APPENDIX A

Threatened and Endangered Species Report for the Lufkin Airport Environmental Services Project in Angelina County, Texas

REVISED JULY 2026

PREPARED FOR

Woolpert, Inc.

PREPARED BY

SWCA Environmental Consultants

THREATENED AND ENDANGERED SPECIES REPORT FOR THE LUFKIN AIRPORT ENVIRONMENTAL SERVICES PROJECT IN ANGELINA COUNTY, TEXAS

Prepared for:

Woolpert, Inc.
720 South Colorado Boulevard, Suite 1200-S
Glendale, Colorado 80246
Attn: Morgan Einspahr

Prepared by:

SWCA Environmental Consultants
1651 Lobdell Avenue, Building A
Baton Rouge, Louisiana 70806
(225) 663-3830
www.swca.com

SWCA Project No. 104024

Revised July 2026

CONTENTS

1 Introduction 1

2 Methods 1

2.1 Species Identification 1

2.2 Species Evaluation 1

2.3 Field Reconnaissance 2

3 Results 2

3.1 Species Evaluation 2

3.1.1 Monarch Butterfly 7

3.1.2 Tricolored Bat 7

3.2 USFWS Designated Critical Habitat 8

4 Summary and Conclusions 8

5 Limitations and Warranty 9

6 Literature Cited 10

Table

Table 1. Federally and State-listed Species Reviewed Within the Study Area 4

Table 2. Federally and State-listed Species Effects Evaluation Summary 8

Appendices

APPENDIX A Vicinity Map, Aerial Map, and TXNDD Species Occurrence Map

APPENDIX B U.S. Fish and Wildlife Service Federally Listed and Texas Parks and Wildlife Department State-Listed Species Reports and Determination Keys

APPENDIX C Photographic Log

1 INTRODUCTION

Woolpert Inc. (Woolpert) retained SWCA Environmental Consultants (SWCA) to conduct a threatened and endangered species evaluation and survey for a proposed approximately 70-acre airport runway extension project (project area), referred to as the Lufkin Airport Environmental Services Project (project) in Angelina County, Texas. The proposed project is within the U.S. Army Corps of Engineers (USACE) Fort Worth District area of responsibility. Refer to Figures 1 and 2 in Appendix A for the location of the proposed project.

The purpose of this assessment is to determine whether state or federally listed threatened or endangered species could potentially occur within the proposed project, and if so, the potential for impacts or disturbance from the proposed project on these species.

2 METHODS

2.1 Species Identification

Federally listed and state-listed species were identified within a desktop study area that encompassed project boundaries and a surrounding 2-mile buffer (study area). To comply with the Endangered Species Act of 1973, as amended (ESA), the species evaluated in this report were based on the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) data (USFWS 2026a) for federally threatened and endangered species with the potential to occur within or near the proposed project location in Angelina County, Texas. In addition, SWCA referenced the Texas Parks and Wildlife Department (TPWD) list of rare species for Angelina County (TPWD 2026a) to identify state-listed threatened and endangered species within the study area. Federally listed and state-listed species reports are found in Appendix B. In addition to evaluating ESA-listed species, SWCA evaluated the project area for potential bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) habitat and presence, as these species are protected by the Bald and Golden Eagle Protection Act (BGEPA) of 1940. Additionally, SWCA utilized the USFWS Critical Habitat Map, which provides spatial data for active, proposed, and designated critical habitat for threatened and endangered species (USFWS 2026b).

SWCA accessed the TPWD Natural Diversity Database (TXNDD) for known occurrence records of listed and rare species (TPWD 2026b). Figure 3 in Appendix A includes a map of occurrence records for listed species within the study area.

The potential for occurrence within the project area for the species addressed in this report is based on 1) documented occurrences, 2) existing information on distribution, and 3) qualitative comparisons of the habitat requirements of each species with vegetation communities or landscape features observed during field surveys. Possible impacts to these species resulting from construction of the proposed project were evaluated based on reasonably foreseeable project-related activities.

2.2 Species Evaluation

The potential for occurrence of each federally listed and state-listed species, as well as species proposed for federal listing, is summarized according to the categories listed below. In the evaluation, the rationale for category assignment is provided in Section 3.1. Potential for occurrence categories are as follows (USFWS 1998):

- *Known to occur* – The species has been documented in the survey area by a reliable observer.

- *May occur* – The survey area is within the species' currently known range, and habitat types within the survey area resemble those known to be used by the species.
- *Unlikely to occur* – The survey area is within the species' currently known range, but habitat types within the survey area do not resemble those known to be used by the species.
- *Does not occur* – The survey area is clearly outside the species' currently known range.

Federally listed and proposed species were assigned to one of three categories of possible effect, following USFWS recommendations (USFWS 1998, 2019). TPWD state-listed species were assigned different labels that coordinate with USFWS categories. The evaluation of impacts to species is limited to the survey area and does not assess the impacts to the species or their habitats at regional or global levels. The effect determinations assigned to species reviewed include:

- *May affect, is likely to adversely affect* (for federally listed species)/*Would impact* (for state-listed only species) – Adverse effects to the evaluated species may occur as a direct or indirect result of the proposed project, and the effect is not discountable, insignificant, or beneficial.
- *May affect, is not likely to adversely affect* (for federally listed species)/*May impact* (for state-listed only species) – The proposed project may affect evaluated species and/or critical habitat; however, the effects are expected to be discountable, insignificant, or completely beneficial.
- *No effect* (for federally listed species)/*No impact* (for state-listed only species) – The proposed project will not affect the evaluated species or critical habitat.

The BGEPA prohibits anyone, without the proper permit, from taking bald eagles or golden eagles, including their parts, nests, or eggs. The BGEPA defines take as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb." The two possible effect determinations for taking bald eagles or golden eagles include the following:

- *Will cause a take* – The proposed project and its activities reasonably anticipate causing a take of bald eagles or golden eagles, including their parts, nests, or eggs.
- *Unlikely to cause a take* – The proposed project and its activities do not reasonably anticipate a take of bald eagles or golden eagles, including their parts, nests, or eggs.

2.3 Field Reconnaissance

SWCA conducted a threatened and endangered species habitat assessment field survey for the project area on May 4, 2026. SWCA used GPS data uploaded within the project area for general orientation and locating the project boundaries. The field reconnaissance consisted of pedestrian visual surveys to evaluate the absence or presence of potentially suitable habitat and occurrences of listed species within the project area. A photographic log containing a representative subset of relevant habitat types observed during the field reconnaissance can be found in Appendix C. SWCA did not conduct presence/absence surveys tailored to specific individual species.

3 RESULTS

3.1 Species Evaluation

The USFWS IPaC list (Project Code: 2026-0123602) dated July 31, 2026, identifies eight species as either threatened, proposed threatened, or proposed endangered within the project area. The eight species

include the proposed endangered tricolored bat (*Perimyotis subflavus),* the threatened piping plover (*Charadrius melodus*), the threatened rufa red knot (*Calidris canutus rufa*), the proposed threatened alligator snapping turtle (*Macrochelys temminckii*), the proposed threatened monarch butterfly (*Danaus plexippus*), the proposed threatened Louisiana pigtoe (*Pleurobema riddellii*), the proposed endangered Texas heelsplitter (*Potamilus amphichaemus*), and the threatened Neches River rose-mallow (*Hibiscus dasycalyx*). The TPWD Rare Threatened and Endangered Species list (RTEST) identified nine species that are federally listed and 19 species that are state listed as threatened, endangered, proposed endangered, or proposed threatened for Angelina County (see Appendix B). Additionally, the TXNDD has occurrence data of the state-ranked Neches crayfish (*Procambarus nechesae*) within 2 miles of the project area; however, based on the distance to the nearest perennial water body and the lack of potential suitable habitat, this species was removed from further consideration.

Several of the initially identified species were removed from further consideration for various reasons. The USFWS list of threatened or endangered species states that the piping plover and rufa red knot only need to be considered for wind related projects within their migratory routes; therefore, these species were removed from further consideration. Additionally, the golden eagle was excluded because its migratory range does not extend further southeast than Central Texas (Lockwood and Freeman 2014; NatureServe 2026a), and the bald eagle was excluded due to the lack of suitable nesting and foraging habitat within or adjoining the project area. The state-listed wood stork (*Mycteria americana*) was also excluded because its current range does not extend west of Florida (USFWS 2026c). Seven state-listed species, the Texas horned lizard (*Phrynosoma cornutum*), Texas pigtoe (*Fusconaia askewi*), Southern hickorynut (*Obovaria arkansasensis*), sand pocketbook (*Lampsilis satura*), interior least tern (*Sternula antillarum athalassos*), paddlefish (*Polyodon spathula*), and western creek chubsucker (*Erimyzon claviformis*) were also removed from further consideration due to a lack of potential suitable habitat within the project area. One federally listed species, the Neches River rose-mallow, and two state and federally listed species, the alligator snapping turtle and Louisiana pigtoe, were also removed from further consideration due to the lack of potential suitable habitat in the project area, specifically perennial water bodies. TXNDD returned one instance of occurrence for the alligator snapping turtle within 2 miles of the project area; however, based on the distance to the nearest perennial water body and the lack of potential suitable habitat, this species was removed from further consideration. Additionally, the American alligator (*Alligator mississippiensis*) is listed through a similarity of appearance 401(d) rule. According to USFWS, species listed under a similarity of appearance are not biologically threatened and are not subject to Section 7 consultation. Since the American alligator does not currently have any federal or state protections and was not documented in the USFWS IPaC report, this species was eliminated from further analysis for the proposed project.

Table 1 lists the 10 species carried forward for further evaluation of impacts from the proposed project. The table also includes a summary of each species' habitat requirements, rationale for the potential of occurrence within the project area, and the determination of effect from the proposed project.

Table 1. Federally and State-listed Species Reviewed Within the Study Area

Common Name (Scientific Name)	Federal Status*	State Status†	Range or Habitat Requirements	Potential for Occurrence in Project Area	Determination of Effect
BIRDS					
Swallow-tailed kite (*Elanoides forficatus*)	–	T	The swallow-tailed kite breeds in the southeastern United States, primarily in Florida, and may breed in parts of South Carolina, Georgia, eastern Texas, Louisiana, Mississippi, and Alabama (NatureServe 2026c). Within Texas, the breeding habitat ranges from sea level to approximately 755 feet above sea level in lowland forested regions, especially swampy areas, ranging into open woodlands and marshes and along rivers, lakes, and ponds. They nest high in tall trees in clearings or on forest woodland edges, usually in pine (*Pinus* spp.), cypress (*Taxodium* spp.), and various deciduous trees (TPWD 2026a; Tweit 2009).	*May occur*. There is potentially suitable foraging and nesting habitat within the project area for this species. However, the forested habitat necessary for nesting is minimal, no individuals were observed during field surveys, and there are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b).	*May impact.* The project area does not contain suitable habitat for this species.
Red-cockaded Woodpecker (*Picoides borealis*)	T	E	The red-cockaded woodpecker's (RCW) range is limited to the southeastern United States, from southeastern Texas eastward to Florida and north to southern Virginia (NatureServe 2026f). RCWs use mature pine ecosystems, particularly open longleaf pine (*Pinus palustris*) savannas, but they will also utilize loblolly (*P. taeda*), slash (*P. elliottii*), or shortleaf (*P. echinata*) pine where suitable conditions exist (NatureServe 2026f). RCWs excavate cavities exclusively in living pines ≥60 years old. Cavity trees are typically located in open stands with low densities of small pines, few or no overstory hardwoods, minimal to no midstory vegetation, and well-developed ground cover dominated by native bunchgrasses and forbs. A cluster of cavity trees is maintained by a family group, and foraging generally occurs within mature pine stands surrounding the cavity tree cluster (NatureServe 2026f).	*Unlikely to occur.* The project area is within the known range of the RCW, and there is one TXNDD occurrence record of this species within 2 miles of the project area (TPWD 2026b). However, no suitable nesting or foraging habitat was identified during field surveys. The forested areas within the project area are mostly comprised of young, mixed pine-hardwoods with a dense midstory and are not suited for this species.	*No effect.* The project area does not contain suitable habitat for this species.
White-faced ibis (*Plegadis chihi*)	–	T	The white-faced ibis breeds and winters along the Gulf Coast in Texas and may occur as a migrant in western Texas and the Panhandle. They nest primarily in colonies on islands along the coast and occasionally in inland marshes and swamps (Benson and Arnold 2001). This species will feed in freshwater wetlands, flooded agricultural fields, marshes, swamps, ponds, and rivers (TPWD 2026a).	*Unlikely to occur*. The project area does not contain suitable nesting or foraging habitat for this species. Additionally, no individuals were observed during field surveys, and there are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b).	*No impact.* The project area does not contain suitable habitat for this species.

Common Name (Scientific Name)	Federal Status*	State Status†	Range or Habitat Requirements	Potential for Occurrence in Project Area	Determination of Effect
Bachman's sparrow (*Peucaea aestivalis*)	–	T	The Bachman's sparrow prefers open, old-growth pine forests with scattered bushes and dry grassy understory within the Pineywoods region; brushy or overgrown grassy hillsides; overgrown fields with thickets and brambles; grassy orchards; and remnant grasslands in the Post Oak Savannah region. This sparrow nests on the ground against grass tufts or under low shrubs (NatureServe 2026b).	*May occur.* The open grasslands with scattered shrubby windrows within the project area are potentially suitable foraging and nesting habitat for this species. However, the grass fields within the project area are regularly mowed and maintained, and there are no old-growth pine woods in the area. No individuals were observed during field surveys. Additionally, there are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b).	*May impact.* The project area contains potentially suitable habitat for this species.
INSECTS					
Monarch butterfly (*Danaus plexippus*)	PT	–	The monarch butterfly ranges throughout most of North America and winters in specific areas in coastal California and Mexico (NatureServe 2026d). Large patches of milkweed are required for this species to breed, as the glycosides within them provide both food and chemical protection for the emerging caterpillars. This species will obtain nectar from all manner of the flowers (NatureServe 2026d).	*May occur.* Since the project area is within this species' migration path, it is possible that monarch butterflies could occur. Potential habitat exists in the open grassy fields and other cleared areas. No milkweed plants were observed within the project area during field surveys. However, SWCA did identify large patches of milkweed in fields adjacent to the project area, and there are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b).	*May affect, is not likely to adversely affect*. See Section 3.1.1 for further details.
MAMMALS					
Rafinesque's big-eared bat (*Corynorhinus rafinesquii*)	–	T	The Rafinesque's big-eared bat was historically found in lowland pine and hardwood forests with large hollow trees (Clark et al. 1997). Individuals roost in cavity trees of bottomland hardwoods, concrete culverts, and abandoned artificial structures (TPWD 2026a).	*Unlikely to occur.* Though there are forested areas within the project area, no large cavity trees were observed during field surveys. Additionally, there are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b).	*No impact.* The project area does not contain suitable habitat for this species.
Tricolored bat (*Perimyotis subflavus*)	PE	–	The tricolored bat's range consists of eastern and central portions of the United States and Canada, including 39 U.S. states. This species typically forages in open areas near water, such as forest edges, riparian zones, and wetlands, where insect prey is abundant. During the summer months, tricolored bats roost in tree foliage, often in mixed pine-hardwood or deciduous forests, selecting sites with dense leaves that provide cover and stable microclimates. In the winter, they hibernate in caves, mines, or other underground structures with cool, humid, and stable conditions, often in karst landscapes or abandoned mines (USFWS 2026e).	*May occur.* The forested areas within the project area could provide suitable habitat for this species; however, the forested areas are small and fragmented. Although there are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b), suitable habitat in the form of trees with exfoliating bark and leaf clusters is present within the project area.	*May affect, is not likely to adversely affect*. The project area does contain suitable habitat for this species. See Section 3.1.2 for further details.
MOLLUSKS					

Common Name (Scientific Name)	Federal Status*	State Status†	Range or Habitat Requirements	Potential for Occurrence in Project Area	Determination of Effect
Texas heelsplitter (*Potamilus amphichaenus*)	PE	T	The Texas heelsplitter mussel is endemic to the Neches, Sabine, and Trinity River drainages of eastern Texas (Howells 1997). This species prefers still to moderately flowing waters with substrates consisting of firm mud, sand, or finer gravel bottoms and is sometimes associated with fallen timber (Howells 2010; Howells 2014). The Texas heelsplitter can also tolerate artificial impoundments and has been recorded in several eastern Texas reservoirs (Howells 2010).	*Unlikely to occur.* The project area is within the known range of this species; however, the project area does not contain rivers of suitable size or substrate to support the Texas heelsplitter. Additionally, there are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b).	*No effect.* The project area does not contain suitable habitat for this species.
REPTILES					
Northern scarlet snake (*Cemophora coccinea*)	–	T	The northern scarlet snake inhabits hardwood, mixed, or pine forests/woodlands and adjacent open areas with sandy or loamy well-drained soils (NatureServe 2026e). Specific habitats include pine flatwoods, along borders of swamps and stream banks, and bottomland forest. Individuals are rarely observed, given their secretive and semi-fossorial nature, though they can sometimes be found under rocks or in/under logs (NatureServe 2026e).	*May occur.* The project area has loamy soils and mixed hardwood forests with adjacent open areas that may provide suitable habitat for this species; however, no individuals were observed during field surveys. Additionally, there are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b).	*May impact.* The project area contains potentially suitable habitat for this species.
Louisiana pine snake (*Pituophis ruthveni*)	T	T	In Texas, the Louisiana pine snake occurs in longleaf pine (*Pinus palustris*) -oak sandhills interspersed with moist bottomlands (NatureServe 2026g). This species prefers openly wooded areas with moderate to sparse midstory and well-developed herbaceous understory over dense forest and is frequently found in fields, farmland, and tracts of second-growth timber (NatureServe 2026g). The Louisiana pine snake is currently known to occur only within five Texas counties: Angelina, Jasper, Newton, Sabine, and Tyler (USFWS 2026d).	*Unlikely to occur.* The project area is within the known range of this species; however, the project area does not contain habitat of suitable size to support the Louisiana pine snake. Additionally, no determination was generated from a USFWS IPaC Determination Key Analysis, and there are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b).	*No effect.* The project area does not contain suitable habitat for this species.

*USFWS Status Definitions:

E = Endangered. The ESA specifically prohibits the take of a species listed as endangered. Take is defined by the ESA as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to engage in any such conduct.

PE = Proposed endangered. Proposed species for listing under the ESA are those candidate species that were found to warrant listing as endangered after completion of a status review and consideration of other protective conservation measures.

T = Threatened. The ESA specifically prohibits the take of a species listed as threatened. Take is defined by the ESA as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to engage in any such conduct.

PT = Proposed threatened. Proposed species for listing under the ESA are those candidate species that were found to warrant listing as threatened after completion of a status review and consideration of other protective conservation measures.

†TPWD Status Definitions:

E = Endangered. Plants or animals that will likely become extinct within the foreseeable future.

T = Threatened. The species may become endangered within the foreseeable future.

Based on natural history information, including habitat associations, migratory pathways, and known distributions, the monarch butterfly and tricolored bat are federally listed or proposed species that have the potential to be affected by the project. Similarly, the swallow-tailed kite, Bachman's sparrow, and northern scarlet snake are state-listed species of concern with potential to be impacted. Following recommendations from TxDOT, only federally listed species listed on the USFWS IPaC with potential to occur within the proposed project area were carried forward for further analysis in Sections 3.1.1 and 3.1.2.

3.1.1 Monarch Butterfly

Current Federal Status: Proposed Threatened

Current State Status: None

Habitat and Range Requirements: The monarch butterfly is proposed threatened by the USFWS. North America forms the core of the monarch butterfly's distribution, but its overall range extends through Central America and the Caribbean to South America (Zhan et al. 2014). In eastern North America, monarch butterflies migrate each autumn to Central Mexico, where they overwinter as reproductively inactive adults. Monarch butterflies that survive winter fly north in spring. When they reach areas with milkweed (*Asclepias* spp.), they mate and lay eggs. Monarch butterfly larvae feed exclusively on plant species in the subfamily Asclepiadoideae. Milkweeds used by monarch butterflies grow in rangelands, agricultural areas, riparian habitats, wetlands, deserts, prairies, meadows, open forests, woodlands, roadsides, and gardens (NatureServe 2026d).

Potential for Occurrence: The project area contains potentially suitable foraging habitat in the form of open grasslands and clearings. No milkweed species were recorded within the project area during field surveys, but SWCA biologists did observe milkweed directly adjacent to the project area within the same open grassland habitat. Additionally, the project area is within the migration path for the monarch butterfly. Due to these factors, this species *may occur* within the proposed project area.

Effect Determination: The project area falls within the monarch butterfly's migration path and contains large patches of milkweed in adjacent areas. However, no individual monarch butterflies or milkweed were observed within the project area during field surveys, and there are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b). Individuals utilizing wildflowers for foraging could avoid areas of high activity during construction and use similar adjacent habitats. Loss of potential habitat for this species from the proposed Project would be minimal. Due to these factors, the proposed project *may affect, is not likely to adversely affect,* the monarch butterfly.

The monarch is currently proposed for listing under the ESA as threatened, and no consultation with USFWS is currently required. If the species becomes listed prior to project completion, the project will be reevaluated to determine whether additional coordination is required.

3.1.2 Tricolored Bat

Current Federal Status: Proposed Endangered

Current State Status: None

Habitat and Range Requirements: The tricolored bat is a relatively small, federally proposed endangered bat endemic to the central and eastern United States (USFWS 2026e). The species is found in a variety of forested landscapes across 39 states, including Texas. The preferred foraging habitat for this

species includes forested edges and riparian areas where individuals will opportunistically feed on a variety of small insects. During the winter, tricolored bats are often found in caves and abandoned mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts or bridges where they exhibit shorter torpor bouts and forage during warm nights. During the spring, summer, and fall, tricolored bats roost in dead or live tree foliage (such as deciduous leaf clusters, pine needle clusters, and occasionally Spanish moss), rock crevices, tree cavities, and occasionally human-made structures (USFWS 2026e). In the southern portion of their range, tricolored bats mate in October/November and produce a litter of usually two pups between May and July (USFWS 2026e). White-nose syndrome, a fungal disease known to affect bats, is the primary cause of decline for tricolored bats east of the Mississippi River. Additional threats, such as habitat loss and fragmentation, have impacted the species range-wide (USFWS 2026e).

Potential for Occurrence: There is suitable habitat in the form of trees with exfoliating bark and leaf clusters; however, the forested areas are minimal and fragmented within the project area. There are no TXNDD occurrence records within 2 miles of the project area (TPWD 2026b). Based on these factors, this species *may occur* in the project area.

Determination of Impact: The forested areas within the project area could provide suitable habitat for this species. Therefore, this project *may affect, is not likely to adversely affect,* the tricolored bat.

The tricolored bat is currently proposed for listing under the ESA as endangered, and no consultation with USFWS is currently required. If the species becomes listed prior to project completion, the project will be reevaluated to determine whether additional coordination is required.

3.2 USFWS Designated Critical Habitat

No USFWS designated critical habitat is present within the project area (USFWS 2026a).

4 SUMMARY AND CONCLUSIONS

SWCA performed an effects evaluation of the proposed Lufkin Airport Environmental Services Project for federally listed species identified by USFWS (2026a) and state-listed species identified by TPWD (2026a) for the project area in Angelina County, Texas. This review included a field reconnaissance of habitat conditions, a review of species' habitat requirements, and a desktop literature review of species' temporal and spatial distributions and occurrences. Based upon this information, it is SWCA's opinion that the proposed project will have *no effect* on three federally listed or proposed for listing species and *may affect, is not likely to adversely affect* two federally proposed species. A summary of federally and state-listed species effects is provided in Table 2 below.

Table 2. Federally and State-listed Species Effects Evaluation Summary

Common Name (Scientific Name)	Status[1]	Determination of Effect[2]
Red-cockaded Woodpecker (*Picoides borealis*)	FT / SE	*No effect*
Monarch butterfly (*Danaus plexippus*)	PT	*May affect, is not likely to adversely affect*
Tricolored bat (*Perimyotis subflavus*)	PE	*May affect, is not likely to adversely affect*
Texas heelsplitter (*Potamilus amphichaenus*)	PE	*No effect*
Louisiana pine snake (*Pituophis ruthveni*)	T / ST	*No effect*

Common Name (Scientific Name)	Status[1]	Determination of Effect[2]

Notes:

[1] Status codes: FT = federally threatened; PT = proposed threatened; PE = proposed endangered; SE = state endangered; ST = state threatened.

[2] Effect determination terminology such as '*may affect*' is associated with federal ESA Section 7 consultation for federally listed species. State-listed species discussed in this report are evaluated using general impact terminology (e.g., 'may impact') and are not subject to federal ESA effect determinations unless also federally listed. Proposed species are included for disclosure and planning purposes because they have been formally proposed for federal listing but are not currently listed under the ESA.

5 LIMITATIONS AND WARRANTY

Within the limitations of schedule, budget, and scope of work, SWCA warrants that this study was conducted in accordance with technical guidelines, evaluation criteria, and species' listing status in effect at the time this evaluation was performed.

The results and conclusions of this report represent the best professional judgment of SWCA scientists. No other warranty, expressed or implied, is made.

Please be aware that the USFWS and National Marine Fisheries Service are the federal agencies charged with administration of the ESA and have final authority to either concur or not concur with determinations provided herein.

6 LITERATURE CITED

Benson, K.L.P., and K.A. Arnold. 2001. The Texas Breeding Bird Atlas. Texas A&M University System, College Station and Corpus Christi, TX. Available at: http://txtbba.tamu.edu. Accessed May 2026.

Clark, M.K., E. Hajnos, and A. Black. 1997. Radio-tracking of Corynorhinus rafinesquii and Myotis austroriparius in South Carolina. Bat Research News 38:136–137.

Howells, R.G. 1997. Status of freshwater mussels (Bivalvia: Unionidae) of the Big Thicket region of eastern Texas. Texas Journal of Science 49 (Supplement): 21–24.

———. 2010. Texas Heelsplitter (Potamilus amphichaenus): summary of selected biological and ecological data for Texas. Biostudies, Kerrville, Texas.

———. 2014. Field Guide to Texas Freshwater Mussels. Second Edition. BioStudies, Kerrville, Texas.

iNaturalist. 2026. Northern Scarlet Snake. Available at: https://www.inaturalist.org/guide_taxa/776619. Accessed May 2026.

Lockwood, M.W., and B. Freeman. 2014. The TOS Handbook of Texas Birds. Second Edition. College Station, Texas: Texas A&M University Press.

National Audubon Society. 2025. Audubon Field Guide: swallow-tailed kite. Available at: https://www.audubon.org/fieldguide/bird/swallow-tailed-kite. Accessed May 2026.

NatureServe. 2026a. NatureServe Explorer 2.0: An online encyclopedia of life – Aquila chrysaetos. NatureServe, Arlington, Virginia. Available at: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.100925/Aquila_chrysaetos. Accessed May 2026.

———. 2026b. NatureServe Explorer: An online encyclopedia of life – Peucaea aestivalis. NatureServe, Arlington, Virginia. Available at: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.105170/Peucaea_aestivalis. Accessed May 2026.

———. 2026c. NatureServe Explorer: An online encyclopedia of life – Elanoides forficatus. NatureServe, Arlington, Virginia. Available at: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.105003/Elanoides_forficatus. Accessed May 2026.

———. 2026d. NatureServe Explorer: An online encyclopedia of life – Danaus plexippus. NatureServe, Arlington, Virginia. Available at: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.108245/Danaus_plexippus. Accessed May 2026.

———. 2026e. NatureServe Explorer: An online encyclopedia of life – Cemophora coccinea. NatureServe, Arlington, Virginia. Available at: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.105886/Cemophora_coccinea. Accessed May 2026.

———. 2026f. NatureServe Explorer: An online encyclopedia of life – Picoides borealis. NatureServe, Arlington, Virginia. Available at: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.103433/Dryobates_borealis. Accessed May 2026.

———. 2026g. NatureServe Explorer: An online encyclopedia of life – Pituophis ruthveni. NatureServe, Arlington, Virginia. Available at: https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.102626/Pituophis_ruthveni. Accessed May 2026.

Texas Parks and Wildlife Department (TPWD). 2026a. Rare, Threatened, and Endangered Species of Texas by County. Available at: https://tpwd.texas.gov/gis/rtest/. Accessed May 2026.

———. 2026b. Texas Natural Diversity Database (TXNDD). Element Occurrence data export. Wildlife Diversity Program of Texas Parks and Wildlife Department. Accessed May 2026.

Tweit, R. 2009. Swallow-tailed kite (Elanoides forficatus). In The Texas Breeding Bird Atlas. Texas A&M Agrilife Extension. Available at: https://txtbba.tamu.edu/species-accounts/swallow-tailed-kite/. Accessed May 2026.

U.S. Fish and Wildlife Service (USFWS). 1998. Endangered Species Consultation Handbook. Available at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf. Accessed May 2026.

———. 2019. Guidance for Preparing a Biological Assessment. Available at: http://www.fws.gov/midwest/endangered/section7/ba_guide.html. Accessed May 2026.

———. 2026a. Information for Planning and Consultation (IPaC). Available at: http://ecos.fws.gov/ipac/. Accessed May 2026.

———. 2026b. Critical Habitat Map. Available at: http://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77. Accessed May 2026.

———. 2026c. ECOS. Wood stork (Mycteria americana). Available at: https://ecos.fws.gov/ecp/species/B06O. Accessed May 2026.

———. 2026d. ECOS. Louisiana pinesnake (Pituophis ruthveni). Available at: https://ecos.fws.gov/ecp/species/299. Accessed May 2026.

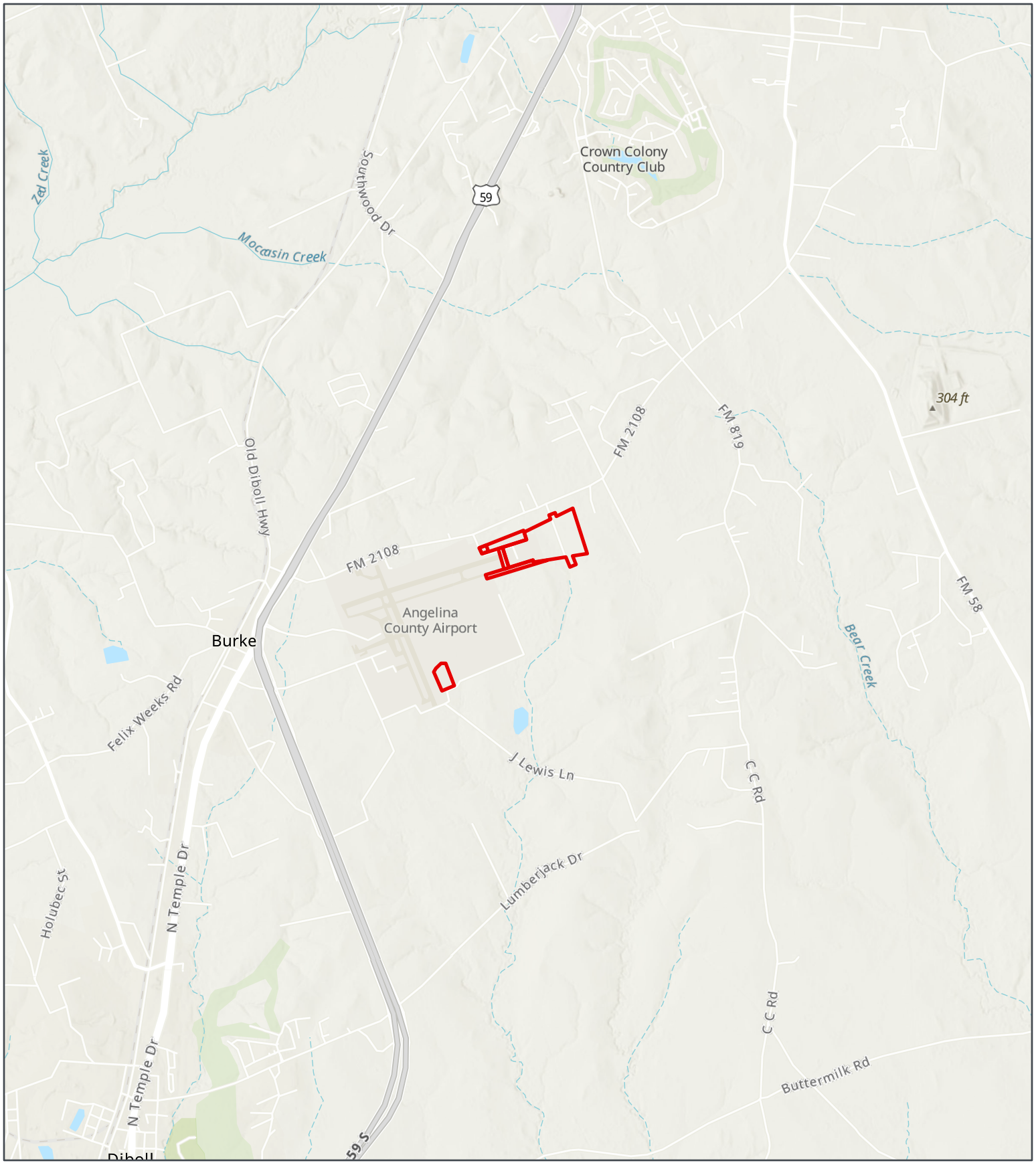
———. 2026e. Species profiles. Available at: https://www.fws.gov/species. Accessed May 2026.

Zhan, S., W. Zhang, K. Niitepõld, J. Hsu, J. Fernández Haeger, M.P. Zalucki, S. Altizer, J.C. de Roode, S.M. Reppert, and M.R. Kronforst. 2014. The genetics of monarch butterfly migration and warning colouration. Nature 514(7522):317–321.

Zimmerman, G.M. 2004. Studies of the Annual Cycle of the Swallow-Tailed Kite (Elanoides forficatus): Migration, Habitat Use, and Parasites. M.S. thesis, Georgia Southern University.

APPENDIX A

Vicinity Map, Aerial Map, and TXNDD Species Occurrence Map



ANGELINA COUNTY AIRPORT

Figure 1. Vicinity Map

Angelina County, TX
USGS 7.5' Quadrangle:
Bald Hill, TX, 31094-B6
NAD 1983 StatePlane Texas
Central FIPS 4203 Feet
31.2356°N 94.7395°W

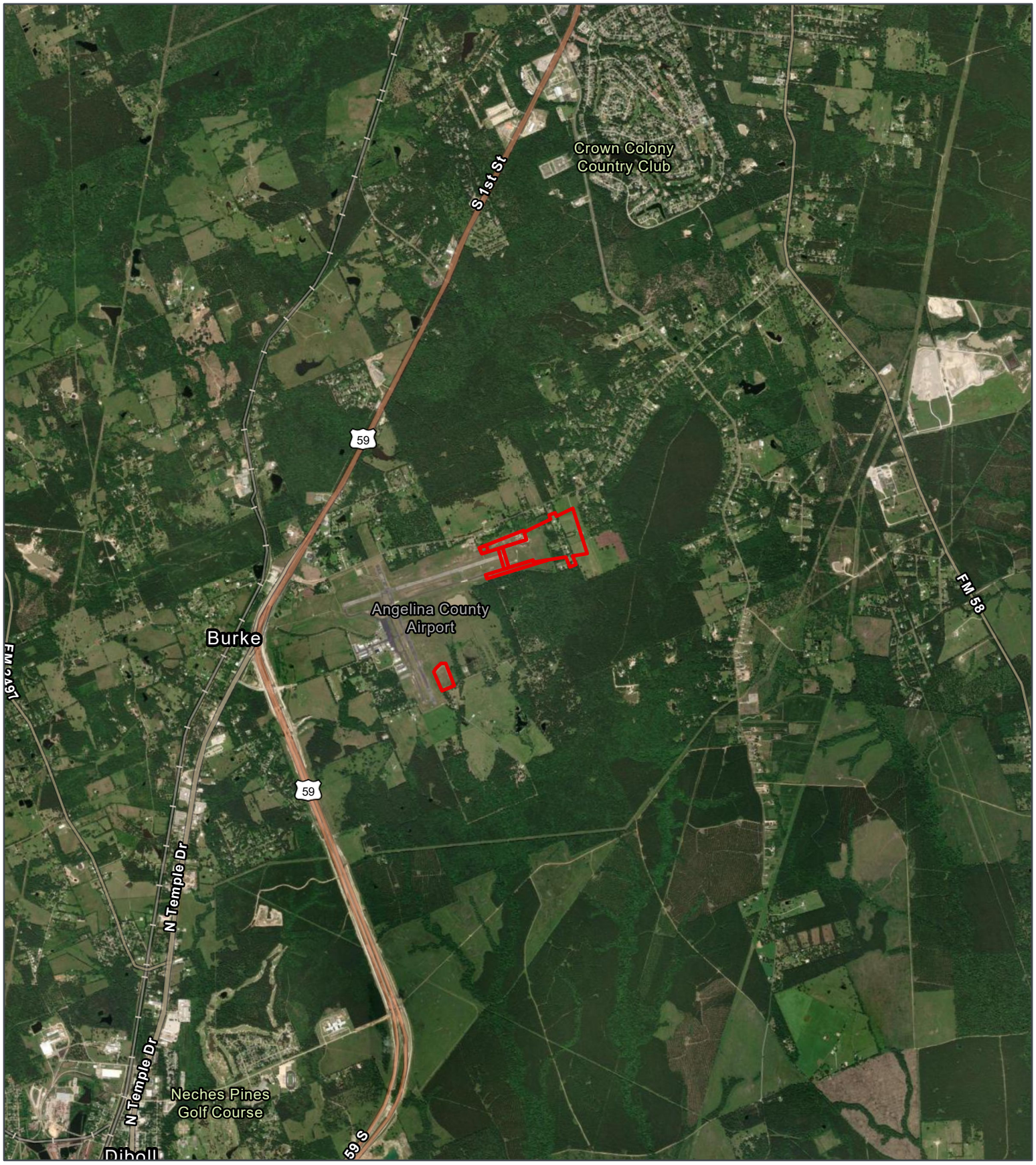
0 2,000 4,000 Feet
0 510 1,020 Meters

N

1:48,839

Base Map: ESRI ArcGIS Online, accessed May 2026
Updated: 5/12/2026
Project No. 104024
Layout: 1_Topographic
Aprx: 104024_angelicaCountyAirport

SWCA ENVIRONMENTAL CONSULTANTS



ANGELINA COUNTY AIRPORT

Figure 2.
Aerial Map

Project Area

Angelina County, TX
USGS 7.5' Quadrangle:
Bald Hill, TX, 31094-B6
NAD 1983 StatePlane Texas
Central FIPS 4203 Feet
31.2356°N 94.7395°W

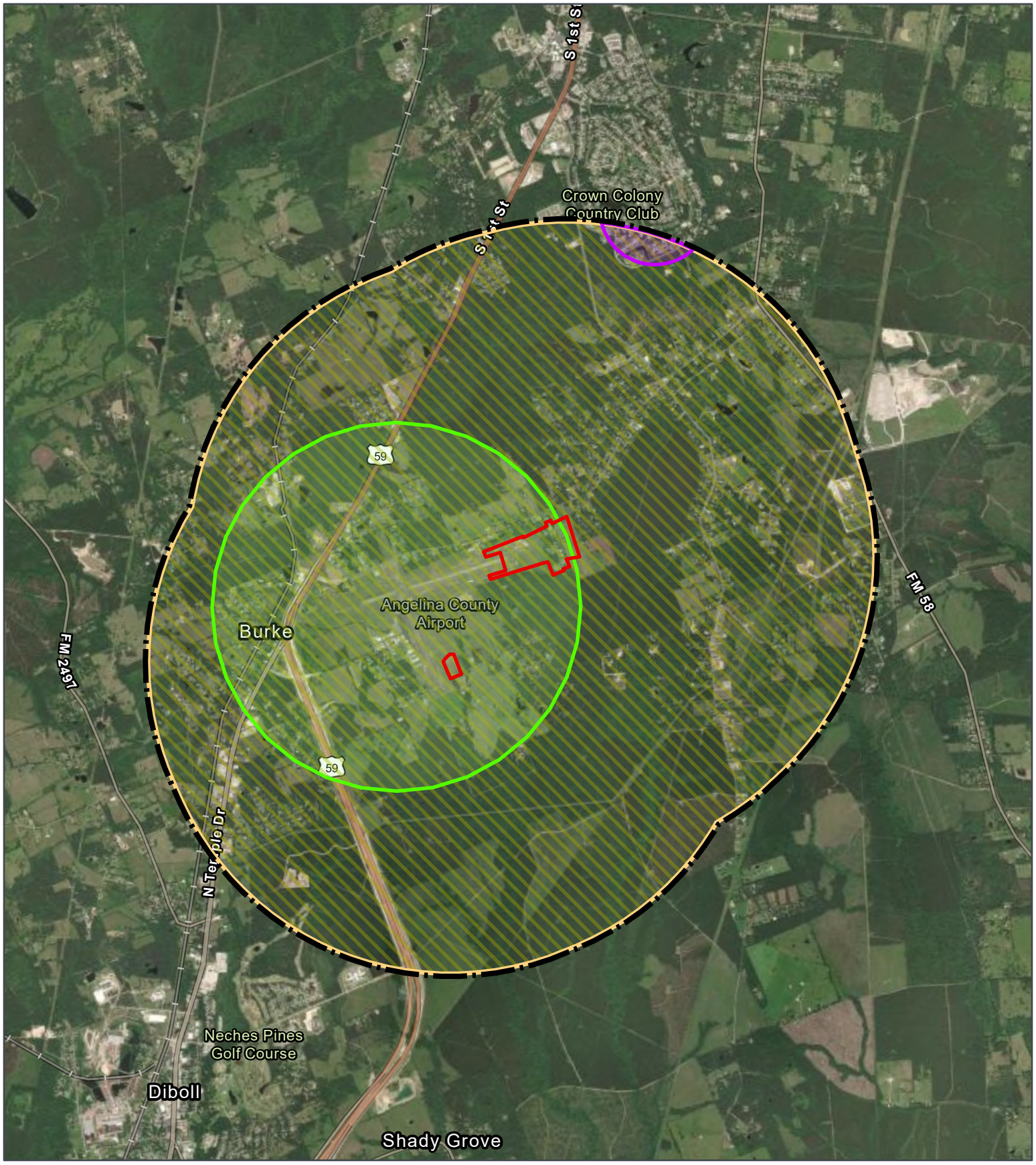
0 2,000 4,000 Feet
0 510 1,020 Meters

N

1:48,839

Base Map: ESRI ArcGIS Online, accessed May 2026
Updated: 5/12/2026
Project No. 104024
Layout: 2_Aerial
Aprx: 104024_angelicaCountyAirport

SWCA
ENVIRONMENTAL CONSULTANTS



ANGELINA COUNTY AIRPORT

Figure 3. TXNDD Species Occurrence Map

- Project Area
- Buffer (2 mi)
- Alligator Snapping Turtle
- Neches Crayfish
- Red-Cockaded Woodpecker

Angelina County, TX
USGS 7.5' Quadrangle:
Bald Hill, TX, 31094-B6
NAD 1983 StatePlane Texas
Central FIPS 4203 Feet
31.2356°N 94.7395°W

0 2,250 4,500 Feet
0 580 1,160 Meters

N

1:55,000

Base Map: ESRI ArcGIS Online, accessed June 2026
Updated: 6/1/2026
Project No. 104024
Layout: 3_TXNDD
Aprx: 104024_angelicaCountyAirport

SWCA ENVIRONMENTAL CONSULTANTS

APPENDIX B

U.S. Fish and Wildlife Service Federally Listed and Texas Parks and Wildlife Department State-Listed Species Reports and Determination Keys

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Texas Coastal & Central Plains Esfo
17629 El Camino Real,
Suite 211
Houston, TX 77058-3051
Phone: (281) 286-8282

In Reply Refer To: 07/31/2026 12:23:53 UTC
Project Code: 2026-0123602
Project Name: Lufkin Airport EA

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 attached species list identifies threatened, endangered, proposed, and candidate species, as well as designated and proposed critical habitat, that may occur within the boundary of your project area 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.*). Project related correspondence or questions should be directed to the appropriate field office based on the county of occurrence (refer to the map of Texas field office jurisdictions for contact information).

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 attached 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.

After evaluating the potential effects of a proposed action on federally listed species, one of the following determinations should be made by the Federal action agency:

1. *No effect* - the appropriate determination when a project, as proposed, is anticipated to have no effects to listed species or critical habitat. A "no effect" determination does not require section 7 consultation and no coordination or contact with the Service is necessary. However, the action agency should maintain a complete record of their evaluation, including the steps leading to the determination of affect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related information.
2. *May affect, but is not likely to adversely affect* - the appropriate determination when a proposed action's anticipated effects to listed species or critical habitat are insignificant, discountable, or completely beneficial. Insignificant effects relate to the size of the impact and should never reach the scale where "take" of a listed species occurs. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not be able to meaningfully measure, detect, or evaluate insignificant effects, or expect discountable effects to occur. This determination requires written concurrence from the Service. A biological evaluation or other supporting information justifying this determination should be submitted with a request for written concurrence.
3. *May affect, is likely to adversely affect* - the appropriate determination if any adverse effect to listed species or critical habitat may occur as a consequence of the proposed action, and the effect is not discountable or insignificant.?This determination requires formal section 7 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.

Non-Federal entities may coordinate under Sections 9 and 10 of the Act. Section 9 and Federal regulations prohibit the take of endangered and threatened species, respectively, without special exemption. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such

conduct. Should the proposed project have the potential to take listed species, the Service recommends that the applicant develop a Habitat Conservation Plan and obtain a section 10(a)(1)(B) permit (see the Habitat Conservation Planning Handbook Toolbox for more information).

Migratory Birds and Eagles:

The attached list also provides information on the potential occurrence of migratory birds and eagles, which are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. For more information, including contacts for our Migratory Bird Offices, visit the Migratory Bird Program page.

We appreciate your concern for threatened and endangered species. The Service encourages Federal action 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
- 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:

Texas Coastal & Central Plains Esfo
17629 El Camino Real,
Suite 211
Houston, TX 77058-3051
(281) 286-8282

PROJECT SUMMARY

Project Code: 2026-0123602
Project Name: Lufkin Airport EA
Project Type: Airport - Maintenance/Modification
Project Description: Proposed 45-acre runway extension area and 25-acre acquisition area for Lufkin Airport in Angelina County, TX.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@31.238872049999998,-94.73650034872574,14z



Counties: Angelina County, Texas

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 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[1], 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 *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039 General project design guidelines: https://ipac.ecosphere.fws.gov/project/COTXWHEHJJFCFFERMETPIVBWIU/documents/generated/11502.pdf	Threatened
rufa red knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1864 General project design guidelines: https://ipac.ecosphere.fws.gov/project/COTXWHEHJJFCFFERMETPIVBWIU/documents/generated/11502.pdf	Threatened

REPTILES

NAME	STATUS
Alligator snapping turtle *Macrochelys temminckii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4658	Proposed Threatened

CLAMS

NAME	STATUS
Louisiana Pigtoe *Pleurobema riddellii* Population: There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/10233	Proposed Threatened
Texas heelsplitter *Potamilus amphichaenus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/299	Proposed Endangered

INSECTS

NAME	STATUS
Monarch butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Neches River rose-mallow *Hibiscus dasycalyx* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1441 General project design guidelines: https://ipac.ecosphere.fws.gov/project/COTXWHEHJJFCFFERMETPIVBWIU/documents/generated/11734.pdf	Threatened

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.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. 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 *Haliaeetus leucocephalus* 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. https://ecos.fws.gov/ecp/species/1626	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 (■)

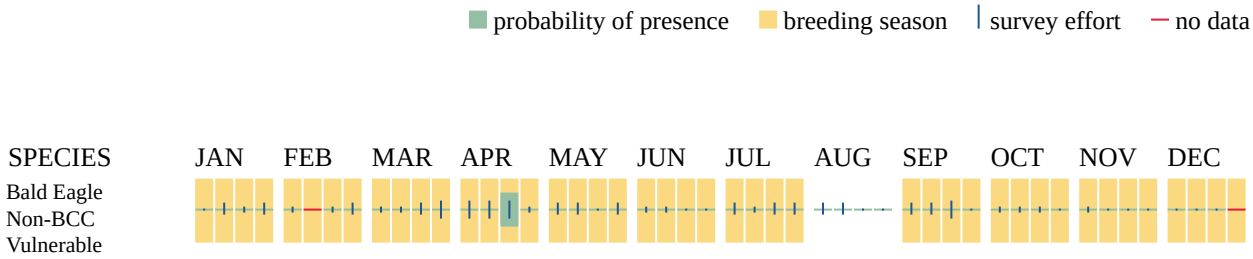
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

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-incidental-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) [1] 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 Golden-Plover *Pluvialis dominica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10561	Breeds elsewhere
American Kestrel *Falco sparverius paulus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bald Eagle *Haliaeetus leucocephalus* 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. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Brown-headed Nuthatch *Sitta pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9427	Breeds Mar 1 to Jul 15
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper *Calidris melanotos* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Swallow-tailed Kite *Elanoides forficatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	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.

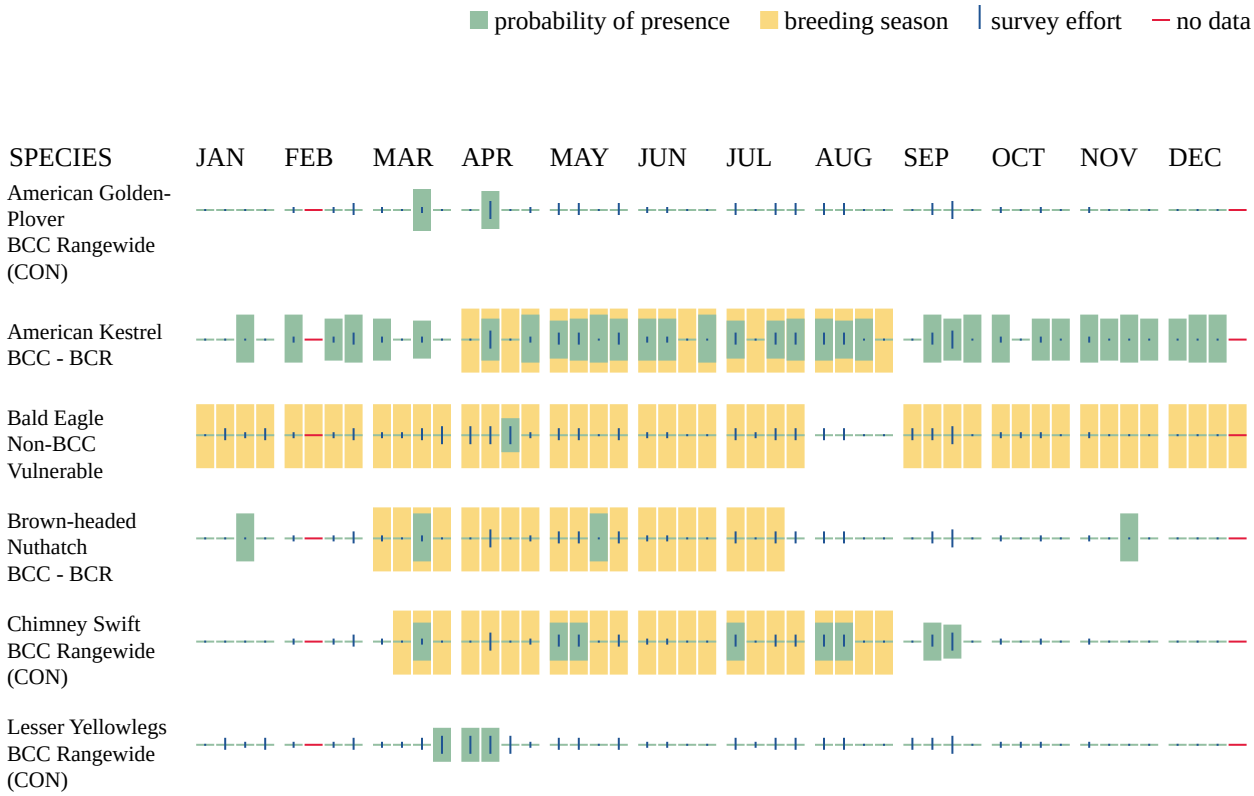
Probability of Presence (■)

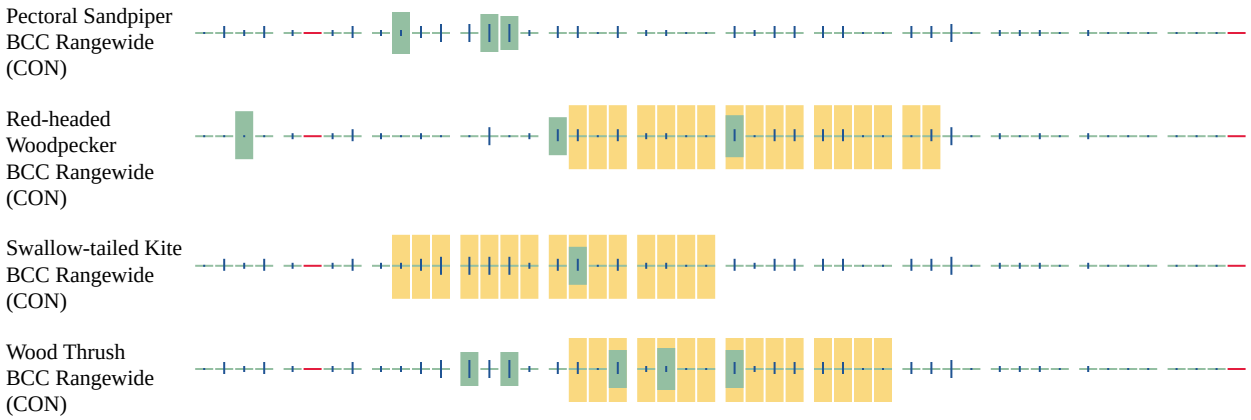
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

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.





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-incidental-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.

FRESHWATER POND

- PUBHx

RIVERINE

- R4SBC

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Ellery Harding
Address: 13 Parafox Place
City: Pensacola
State: FL
Zip: 32502
Email ellery.harding@swca.com
Phone: 4703649735

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Texas Coastal & Central Plains Esfo
17629 El Camino Real, Suite 211
Houston, TX 77058-3051
Phone: (281) 286-8282 Fax: (281) 488-5882

In Reply Refer To: 05/13/2026 19:09:37 UTC
Project code: 2026-0089405
Project Name: Lufkin Airport EA

Subject: Technical Assistance letter for 'Lufkin Airport EA' for specified federally threatened and endangered species and designated critical habitat that may occur in your proposed project area consistent with the Texas Statewide Determination Key (Texas DKey) for project review and guidance for federally listed species.

Dear Skylar Bueche:

The U.S. Fish and Wildlife Service (Service) received on **May 13, 2026** your effects determination for the 'Lufkin Airport EA' (the Action) using the Texas DKey for project review and guidance for federally-listed species within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance of the Service's Texas DKey, you determined the proposed Action will have "No Effect" on the following species:

Species	Listing Status	Determination
Neches River Rose-mallow (*Hibiscus dasycalyx*)	Threatened	No effect
Piping Plover (*Charadrius melodus*)	Threatened	No effect
Rufa Red Knot (*Calidris canutus rufa*)	Threatened	No effect

Thank you for informing the Service of your "No Effect" determinations for this project. No further consultation/coordination for this project is required for these species and/or critical habitats.

Other Species and Critical Habitat that May be Present in the Action Area

This letter only covers the listed species in the above table. The following species may also occur in the Action area:

- Alligator Snapping Turtle *Macrochelys temminckii* Proposed Threatened
- Louisiana Pigtoe *Pleurobema riddellii* Proposed Threatened

- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Texas Heelsplitter *Potamilus amphichaenus* Proposed Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

If you determine your project may affect additional listed or proposed listed species not covered by the Texas DKey, please contact the appropriate Texas Coastal and Central Plains Ecological Services Field Office (ESFO) or your Service point of contact in the ESFO to discuss methods to avoid or minimize potential adverse effects to those species.

The Service recommends that your agency contact the ESFO or re-evaluate the Action in IPaC if: 1) the scope, timing, duration, or location of the Action changes, 2) new information reveals the Action may affect listed species or designated critical habitat, or 3) a new species is listed or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project changes are final or resources committed.

Bald and Golden Eagle Protection Act (BGEPA):

Based on your answers to the questionnaire, your proposed project is unlikely to disturb nesting Bald Eagles. We do not recommend you apply for a permit at this time. However, if activity plans change in any way, it is important to redo the questionnaire or consult your regional Migratory Bird Permit Office to obtain the correct recommendation. Please note that individuals and organizations that disturb eagles may be subject to fine and prosecution under the Bald and Golden Eagle Protection Act.

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

1. Name

Lufkin Airport EA

2. Description

The following description was provided for the project 'Lufkin Airport EA':

> Proposed 45-acre runway extension area and 25-acre acquisition area for Lufkin Airport in Angelina County, TX.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@31.238872049999998,-94.73650034872574,14z



QUALIFICATION INTERVIEW

1. This determination key is intended to assist the user in evaluating the effects of their actions on federally listed species. It does not cover other prohibited activities under the Endangered Species Act (e.g., for wildlife: import/export, Interstate or foreign commerce, possession of illegally taken wildlife, etc.; for plants: import/export, reduce to possession, malicious destruction on Federal lands, commercial sale, etc.) or other statutes.

   Click **'yes'** to acknowledge that you must consider other prohibitions of the ESA or other statutes outside of this determination key.

   Yes

2. Does the proposed project involve research or other actions that include the collection, capture, handling, or harassment of any individual federally listed threatened, endangered or proposed species?

   No

3. Does the proposed project involve the use of manned or unmanned aircraft (e.g., airplanes, helicopters, drones, balloons)?

   No

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

   Yes

5. Are you the Federal agency or designated non-federal representative?

   No

6. Is the project a communications tower licensed or regulated by the Federal Communications Commission?

   No

7. Is the lead federal agency for the project Housing and Urban Development?

   No

8. Is this a broadband internet project funded by a National Telecommunications and Information Administration grant?

   No

9. Is this project funded through the Texas Water Development Board under the Texas Drinking Water or Texas Clean Water State Revolving Funds?

   No

10. Is the lead federal agency for the Federal Energy Regulatory Commission (FERC)?

    No

11. Is this a wind energy project?

    No

12. Is this a solar energy project?

    No

13. Does the project intersect the piping plover species list area?

    Automatically answered
    Yes

14. Does the project intersect the red knot species list area?

    Automatically answered
    Yes

15. Does the project intersect the Neches river rose-mallow (*Hibiscus dasycalyx*) species list area?

    Automatically answered
    Yes

16. Will the project cause hydrologic alterations to designated critical habitat?

    Note: Alterations to the hydrology of Neches River rose-mallow habitat can occur as a result of projects that do not directly overlap suitable habitat, but occur within the watershed or upstream of suitable habitat.

    No

17. Will the project occur in suitable NRRM habitat as described in the 2018 NRRM Recovery Outline?

    No

18. Will the project cause hydrologic alterations to suitable NRRM habitat as described in the 2018 NRRM Recovery Outline?

    Note: Alterations to the hydrology of Neches River rose-mallow habitat can occur as a result of projects that do not directly overlap suitable habitat, but occur within the watershed or upstream of suitable habitat.

    No

19. Do you want to evaluate project for bald eagle impacts?

    Yes

20. The bald eagle evaluation does **NOT** provide an effects determination, but concludes with a recommendation on the potential need for a permit for disturbance of bald eagle nests. Permit recommendations are included in the letter generated at the conclusion of this DKey. Do you wish to proceed?

    Yes

21. Has the project area and surrounding area (at least 660 ft) been surveyed for the presence of bald eagle nests?

    Note: Use of this key will necessitate determine if bald eagles nests occur in the vicinity of a project. Note: if aircraft (including drones) or blasting noises (explosives including fireworks) are part of the activity, larger distances for evaluating the presence of eagle nests will be required.

    No

22. Is the project area located in the eastern portion of USFWS Region 2?

    Automatically answered
    Yes

23. Your project occurs in the eastern portion of the USFWS Region 2. Your Bald Eagle breeding season dates are: October 1st through May 30th.

    Automatically answered
    Yes

24. Will the activity occur during the Bald Eagle breeding season?

    No

25. Will the activity occur within 660 feet of a Bald Eagle nest(s)?

    No

26. Is the activity consistent with **Category A** as described in the U.S. Fish and Wildlife Service National Bald Eagle Management Guidelines?

    Yes

27. Do you have additional supporting documents you would like to upload to support your project review (e.g., Biological Evaluation, Habitat Assessment, Environmental Report, photos, maps, etc.)?

    If Yes, upload document(s)

    No

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Skylar Bueche
Address: 1651 Lobdell Avenue
Address Line 2: Building A
City: Baton Rouge
State: LA
Zip: 70806
Email skylar.bueche@swca.com
Phone: 2256633830

LEAD AGENCY CONTACT INFORMATION

Lead Agency: County of Angelina

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Texas Coastal & Central Plains Esfo
17629 El Camino Real, Suite 211
Houston, TX 77058-3051
Phone: (281) 286-8282 Fax: (281) 488-5882

In Reply Refer To: 05/13/2026 16:36:08 UTC
Project code: 2026-0089405
Project Name: Lufkin Airport EA

Federal Nexus: yes
Federal Action Agency (if applicable): County of Angelina

Subject: Record of project representative's no effect determination for 'Lufkin Airport EA'

Dear Skylar Bueche:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on May 13, 2026, for 'Lufkin Airport EA' (here forward, Project). This project has been assigned Project Code 2026-0089405 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the **Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey)**, invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat and/or Tricolored Bat

Based upon your IPaC submission and a standing analysis, your project has reached the following effect determinations:

Species	Listing Status	Determination
Tricolored Bat (*Perimyotis subflavus*)	Proposed Endangered	No effect

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate.

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Alligator Snapping Turtle *Macrochelys temminckii* Proposed Threatened
- Louisiana Pigtoe *Pleurobema riddellii* Proposed Threatened
- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Neches River Rose-mallow *Hibiscus dasycalyx* Threatened
- Piping Plover *Charadrius melodus* Threatened
- Rufa Red Knot *Calidris canutus rufa* Threatened
- Texas Heelsplitter *Potamilus amphichaenus* Proposed Endangered

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the species covered by this key. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Texas Coastal & Central Plains Esfo and reference Project Code 2026-0089405 associated with this Project.

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

1. Name

Lufkin Airport EA

2. Description

The following description was provided for the project 'Lufkin Airport EA':

> Proposed 45-acre runway extension area and 25-acre acquisition area for Lufkin Airport in Angelina County, TX.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@31.238872049999998,-94.73650034872574,14z



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the species covered by this determination key. Therefore, no consultation with the U.S. Fish and Wildlife 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 for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

   Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

   No

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

   Automatically answered
   Yes

3. Your project overlaps with Zone 2 of the area where northern long-eared bats and tricolored bats may be present and roosting in trees year-round.

   Do you understand that your project may impact bats at any time during the year?

   Yes

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

   No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Note for projects in Pennsylvania: Projects requiring authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act would be considered as having a federal nexus. Since the U.S. Army Corps of Engineers (Corps) has issued the Pennsylvania State Programmatic General Permit (PASPGP), which may be verified by the PA Department of Environmental Protection or certain Conservation Districts, the need to receive a Corps authorization to perform the work under the PASPGP serves as a federal nexus. As such, if proposing to use the PASPGP, you would answer ‘yes’ to this question.

   Yes

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

   No

7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

   Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

   No

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

   No

9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

   No

10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum or winter roost? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

    Automatically answered

    No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

    No

12. Is the action located in New England (CT, MA, ME, NH, RI, or VT)?

    No

13. Will the action cause effects to a bridge?

    Note: Covered bridges should be considered as bridges in this question.

    No

14. Will the action result in effects to a culvert or tunnel at any time of year?

    No

15. Are trees present within 1000 feet of the action area? **Note:** If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines.

    Yes

16. Does the action include the intentional exclusion of bats from a building or building-like structure? **Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

    No

17. Does the action involve removal, modification, or maintenance of a human-made building-like structure (barn, house, or other building) **known or suspected to contain roosting bats?**

    No

18. Will the action cause construction of one or more new roads open to the public?

    For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

    No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase average night-time traffic permanently or temporarily on one or more existing roads? **Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

    No

20. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

    For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

    No

21. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

    Note: For information regarding NSF/ANSI 60 please visit https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects

    No

22. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

    No

23. Will the action include drilling or blasting?

    No

24. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use at night)?

    No

25. Will the proposed action involve the use of herbicides or pesticides (e.g., fungicides, insecticides, or rodenticides)?

    No

26. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season? Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining. **Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines.

    No

27. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable forested northern long-eared bat or tricolored bat roosting habitat? **Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines.

    No

28. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

    Yes

29. Is the project related to the production of coal, including projects that support the mining of coal, as well as the production and/or distribution of energy produced from coal?

    No

30. Will the proposed action occur exclusively in an already established and currently maintained utility right-of-way?

    No

31. Does the action include emergency cutting or trimming of hazard trees in order to remove an imminent threat to human safety or property? See hazard tree note at the bottom of the key for text that will be added to response letters

    Note: A "hazard tree" is a tree that is an immediate threat to lives, public health and safety, or improved property.

    No

32. Does the project intersect with the 0- 9.9% forest density category?

    Automatically answered
    No

33. Does the project intersect with the 10.0- 19.9% forest density category map?

    Automatically answered
    No

34. Does the project intersect with the 20.0- 29.9% forest density category map?

    Automatically answered
    No

35. Does the project intersect with the 30.0- 100% forest density category map?

    Automatically answered
    Yes

36. Will the action cause trees to be cut, knocked down, or otherwise brought down across an area greater than 100 acres in total extent?

    No

37. Will the proposed action result in the use of prescribed fire?

    Note: If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

    No

38. Does the action area intersect the tricolored bat species list area?

    Automatically answered
    Yes

39. Is the action area located within 0.5-mile of radius of an entrance/opening to any known tricolored bat hibernacula or winter roost?

    Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

    Automatically answered
    No

40. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

    Automatically answered
    No

41. Your project overlaps with an area where tricolored bats may be present and roosting in trees year-round.

    Has a presence/probable absence survey for the tricolored bat following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines been conducted within the project area? If unsure, answer "No."

    No

42. Your project overlaps with an area where tricolored bats may be present and roosting in trees year-round. Is suitable tricolored bat habitat present within 1000 feet of project activities? Note: If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pines) answer "Yes." Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines.

    No

43. Do you have any documents that you want to include with this submission?

    No

PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

15

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Skylar Bueche
Address: 1651 Lobdell Avenue
Address Line 2: Building A
City: Baton Rouge
State: LA
Zip: 70806
Email skylar.bueche@swca.com
Phone: 2256633830

LEAD AGENCY CONTACT INFORMATION

Lead Agency: County of Angelina

Last Update: 1/15/2025

ANGELINA COUNTY

AMPHIBIANS

Gulf Coast waterdog *Necturus beyeri*

This species is associated with permanent flowing water within forested habitats, from small streams to large rivers. The are frequently associated with slow moving, sandy bottomed spring fed streams with lots of aquatic habitat such as log jams and leaf litter beds.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: GNR	State Rank: S3

southern crawfish frog *Lithobates areolatus areolatus*

Terrestrial and aquatic: The terrestial habitat is primarily grassland and can vary from pasture to intact prairie; it can also include small prairies in the middle of large forested areas. Aquatic habitat is any body of water but preferred habitat is ephemeral wetlands.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4T4	State Rank: S3

spotted dusky salamander *Desmognathus conanti*

This species occurs in association with aquatic habitats in forested areas. Small, clear, spring fed streams with sandy substrate bordered with ferns and moss as well as murky, stagnant water bodies in cypress swamps, baygalls, and flood plains in bottomland forests support populations of this species.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S1

Strecker's chorus frog *Pseudacris streckeri*

Terrestrial and aquatic: Wooded floodplains and flats, prairies, cultivated fields and marshes. Likes sandy substrates.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S3

Woodhouse's toad *Anaxyrus woodhousii*

Terrestrial and aquatic: A wide variety of terrestrial habitats are used by this species, including forests, grasslands, and barrier island sand dunes. Aquatic habitats are equally varied.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S5

BIRDS

Bachman's sparrow *Peucaea aestivalis*

Open pine woods with scattered bushes and grassy understory in Pineywoods region, brushy or overgrown grassy hillsides, overgrown fields with thickets and brambles, grassy orchards; remnant grasslands in Post Oak Savannah region; nests on ground against grass tuft or under low shrub

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S1B

DISCLAIMER

The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

BIRDS

bald eagle *Haliaeetus leucocephalus*

Found primarily near rivers and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds

Federal Status:	State Status:	SGCN: N
Endemic: N	Global Rank: G5	State Rank: S3B,S3N

Bank Swallow *Riparia riparia*

Bank Swallows live in low areas along rivers, streams, ocean coasts, and reservoirs. Their territories usually include vertical cliffs or banks where they nest in colonies of 10 to 2,000 nests. Though in the past Bank Swallows were most commonly found around natural bluffs or eroding streamside banks, they now often nest in human-made sites, such as sand and gravel quarries or road cuts. They forage in open areas and avoid places with tree cover.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S2B,S4N

Brewer's Blackbird *Euphagus cyanocephalus*

Shrubby and bushy areas (especially near water), riparian woodland, aspen parklands, cultivated lands, marshes, and around human habitation; in migration and winter also in pastures and fields (AOU 1983).

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S5

Brown Pelican *Pelecanus occidentalis*

Largely coastal and near shore areas, where it roosts and nests on islands and spoil banks. Feeds in lagunas and shallow seaward waters.

Federal Status:	State Status:	SGCN: N
Endemic: N	Global Rank: G4	State Rank: S3B

Common Grackle *Quiscalus quiscula*

Common Grackles do well in human landscapes, using scattered trees for nesting and open ground for foraging. Typical natural habitats include open woodland, forest edge, grassland, meadows, swamps, marshes, and palmetto hammocks. They are also very common near agricultural fields and feedlots, suburbs, city parks, cemeteries, pine plantations, and hedgerows. Unbroken tracts of forest are the only places where you are unlikely to find Common Grackles.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S5B

Common Nighthawk *Chordeiles minor*

Common Nighthawks nest in both rural and urban habitats including coastal sand dunes and beaches, logged forest, recently burned forest, woodland clearings, prairies, plains, sagebrush, grasslands, open forests, and rock outcrops. They also nest on flat gravel rooftops, though less often as gravel roofs are being replaced by smooth, rubberized roofs that provide an unsuitable surface.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S4B

Franklin's gull *Leucophaeus pipixcan*

DISCLAIMER

The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

BIRDS

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. This species is only a spring and fall migrant throughout Texas. It does not breed in or near Texas. Winter records are unusual consisting of one or a few individuals at a given site (especially along the Gulf coastline). During migration, these gulls fly during daylight hours but often come down to wetlands, lake shore, or islands to roost for the night.

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G5 State Rank: S2N

Henslow's Sparrow *Centronyx henslowii*

Wintering individuals (not flocks) found in weedy fields or cut-over areas where lots of bunch grasses occur along with vines and brambles; a key component is bare ground for running/walking

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G4 State Rank: S2S3N,SXB

interior least tern *Sternula antillarum athalassos*

Sand beaches, flats, bays, inlets, lagoons, islands. Subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also know to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony

Federal Status: State Status: E SGCN: N
Endemic: N Global Rank: G4T3Q State Rank: S1B

Least Tern *Sternula antillarum*

Sand beaches, flats, bays, inlets, lagoons, islands, river sandbars and flat gravel rooftops in urban areas.

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G4 State Rank: S2B

Loggerhead Shrike *Lanius ludovicianus*

Loggerhead Shrikes inhabit open country with short vegetation and well-spaced shrubs or low trees, particularly those with spines or thorns. They frequent agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses, and cemeteries. Loggerhead Shrikes are often seen along mowed roadsides with access to fence lines and utility poles.

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G4 State Rank: S4B

Northern Bobwhite *Colinus virginianus*

Inhabits a wide variety of vegetation types, particularly early successional stages. Occurs in croplands, grasslands, pastures, fallow fields, grass-brush rangelands, open pinelands, open mixed pine-hardwood forests, and habitat mosaics (Brennan 1999).

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G4G5 State Rank: S4B

piping plover *Charadrius melodus*

DISCLAIMER
The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

BIRDS

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. Beaches, sandflats, and dunes along Gulf Coast beaches and adjacent offshore islands. Also spoil islands in the Intracoastal Waterway. Based on the November 30, 1992 Section 6 Job No. 9.1, Piping Plover and Snowy Plover Winter Habitat Status Survey, algal flats appear to be the highest quality habitat. Some of the most important aspects of algal flats are their relative inaccessibility and their continuous availability throughout all tidal conditions. Sand flats often appear to be preferred over algal flats when both are available, but large portions of sand flats along the Texas coast are available only during low-very low tides and are often completely unavailable during extreme high tides or strong north winds. Beaches appear to serve as a secondary habitat to the flats associated with the primary bays, lagoons, and inter-island passes. Beaches are rarely used on the southern Texas coast, where bayside habitat is always available, and are abandoned as bayside habitats become available on the central and northern coast. However, beaches are probably a vital habitat along the central and northern coast (i.e. north of Padre Island) during periods of extreme high tides that cover the flats. Optimal site characteristics appear to be large in area, sparsely vegetated, continuously available or in close proximity to secondary habitat, and with limited human disturbance.

Federal Status: T	State Status: T	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S2N

red-cockaded woodpecker *Dryobates borealis*

Cavity nests in older pine (60+ years); forages in younger pine (30+ years); prefers longleaf, shortleaf, and loblolly

Federal Status: E, PT	State Status: E	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S2

Sanderling *Calidris alba*

Nonbreeding: primarily sandy beaches, less frequently on mud flats and shores of lakes or rivers (AOU 1983) also on exposed reefs (Pratt et al. 1987). Sleeps/loafs on upper beach or on salt pond dike.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S5

Sprague's pipit *Anthus spragueii*

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. Habitat during migration and in winter consists of pastures and weedy fields (AOU 1983), including grasslands with dense herbaceous vegetation or grassy agricultural fields.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3G4	State Rank: S3N

swallow-tailed kite *Elanoides forficatus*

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. Lowland forested regions, especially swampy areas, ranging into open woodland; marshes, along rivers, lakes, and ponds; nests high in tall tree in clearing or on forest woodland edge, usually in pine, cypress, or various deciduous trees.

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S2B

white-faced ibis *Plegadis chihi*

DISCLAIMER
The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

BIRDS

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. Prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; currently confined to near-coastal rookeries in so-called hog-wallow prairies. Nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats.

Federal Status:	State Status: T	SGCN: N
Endemic: N	Global Rank: G5	State Rank: S4B

Willet *Tringa semipalmata*

Marshes, tidal mudflats, beaches, lake margins, mangroves, tidal channels, river mouths, coastal lagoons, sandy or rocky shores, and, less frequently, open grassland (AOU 1983, Stiles and Skutch 1989).

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S5B

Wilson's Warbler *Cardellina pusilla*

Wilson’s warblers key in on forests and scrubby areas along streams to fatten up during migration. During the nonbreeding season they use many types of habitats from lowland thickets near streams to high-elevation cloud forests in Mexico and Central America.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S4

wood stork *Mycteria americana*

The county distribution for this species includes geographic areas that the species may use during migration. Time of year should be factored into evaluations to determine potential presence of this species in a specific county. Prefers to nest in large tracts of baldcypress (Taxodium distichum) or red mangrove (Rhizophora mangle); forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960.

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: SHB,S3N

yellow-billed cuckoo *Coccyzus americanus*

In Texas, the populations of concern are found breeding in riparian areas in the Trans Pecos (know as part of the Western Distinct Population Segment). It is the Western DPS that is on the U.S. ESA threatened list and includes the Texas counties Brewster, Culberson, El Paso, Hudspeth, Jeff Davis, and Presidio. Riparian woodlands below 6,000' in elevation consisting of cottonwoods and willows are prime habitat. This species is a long-distant migrant that summers in Texas, but winters mainly in South America. Breeding birds of the Trans Pecos populations typically arrive on their breeding grounds possibly in late April but the peak arrival time is in May. Threats to preferred habitat include hydrologic changes that don't promote the regeneration of cottonwoods and willows, plus livestock browsing and trampling of sapling trees in sensitive riparian areas.

Federal Status: T	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S4S5B

DISCLAIMER

The information on this web application is provided “as is” without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

CRUSTACEANS

blackbelted crayfish *Procambarus nigrocinctus*

It occurs in moderately flowing small creeks. Found among rocks and accumulated debris.

Federal Status:	State Status:	SGCN: Y
Endemic: Y	Global Rank: G1G2	State Rank: S1

Neches crayfish *Procambarus nechesae*

Simple burrows in temporary or semi permanent pools in roadside ditches

Federal Status:	State Status:	SGCN: Y
Endemic: Y	Global Rank: G2	State Rank: S1S2

FISH

blackspot shiner *Notropis atrocaudalis*

Occurs from the lower Brazos River to the Sabine River drainage; Red River drainage. Small to moderate size tributary streams in runs and pools over all types of substrates.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S3

paddlefish *Polyodon spathula*

Species occurred in every major river drainage from the Trinity Basin eastward, but its numbers and range had been substantially reduced by the 1950's; recently reintroduced into Big Cypress drainage upstream of Caddo Lake. Prefers large, free-flowing rivers but will frequent impoundments with access to spawning sites.

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S3

river darter *Percina shumardi*

In Texas limited to eastern streams including Red River southward to the Neches River, and a disjunct population in the Guadalupe and San Antonio river systems east of the Balcones Escarpment. Confined to large rivers and lower parts of major tributaries; usually found in deep chutes and riffles where current is swift and bottom composed of coarse gravel or rock.

Federal Status:	State Status:	SGCN: Y
Endemic:	Global Rank: G5	State Rank: S4

Sabine shiner *Notropis sabinae*

Inhabits small streams and large rivers of eastern Texas from San Jacinto drainage northward along the Gulf Coast to the Sabine River Basin; Habitat generalist with affinities for shallow, moving water and rarely found in pools and backwater areas;
closely restricted to substrate of fine, silt free sand in small creeks and rivers having slight to moderate current.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S3

DISCLAIMER

The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

FISH

spotted sucker *Minytrema melanops*

Found primarily in east Texas streams from the Red to the Brazos river basins. An isolated, disjunct population occurs in the Llano River near Junction downstream to about Mason; this may be an introduced population. Typically in clear creeks with firm substrates.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S3

western creek chubsucker *Erimyzon claviformis*

Eastern Texas streams from the Red River to the San Jacinto drainage. Habitat includes silt-, sand-, and gravel-bottomed pools of clear headwaters, creeks, and small rivers; often near vegetation; occasionally in lakes. Spawning occurs in river mouths or pools, riffles, lake outlets, or upstream creeks. Prefers headwaters, but seldom occurs in springs.

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S2S3

INSECTS

American bumblebee *Bombus pensylvanicus*

Habitat description is not available at this time.

Federal Status:	State Status:	SGCN: Y
Endemic:	Global Rank: G3G4	State Rank: SNR

migratory monarch butterfly *Danaus plexippus plexippus*

Habitat description is not available at this time.

Federal Status: C	State Status:	SGCN: Y
Endemic:	Global Rank: G4T3	State Rank: SNR

Texas emerald dragonfly *Somatochlora margarita*

East Texas pineywoods; springfed creeks and bogs; small sandy forested streams with moderate current

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G2G3	State Rank: S2

MAMMALS

eastern spotted skunk *Spilogale putorius*

Generalist; open fields prairies, croplands, fence rows, farmyards, forest edges & woodlands. Prefer wooded, brushy areas & tallgrass prairies. S.p. ssp. interrupta found in wooded areas and tallgrass prairies, preferring rocky canyons and outcrops when such sites are available.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S1S3

DISCLAIMER

The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

MAMMALS

hoary bat *Lasiurus cinereus*

Hoary bats are highly migratory, high-flying bats that have been noted throughout the state. Females are known to migrate to Mexico in the winter, males tend to remain further north and may stay in Texas year-round. Commonly associated with forests (foliage roosting species) but are found in unforested parts of the state and lowland deserts. Tend to be captured over water and large, open flyways.

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G3G4 State Rank: S3

mountain lion *Puma concolor*

Generalist; found in a wide range of habitats statewide. Found most frequently in rugged mountains & riparian zones.

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G5 State Rank: S2S3

plains spotted skunk *Spilogale interrupta*

Generalist; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G3 State Rank: S1S3

Rafinesque's big-eared bat *Corynorhinus rafinesquii*

Historically, lowland pine and hardwood forests with large hollow trees. roosts in cavity trees of bottomland hardwoods, concrete culverts, and abandoned man-made structures

Federal Status: State Status: T SGCN: Y
Endemic: N Global Rank: G3G4 State Rank: S2

Seminole bat *Lasiurus seminolus*

Pine-oak and long-leaf pine in east Texas. Habitats include pine, mixed pine-hardwood, and hardwood forests of uplands and bottomlands, particularly pine-dominated forests, including mature pine and pine-hardwood corridors in managed pine forest landscapes (Menzel et al. 1998, 1999, 2000; Carter et al. 2004; Marks and Marks 2006; Perry and Thill 2007; Perry et al. 2007; Hein et al. 2008; Ammerman et al. 2012).

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G5 State Rank: S3

southeastern myotis bat *Myotis austroriparius*

Caves are rare in Texas portion of range; buildings, hollow trees are probably important. Historically, lowland pine and hardwood forests with large hollow trees; associated with ecological communities near water. Roosts in cavity trees of bottomland hardwoods, concrete culverts, and abandoned man-made structures.

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G4 State Rank: S3?

tricolored bat *Perimyotis subflavus*

Forest, woodland and riparian areas are important. Caves are very important to this species.

Federal Status: PE State Status: SGCN: Y

DISCLAIMER
The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

MAMMALS

Endemic: N | Global Rank: G3G4 | State Rank: S2

MOLLUSKS

Creeper *Strophitus undulatus*

Reported from headwater streams to large rivers, though may be rare in these systems, occasionally in lakes and canals. In riverine habitats can be found in riffles or areas with less current such as banks, backwaters or pools. Can occur in a variety of substrates including mud, sand, gravel, and may also be found wedged in cracks in bedrock slabs or among macrophyte beds (Parmalee and Bogan 1998; Williams et al. 2008; Watters et al. 2009; Haag and Cicerello 2016).

Federal Status: | State Status: | SGCN: Y

Endemic: N | Global Rank: G5 | State Rank: S1

Deertoe *Truncilla truncata*

Reported from streams, rivers, lakes, and reservoirs. In riverine habitats primarily occurs in mainchannel habitats such as riffles or runs with moderate to swift current but may occasionally occur in areas with no current. Typically found in sand, gravel, cobble substrates, but sometimes may occur in firm mud or in crevices among large rocks and boulders (Parmalee and Bogan 1998; Williams et al. 2008).

Federal Status: | State Status: | SGCN: Y

Endemic: N | Global Rank: G5 | State Rank: S3

Fawnsfoot *Truncilla donaciformis*

Reported from streams, rivers, lakes, and reservoirs. In riverine habitats occurs in mainchannel habitats such as riffles or runs with moderate to swift current and in areas with no current such as banks and backwaters. Found in firm mud, sand, gravel, and cobble substrates. Juveniles are often found attached to rocks and other hard surfaces by byssal threads, which are retained into adulthood (Haag 2012). May spend much of their lives well-buried in substrate (Parmalee and Bogan 1998; Williams et al. 2008).

Federal Status: | State Status: | SGCN: Y

Endemic: N | Global Rank: G5 | State Rank: S2

Gulf Mapleleaf *Tritogonia nobilis*

Reported from streams to rivers, lakes, and reservoirs. In riverine habitats it is often found in nearshore, backwaters, or riffles in still to moderate currents in mud, sand, gravel, or cobble substrates (Howells et al. 1996; Williams et al. 2008).

Federal Status: | State Status: | SGCN: Y

Endemic: N | Global Rank: G4 | State Rank: SU

Little Spectaclecase *Leaunio lienosus*

Reported from streams to rivers in still to moderate currents in mud, sand, or gravel substrates. Usually found in nearshore habitats such as bank and backwater habitats or depositional areas but may occur in mainchannel habitats such as riffles.

Federal Status: | State Status: | SGCN: Y

Endemic: N | Global Rank: G5 | State Rank: S1S2

DISCLAIMER

The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

MOLLUSKS

Louisiana Fatmucket *Lampsilis hydiana*

Reported from streams to rivers, may penetrate into headwaters, oxbows, lakes, canals, and reservoirs. Reported to occur in still to moderate currents in sand, mud, and gravel substrates. In riverine systems it is found primarily in nearshore habitats such as banks, backwaters and oxbows (Howells et al. 1996; Randklev et al. 2013a; Randklev et al. 2014a; Tsakiris and Randklev 2016). It adapts readily to reservoirs and can cope with flow modification stemming from river impoundment (Randklev et al. 2016).

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S4

Louisiana pigtoe *Pleurobema riddellii*

Occurs in small streams to large rivers in slow to moderate currents in substrates of clay, mud, sand, and gravel. Not known from impoundments (Howells 2010f; Randklev et al. 2013b; Troia et al. 2015). [Mussels of Texas 2019]

Federal Status: PT	State Status: T	SGCN: Y
Endemic: N	Global Rank: G1G2	State Rank: S1

Mapleleaf *Quadrula quadrula*

Reported from streams to rivers, lakes, and reservoirs. In riverine habitats, it may be found in main-channel habitats such as riffles or runs in sand, gravel, and cobble substrates with moderate to swift currents. May also be found in nearshore habitats such as banks and backwaters to include pools in sand or mud substrates with little to no flow. (Williams et al. 2008; Howells 2016; Haag and Cicerello 2016).

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S3

Pimpleback *Cyclonaias pustulosa*

Occurs in small streams to large rivers in habitats including riffles and runs with flowing water, also found in nearshore habitats such as banks and backwaters or pools. Can occur in reservoirs but varies based by population. Is often found in substrates comprising of sand, gravel, and cobble but also mud and silt (Howells et al. 1996; Williams et al. 2008; Watters et al. 2009).

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: SNR

Pistolgrip *Tritogonia verrucosa*

Reported from streams to rivers, lakes, and reservoirs, but considered less tolerant of impoundment (Haag and Cicerello 2016). Can occur in a variety of habitat types but most often found in main channel habitats such as riffles and runs with moderate current and sand, gravel, or cobble substrates (Howells et al. 1996; Williams et al. 2008).

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4G5	State Rank: S3S4

Pondmussel *Sagittunio subrostratus*

Reported from streams to rivers, where it can invade headwater systems but is rarely in large river systems. Can also inhabit natural and artificial ponds, lakes, reservoirs, and canals. In riverine habitat typically occurs in backwaters, pools, sloughs, and oxbows in little to no current in substrates of mud or sand (Parmalee and Bogan 1998; Williams et al. 2008; Watters et al. 2009; Haag and Cicerello 2016; Watters 2018).

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: S4

DISCLAIMER
The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

MOLLUSKS

sandbank pocketbook *Lampsilis satura*

Occurs in small streams to large rivers in slow to moderate current in sandy mud to sand and gravel substrate. Can occur in a variety of habitats but most common in littoral habitats such as banks or backwaters or in protected areas along point bars (Randklev et al. 2013b; Randklev et al. 2014a; Troia et al. 2015). [Mussels of Texas 2019]

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G2?	State Rank: S1

southern hickorynut *Obovaria arkansasensis*

Clay, sand, and medium sized gravel substrates with low to moderate current; Neches, Sabine, and Cypress river basins

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G3G4	State Rank: S1

Tapered Pondhorn *Uniomerus declivis*

It likely occurs in streams, rivers, oxbows, marshes, swamps, lakes, canals, ponds, and reservoirs in still to moderate currents in mud, sand, or gravel substrates. Also probably occurs in woody debris such as logjams and exposed roots of riparian trees (Williams et al. 2008).

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G5	State Rank: SNR

Texas heelsplitter *Potamilus amphichaenus*

Occurs in small streams to large rivers in standing to slow-flowing water; most common in banks, backwaters and quiet pools; adapts to some reservoirs. Often found in soft substrates such as mud, silt or sand (Howells et al. 1996; Randklev et al. 2017a). [Mussels of Texas 2019]

Federal Status: PE	State Status: T	SGCN: Y
Endemic: N	Global Rank: G1G3	State Rank: S1

Texas pigtoe *Fusconaia askewi*

Occurs in small streams to large rivers, usually in water with at least some current; not known from reservoirs. Found in a variety of habitats but most common in riffles. Inhabits various substrates though most often sand, gravel, and cobble (Howells 2010a; Randklev et al. 2013b; Randklev et al. 2014a; Troia et al 2015).[Mussel of Texas 2019]

Federal Status:	State Status: T	SGCN: Y
Endemic: N	Global Rank: G2?	State Rank: S2S3

Wartyback *Cyclonaias nodulata*

Reported from small to medium-sized rivers, often in the lower reaches of these systems, and occasionally in lakes and reservoirs. Often found in habitats with substrates composed of sand and gravel in moving water (Parmalee and Bogan 1998). Occurs in main-channel habitats such as riffles and runs and in nearshore habitats including banks and backwaters (Haag and Cicerello 2016).

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G4	State Rank: S2

REPTILES

alligator snapping turtle *Macrochelys temminckii*

DISCLAIMER
The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

REPTILES

Aquatic: Perennial water bodies; rivers, canals, lakes, and oxbows; also swamps, bayous, and ponds near running water; sometimes enters brackish coastal waters. Females emerge to lay eggs close to the waters edge.

Federal Status: PT | State Status: T | SGCN: Y
Endemic: N | Global Rank: G3 | State Rank: S2

American alligator *Alligator mississippiensis*

Aquatic: Coastal marshes; inland natural rivers, swamps and marshes; manmade impoundments.

Federal Status: SAT | State Status: | SGCN: N
Endemic: N | Global Rank: G5 | State Rank: S4

common garter snake *Thamnophis sirtalis*

Terrestrial and aquatic: Habitats used include the grasslands and modified open areas in the vicinity of aquatic features, such as ponds, streams or marshes. Damp soils and debris for cover are thought to be critical.

Federal Status: | State Status: | SGCN: Y
Endemic: N | Global Rank: G5 | State Rank: S2

eastern box turtle *Terrapene carolina*

Terrestrial: Eastern box turtles inhabit forests, fields, forest-brush, and forest-field ecotones. In some areas they move seasonally from fields in spring to forest in summer. They commonly enters pools of shallow water in summer. For shelter, they burrow into loose soil, debris, mud, old stump holes, or under leaf litter. They can successfully hibernate in sites that may experience subfreezing temperatures.

Federal Status: | State Status: | SGCN: Y
Endemic: N | Global Rank: G5 | State Rank: S3

Louisiana pine snake *Pituophis ruthveni*

Terrestrial: Deep sandy soils with large stands of well-managed long leaf pine woodlands.

Federal Status: T | State Status: T | SGCN: Y
Endemic: N | Global Rank: G1G2 | State Rank: S1

northern scarlet snake *Cemophora coccinea*

Terrestrial: Prefers well drained soils with pine, hardwood, or mixed hardwood scrub in addition to open grassland habitats with appropriate soils.

Federal Status: | State Status: T | SGCN: N
Endemic: N | Global Rank: G5 | State Rank: S4

prairie skink *Plestiodon septentrionalis*

The prairie skink can occur in any native grassland habitat across the Rolling Plains, Blackland Prairie, Post Oak Savanna and Pineywoods ecoregions.

Federal Status: | State Status: | SGCN: Y
Endemic: N | Global Rank: G5 | State Rank: S2

pygmy rattlesnake *Sistrurus miliarius*

DISCLAIMER
The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

REPTILES

The pygmy rattlesnake occurs in a variety of wooded habitats from bottomland coastal hardwood forests to upland savannas. The species is frequently found in association with standing water.

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G5 State Rank: S2S3

slender glass lizard *Ophisaurus attenuatus*

Terrestrial: Habitats include open grassland, prairie, woodland edge, open woodland, oak savannas, longleaf pine flatwoods, scrubby areas, fallow fields, and areas near streams and ponds, often in habitats with sandy soil.

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G5 State Rank: S3

smooth softshell *Apalone mutica*

Aquatic: Large rivers and streams; in some areas also found in lakes and impoundments (Ernst and Barbour 1972). Usually in water with sandy or mud bottom and few aquatic plants. Often basks on sand bars and mudflats at edge of water. Eggs are laid in nests dug in high open sandbars and banks close to water, usually within 90 m of water (Fitch and Plummer 1975).

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G5 State Rank: S3

Texas horned lizard *Phrynosoma cornutum*

Terrestrial: Open habitats with sparse vegetation, including grass, prairie, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive. Occurs to 6000 feet, but largely limited below the pinyon-juniper zone on mountains in the Big Bend area.

Federal Status: State Status: T SGCN: Y
Endemic: N Global Rank: G4G5 State Rank: S3

western box turtle *Terrapene ornata*

Terrestrial: Ornate or western box trutles inhabit prairie grassland, pasture, fields, sandhills, and open woodland. They are essentially terrestrial but sometimes enter slow, shallow streams and creek pools. For shelter, they burrow into soil (e.g., under plants such as yucca) (Converse et al. 2002) or enter burrows made by other species.

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G4G5 State Rank: S3

western chicken turtle *Deirochelys reticularia miaria*

Aquatic and terrestrial: This species uses aquatic habitats in the late winter, spring and early summer and then terrestrial habitats the remainder of the year. Preferred aquatic habitats seem to be highly vegetated shallow wetlands with gentle slopes. Specific terrestrial habitats are not well known.

Federal Status: State Status: SGCN: Y
Endemic: N Global Rank: G5T5 State Rank: S2S3

PLANTS

barbed rattlesnake-root *Prenanthes barbata*

DISCLAIMER
The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

PLANTS

In east Texas occurs on calciphilc hardwood terraces above floodplains, and seepage slopes, often in the company of a comparatively rich herbaceous flora; elsewhere found on prairies, barrens, and open woodlands; in calcareous substrates and in sand over clay on the Weches, Fleming, and Lissie formations; flowering August-November

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S3

bog coneflower *Rudbeckia scabrifolia*

Restricted to partial shade at the lower edges of hillside seepage bogs and associated broadleaf semi-evergreen acid seep forests; typically at the head of a spring or seep, and usually on sites underlain by the Catahoula Formation or near the Catahoula-Fleming contact; flowering June-September

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3G4	State Rank: S2

Boynton's oak *Quercus boyntonii*

Loblolly pine-oak forests on deep, sandy soils in creek bottoms; possibly also in shallower soils of upland prairies; flowering in the spring

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G1	State Rank: SH

Drummond's yellow-eyed grass *Xyris drummondii*

Wet sand or peaty sand in hillside seepage bogs; in Texas, exclusively over the Catahoula formation, elsewhere also found along contact betweer Willis and Bentley formations; flowering mid June-mid August, seeds developing mid-late summer and early fall

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3G4	State Rank: S2

incised groovebur *Agrimonia incisa*

Sandy soils in dry to mesic pine or mixed pine-oak forests and forest borders; usually in fire-maintained longleaf pine savannas but also in more mesic habitats; Perennial; Flowering July-September

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S3

large beakrush *Rhynchospora macra*

Found in ombotropic quaking peat bogs; Perennial; Flowering/Fruiting Aug-Oct

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3G4	State Rank: S2

DISCLAIMER
The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

PLANTS

Mohlenbrock's sedge *Cyperus grayoides*

Deep sand and sandy loam in dry, almost barren openings in upland longleaf pine savannas, mixed pine-oak forests, and post oak woodlands; Occurs primarily in deep, periodically disturbed sandy soils in open areas maintained by factors such as wind, erosion, or fire. This species does not occur in shaded areas or in areas of high competition with other herbaceous species. Habitats include remnant sand prairies, sandy fields, sand blow outs, sandhill woodlands, pine barrens, and open barrens in which the slope is sufficient to produce sand erosion. May also occur in areas where the soils have been disturbed by logging or road construction; Perennial

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3G4	State Rank: S3S4

panicled indigobush *Amorpha paniculata*

A stout shrub, 3 m (9 ft) tall that grows in acid seep forests, peat bogs, wet floodplain forests, and seasonal wetlands on the edge of Saline Prairies in East Texas. It is distinguished from other Amorpha species by its fuzzy leaflets with prominent raised veins underneath, and the flower panicles, which are 8 to 16 inches long and slender, held above the foliage. Perennial; Flowering May-August.

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S3

roughleaf yellow-eyed grass *Xyris scabrifolia*

Wet sand and/or peat in acid seepage areas or hillside seepage bogs on the Catahoula formation or near the contact of the Catahoula and the Willis formations, in open areas and in partial shade of evergreen shrub thickets, often on Sphagnum hummocks; flowering late July-early September

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S2

slender gay-feather *Liatris tenuis*

Sandy soils of fire-maintained upland longleaf pine savannas, mostly over the Catahoula Formation; flowering June-September

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S3

smooth indigobush *Amorpha laevigata*

Prairies, open woods and creek banks; Perennial; Flowering May-July

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3?	State Rank: S1

Soxman's milkvetch *Astragalus soxmaniorum*

Primarily in deep sandy soils of sandhills, fallow fields, and open scrub oak-pine woodlands; Perennial; Flowering March-June; Fruiting April-June

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S3

DISCLAIMER

The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

ANGELINA COUNTY

PLANTS

Texas screwstem *Bartonia paniculata ssp. texana*

In and around acid seeps in Pine-Oak forests on gentle slopes and baygall shrub thickets at spring heads; often on clumps of bryophytes at tree bases, on roots, and on logs; flowering September-November, can be identified in mid to late October when its in fruit

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G2G3	State Rank: S2S3

Texas trillium *Trillium texanum*

In or along the margins of hardwood forests on wet acid soils of bottoms and lower slopes, strongly associated with forested seeps and baygalls; flowering March-May

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3	State Rank: S3

yellow fringeless orchid *Platanthera integra*

Currently known only from a few bog sites in Angelina, Jasper and Newton counties; Perennial; Flowering/Fruiting Aug

Federal Status:	State Status:	SGCN: Y
Endemic: N	Global Rank: G3G4	State Rank: S1

DISCLAIMER

The information on this web application is provided "as is" without warranty as to the currentness, completeness, or accuracy of any specific data. The data provided are for planning, assessment, and informational purposes. Refer to the Frequently Asked Questions (FAQs) on the application website for further information.

APPENDIX C

Photographic Log

Wetland Habitats Observed within the Project Area



Figure 1. Emergent wetland.



Figure 2. Emergent wetland.



Figure 3. Emergent wetland.



Figure 4. Emergent wetland.



Figure 5. Shrub/scrub wetland.



Figure 6.Shrub/scrub wetland.

Upland Habitats Observed within the Project Area



Figure 7. Herbaceous upland.



Figure 8. *Asclepias asperula* in an herbaceous upland.



Figure 9. Upland hardwood forest.



Figure 10. Upland hardwood forest.



Figure 11. Upland hardwood forest.



Figure 12. Upland hardwood forest.

Aquatic Habitats Observed within the Project Area

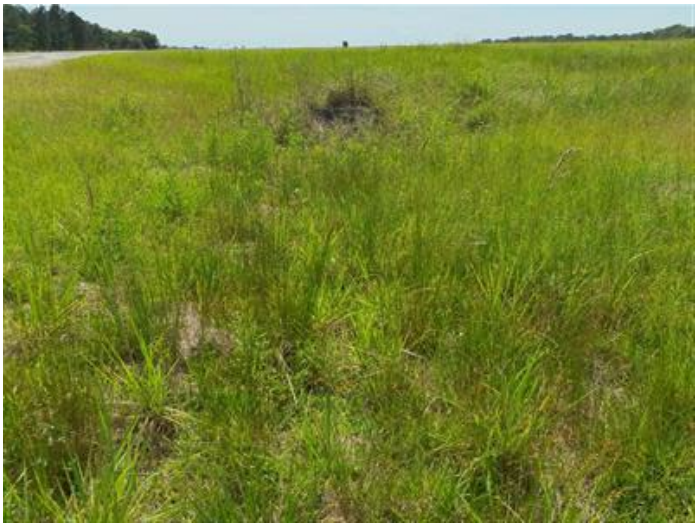


Figure 13. Ephemeral stream running parallel with a paved runway.



Figure 14. Ephemeral stream running parallel with a paved runway.



Figure 15. Man-made intermittent drainage stream.



Figure 16. Man-made intermittent drainage stream.