| SPECIES ANALYSIS SPREADSHEET: Project Information Sheet | |
|---|---|
| **Project Name:** | FM 741 Road Widening |
| **CSJ(s):** | 1092-01-021 |
| **TxDOT District:**<br>(Click dropdown arrow to select a District from List) | Dallas |
| **County(ies):**<br>(Click dropdown arrow to select each county) | Kaufman |
| **Prepared by:**<br>(Full Name) | Marissa Buschow / Clint Wardlow, Cox\|McLain Environmental Consulting, now Stantec |
| **Date Completed:**<br>(m/d/yyyy) | 8/22/2022 |
| *TxDOT ENV Spreadsheet Template date: April 7, 2022.* | |

**SPECIES ANALYSIS SUMMARY**
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**CSJ(s): 1092-01-021**

| County | Taxon | Common Name | Scientific Name | Habitat | Suitable Habitat Present? | Explanation for determination regarding suitable habitat | Federal Status | Effect/Take Determination for Federally Listed Species | State Status | Impact Determination for State-Listed Species | Explanation for Effect/Take and/or Impact Determination | Presence/ Absence survey conducted? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kaufman | Birds | Black Rail | *Laterallus jamaicensis* | Black rails are year-round residents of the central and upper coast and migrants in the eastern part of the state. The species nests in salt, brackish, and freshwater marshes, pond borders, wet meadows, and wetlands with hydrophytic grass species. Water depth is an important and key habitat component, as the species typically is found where water is less than two to four centimeters deep. Other significant habitat factors may include vegetation density, distance to open water, and water regime stability. Nesting typically occurs in the highest sections of the marsh, which have mesic to hydric soils and are flooded by only the highest tides. Nests are built in areas with saturated or shallowly flooded soils and dense vegetation on damp ground, on mat of previous year's dead grasses, or over shallow water. In salt or brackish marshes, typical habitat includes dense stands of cordgrasses (*Spartina* sp.), spikegrasses (*Distichlis* sp.), and needlerush (*Juncus* sp.), or, in more upland saltbush communities along marsh edges. Typical freshwater habitat includes species such as cattail (*Typha* ) and bulrush (*Scirpus* sp.). Non-breeding habitat is thought to be similar to breeding habitat. | N/A | In Texas, the Black Rail breeds and winters in high quality coastal marsh and prairie. The project area is outside the breeding and wintering ranges of this species. Suitable habitat for migratory Black Rails may be present; however, any use of that habitat would be incidental and ephemeral. | T | No effect or take | T | No impact | The project area does not contain suitable breeding or wintering habitat for the Black Rail. Any use of potential migratory stopover habitat within the project area would be incidental and ephemeral. | N |
| Kaufman | Birds | Least Tern - Migratory | *Sternula (=Sterna) antillarum* | The interior population (subspecies *athalassos* ) of the Least Tern nests on bare or sparsely vegetated sand, shell, and gravel beaches, sandbars, islands, and salt flats associated with inland rivers and reservoirs. It occasionally nests on man-made structures such as sand and gravel pits or gravel rooftops. Preferred habitat includes sand and gravel bars within a wide unobstructed river channel, or open flats along shorelines of lakes and reservoirs. Colony sites can move annually, depending on landscape disturbance and vegetation growth at established colonies. It is known to nest at three reservoirs along the Rio Grande River, on the Canadian River in the northern Panhandle, and along the Red River. | N/A | The project area is outside the breeding and wintering range of this species. Although suitable stopover habitat may be present, Least Tern is not expected to regularly occur and any use of this habitat would be incidental. | — | N/A | E | No impact | The project area does not contain suitable breeding or wintering habitat for the Least Tern. | N |

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| Kaufman | Birds | Piping Plover - Migratory | *Charadrius melodus* | This migratory species overwinters in Texas, where it occurs on beaches, ephemeral sand flats, barrier islands, sand, mud, algal flats, washover passes, salt marshes, lagoons, and dunes along the Gulf Coast and adjacent offshore islands, including spoil islands in the Intracoastal Waterway. Algal flats appear to be the highest quality habitat because of 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 or 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. | N/A | The list of federally threatened and endangered species indicates that based on the project location within the migratory route, effects to Piping Plover only need be considered for wind energy projects. The project area is outside the breeding and wintering range of this species. Although suitable stopover habitat may be present, Piping Plover is not expected to regularly occur and any use of this habitat would be incidental. | T | No effect or Take | T | No impact | The project is not a wind energy project within the migratory route and does not contain suitable breeding and wintering habitat for the Piping Plover. | N |
| Kaufman | Birds | Red Knot - Migratory | *Calidris canutus rufa* | The species is a winter resident and migrant in Texas. It is primarily found in marine habitats such as sandy beaches, salt marshes, lagoons, mudflats of estuaries and bays, and mangrove swamps during winter months. It primarily occurs along the Gulf coast on tidal flats and beaches and less frequently in marshes and flooded fields. It has occasionally been observed along shorelines of large lakes and freshwater marshes. | N/A | The list of federally threatened and endangered species indicates that based on the project location within the migratory route, effects to Red Knot only need be considered for wind energy projects. The project area is outside the breeding and wintering range of this species. Although suitable stopover habitat may be present, Red Knot is not expected to regularly occur and any use of this habitat would be incidental. | T | No effect or Take | T | No impact | The project is not a wind energy project within the migratory route and does not contain suitable breeding and wintering habitat for the Red Knot. | N |

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| Kaufman | Birds | White-faced Ibis | *Plegadis chihi* | The species is found in the Western Gulf Coastal Plains ecoregion of Texas. Preferred habitat includes freshwater wetlands, marshes, ponds, rivers, irrigated land, and sloughs, but it occasionally forages in brackish or saltwater marshes. It nests in marshes in low trees, on the ground in bulrushes (Scirpus sp.) or reeds, or on floating mats. | Y | Freshwater wetlands and streams were observed in the project area in April 2022. | — | N/A | T | May impact | Suitable habitat is present in the project area. The following BMPs would be implemented: Bird BMPs. | N |
| Kaufman | Birds | Whooping Crane | *Grus americana* | The species breeds in Canada and winters on the Texas coast at Aransas National Wildlife Refuge. During migration it typically stops to rest and feed in open bottomlands of large rivers and marshes but, like other waterbirds, it may also utilize flooded croplands, playas, large wetlands associated with lakes, small ponds, and various other aquatic features. Typical migration habitat includes sites with good horizontal visibility, water depth of 30 centimeters or less, and minimum wetland size of 0.04 hectare for roosting. | N | No open bottomlands or flooded croplands with good horizontal visibility are present in the project area. | E | No effect or take | E | No impact | No suitable habitat is present in the project area. | N |
| Kaufman | Birds | Wood Stork | *Mycteria americana* | The species breeds in Mexico, and nesting sites have not been recorded in Texas since 1960. However, post-breeding migrants disperse into Texas in the summer. Foraging habitat includes freshwater prairie ponds, flooded pastures or fields, ditches, and other shallow standing water with an open canopy, occasionally including brackish wetlands. The species typically roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries). | Y | Though freshwater wetlands and intermittent streams were observed in the project area in April 2022, no rookeries were observed and no recent nesting has been recorded in Texas. The species could utilize wetlands, roadside ditches, and other shallow standing water for foraging. | — | N/A | T | No impact | Although suitable habitat is present, species presence would be incidental. | N |

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| Kaufman | Insects | Monarch Butterfly | *Danaus plexippus* | Found statewide. Adults are found in a variety of habitats including native prairies, pastures, open woodlands and savannas, desert scrub, roadsides, and other habitats with abundant nectar plants, including urbanized areas. Although adults may be present year round, they are primarily encountered between March and November, and are most commonly observed in the summer and fall during breeding and migration. Caterpillars are found on various species of the family Asclepiadaceae (occasionally treated as a subfamily of Apocynaceae). Common host plants in Texas include milkweeds (Asclepias spp.) milkweed vines (Matelea spp.), climbing milkweed (Funastrum spp.), swallowworts (Cynanchum spp.) and Anglepod (Gonolobus suberosus). Caterpillars are most frequently observed between April and September." | Y | Nectar-producing vegetation was observed throughout the project area in April 2022. | C | May affect | — | N/A | Suitable habitat is present. This project may affect the monarch butterfly. This project is not anticipated to be completed prior to the species being listed; however, consultation is not required for candidate species. The USFWS intends to propose listing the monarch in Fiscal Year 2024. If the monarch butterfly is proposed for listing during the life of this project, the impacts to monarch butterflies will be reevaluated to determine the appropriate course of action, which may include conference or consultation with USFWS. | N |
| Kaufman | Mammals | Black Bear | *Ursus americanus* | Once widespread throughout the state, both subspecies of American black bear (*Ursus americanus eremicus* and *U. a. amblyceps* ) have been restricted to west Texas, primarily in or near the larger mountain ranges such as the Chisos and Guadalupe Mountains, but occasionally in the Edwards Plateau region. Preferred habitat consists of desert scrub, chaparral, and juniper-oak or pinyon-oak woodlands. Optimal brushy and forest habitats consist of moderate to high density and canopy cover, high species diversity, rugged topography, and low human population. | N | Habitat in and near the project area is fragmented by development, agriculture, and roadways. | — | N/A | T | No impact | No suitable habitat is present in the project area. | N |

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| Kaufman | Mollusks | Louisiana Pigtoe | *Pleurobema riddellii* | Freshwater mussel currently found in the Sabine, Neches, and Trinity River basins in Texas. The species occurs in streams to medium-sized rivers with moderate flow. In Texas, the species has only been documented occurring in relatively shallow lotic waters with preferable substrate being sand and sand with gravel and silt. It is not generally known to tolerate impoundments. | Y | Buffalo Creek, a stream in the Trinity River basin, transects the project area. Though NHD maps the stream as intermittent, it displays perennial characteristics within the project area, as confirmed during 2022 field visits. The stream has not been assigned a stream grouping number and no mussel observations have been mapped in Buffalo Creek (Mussels of Texas 2020). | — | N/A | T | May impact | Suitable habitat is present in the project area. Presence/absence surveys are recommended. The following BMPs would be implemented: Freshwater Mussel BMP, Water Quality BMP, and Stream Crossings BMP. | N |
| Kaufman | Mollusks | Sandbank Pocketbook | *Lampsilis satura* | A freshwater mussel that is currently limited to the Upper Trinity, Neches, Sabine, and San Jacinto River basins in Texas. The species occurs in flowing small to large rivers with gravel, gravel-sand, and sand substrates. It has been observed in littoral areas with snags, gravel, or sand substrate with slow to moderate currents, as well as lotic waters in substrates of sand, silty sand, and sand and clay mixture. | Y | Buffalo Creek, a stream in the Trinity River basin, transects the project area. Though NHD maps the stream as intermittent, it displays perennial characteristics within the project area, as confirmed during 2022 field visits. The stream has not been assigned a stream grouping number and no mussel observations have been mapped in Buffalo Creek (Mussels of Texas 2020). | — | N/A | T | May impact | Suitable habitat is present in the project area. Presence/absence surveys are recommended. The following BMPs would be implemented: Freshwater Mussel BMP, Water Quality BMP, and Stream Crossings BMP. | N |

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| Kaufman | Mollusks | Texas Fawnsfoot | *Truncilla macrodon* | A freshwater mussel that is currently limited to the Brazos, Colorado, and Trinity River basins in Texas. The species occupies large streams to medium rivers and is intolerant of impoundment. Little is known about the species due to lack of representative specimens, however it is thought that the species prefers protected areas near shore in water with a moderate current over mud, sandy mud, and gravel substrates. It is also found in perennial irrigation canals for rice. | Y | County occurrences have been recorded in the East Fork Trinity River approximately 4 miles west of the project area (Mussels of Texas 2020). Though NHD maps Buffalo Creek as intermittent, it displays perennial characteristics within the project area, as confirmed during 2022 field visits. The stream has not been assigned a stream grouping number and no mussel observations have been mapped in Buffalo Creek (Mussels of Texas 2020). | PT | May affect | T | May impact | Suitable habitat is present in the project area. Presence/absence surveys are recommended. If the proposed species becomes listed, then a re-evaluation would be required at that time to assess the need for a consultation. The following BMPs would be implemented: Freshwater Mussel BMP, Water Quality BMP, and Stream Crossings BMP. | N |
| Kaufman | Mollusks | Texas Heelsplitter | *Potamilus amphichaenus* | A freshwater mussel currently known from the Trinity, Neches, and Sabine River basins. The species occurs in small streams to medium rivers with sand or mud substrate. It is found in flowing water but not in riffles or shoals. It prefers quiet waters and can be found in reservoirs. | Y | Buffalo Creek, a stream in the Trinity River basin, transects the project area. Though NHD maps the stream as intermittent, it displays perennial characteristics within the project area, as confirmed during 2022 field visits. The stream has not been assigned a stream grouping number and no mussel observations have been mapped in Buffalo Creek (Mussels of Texas 2020). | — | N/A | T | May impact | Suitable habitat is present in the project area. Presence/absence surveys are recommended. The following BMPs would be implemented: Freshwater Mussel BMP, Water Quality BMP, and Stream Crossings BMP. | N |

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| Kaufman | Mollusks | Trinity Pigtoe | *Fusconaia chunii* | This species of mussel was recently split from Texas Pigtoe and occurs in similar habitats. It is found in a variety of habitats but most common in riffles. It inhabits various substrates though most often sand, gravel, and cobble. | Y | Buffalo Creek, a stream in the Trinity River basin, transects the project area. Though NHD maps the stream as intermittent, it displays perennial characteristics within the project area, as confirmed during 2022 field visits. The stream has not been assigned a stream grouping number and no mussel observations have been mapped in Buffalo Creek (Mussels of Texas 2020). | — | N/A | T | May impact | Suitable habitat is present in the project area. Presence/absence surveys are recommended. The following BMPs would be implemented: Freshwater Mussel BMP, Water Quality BMP, and Stream Crossings BMP. | N |
| Kaufman | Reptiles | Alligator Snapping Turtle | *Macrochelys temminckii* | Occurs in East Texas where it inhabits perennial water bodies such as the deep water of rivers, canals, lakes, and oxbows, along with swamps, bayous, and ponds near deep running water. Preferred habitat is usually in water with a mud bottom and abundant aquatic vegetation, but the species may use sand-bottomed creeks. | Y | Buffalo Creek, a stream in the Trinity River basin, transects the project area. Though NHD maps the stream as intermittent, it displays perennial characteristics within the project area. | PT | May affect | T | May impact | Suitable habitat is present in the project area. Presence/absence surveys are recommended. If the proposed species becomes listed, then a re-evaluation would be required at that time to assess the need for a consultation. The following BMPs would be implemented: Terrestrial Amphibian and Reptile BMP and Vegetation BMP. | N |
| Kaufman | Reptiles | Texas Horned Lizard | *Phrynosoma cornutum* | The species is found in semi-arid open areas with scattered vegetation comprised of bunchgrass, cacti, yucca, mesquite, acacia, juniper, or other woody shrubs and small trees commonly found in loose sandy or loamy soils. | N | No semi-arid open areas were observed in the project area in April 2022. | — | N/A | T | No impact | No suitable habitat is present in the project area. | N |

SPECIES ANALYSIS SUMMARY (SGCN)
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|---|---|---|---|---|---|---|---|---|---|
| Kaufman | Amphibians | eastern tiger salamander | *Ambystoma tigrinum* | Terrestrial adults generally occur under cover objects or in burrows surrounding a variety of lentic freshwater habitats, such as ponds, lakes, bottomland wetlands, or upland ephemeral pools. The specific terrestrial habitats are also varied and the occurrence of this species seems to be more closely associated with sandy, loamy or other soils which have easy burrowing properties, rather than any particular ecological system type. Requires fishless breeding pools for successful reproduction. | Y | Though the majority of the project area is highly disturbed, fishless pools and wetlands with loose easily-burrowed soils were observed in April 2022. | May impact | Suitable habitat is present in the project area. The following BMPs would be implemented: Aquatic Amphibian and Reptile BMP, Terrestrial Amphibian and Reptile BMP, Vegetation BMP, and Water Quality BMP. | N |
| Kaufman | Amphibians | 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. | Y | Grasslands, wetlands, and streams were observed in the project area in April 2022. | May impact | Suitable habitat is present in the project area. The following BMPs would be implemented: Aquatic Amphibian and Reptile BMP, Terrestrial Amphibian and Reptile BMP, Vegetation BMP, and Water Quality BMP. | N |
| Kaufman | Amphibians | Strecker's chorus frog | *Pseudacris streckeri* | Terrestrial and aquatic: Wooded floodplains and flats, prairies, cultivated fields and marshes. Likes sandy substrates. | Y | Wooded streams, cultivated fields, and wetlands are present in the project area. | May impact | Suitable habitat is present in the project area. The following BMPs would be implemented: Aquatic Amphibian and Reptile BMP, Terrestrial Amphibian and Reptile BMP, Vegetation BMP, and Water Quality BMP. | N |
| Kaufman | Amphibians | 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. | Y | A variety of terrestrial and aquatic habitats are present in the project area. | May impact | Suitable habitat is present in the project area. The following BMPs would be implemented: Aquatic Amphibian and Reptile BMP, Terrestrial Amphibian and Reptile BMP, Vegetation BMP, and Water Quality BMP. | N |
| Kaufman | 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 | N | No large bodies of water occur in or near the project area. | No impact | No suitable habitat is present in the project area. | N |

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| Kaufman | Birds | chestnut-collared longspur | *Calcarius ornatus* | Occurs in open shortgrass settings especially in patches with some bare ground. Also occurs in grain sorghum fields and Conservation Reserve Program lands | Y | Open fields with bare/plowed ground were observed in the project area in April 2022. | May impact | Suitable habitat is present in the project area. Bird BMPs would be implemented. | N |
| Kaufman | Birds | Franklin's gull | *Leucophaeus pipixcan* | 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. | N | No large bodies of water with shores are present in the project area. | No impact | No suitable habitat is present in the project area. | N |
| Kaufman | Birds | 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. | Y | Open fields with bare/plowed ground were observed in the project area in April 2022. | May impact | Suitable habitat is present in the project area. Bird BMPs would be implemented. | N |
| Kaufman | Birds | western burrowing owl | *Athene cunicularia hypugaea* | Open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows | N | Though open grasslands are present in the project area, they are in proximity to a busy roadway. No burrows were observed. | No impact | No suitable habitat is present in the project area. | N |
| Kaufman | Insects | American bumblebee | *Bombus pensylvanicus* | Habitat description is not available at this time. | N | Due to a lack of habitat description, an impact determination cannot be made. | No impact | Due to a lack of habitat description, an impact determination cannot be made. | N |

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| Kaufman | Mammals | big brown bat | *Eptesicus fuscus* | Any wooded areas or woodlands except south Texas. Riparian areas in west Texas. | Y | Wooded areas are present in the project area. Though bridges and culverts were present, no evidence of occupation was observed during April 2022 site investigations. Potential roost trees may occur in forested areas between Station 170 and 175 (centered on 32.67170, -96.44382) and Station 195 and 215 (centered on wooded riparian crossings at 36.67157, -96.44382 and 32.67750, -96.44264). Potential roost structures (bridges and culverts) are present at: Station 153 (32.66812, -96.44843), Station 173 (32.67194, -96.44358), Station 199 (32.67785, -96.44269), Station 216 (32.68106, -96.44627), and Station 445 | May impact | Suitable habitat is present in the project area. Bat BMPs would be implemented. | N |
| Kaufman | Mammals | eastern red bat | *Lasiurus borealis* | Red bats are migratory bats that are common across Texas. They are most common in the eastern and central parts of the state, due to their requirement of forests for foliage roosting. West Texas specimens are associated with forested areas (cottonwoods). Also common along the coastline. These bats are highly mobile, seasonally migratory, and practice a type of wandering migration". Associations with specific habitat is difficult unless specific migratory stopover sites or wintering grounds are found. Likely associated with any forested area in East | Y | Wooded areas are present in the project area. Potential roost trees may occur in forested areas between Station 170 and 175 (centered on 32.67170, -96.44382) and Station 195 and 215 (centered on 32.67852, -96.44360). | May impact | Suitable habitat is present in the project area. Bat BMPs would be implemented. | N |
| Kaufman | 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. | Y | A variety of terrestrial habitats are present in the project area. | May impact | Suitable habitat is present in the project area. Fossorial Mammal BMPs would be implemented. | N |

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| Kaufman | 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. | Y | Wooded areas are present in the project area. Potential roost trees may occur in forested areas between Station 170 and 175 (centered on 32.67170, -96.44382) and Station 195 and 215 (centered on 32.67852, -96.44360). | May impact | Suitable habitat is present in the project area. Bat BMPs would be implemented. | N |
| Kaufman | Mammals | long-tailed weasel | *Mustela frenata* | Includes brushlands, fence rows, upland woods and bottomland hardwoods, forest edges & rocky desert scrub. Usually live close to water. | Y | A variety of terrestrial habitats and water sources are present in the project area. | May impact | Suitable habitat is present in the project area. Fossorial Mammal BMPs would be implemented. | N |
| Kaufman | Mammals | mountain lion | *Puma concolor* | Generalist; found in a wide range of habitats statewide. Found most frequently in rugged mountains & riparian zones. | N | No large tracts of undeveloped habitat occur in or near the project area. Much of the project area is highly developed and in proximity to busy roadways. | No impact | No suitable habitat is present in the project area. | N |
| Kaufman | Mammals | muskrat | *Ondatra zibethicus* | Found in fresh or brackish marshes, lakes, ponds, swamps, and other bodies of slow-moving water. Most abundant in areas with cattail. Dens in bank burrow or conical house of vegetation in shallow vegetated water. It is primarily found in the Rio Grande near El Paso and in SE Texas in the Houston area. | Y | Streams and wetlands are present in the project area. | May impact | Suitable habitat is present in the project area. Fossorial Mammal BMPs would be implemented. | N |

| County | Taxon | Common Name | Scientific Name | Habitat | Suitable Habitat Present? | Explanation for determination regarding suitable habitat | Impact Determination for SGCNs | Explanation for Impact Determination | Presence/ Absence survey conducted? |
|---|---|---|---|---|---|---|---|---|---|
| Kaufman | Mammals | 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. | Y | Wooded areas are present in the project area. Though bridges and culverts were present, no evidence of occupation was observed during April 2022 site investigations. Potential roost trees may occur in forested areas between Station 170 and 175 (centered on 32.67170, -96.44382) and Station 195 and 215 (centered on wooded riparian crossings at 36.67157, -96.44382 and 32.67750, -96.44264). Potential roost structures (bridges and culverts) are present at: Station 153 (32.66812, -96.44843), Station 173 (32.67194, -96.44358), Station 199 (32.67785, -96.44269), Station 216 (32.68106, -96.44627), and Station 445 | May impact | Suitable habitat is present in the project area. Bat BMPs would be implemented. | N |
| Kaufman | Mammals | swamp rabbit | *Sylvilagus aquaticus* | Primarily found in lowland areas near water including: cypress bogs and marshes, floodplains, creeks and rivers. | N | Though streams transect the project area, no wooded lowland areas of sufficient size are present. | No impact | No suitable habitat is present in the project area. | N |

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|---|---|---|---|---|---|---|---|---|---|
| Kaufman | Mammals | tricolored bat | *Perimyotis subflavus* | Forest, woodland and riparian areas are important. Caves are very important to this species. | Y | Wooded areas are present in the project area. Though bridges and culverts were present, no evidence of occupation was observed during April 2022 site investigations. Potential roost trees may occur in forested areas between Station 170 and 175 (centered on 32.67170, -96.44382) and Station 195 and 215 (centered on wooded riparian crossings at 36.67157, -96.44382 and 32.67750, -96.44264). Potential roost structures (bridges and culverts) are present at: Station 153 (32.66812, -96.44843), Station 173 (32.67194, -96.44358), Station 199 (32.67785, -96.44269), Station 216 (32.68106, -96.44627), and Station 445 | May impact | Suitable habitat is present in the project area. Bat BMPs would be implemented. | N |
| Kaufman | Plants | Shinner's sedge | *Carex shinnersii* | Occurs in ditches and swales in prairie landscapes (Carr 2015). | Y | Ditches and swales occur within existing and proposed ROW, though the species was not observed during April 2022 site investigations. | May impact | Suitable habitat is present in the project area. The Vegetation BMP would be implemented. | N |
| Kaufman | Plants | Topeka purple-coneflower | *Echinacea atrorubens* | Occurring mostly in tallgrass prairie of the southern Great Plains, in blackland prairies but also in a variety of other sites like limestone hillsides; Perennial; Flowering Jan-June; Fruiting Jan-May | Y | Prairie landscapes occur within existing and proposed ROW, though the species was not observed during April 2022 site investigations. | May impact | Suitable habitat is present in the project area. The Vegetation BMP would be implemented. | N |

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| Kaufman | Reptiles | 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. | Y | A variety of terrestrial habitats are present in the project area. | May impact | Suitable habitat is present in the project area. The following BMPs would be implemented: Terrestrial Amphibian and Reptile BMP and Vegetation BMP. | N |
| Kaufman | Reptiles | 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. | Y | Grasslands with native vegetation are present in the project area. | May impact | Suitable habitat is present in the project area. The following BMPs would be implemented: Terrestrial Amphibian and Reptile BMP and Vegetation BMP. | N |
| Kaufman | Reptiles | 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. | Y | A variety of terrestrial habitats are present in the project area. | May impact | Suitable habitat is present in the project area. The following BMPs would be implemented: Terrestrial Amphibian and Reptile BMP and Vegetation BMP. | N |
| Kaufman | Reptiles | western box turtle | *Terrapene ornata* | Terrestrial: Ornate or western box turtles 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. | Y | A variety of terrestrial habitats are present in the project area. | May impact | Suitable habitat is present in the project area. The following BMPs would be implemented: Terrestrial Amphibian and Reptile BMP and Vegetation BMP. | N |
| Kaufman | Reptiles | 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. | Y | Freshwater wetlands were observed in the project area in April 2022. | May impact | Suitable habitat is present in the project area. The following BMPs would be implemented: Terrestrial Amphibian and Reptile BMP and Vegetation BMP. | N |
| Kaufman | Reptiles | western hognose snake | *Heterodon nasicus* | Terrestrial: Shortgrass or mixed grass prairie, with gravel or sandy soils. Often found associated with draws, floodplains, and more mesic habitats within the arid landscape. Frequently occurs in shrub encroached grasslands. | N | No arid prairies or shrub-encroached grasslands are present in the project area. | No impact | No suitable habitat is present in the project area. | N |

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|---|---|---|---|---|---|---|---|---|---|
| Kaufman | Reptiles | western massasauga | *Sistrurus tergeminus* | Terrestrial: Shortgrass or mixed grass prairie, with gravel or sandy soils. Often found associated with draws, floodplains, and more mesic habitats within the arid landscape. Frequently occurs in shrub encroached grasslands. | N | No arid prairies or shrub-encroached grasslands are present in the project area. | No impact | No suitable habitat is present in the project area. | N |