering monarchs, habitat with a specific microclimate is needed for protection from the elements, as well as moderate temperatures to avoid freezing. These conditions vary between populations. For the eastern North American population, most monarchs overwinter in Oyamel fir (*Abies religiosa*) tree roosts located in mountainous regions in central Mexico at an elevation of 2,400 to 3,600 meters. Monarchs living west of the Rocky Mountain range in North America primarily overwinter in California at sites along the Pacific Coast, roosting in eucalyptus (*Eucalyptus spp.*), Monterey pines (*Pinus radiata*) and Monterey cypress (*Hesperocyparis macrocarpa*) trees. Whether it's a field, roadside area, open area, wet area or urban garden, milkweed and flowering plants are needed for monarch habitat. Adult monarchs feed on the nectar of many flowers during breeding and migration, but they can only lay eggs on milkweed plants. During the site reconnaissance, no monarch butterflies or milkweed were observed on or directly adjacent to the Property, therefore should have no effect on this species.

## **Methodology**

TBC reviewed the SCDNR and the USF&WS databases for records of protected species known to occur within Orangeburg County. The purpose of the search was to identify current and historic documented occurrences of protected species located within this county. Additionally, TBC personnel reviewed available supporting information including the USGS topographic quadrangle and applicable soil survey data. The purpose of reviewing this supporting information was to identify drainage features and soil types in the site area that may be suitable habitat for protected species. During field reconnaissance, TBC personnel integrated the information obtained from this supporting documentation with field evaluation for the presence of protected species or potential protected species habitat.

## **Summary and Conclusions**

Based on the literature review, habitat assessment, and pedestrian field review of the Property, it is our opinion that future construction activities associated with proposed development on the Property may effect federal or state listed protected species for Orangeburg County. The determination key for the listed species for South Carolina was also used in the IPaCs website and a letter from USF&WS was generated that concurs with this finding. It is attached to this report in the Appendices.



**Biological Evaluation  
Bellevue Road Tract**

Orangeburg, Orangeburg County, South Carolina  
Project No. 01967-26183

**Closure**

TBC appreciates the opportunity to be of service to you by performing this Biological Evaluation for the Property. Please contact us at (843) 248-9388 with questions regarding this report, or if you require additional information.

Sincerely,

Charles C. Oates, Jr.

Project Manager

[coates@TheBrigmanCompany.com](mailto:coates@TheBrigmanCompany.com)

## **Appendices**

Exhibit 1: Vicinity Map

Exhibit 2: USGS Topographic Map Exhibit

Exhibit 3: Aerial Exhibit

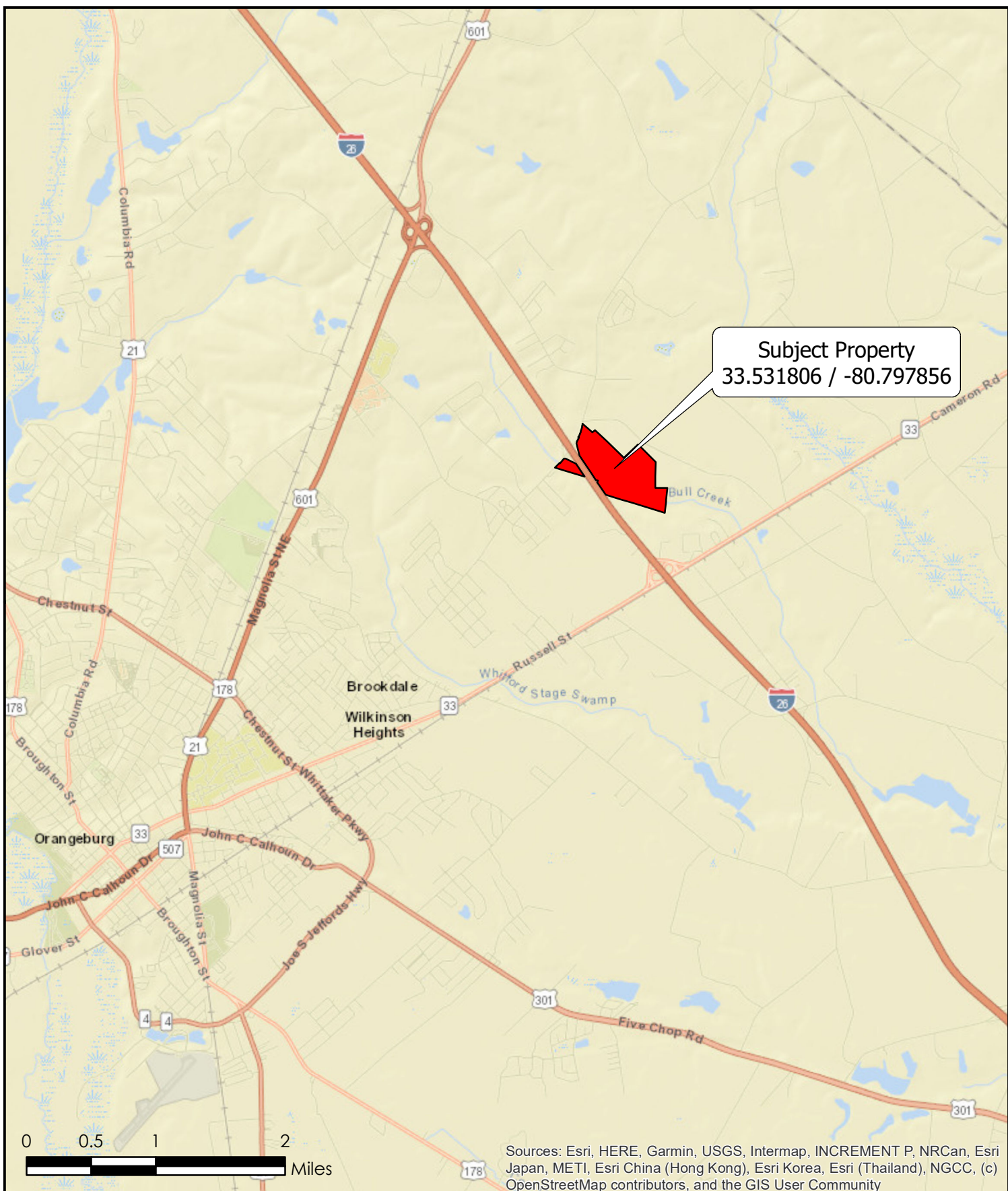
Exhibit 4: USDA/SCS Soil Survey Exhibit

Site Photographs

USF&WS IPaC Report

South Carolina Listed Species Consistency Letter from USF&WS

SCDNR Heritage Trust Request for Threatened and Endangered Species Consultation Report



Subject Property  
33.531806 / -80.797856

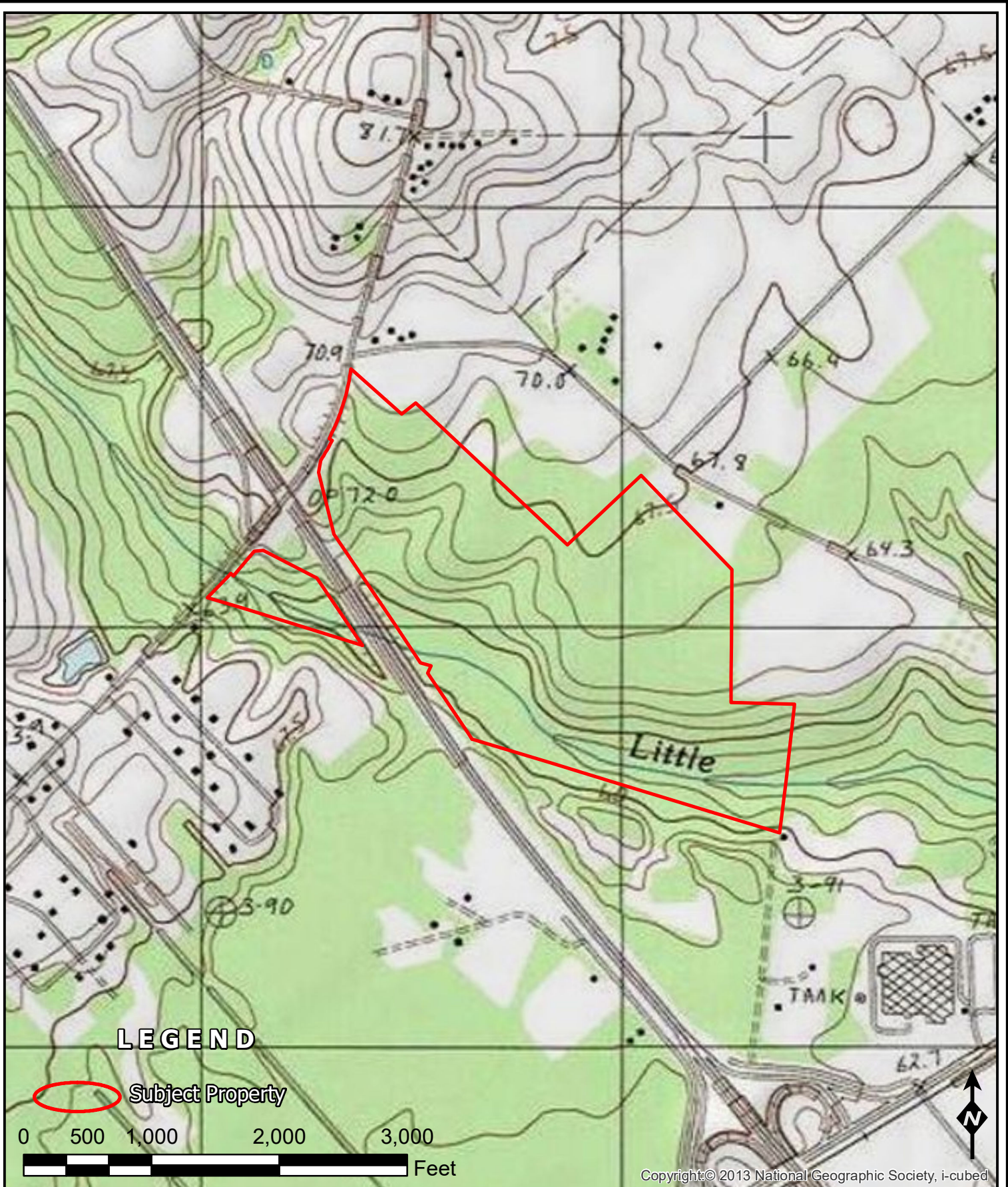
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



**Site Vicinity Map**  
 Belleview Road Tracts A & B  
 TMS# 208-00-02-002  
 Orangeburg County, SC  
 June 2026



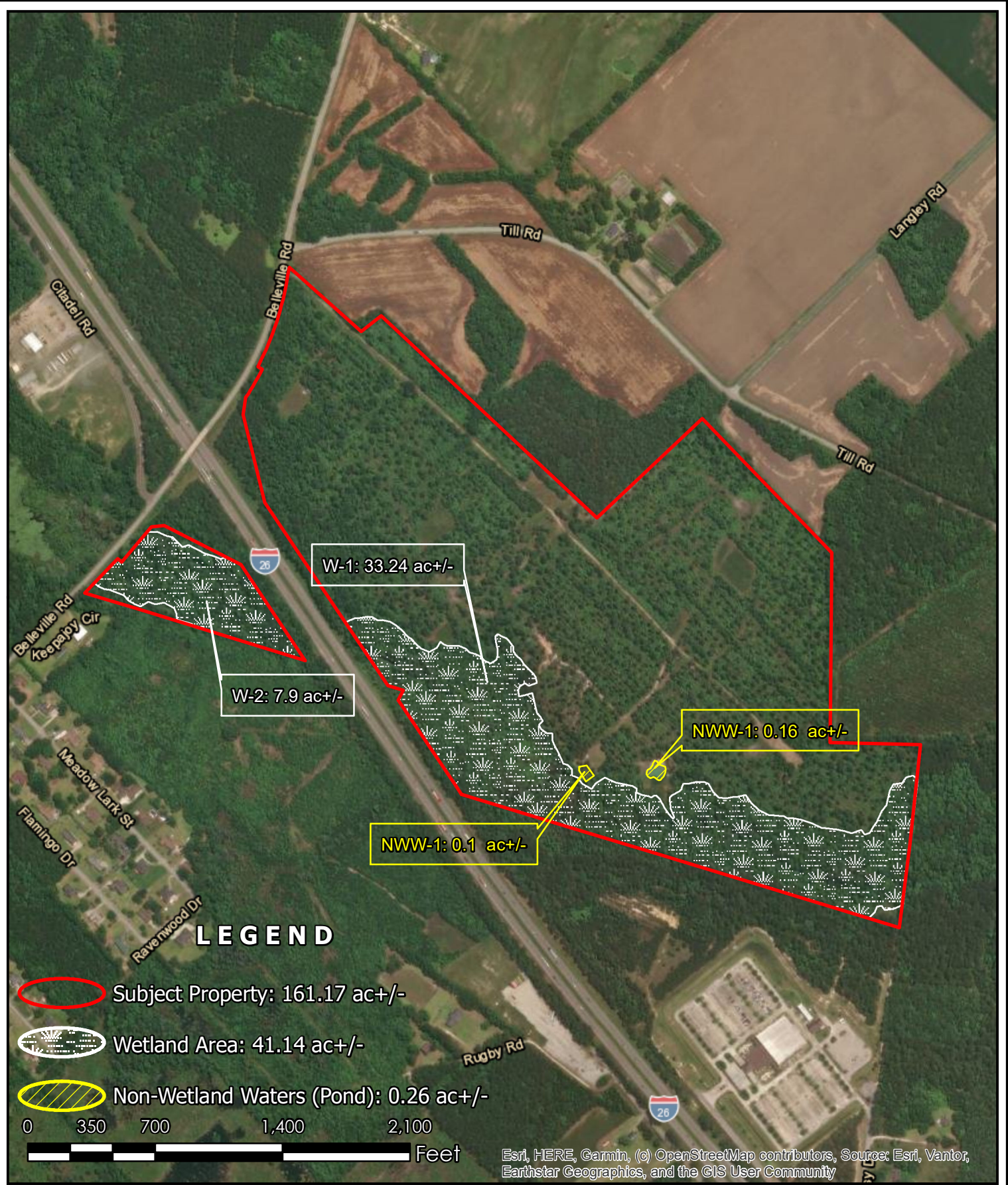
1" = 1 miles



**USGS 7.5-Min. Orangeburg North, SC Topographic Map**

Bellevue Road Tracts A & B  
 TMS# 208-00-02-002  
 Orangeburg County, SC  
 June 2026

1" = 1,000'

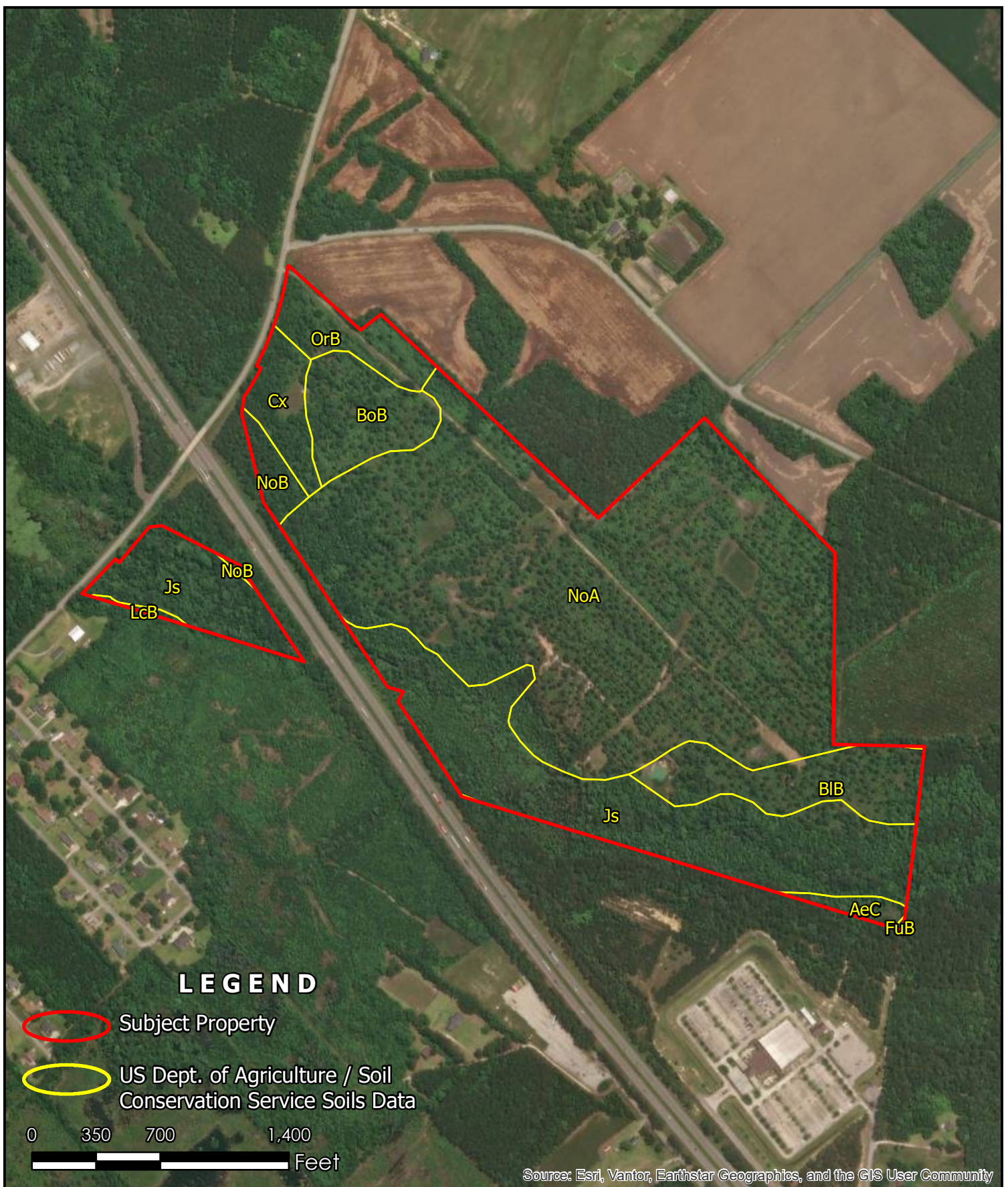


**Delineation Concurrence Exhibit**



Belleview Road Tracts A & B  
 TMS# 208-00-02-002  
 Orangeburg County, SC  
 June 4, 2026



1" = 700'



**LEGEND**

-  Subject Property
-  US Dept. of Agriculture / Soil Conservation Service Soils Data



Source: Esri, Vantor, Earthstar Geographics, and the GIS User Community



**TBC**  
THE BRIGMAN CO.

**USDA / SCS Soils Map**  
Belleview Road Tracts A & B  
TMS# 208-00-02-002  
Orangeburg County, SC  
June 2026



1" = 700'



# 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

In Reply Refer To:  
Project Code: 2026-0098933  
Project Name: Belleview Road Tract

06/04/2026 17:31:54 UTC

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 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 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:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

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 Code 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
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

## **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

Project Code: 2026-0098933

Project Name: Belleview Road Tract

Project Type: Planting / Silviculture

Project Description: The subject property is approximately 161.17 acres in size. No specific plans for development at this time.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.531915,-80.7969013688739,14z>



Counties: Orangeburg County, South Carolina

## ENDANGERED SPECIES ACT SPECIES

There is a total of 5 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 Fisheries<sup>1</sup>, 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
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/MLUPAU5NGJEVJOKVUGMZEJWD7Q/documents/generated/12882.pdf">https://ipac.ecosphere.fws.gov/project/MLUPAU5NGJEVJOKVUGMZEJWD7Q/documents/generated/12882.pdf</a>	Proposed Endangered

**BIRDS**

NAME	STATUS
Red-cockaded Woodpecker <i>Dryobates borealis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7614">https://ecos.fws.gov/ecp/species/7614</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/MLUPAU5NGJEVJOKVUGMZEJWD7Q/documents/generated/12166.pdf">https://ipac.ecosphere.fws.gov/project/MLUPAU5NGJEVJOKVUGMZEJWD7Q/documents/generated/12166.pdf</a>	Threatened

**REPTILES**

NAME	STATUS
Southern Hognose Snake <i>Heterodon simus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3248">https://ecos.fws.gov/ecp/species/3248</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/MLUPAU5NGJEVJOKVUGMZEJWD7Q/documents/generated/11603.pdf">https://ipac.ecosphere.fws.gov/project/MLUPAU5NGJEVJOKVUGMZEJWD7Q/documents/generated/11603.pdf</a>	Proposed Threatened

**INSECTS**

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/MLUPAU5NGJEVJOKVUGMZEJWD7Q/documents/generated/11602.pdf">https://ipac.ecosphere.fws.gov/project/MLUPAU5NGJEVJOKVUGMZEJWD7Q/documents/generated/11602.pdf</a>	Proposed Threatened

**FLOWERING PLANTS**

NAME	STATUS
Canby's Dropwort <i>Oxypolis canbyi</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7738">https://ecos.fws.gov/ecp/species/7738</a> General project design guidelines:	Endangered

NAME

STATUS

<https://ipac.ecosphere.fws.gov/project/MLUPAU5NGJEVJOKVUGMZEJWD7Q/documents/generated/9753.pdf>

## CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## 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.

## BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act <sup>2</sup> and the Migratory Bird Treaty Act (MBTA) <sup>1</sup>. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

### Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

### Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a>	Breeds Sep 1 to Jul 31

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

### Breeding Season (■)

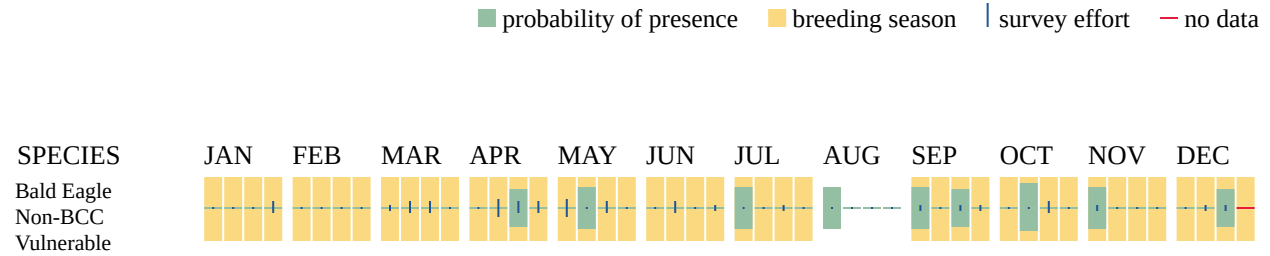
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

### Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) <sup>1</sup> prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

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)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9587">https://ecos.fws.gov/ecp/species/9587</a>	Breeds Apr 1 to Aug 31

NAME	BREEDING SEASON
<p><b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i>  This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a></p>	Breeds Sep 1 to Jul 31
<p><b>Brown-headed Nuthatch</b> <i>Sitta pusilla</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/9427">https://ecos.fws.gov/ecp/species/9427</a></p>	Breeds Mar 1 to Jul 15
<p><b>Chimney Swift</b> <i>Chaetura pelagica</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9406">https://ecos.fws.gov/ecp/species/9406</a></p>	Breeds Mar 15 to Aug 25
<p><b>Chuck-will's-widow</b> <i>Antrostomus carolinensis</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/9604">https://ecos.fws.gov/ecp/species/9604</a></p>	Breeds May 10 to Jul 10
<p><b>Coastal (waynes) Black-throated Green Warbler</b> <i>Setophaga virens waynei</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/11879">https://ecos.fws.gov/ecp/species/11879</a></p>	Breeds May 1 to Aug 15
<p><b>Eastern Whip-poor-will</b> <i>Antrostomus vociferus</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/10678">https://ecos.fws.gov/ecp/species/10678</a></p>	Breeds May 1 to Aug 20
<p><b>Kentucky Warbler</b> <i>Geothlypis formosa</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9443">https://ecos.fws.gov/ecp/species/9443</a></p>	Breeds Apr 20 to Aug 20
<p><b>Painted Bunting</b> <i>Passerina ciris</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/9511">https://ecos.fws.gov/ecp/species/9511</a></p>	Breeds Apr 25 to Aug 15
<p><b>Prairie Warbler</b> <i>Setophaga discolor</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9513">https://ecos.fws.gov/ecp/species/9513</a></p>	Breeds May 1 to Jul 31
<p><b>Prothonotary Warbler</b> <i>Protonotaria citrea</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9439">https://ecos.fws.gov/ecp/species/9439</a></p>	Breeds Apr 1 to Jul 31

NAME	BREEDING SEASON
<b>Red-headed Woodpecker</b> <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9398">https://ecos.fws.gov/ecp/species/9398</a>	Breeds May 10 to Sep 10
<b>Rusty Blackbird</b> <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9478">https://ecos.fws.gov/ecp/species/9478</a>	Breeds elsewhere
<b>Wood Thrush</b> <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9431">https://ecos.fws.gov/ecp/species/9431</a>	Breeds May 10 to Aug 31

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

### Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

### Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

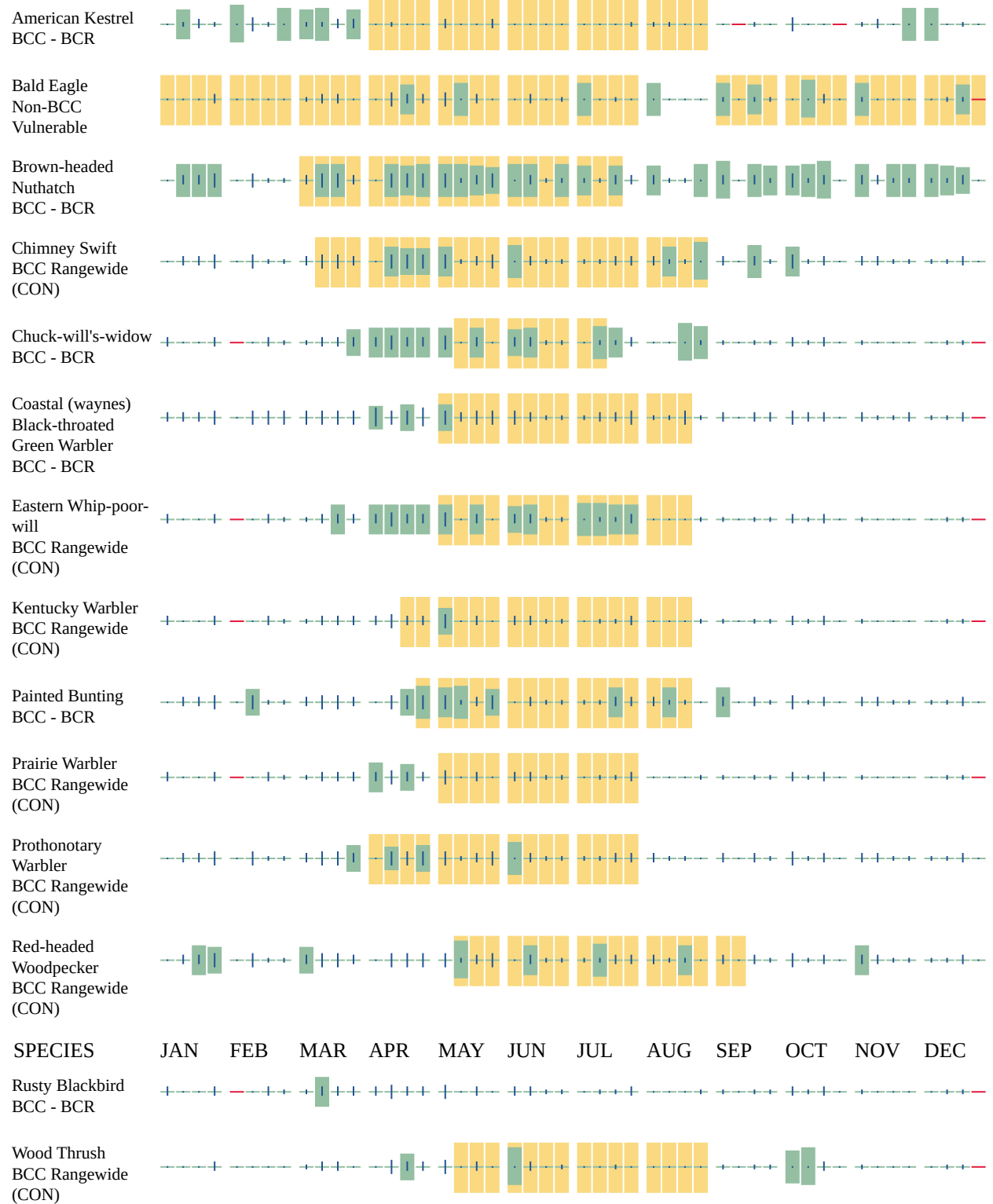
### No Data (—)

A week is marked as having no data if there were no survey events for that week.

---

■ probability of presence   ■ breeding season   | survey effort   — no data

SPECIES    JAN    FEB    MAR    APR    MAY    JUN    JUL    AUG    SEP    OCT    NOV    DEC



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>

- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Charles Oates  
Address: 607 Main Street  
City: Conway  
State: SC  
Zip: 29526  
Email: coates@thebrigmancompany.com  
Phone: 8434501331

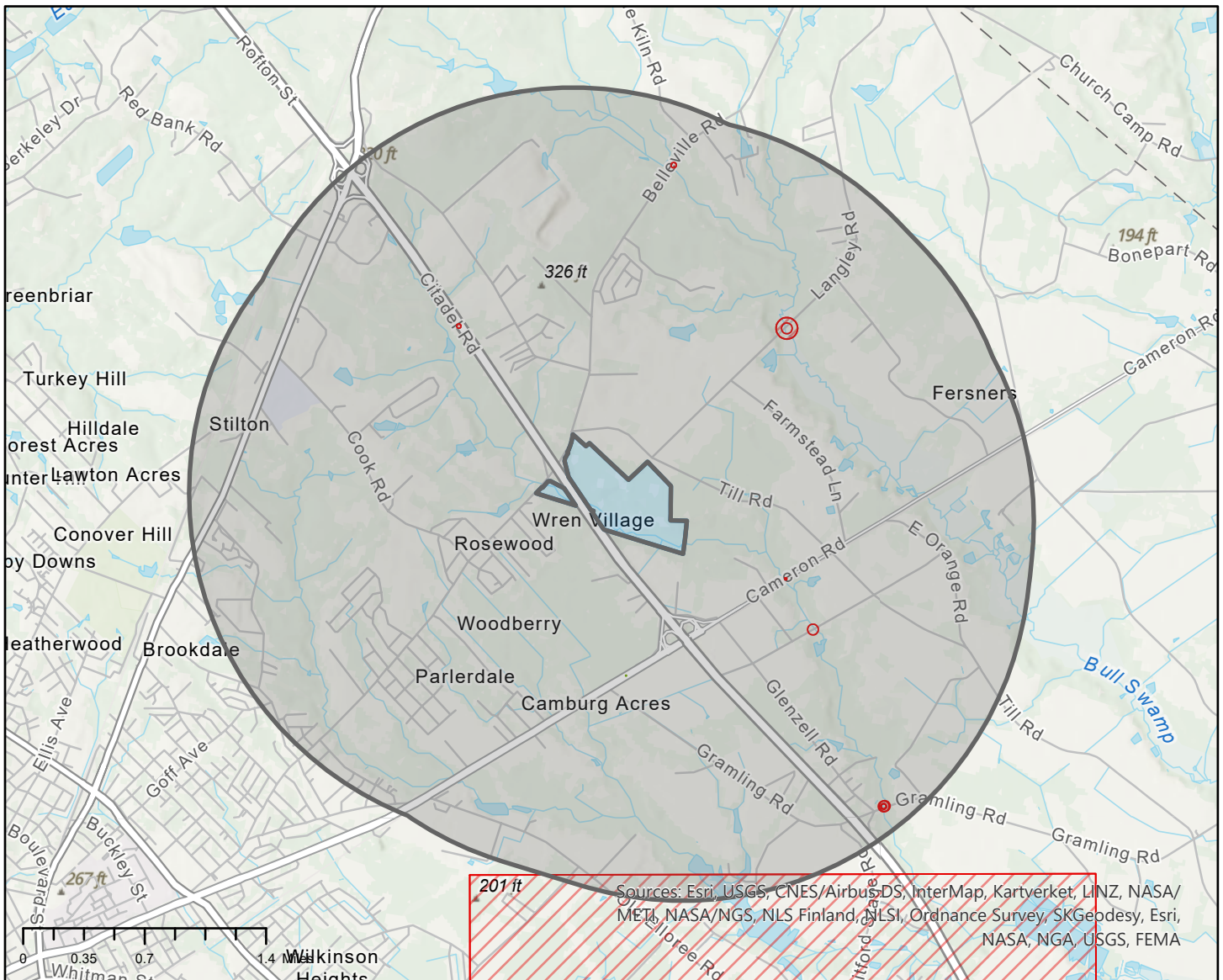


PO Box 167  
Columbia, SC 29202  
(803) 734-1396  
speciesreview@dnr.sc.gov

*Requested on Thursday, June 4, 2026 by The Brigman Company.*

Re: Request for Threatened and Endangered Species Consultation  
The Brigman Company - Belleview Road Tracts - Development (Commercial/Residential) - Orangeburg  
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 Orangeburg County, South Carolina. The following map depicts the project area and a 2 mile buffer surrounding:





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 - A list of state & federally listed species within the county of the project area
- F - Other important information on conservation status, listed species, and how to submit observations to the program.

Please be advised:

The contents of this report, including all tables, maps, recommendations, and various other text, are produced as a direct result of the information a user provides at the time of submission. The SCDNR assumes that all information submitted by the user represents the project scope as proposed, and recommends that additional reports be requested should the scope deviate from how the project was initially represented to the SCDNR.

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](mailto:environmental@dnr.sc.gov) or by visiting [www.dnr.sc.gov/environmental](http://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](mailto:speciesreview@dnr.sc.gov) or by phone at 803-734-4080.

Sincerely,

A handwritten signature in black ink that reads "Megan Levinson". The signature is fluid and cursive, with a long horizontal stroke at the end.

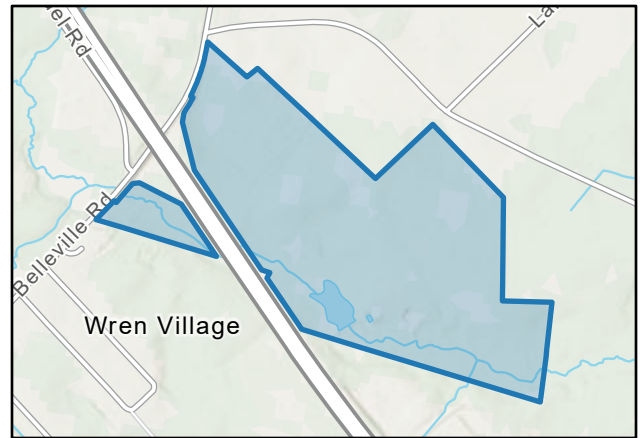
Megan Levinson  
Heritage Trust Program  
SC Department of Natural Resources

## 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](mailto:speciesreview@dnr.sc.gov) should you have further questions related to sensitive species found within the project area.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA



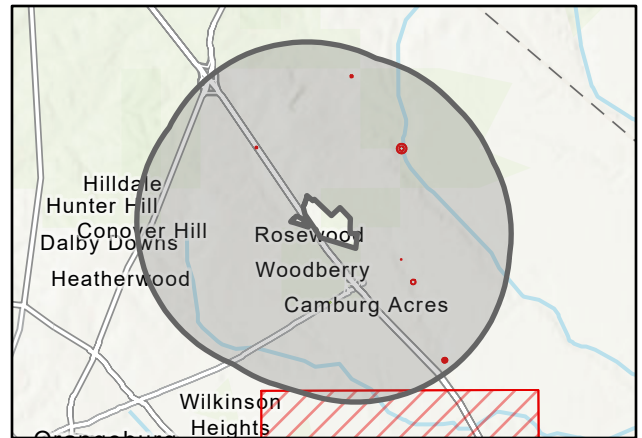
No records for species of concern are found within the project area

## 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: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS



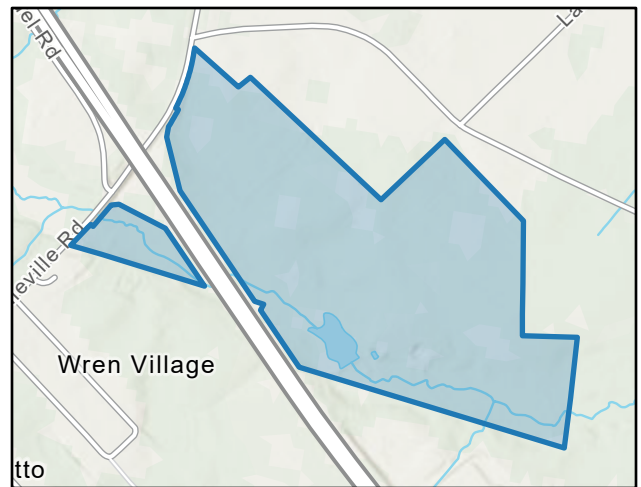
Scientific Name	Common Name	Federal Status	State Status	G Rank	S Rank	SWAP Priority	Last Obs. Date
<i>Perimyotis subflavus</i>	Tricolored Bat	LEP	NA	G3G4	S3	1	2023-01-31
<i>Lanius ludovicianus</i>	Loggerhead Shrike	MBTA	NA	G4	S3	1	1995
<i>Passerina ciris</i>	Painted Bunting	MBTA	NA	G5	S3B	2	1995
<i>Acantharchus pomotis</i>	Mud Sunfish	NA	NA	G4G5	S4	0	2011-04-21
<i>Acantharchus pomotis</i>	Mud Sunfish	NA	NA	G4G5	S4	0	1978-07-10
<i>Ameiurus platycephalus</i>	Flat Bullhead	NA	NA	G4	S3S4	3	1978-07-10
<i>Anguilla rostrata</i>	American Eel	NA	NA	G4	S2S3	1	2011-04-21
<i>Enneacanthus chaetodon</i>	Blackbanded Sunfish	NA	NA	G3G4	S2S3	2	No Date
<i>Etheostoma serrifer</i>	Sawcheek Darter	NA	NA	G5	S4	3	2011-04-21
<i>Etheostoma serrifer</i>	Sawcheek Darter	NA	NA	G5	S4	3	1978-07-10
<i>Laevapex fuscus</i>	Dusky Aneclid	NA	NA	G5	S5	0	1997-02-12
<i>Noturus gyrinus</i>	Tadpole Madtom	NA	NA	G5	S4	0	1978-07-10
<i>Procambarus hirsutus</i>	Shaggy Crayfish	NA	NA	G4	S4	3	1983-04-18
<i>Procambarus hirsutus</i>	Shaggy Crayfish	NA	NA	G4	S4	3	No Date
<i>Procambarus troglodytes</i>	Eastern Red Swamp Crayfish	NA	NA	G5	S3	3	No Date
<i>Lilium pyrophilum</i>	Sandhills Bog Lily	NA	NA	G2G3	S1	1	1957-07-19

## C. Species Best Management Practices (1 of 3)

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](mailto:speciesreview@dnr.sc.gov) should you have further questions with regard to survey methods, consultation, or other species-related concerns.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA



Three listed species of bats have been known to occur in the coastal plain ecoregions of South Carolina, including the state-endangered Rafinesque's big-eared bat (*Corynorhinus rafinesquii*); the federally endangered northern long-eared bat (NLEB) (*Myotis septentrionalis*); and the federally at-risk & proposed endangered tricolored bat (*Perimyotis subflavus*). Please note that take of a state endangered species is prohibited under S.C. Code of Laws §50-15-30. Prior to any land-clearing activities in the proposed project area, the SCDNR recommends a threatened and endangered species assessment be conducted to identify suitable habitat and provided to SCDNR for review.

Regarding Rafinesque's big-eared bat: Suitable habitat for Rafinesque's big-eared bat is defined as swamp forests, hardwood or mixed mature bottomlands, maritime forests and black gum (*Nyssa sylvatica*) and water tupelo (*Nyssa aquatica*) stands (Cochran 1999, Hofmann et al. 1999, Lance et al. 2001, Gooding and Langford 2004, Trousdale and Beckett 2005). If suitable habitat exists within the project, the SCDNR recommends assumption of presence of Rafinesque's big-eared bat within areas of forested wetlands and to further protect these areas, surround them with a 1000-foot buffers and avoid tree clearing from May 1st to July 31st to minimize disturbance and destruction of habitat that may be used by females during gestation or maternal care for pups. All other tree clearing outside of the forested wetlands and its associated buffer may occur in areas that are not wetlands or other aquatic resources in non-Rafinesque's big-eared bat maternity roosting habitat anytime. Where wetlands occur that are not Rafinesque's big-eared bat habitat, but they are spotted turtle habitat, tree clearing should only occur August to December to prevent impacts to spotted turtles during reproduction. However, if wetlands are dry January to June, they may be cleared, but they must be completely dry (no surface water present). For future right-of-way management (if applicable), use heavy equipment and herbicide treatment for right-of-way vegetation management in wetlands only during the months of July to November. If wetlands are completely dry (no surface water present), heavy equipment may be used January to June, but the wetlands must be completely dry.

Please note that tricolored bat was proposed for listing by the U.S. Fish and Wildlife Service on September 13, 2022. Therefore, due to the conservation concerns surrounding this species, the SCDNR strongly suggests acoustic surveys be conducted by a qualified individual during the summer months to assess the use of the area to be cleared by tricolored bats. Should the species occur in the proposed area slated for clearing, coordination should occur with SCDNR and USFWS regarding avoidance and minimization measures. Tricolored bat utilize caves, rock crevices, tree foliage and basal cavities, Spanish moss and man-made structures, such as houses, barns and culverts, as maternity roosts during the summer months and they will use more than one roost location. If this species are found on-site, please contact the U.S. Fish & Wildlife Service and SCDNR. The SCDNR recommends the assumption of presence of the the species and abide by a clearing moratorium from May 1st to July 31st if suitable habitat for the species is likely or are explicitly identified within the project footprint.

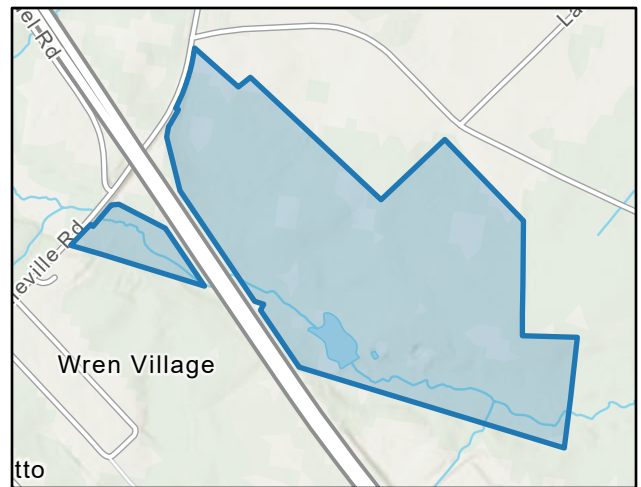
In the interest of preserving plant diversity, the South Carolina Plant Conservation Alliance performs native plant rescues in order to protect and preserve our diversity of native plants. If you are interested in assisting with this important endeavor please contact the SCDNR Botanist at [botany@dnr.sc.gov](mailto:botany@dnr.sc.gov) before any development occurs onsite. There may be plants of interest on the project site that the Alliance would like to preserve.

## C. Species Best Management Practices (2 of 3)

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](mailto:speciesreview@dnr.sc.gov) should you have further questions with regard to survey methods, consultation, or other species-related concerns.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA



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.

Related to American alligator (1 of 3): American alligator (*Alligator mississippiensis*), a federally and state regulated species, is common throughout freshwater habitats in the Coastal Plain of South Carolina. Juvenile alligators frequently utilize stormwater or stormwater-like ponds, such as golf course ponds or resort lagoons, to avoid being preyed upon by larger adult alligators. Alligators are ambush predators that spend most of their lives in water. They have a natural fear of people unless they become habituated. Most often alligators become habituated when people feed them, either purposefully or accidentally. Please note it is illegal to feed, entice or molest an alligator pursuant to S.C. Code of Laws §50-15-500(C); it is also illegal to kill or possess an alligator without a permit pursuant to S.C. Code §50-15-500(D). Accidental feeding can occur when people do not properly dispose of food or fish carcasses associated with recreational fishing or indirect feeding of other wildlife, such as fish, turtles, or ducks, where alligators reside. A habituated alligator is more likely to approach or be near people and pose a potential threat. Therefore, any development should be designed in a manner that will substantially minimize the interaction of alligators and people.

Related to American alligator (2 of 3): The SCDNR recommends the following best management practices to deter human and alligator interactions:

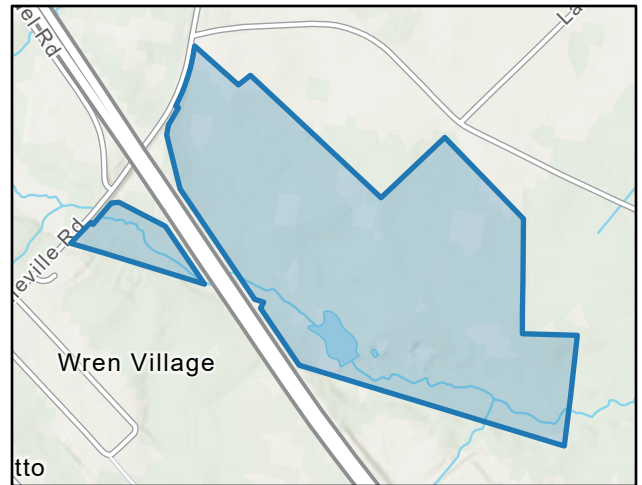
- Any private property or private yards near ponds or waterways should be fenced to limit unexpected alligator encounters. If fencing individual yards is not possible, fencing around the pond should occur. Keeping people, pets, and children from the edge of the water is the single best way to prevent alligator interactions. Due to the alligator's ability to ambush and lunge a great distance to capture its prey, walking paths around ponds should be a minimum of 10 feet from the shoreline. However, to provide greater protection, the SCDNR recommends this distance be increased to 30 feet to reduce alligator and human conflicts. Brush near the water's edge should be managed and considered in the minimum distance as alligators will utilize vegetation to rest and hunting to wait and ambush prey. If vegetation extends five feet from the edge of the water, then the walkway should be a minimum of 10 to ideally 30 feet beyond the farthest edge of vegetation from the water. Additionally, consideration should be given to require that all dogs on walkways near stormwater ponds or pond-like features in the neighborhood must be leashed to prevent alligator from targeting pets as prey. There should be a designated area included in design plans to provide a place for fishermen to properly dispose of fish carcasses or bait to avoid the accidental feeding and habituation of alligators.

### C. Species Best Management Practices (3 of 3)

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](mailto:speciesreview@dnr.sc.gov) should you have further questions with regard to survey methods, consultation, or other species-related concerns.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA



Related to American alligator (3 of 3): The SCDNR recommends the following best management practices to deter human and alligator interactions:

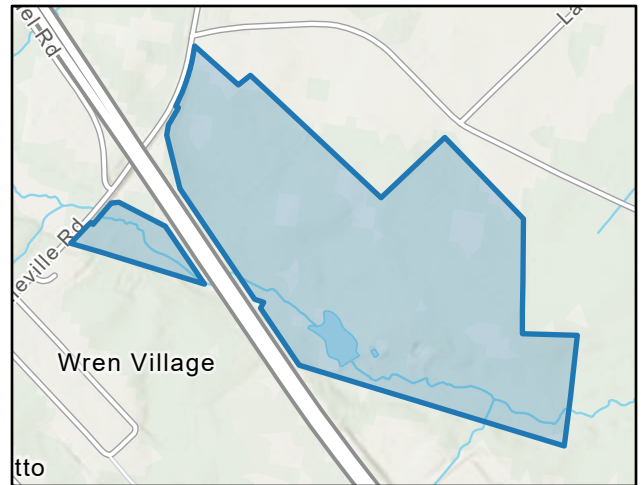
- Retention ponds, lagoons and other water features should be designed to limit the occurrence of alligator basking adjacent to homes and walkways. As alligators are more likely to bask on shallow slopes, this can be achieved by construction of shallow bank slopes away from the homes and steeper bank slopes near homes or walkways.
- Warning signs noting the presence of alligators and that feeding is illegal should be posted at the entrances to the neighborhood and at any access point where people may be able to approach the water's edge. Signs can be acquired by calling SCDNR at 843-546-6062 or can be purchased on our website at [www.gooutdoorsouthcarolina.com](http://www.gooutdoorsouthcarolina.com).
- The SCDNR recommends that the HOA/management company for the residential development should provide information and educational handouts to all residents on an annual basis prior to spring and summer before alligator activity increases. Information and educational handouts are available on our website [www.dnr.sc.gov/wildlife/herps/alligator](http://www.dnr.sc.gov/wildlife/herps/alligator).

## 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](mailto:environmental@dnr.sc.gov) should you have further questions with regard to best management practices related to this project area.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA



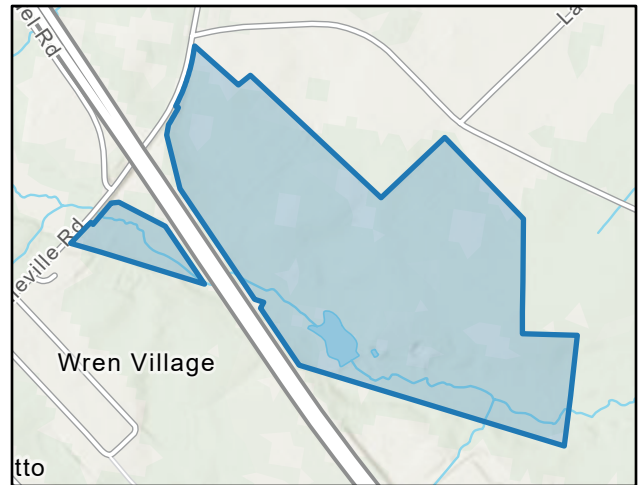
- All necessary measures must be taken to prevent oil, tar, trash and other pollutants from entering the adjacent offsite areas/wetlands/water.
- Once the project is initiated, it must be carried to completion in an expeditious manner to minimize the period of disturbance to the environment.
- Upon project 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](mailto:environmental@dnr.sc.gov) should you have further questions with regard to best management practices related to this project area.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA



• Residential and commercial development has grown exponentially in recent years. Activities associated with these developments can have detrimental impacts on wildlife and aquatic resources such as habitat fragmentation, loss of available habitats and pollution, especially stormwater pollution. The result of these impacts causes the displacement of species and increases wildlife and human interactions. However, properly planned and sited development activities may allow for economic expansion with minimal negative impacts. • Where appropriate, particularly adjacent to wetlands and water bodies, drainage plans and construction measures for residential and commercial development should be designed to control erosion and sedimentation, water quality degradation and other negative impacts on adjacent water and wetlands utilizing the best available design research. Developers proposing development activities should contact and work closely with local community development planning entities. • Developments should be planned where growth is most compatible with natural resources utilizing residential and commercial cluster development methods, maximizing green spaces which can both be beneficial to protect natural resources and provide recreational opportunities for outdoor enthusiasts. • Developments should be designed and constructed to avoid impact to wetland and stream areas whenever possible and to minimize unavoidable wetland and stream impacts to the maximum extent possible. Aquatic habitats and other sensitive natural areas should be identified in the initial planning stages of the project and incorporated in their natural state into the overall development plan. • Developments should be designed to maintain the integrity and contiguity of wetland and stream systems and their associated riparian corridors, including the establishment of protective upland buffers around and between undisturbed aquatic systems whenever possible. Projects should be designed to minimize habitat fragmentation, including the construction of a limited number of road and utility crossings through streams and wetlands.

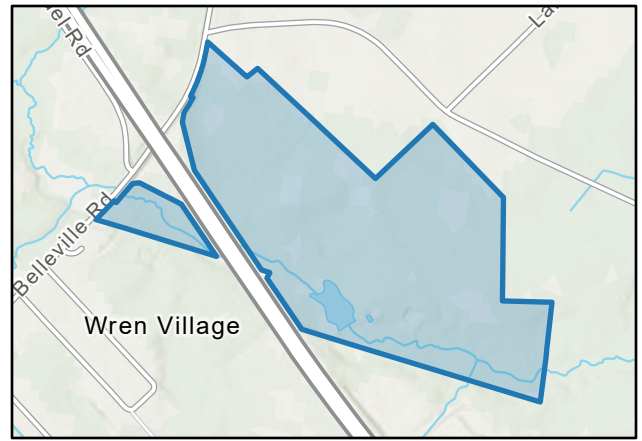
• The SCDNR recommends that the applicant incorporate vegetated bioswales, catch basins and/or bioretention cells/rain gardens into development plans beyond the regulatory requirements of the Stormwater Permitting requirements to add additional features to aid in capturing and filtering runoff from hardened surfaces. These structures can protect water quality and prevent oil, gas and other pollutants from directly entering nearby waterways. In addition, the SCDNR strongly recommends the use of permeable or porous pavement surfaces when possible. Permeable surfaces allow for rainfall to filter through the soil which aids in flood control and improves water quality. • The following resources are available from Clemson Extension to assist: • <https://hgic.clemson.edu/factsheet/an-introduction-to-bioswales/> • <https://hgic.clemson.edu/factsheet/rain-garden-plants-introduction/> • <https://hgic.clemson.edu/factsheet/bioretention-cells-a-guide-for-your-residents/> • <https://hgic.clemson.edu/factsheet/an-introduction-to-porous-pavement/> • <https://hgic.clemson.edu/factsheet/trees-for-stormwater-management/>

## E. State & Federally Listed Species in Orangeburg County

The South Carolina Department of Natural Resources' Heritage Trust Program organizes a database that captures and tracks element of occurrence data for rare, threatened and endangered species, both federal and state. Please keep in mind that this information included within this report is derived from existing databases, and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. If your project requires the assessment of potential threatened or endangered species that could be within the project area, the SCDNR asks that you include a review of the state listed species within the county or watershed in addition to those that may be within the report as being within the project footprint or within 1-mile of the proposed project area. Consideration should be given to the occurrence of suitable habitat onsite, species movement and connectivity of habitat when assessing the likelihood of a state listed species on the project area.



Map Credits: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA

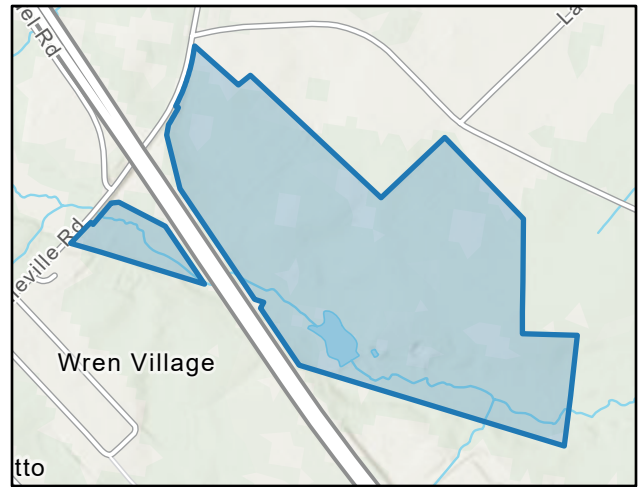


County	Scientific Name	Common Name	G Rank	S Rank	Federal Status	State Status	Group Type
Orangeburg	<i>Acipenser brevirostrum</i>	Shortnose Sturgeon	G3	S3	LE: Federally Endangered	SE: State Endangered	Zoological
Orangeburg	<i>Acipenser oxyrinchus oxyrinchus</i>	Atlantic Sturgeon	G3T3	S3	LE: Federally Endangered	Not Applicable	Zoological
Orangeburg	<i>Bombus fraternus</i>	Southern Plains Bumble Bee	G3G4	SNR	ARS: At-Risk Species	Not Applicable	Zoological
Orangeburg	<i>Clemmys guttata</i>	Spotted Turtle	G5	S2	ARS: At-Risk Species	ST: State Threatened	Zoological
Orangeburg	<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	Not Applicable	SE: State Endangered	Zoological
Orangeburg	<i>Danaus plexippus</i>	Monarch Butterfly	G4	S4	C: Candidate	Not Applicable	Zoological
Orangeburg	<i>Dryobates borealis</i>	Red-cockaded Woodpecker	G3	S2	LT: Federally Threatend	SE: State Endangered	Zoological
Orangeburg	<i>Eurycea chamberlaini</i>	Chamberlain's Dwarf Salamander	G4	S3	ARS: At-Risk Species	Not Applicable	Zoological
Orangeburg	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3B,S3N	Bald & Golden Eagle Protection Act	ST: State Threatened	Zoological
Orangeburg	<i>Lasiurus cinereus</i>	Hoary Bat	G3G4	S2	ARS: At-Risk Species	Not Applicable	Zoological
Orangeburg	<i>Lithobates capito</i>	Carolina Gopher Frog	G2G3	S1	ARS: At-Risk Species	SE: State Endangered	Zoological
Orangeburg	<i>Lobelia boykinii</i>	Boykin's Lobelia	G1G2	S2?	ARS: At-Risk Species	Not Applicable	Botanical
Orangeburg	<i>Myotis lucifugus</i>	Little Brown Bat	G3G4	S2	ARS: At-Risk Species	Not Applicable	Zoological
Orangeburg	<i>Noturus sp. 2</i>	Broadtail Madtom	G2	S1	Not Applicable	ST: State Threatened	Zoological
Orangeburg	<i>Perimyotis subflavus</i>	Tricolored Bat	G3G4	S3	LEP: Federally Endangered (Proposed)	Not Applicable	Zoological
Orangeburg	<i>Pseudobranchius striatus striatus</i>	Broad-striped Dwarf Siren	G5T1T3	S1	Not Applicable	ST: State Threatened	Zoological
Orangeburg	<i>Tiedemannia canbyi</i>	Canby's Cowbane	G2	S2	LE: Federally Endangered	Not Applicable	Botanical

## F. Important Information & 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: Sources: Esri, USGS, CNES/Airbus DS, InterMap, Kartverket, LINZ, NASA/METI, NASA/NGS, NLS Finland, NLSI, Ordnance Survey, SKGeodesy, Esri, NASA, NGA, USGS, FEMA



### Conservation Ranks & SWAP Priority Status

The SC Natural Heritage Program assigns S Ranks for species tracked within the state of South Carolina based on ranking methodology developed by NatureServe and its state program network. For information conservation rank definitions, please visit <https://explorer.natureserve.org/AboutTheData/Statuses>

The SCDNR maintains and updates its State Wildlife Action Plan (SWAP) every 10 years. This plan categorizes species of concern by Moderate, High, and Highest Priority. Please visit <https://www.dnr.sc.gov/swap/index.html> for more information about the SC SWAP.

### Important Information Regarding Element Occurrence Data:

The South Carolina Department of Natural Resources' Heritage Trust Program organizes a database that captures and tracks element of occurrence data for rare, threatened and endangered species, both federal and state. Please keep in mind that this information included within this report is derived from existing databases, and do not assume that it is complete. Areas not yet inventoried may contain significant species or communities. If your project requires the assessment of potential threatened or endangered species that could be within the project area, the SCDNR asks that you include a review of the state listed species within the county or watershed in addition to those that may be within the report as being within the project footprint or within 1-mile of the proposed project area. Consideration should be given to the occurrence of suitable habitat onsite, species movement and connectivity of habitat when assessing the likelihood of a state listed species on the project area. To view these lists please visit our county and watershed dashboards at our website: <https://natural-heritage-program-scdnr.hub.arcgis.com/#track>

### State-listed Species Guidance

The South Carolina Department of Natural Resources has released a document to provide clarity for the avoidance of a take of a state listed species and what may be needed from permit applicants, for each species listed as threatened or endangered under SC Code of Regulations 123-150 and 123-150.2. Please review this document for information on species-habitat requirements, survey protocol, and other information regarding environmental review: <https://dnr.sc.gov/environmental/docs/SCDNRStateListedSpeciesProtectionGuidance.pdf>

### Instructions for accessing the SC Natural Heritage Occurrence Reporting Form

- 1) Follow <https://arcg.is/1a0jzC0> or use the QR code here.
- 2) Select 'Open in browser' or 'Open in the Survey123 field app' depending on your preference. The browser option will only work when connected to the internet.
- 3) If using in the Survey123 field app, be sure to download the app from your app store beforehand.

