



Animal and Plant Health Inspection Service
U.S. DEPARTMENT OF AGRICULTURE

Cattle Fever Tick Eradication Program Fence Deterrent in Kenedy County, Texas

Final Environmental Assessment

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1 Introduction and Purpose and Need

1.1 Background

The United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA APHIS), Veterinary Services is responsible for (1) protecting and improving the health, quality, and marketability of United States (U.S.) animals by eliminating animal diseases, and (2) monitoring and promoting animal health and productivity. The Animal Health Protection Act of 2002, as amended (7 United States Code (U.S.C.) § 8301-8317), provides broad authority for USDA APHIS to prevent the introduction into or dissemination within the United States of any pest or disease of livestock (§ 8303-8305). The Act authorizes prohibition and restriction of the importation, exportation, and interstate movement of animals moving in trade and strays, as well as exportation, inspection, disinfection, seizure, quarantine, destruction, and disposal of animals and conveyances (§ 8303-8308). This includes the ability to “carry out operations and measures to detect, control, or eradicate any pest or disease of livestock” and identifies specific cooperative programs as one way to achieve these actions (§ 8308).

Cattle fever ticks (CFTs), known scientifically as *Rhipicephalus* (formally *Boophilus*) *annulatus* and *R. (B.) microplus*, are agricultural pests that pose a serious threat to U.S. livestock, particularly cattle and horses. These ticks feed on livestock, causing anemia and transmitting protozoan parasites that lead to bovine babesiosis, a severe and often fatal disease of livestock. CFTs are endemic in Central and South America and can enter the United States through transported animals and materials (Busch et al., 2014 and Nakayima et al., 2014). Infestations can spread rapidly, causing economic and agricultural damage.

USDA APHIS initiated the Cattle Fever Tick Eradication Program (CFTEP) in 1906 as a cooperative Federal-State effort to eliminate bovine babesiosis (or cattle fever) from the U.S. cattle population. By 1943, the United States was declared free of CFTs, except in the Texas Permanent Tick Quarantine Zone (PTQZ), which spans over 500 miles from Del Rio, Texas, to the Gulf of America (Figure 1).

However, increased cross-border movement of livestock hosts of CFTs (e.g., cattle and horses) and growing wildlife host populations (e.g., deer and nilgai) have elevated the risk of tick entry and establishment in the United States. Overall CFT quarantine on cattle premises in South Texas show an upward trend from 2014 to 2017, a period of relative stabilization from 2017 to 2021, and a sporadic decline since 2021 (Figure 2).

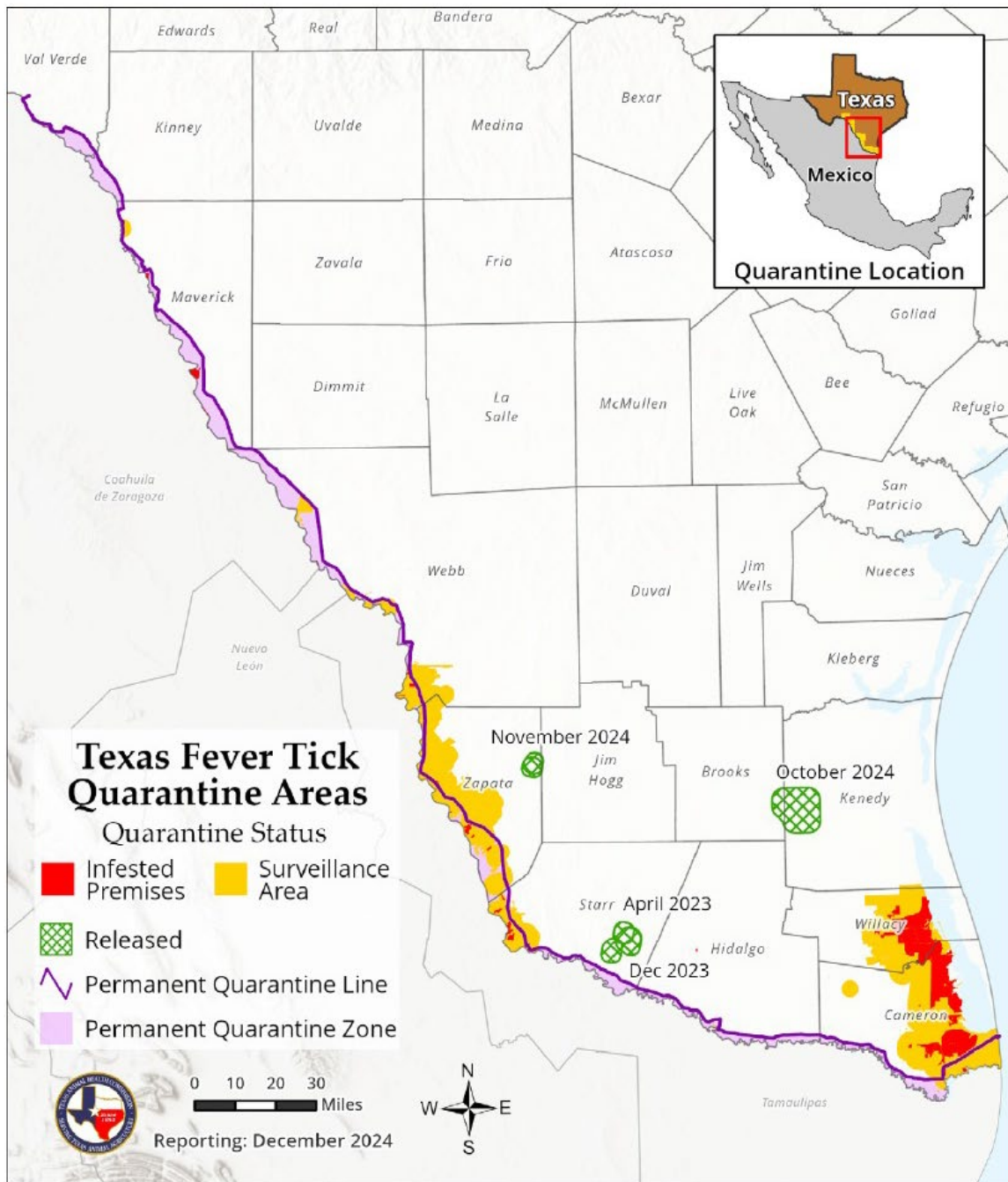


Figure 1. Texas fever tick quarantine areas.

Source: (TAHC, 2024)

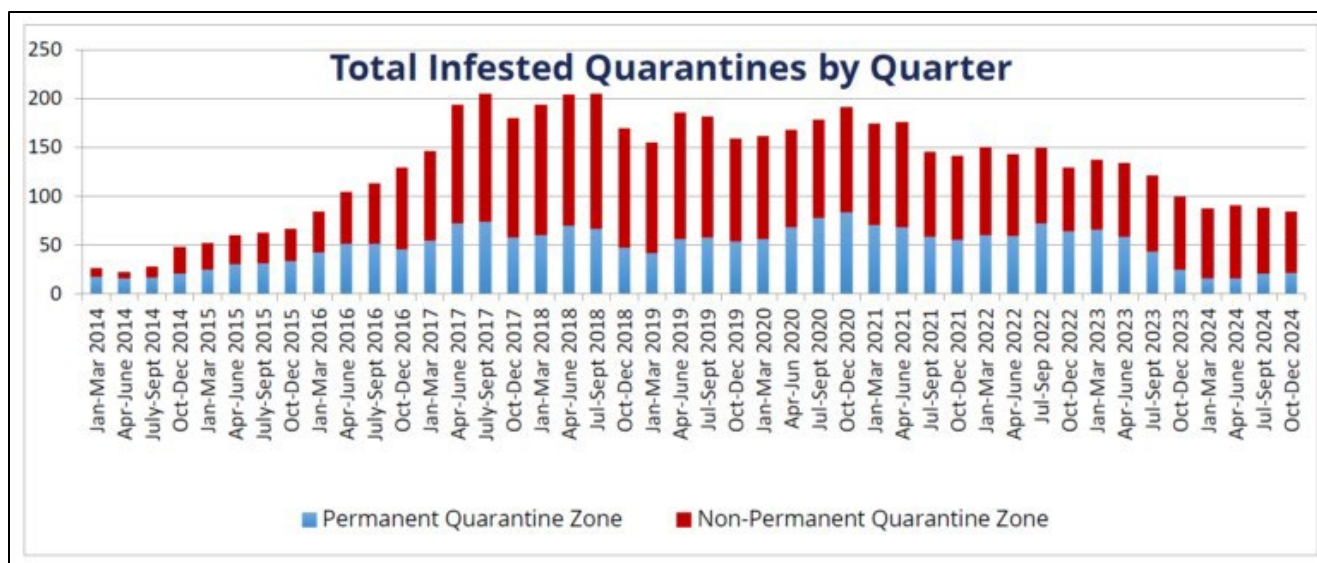


Figure 2. Total infested quarantines by quarter from January 2014 - June 2024.

Source: (TAMU, 2024).

As of December 31, 2024, 84 premises identified in several South Texas counties (Cameron, Starr, Webb, Willacy, and Zapata) were infested and quarantined for CFTs (TAMU, 2024). These CFT infestations impose substantial challenges, including prolonged quarantine restrictions on cattle herds, increased management efforts and related expenses for cattle producers within the tick-free zones of South Texas, and undermine ongoing eradication efforts. USDA APHIS continues to implement control measures, including surveillance and patrolling to detect stray or smuggled livestock potentially infested with CFTs; inspections of livestock for the presence of ticks; treatment of infested animals with acaricides (substances used to kill ticks like coumaphos, doramectin, imidocarb, and pyrethroids); vacating potentially tick-infested pastures and premises; and quarantine to prevent the spread of ticks. Enhancing these efforts, CFTEP has installed high game fencing in key south Texas counties to impede the movements of wildlife hosts of CFTs (e.g., deer and nilgai).

Since 1968, concerns have grown regarding the role of wildlife, particularly white-tailed deer (*Odocoileus virginianus*) and nilgai antelope (*Boselaphus tragocamelus*), in sustaining CFT populations and potentially reinfesting tick-free areas (USDA APHIS, 2018; Currie et al., 2020; Osbrink et al., 2021; Thomas and Duhaime, 2022; and USDA APHIS, 2025). Chronic infestations observed in Webb County, Texas, since the 1970s, as well as a rise in tick activity along the Texas-Mexico border noted in 2010, have highlighted how wildlife movements challenge the traditional control measures listed above (USDA APHIS, 2017 and 2025). Beginning in November 2016, the CFTEP began using ivermectin-treated corn in feeders to minimize the spread of CFTs by white-tailed deer. USDA APHIS recently evaluated the expansion of the use of ivermectin-treated corn to dozens of additional Texas counties (USDA

APHIS, 2025).

1.2 Babesiosis

Bovine babesiosis is a severe and often fatal disease of livestock caused by protozoan parasites (*Babesia* spp.) transmitted by CFTs. These ticks typically attach themselves to the skin inside an animal's thigh, flanks, and forelegs or along the belly and brisket and can spread disease through their infected saliva while feeding. These CFT-transmitted pathogens destroy the infected animal's red blood cells causing neurological disturbances and other symptoms such as anemia, jaundice, aggressiveness, blindness, head pressing, hyperexcitability, muscle tremors, coma, and eventually death. Babesiosis causes substantial economic losses due to reduced livestock productivity, hide damage, and increased mortality.

In South Texas, the main protozoan pathogens that cause babesiosis are *Babesia bovis*, *B. bigemina*, and *B. divergens*. The first two species cause blood loss, damage to hides, and an overall decrease in the livestock's condition while the last species is the most lethal cause of babesia in Europe, although fatality is rare (Homer et al., 2000). In North America, human babesiosis is predominantly caused by *B. microti*, a rodent-borne piroplasm (Homer et al., 2000). Without the presence of CFT, there is no biological transmission of these *Babesia* organisms. CFTs infected with the protozoa feed on cattle and release the protozoa into the bloodstream. The protozoa break down the cellular membrane of red blood cells leading to anemia, jaundice, and the infected animal may die. Infected cattle exhibit neurological disturbances characterized by the symptoms listed above.

The life cycle of CFTs consists of four stages (USDA APHIS, 2024): egg, larva, nymph, and adult (Figure 3). They are a one-host tick, meaning that they feed on only one host during their life cycle. A blood-engorged female tick releases 1,000 to 2,000 eggs into the surrounding environment after detaching from the host and before dying on the ground. This starts the life cycle again, and new hosts are sought by the larva after the eggs hatch. Many adult ticks are olive green while others are mottled yellow or olive brown in appearance (Figure 3).

Additional information on CFT biology, history, concerns, and previous program activities is detailed in USDA APHIS CFTEP documents “Cattle Fever Tick Eradication Program – Tick Control Barrier, Maverick, Starr, Webb, and Zapata Counties, Texas, Final Environmental Impact Statement – May 2018” (CFTEP FEIS) (USDA APHIS, 2018); “Cattle Fever Tick Eradication Program Use of Ivermectin – January 2017” (Final EA) (USDA APHIS, 2017); and “Cattle Fever Tick Eradication on Laguna Atascosa and Lower Rio Grande Valley National Wildlife Refuges - February 2018” (Final EA) (USDA APHIS, 2018), incorporated in this document by reference.



Figure 3. Cattle fever tick life stages, from left to right: larva, nymph, and adult engorged female.

Source: (USDA APHIS VS, 2024).

1.3 Purpose and Need

Eight-foot-tall high game fencing has been found to be effective in deterring the movement of free-ranging wildlife hosts of CFTs, which in turn reduces the risk of tick infestations and disease in livestock. The purpose for funding the modification of the four-foot-high cattle fencing at King Ranch Norias Division in southern Kenedy County, Texas, to a height of eight feet is to limit the spread of CFTs by white-tailed deer and other free-ranging CFT hosts, such as nilgai, into tick-free areas. This action is necessary because wildlife hosts of CFTs can easily jump over the existing four-foot-high (cattle) fencing to forage alongside cattle. The proposed eight-foot-high (game) fencing would serve as a deterrent to the unrestricted movement of such wildlife species, thereby enhancing ongoing CFTEP activities.

The proposed game fencing is needed given the recent increasing numbers of CFT-infested premises (Figure 2) observed outside of the Tick Permanent Quarantine Zone in South Texas (Figure 1) and given the potential for CFTs that transmit bovine babesiosis spreading throughout Kenedy County and beyond.

By limiting the movement of wildlife, the high game fencing would contribute to the CFTEP's efforts. It may also help reduce the need for acaricide (chemical) treatment of tick-infested

animals and even decrease the overall animal production costs in South Texas. Employees of the Texas Animal Health Commission (TAHC) and the CFTEP, who also are responsible for protecting animal health, may experience reduced workloads (USDA APHIS, 2018).

This environmental assessment (EA) is consistent with requirements of the National Environmental Policy Act (NEPA) of 1969 as amended (42 U.S.C. § 4321 *et seq.*) and USDA NEPA regulations (7 Code of Federal Regulations (CFR) 1b).

2 Alternatives

The proposed action area for this EA is the Norias Division of King Ranch in southern Kenedy County, Texas, where the program proposes to increase the height of an existing four-foot-high cattle fence. Specifically, the proposed action involves adding four-foot-high fencing to the existing cattle fence, creating an eight-foot-high game proof barrier. The 14-mile fence runs along the southern fence/boundary line of the King Ranch Norias Division. The increased height will impede the movement of wildlife species that host CFTs, a serious concern in the region.

This EA evaluates two alternatives: a no action alternative and a proposed action alternative.

2.1 No Action Alternative

Under the no action alternative, USDA APHIS would not provide any funding toward the installation of the high game fencing at the Norias Division of King Ranch in southern Kenedy County, Texas. The lack of effective barriers or the reliance on existing cattle fencing, which can be easily breached by certain wildlife hosts, contributes to the continued spread of CFTs by infested wild ungulates among the cattle populations in ranches and other tick-free areas across the region. The existing four-foot-high cattle fences are not high enough to deter the movement of such wildlife CFT hosts, which can easily jump over these structures to forage alongside cattle populations while spreading CFTs and, thereby, compromising the effectiveness of the CFTEP.

2.2 Proposed Action Alternative (Preferred)

Under the proposed action alternative (preferred alternative), USDA APHIS would provide funding toward the modification of the existing 14-mile-long fencing (Norias fencing) in southern Kenedy County, Texas. A four-foot-high fencing section will be added to the existing four-foot-high cattle fencing, resulting in an eight-foot-tall game proof structure. The proposed high game fencing will run parallel to the southern boundary line of the King Ranch Norias Division, running from the GPS coordinate point (26.611784, -97.672522) on the west to the GPS coordinate point (26.613157, -97.445148) on the east, toward Red Fish Bay/Laguna Madre (Figure 4).

The features of the proposed fencing are consistent with those previously described in USDA APHIS' environmental documents from 2018, 2021, 2022, and 2024. The information from those earlier documents regarding the agency's fencing program is incorporated in this EA by reference.

Under the preferred alternative, USDA APHIS will fund the cost of the high game fencing materials, and TAHC will be responsible for erecting and maintaining the fence.

2.3 Other Alternatives Considered but Dismissed

USDA APHIS also considered and dismissed several other alternatives. For instance, a fence without underground skirting or zinc coating (ungalvanized wire) was rejected due to its lower effectiveness in preventing burrowing animals from passing through and to its reduced durability, as it would be prone to rust and harder to maintain.

Additional fencing locations were also considered but excluded, as USDA APHIS prioritized locations where fencing could be installed effectively within budget constraints and where it would be most effectful in reducing CFT host movements. USDA APHIS aims to use the best available and cost-effective technologies in its CFTEP activities.

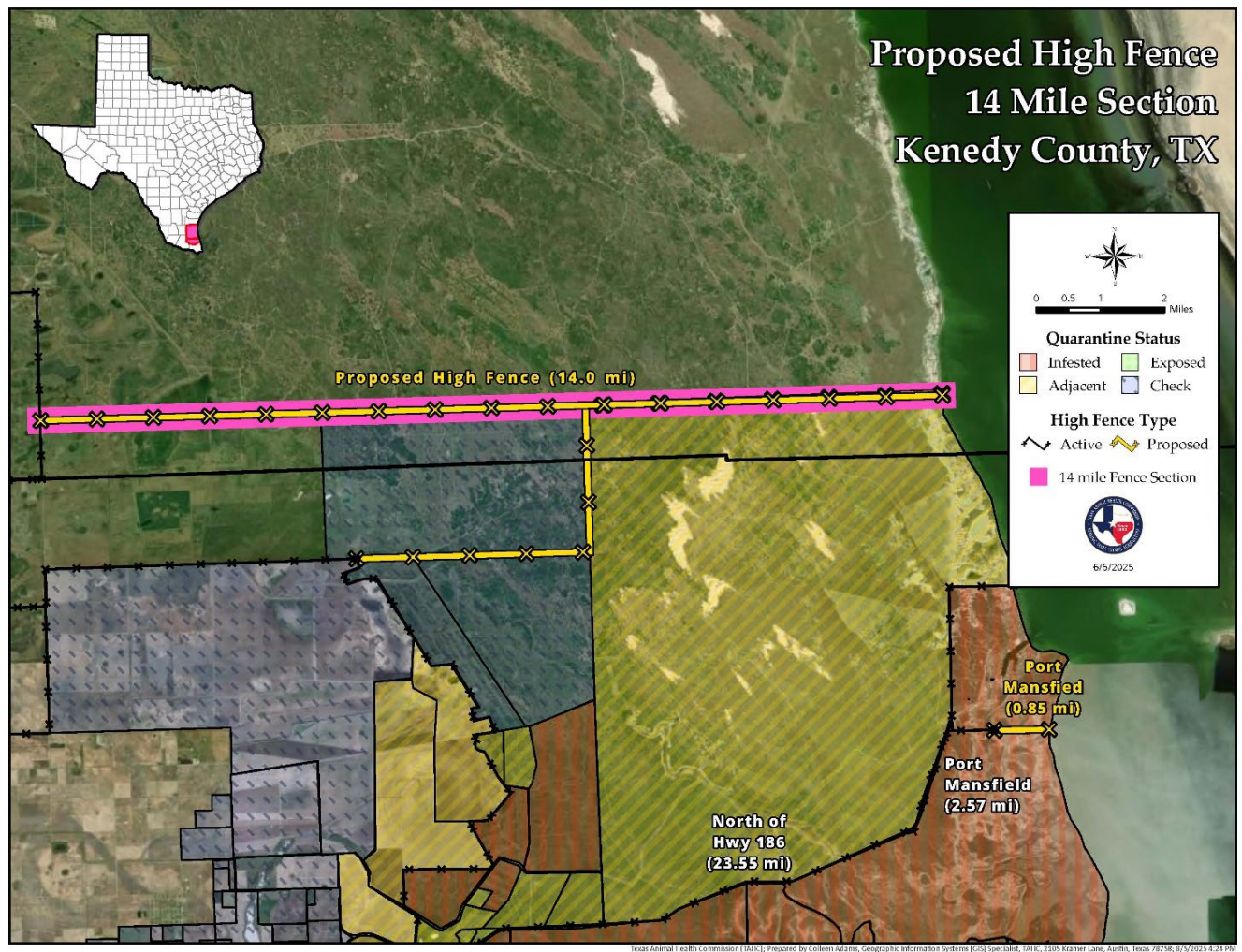


Figure 4. The proposed 14-mile-high game fence location in southern Kenedy County, Texas.

3 Affected Environment

Kenedy County, situated in southern Texas, is one of the least populous counties in both Texas and the United States. As of the 2020 Census, the population of Kenedy County was 350. Its county seat is Sarita, and other small communities within the county include Norias and Armstrong. Ranching remains the cornerstone of Kenedy County's economy, with natural resources and expansive open spaces acting as significant draws for visitors. The renowned King Ranch, established in 1853, occupies a substantial portion of the county.

This chapter discusses the existing physical and social conditions of the proposed program area in Kenedy County, Texas. The resources potentially affected by the proposed alternative include soil, vegetation, agriculture and livestock, wildlife, water quality, air quality, tribal and historic properties, and human health and socioeconomics. Cross-referencing previous relevant NEPA documents, such as USDA APHIS (2018, 2021, and 2022a, b) will be included where appropriate.

3.1 Soil

Kenedy County is characterized by a variety of soil types, primarily influenced by its coastal proximity and geological history. USDA NCSS (2007) identifies four main soil series in Kenedy County with the following characteristics:

- Topo series – these are coarse-loamy, very poorly drained soils. They are mostly found in Gulf Coast Saline Prairies.
- Cayo series - these are coarse-loamy and moderately well drained soils, found the Sand Sheet Prairie.
- Baffin series - these are greenish gray sandy clay loam soils, essentially found in shallow water grass flats associated with bay systems; and
- Yturria series, which are very deep, well-drained, moderately rapid permeable loamy soils.

The diversity of soil types in Kenedy County substantially influences the vegetation found there.

Figure 5 shows that fine sand covers a substantial portion of Kenedy County, but clay loam and sandy clay loam are found in the southeastern border, near Willacy County (KCGCD, 2023), where the proposed action would be located. Along the Gulf Coast, sandy soils are generally salty, with areas of gray to black, cracking clay (TSHA, 2020).

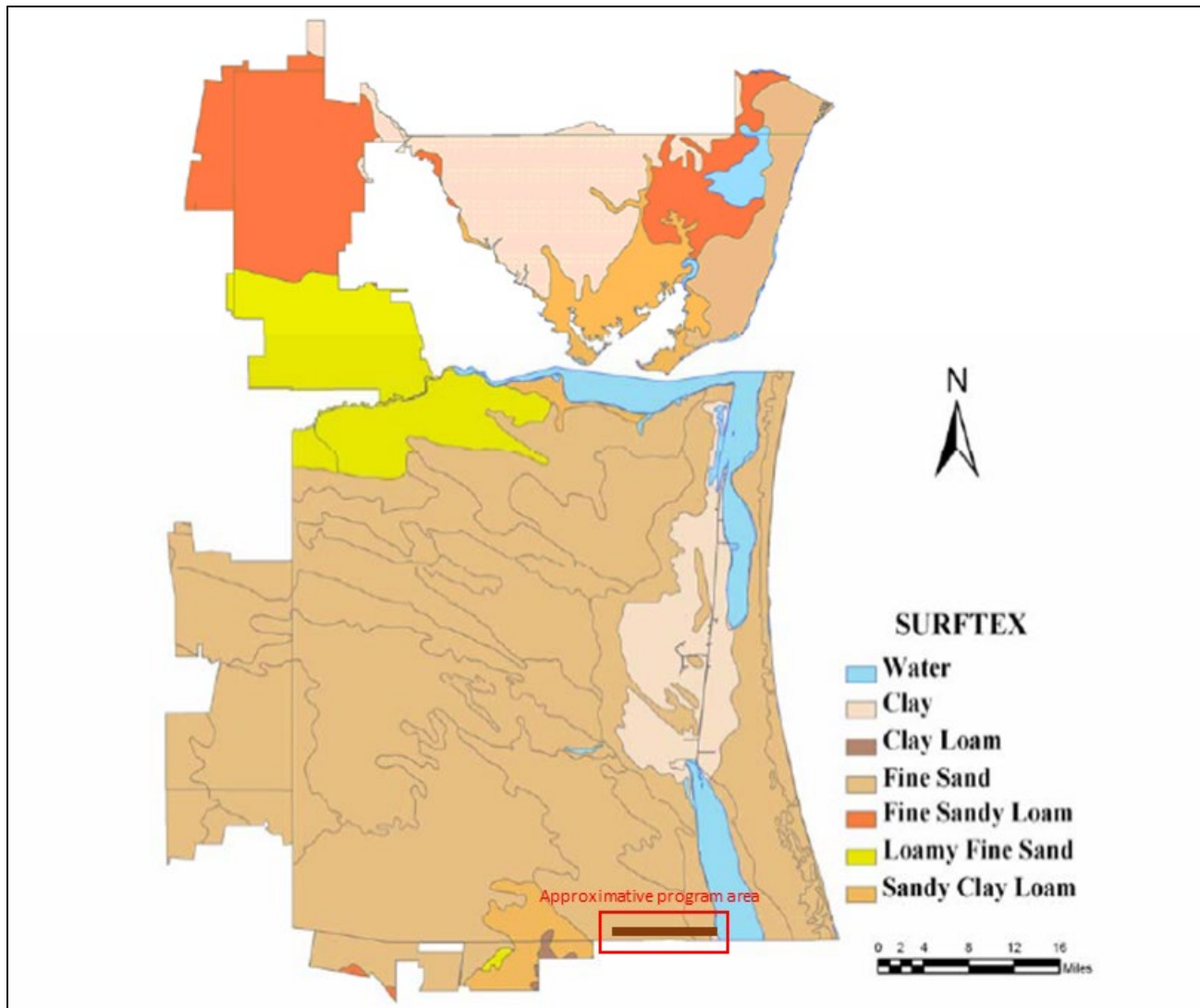


Figure 5. Soil types in Kenedy County, Texas.

Source: (KCGCD, 2023).

3.2 Vegetation

The vegetation in the proposed program area (Figure 6) is diverse and varies from the South Texas sand plains to Gulf Coast prairies and marshes (UTA, 2021 and Texas Almanac, undated) as follows:

The South Texas sand plains cover the essential portion of the county and are characterized by a mix of plant types including:

- Woodlands, dominated by species like live oak (*Quercus* sp.), toothache-tree (*Zanthoxylum hirsutum*), honey mesquite (*Prosopis glandulosa*), brasil (*Condalia hookeri*), pecan (*Carya*

illinoensis), anaqua (*Ehretia anacua*), Texas ebony (*Ebenopsis ebano*), and Sabal palm (*Sabal palmetto* or *Sabal mexicana* depending on the specific location within Texas).

- Shrubs and thornscrub, represented by colima (*Zanthoxylum fagara*), guajillo (*Senegalia berlandieri*), huisache (*Vachellia farnesiana*), whitebrush (*Aloysia gratissima*), blackbrush (*Coleogyne ramosissima*), cenizo (*Leucophyllum frutescens*), *Acacia* spp., and prickly pear (*Opuntia* spp.).
- Grasslands, mostly seacoast bluestem (*Schizachyrium scoparium* var. *littorale*), gulfdune paspalum (*Paspalum monostachyum*), brownseed paspalum (*Paspalum plicatulum*), crinkleawn (*Trachypogon secundus*), indiangrass (*Sorghastrum nutans*), and big bluestem (*Andropogon gerardii*).
- Forbs, such as camphor daisy (*Heterotheca subaxillaris*), partridge pea (*Chamaecrista fasciculata*), croton (*Codiaeum variegatum*), ragweed (*Ambrosia artemisiifolia*), beebalm (*Monarda* spp.), and false indigo (*Baptisia* spp.).

The Gulf Coast prairies and marshes grow tall bunchgrasses nearby the tidewater and are covered essentially with halophytes (plants adapted to growing in saline conditions, as in a salt marsh) such as seashore dropseed (*Sporobolus virginicus*), camphor daisy (*Rayjacksonia phyllocephala*), sea lavender (*Limonium carolinianum*), saltwort (*Batis maritima*), shoregrass (*Distichlis littoralis*), seacoast bluestem (*Schizachyrium scoparium* var. *littorale*), indiangrass (*Sorghastrum nutans*), switchgrass (*Panicum virgatum*), gulf cordgrass (*Sporobolus spartinae*), saltgrass (*Distichlis spicata*), and marsh millet (*Zizaniopsis miliacea*). Overall, the Gulf Coast prairies are fertile farmland, suitable for cattle grazing. Heavy grazing of these prairies changed the native vegetation into predominantly less desirable grazing vegetation, with grasses such as broomsedge bluestem (*Andropogon virginicus*), smutgrass (*Sporobolus indicus*), threeawns (*Aristida* spp.), tumblegrass (*Schedonnardus paniculatus*), eastern gamagrass (*Tripsacum dactyloides*), and Texas wintergrass (*Nassella leucotricha*). Invasive plants affecting the productive grasslands include oak underbrush, Macartney rose (*Rosa bracteata*), huisache (*Vachellia farnesiana*), mesquite (*Prosopis glandulosa*), prickly pear (*Opuntia* spp.), ragweed (*Ambrosia* spp.), bitter sneezeweed (*Helenium amarum*), and broomweed (like *Gutierrezia* spp.)

A vegetation inspection by TAHC shows no native brush habitat or native thorn shrub along the existing fence line at the Norias Division of King Ranch, nor along the adjacent ranch roads. The diversity of the vegetation in Kenedy County eventually influences local agriculture by enhancing the ecosystem services including ranching and food provision to livestock.

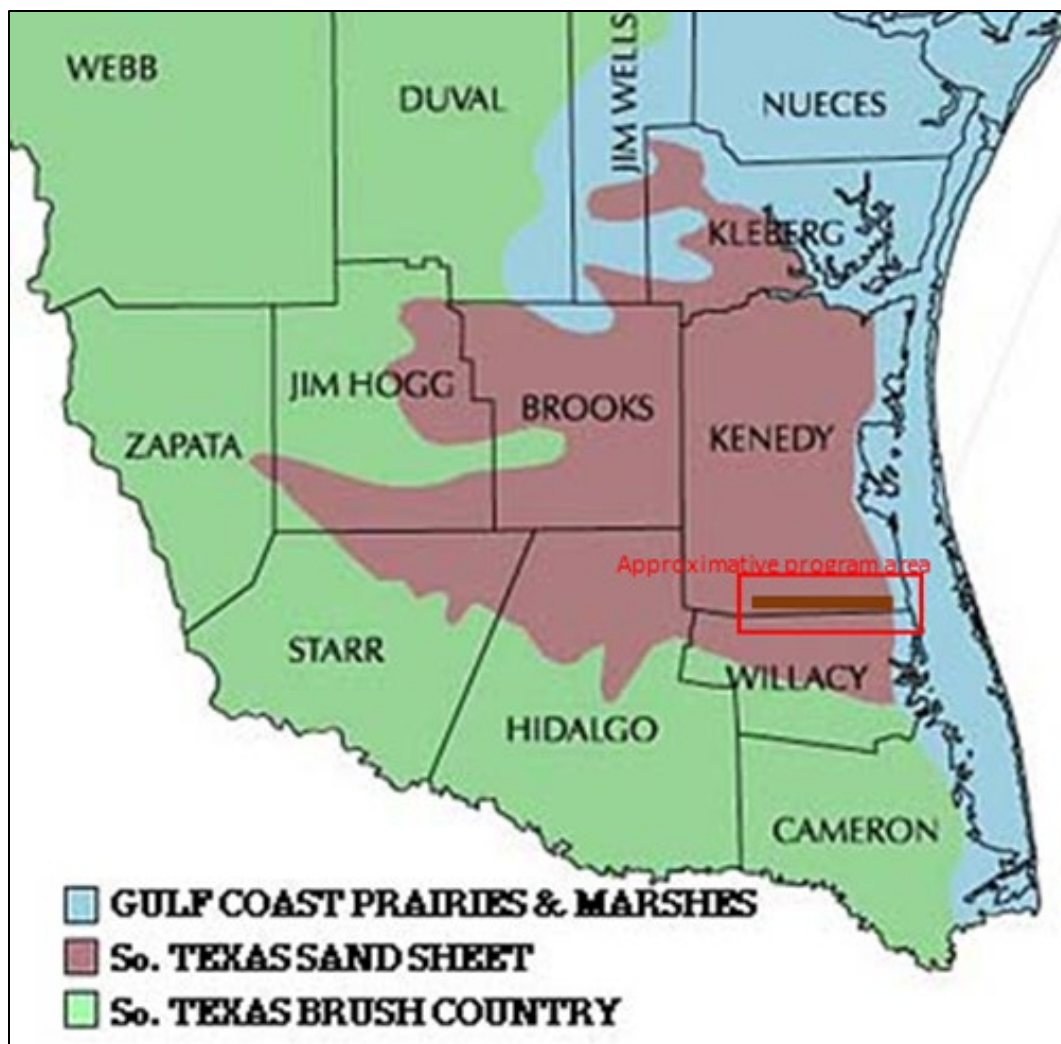


Figure 6. South Texas vegetation types.

Source: (UTA, 2021).

3.3 Agriculture and Livestock

Kenedy County's agricultural economy is overwhelmingly focused on ranching and livestock production, with crop cultivation playing a very limited role. In 2017, the total market value of agricultural products (crops and livestock) was nearly \$20 million, with 99% of sales coming from cattle and calves (USDA NASS, 2017).

Ranching and livestock products (mostly beef) account for over 90% of agricultural receipts, highlighting the central role of animals in the county's agricultural activities (TSHA, 2020). The county possesses extensive rangelands (e.g., Kenedy Ranch, about 235,000 acres) covered with brush and scrubby mesquite that are suitable for cattle grazing operations. For instance, in 2002, 98% of the county's ranchland was dedicated to pasture and livestock sales constituted the county's entire agricultural income (almost 100 percent) amounting to \$8,982,000 (TSHA, 2020).

Regarding crop cultivation, it is practiced only on a very small scale. In fact, less than 1% of the county's land is under cultivation, with small amounts of crops like sorghum, hay, and cotton being grown (TSHA, 2020). In 2017, Kenedy County had only 34 farms with an average farm size of 28,961 acres (USDA NASS, 2017).

3.4 Wildlife

Kenedy County is known for its diverse wildlife. The following list of wildlife species represents a small portion of the biodiversity found in the county's various habitats (eBird, 2025; KMF, undated; NPS, undated, 2015, and 2025; TPWD a, b, and undated).

- Mammals, including white-tailed deer (*Odocoileus virginianus*), nilgai (*Boselaphus tragocamelus*), javelina (*Pecari tajacu*), coyotes (*Canis latrans*), feral hogs (*Sus scrofa*), gray squirrels (*Sciurus carolinensis*), fox squirrels (*Sciurus niger*), skunks (*Mephitis* spp.), raccoons (*Procyon lotor*), opossums (*Didelphis virginiana*), armadillos (*Dasypus novemcinctus*), gray foxes (*Urocyon cinereoargenteus*), red foxes (*Vulpes vulpes*), and bobcats (*Lynx rufus*).
- Birds, such as bobwhite quail (*Colinus virginianus*), wild turkeys (*Meleagris gallopavo*), mourning doves (*Zenaida macroura*), hooded orioles (*Icterus cucullatus*), scissor-tailed flycatchers (*Tyrannus forficatus*), least grebes (*Tachybaptus dominicus*), painted buntings (*Passerina ciris*), spoonbills (*Platalea* spp.), brown pelicans (*Pelecanus occidentalis*), roseate spoonbills (*Platalea ajaj*), and many songbirds.
- Reptiles like American alligators (*Alligator mississippiensis*), Texas blind snakes (*Rena dulcis*), western diamond-backed rattlesnakes (*Crotalus atrox*), Kemp's ridley sea turtles (*Lepidochelys kempii*), Texas horned lizards (*Phrynosoma cornutum*), and keeled earless lizards (*Holbrookia propinqua*).

- Amphibians and crustaceans, mostly Rio Grande leopard frogs (*Lithobates berlandieri*), Texas toads (*Anaxyrus speciosus*), Gulf Coast toads (*Incilius valliceps*), and fiddler crabs (*Uca rapax* and *Gelasimus* spp.).

Threatened and endangered (T&E) species in Kenedy County include Kemp's ridley turtles (*Lepidochelys kempii*), Texas horned lizards (*Phrynosoma cornutum*), Texas tortoises (*Gopherus berlandieri*), Aplomado falcons (*Falco femoralis*), ocelots (*Leopardus pardalis*), jaguarundis (*Puma yagouaroundi*), brown pelicans (*Pelecanus occidentalis*), whooping cranes (*Grus americana*), bald eagles (*Haliaeetus leucocephalus*), piping plovers (*Charadrius melodus*), least terns (*Sterna antillarum*), and Northern Aplomado falcons (*Falco femoralis septentrionalis*).

3.5 Water Quality

The Gulf Coast aquifer is the primary source of groundwater in Kenedy County. While there are limited (or no) major surface water bodies inland or in the program area, many creeks and streams are found in the northern and eastern parts of the county (Figure 7). The county's inland water bodies and aquifer are strongly connected to the coastal eastern environment through significant submarine groundwater discharge into Baffin Bay and Laguna Madre, estimated at 1 cm/day (KCGCD, 2023). The primary use of groundwater in Kenedy County Groundwater Conservation District is for livestock (TAGD, undated).

Under Section 303(d) of the Clean Water Act (CWA), impaired waters are waters that are polluted or degraded and do not meet the water quality standards set by states, territories, or authorized tribes. According to the Texas Commission on Environmental Quality (TCEQ), the state agency that monitors and evaluates physical, chemical, and biological characteristics of aquatic systems as a basis for effective policy, the Upper Laguna Madre/Baffin Bay complex in Kenedy County is listed as impaired under Section 303(d) due to low dissolved oxygen levels (TXGLO, undated).

3.6 Air Quality

The Clean Air Act (CAA) is the comprehensive federal law that regulates air emissions from stationary and mobile sources (42 U.S.C. §7401 *et seq.* (1970)). It protects the Nation's air quality for the purposes of public health and welfare. Among other things, this law authorizes the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants. These pollutants, known as criteria pollutants, include ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. The CAA identifies two types of national ambient air quality standards (primary and secondary). The primary standards provide public health protection, including protecting the health of sensitive populations (e.g., asthmatics, children, and the elderly), and the secondary standards provide public welfare protection, including protection

against decreased visibility and damage to animals, crops, vegetation, and buildings.

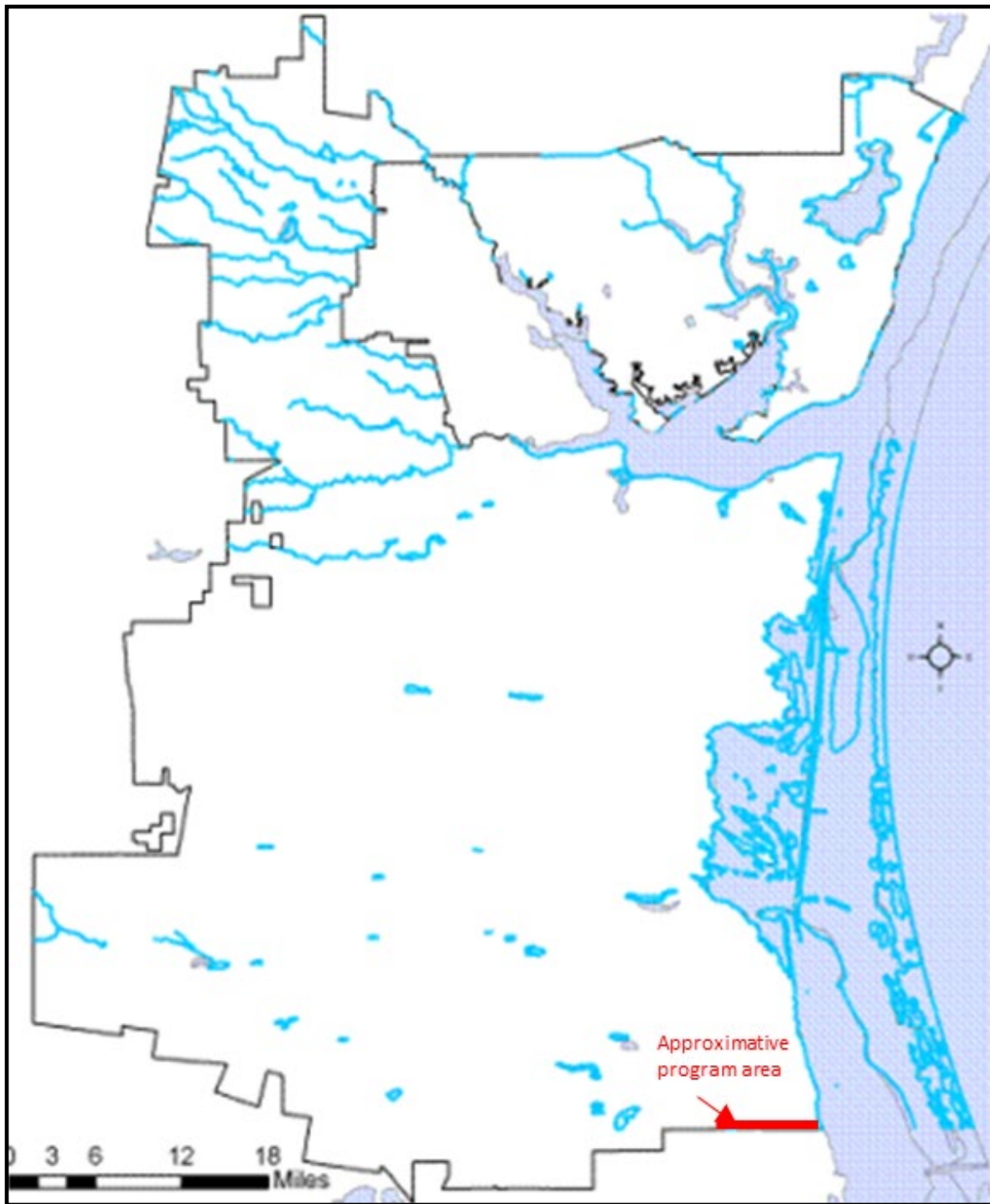


Figure 7. Major surface water bodies located in Kenedy County Groundwater Conservation District.
Source (KCGCD, 2023).

The status of air pollution in any area is based upon whether that area is in attainment (compliance) or non-attainment (noncompliance) with the NAAQS.

To enforce requirements under the CAA, EPA delegated responsibility for ensuring compliance of the NAAQS to local authorities. In Texas, TCEQ monitors and regulates air quality. As of May 2025, Kenedy County was not designated by EPA as a nonattainment area for any of the six above-listed criteria pollutants under NAAQS because the county's air quality meets the standards set for those criteria by EPA (EPA, 2025), meaning the Air Quality Index in this district falls in the “good” category (0–50), as defined by EPA.

3.7 Tribal and Historical Properties

According to the Bureau of Indian Affairs (BIA 2016), there are no federally recognized active tribes or ceded lands in Kenedy County although some Indian tribes of Oklahoma (Apache Tribe of Oklahoma; Comanche Nation of Oklahoma; Tonkawa Tribe of Indians of Oklahoma; and Wichita and Affiliated Tribes - Wichita, Keechi, Waco and Tawakonie of Oklahoma) may still have some ancestral rights there (HUD 2023).

Using the Department of Housing and Urban Development (HUD) Tribal Directory Assessment Tool (TDAT), USDA APHIS identified two main historical properties within Kenedy County: King Ranch and Mansfield Cut Underwater Archeological District (NRHP¹):

- King Ranch, the largest ranch in the United States, spans 825,000 acres in South Texas. Established in 1853, this property is known for its cattle ranching and for the Triple Crown-winning racehorse Assault. The ranch is a National Historic Landmark (Reference #66000820) and was one of the first added to the National Register of Historic Places on October 15, 1966. It is divided into four sections: Santa Gertrudis, Laureles, Encino, and Norias (TSHA 2014).
- The Mansfield Cut Underwater Archeological District is located near the city of Port Mansfield in the waters off Kenedy and Willacy Counties, Texas. This underwater archeological property contains the Mansfield Cut shipwrecks and was added to the National Register of Historic Places (Reference #74002083) on January 21, 1974.

The proposed fence is in the King Ranch’s Norias Division, 69 miles southeast of the King Ranch Headquarters in Kingsville. The proposed high game fencing in the King Ranch Norias Division does not overlap the Mansfield Cut Archaeological site at Port Mansfield.

¹ National Register of Historic Places. www.nps.gov/subjects/nationalregister/data-downloads.htm. Last accessed 7/21/25

3.8 Human Health and Socioeconomics

The human health and socioeconomic conditions in Kenedy County are evaluated based on the information from the U.S. Census Bureau (USCB, 2024), presented below as follows:

- In 2024, the population of Kenedy County was 330 (down from 350 in 2020)- one of the smallest among Texas counties. In terms of race, Whites alone were the majority (88.9%). Black (5.2%), Two or More Races (3.5%), Asian alone (1.5%), and American Indian and Alaska Native (0.9%) formed the minority groups in the county. The majority ethnic group was Hispanic or Latino (73.2%), followed by White - not Hispanic or Latino (20.4%).
- In 2023, the per capita income was \$31,183 and people in poverty accounted for 14.9%.
- In 2019-2023, 46.8% of residents aged 25+ years held a high school diploma or higher and 10.6% had a bachelor's degree or higher.
- 35.5% of residents owned and occupied a housing unit.
- 37.7% of people under 65 years of age had no health insurance and 38.5% of people in the same category had some form of disability.
- In terms of economic security, persons in civilian labor force aged 16+ years represented 51% of population, of which 22.7% were females.
- Other population characteristics (2019-2023) were as follows: 38.5% were foreign-born; 90.4% (large majority) speak a language other than English at home; and 52.9% of households possess a computer and a broadband Internet subscription.

The proposed action is planned to be non-intrusive of human habitations or communities.

4 Potential Environmental Consequences

This chapter evaluates the potential environmental consequences of the no action and preferred action alternatives, focusing on soil, vegetation, agriculture and livestock, wildlife, water quality, air quality, tribal and historic properties, and human health and socioeconomics.

As stated in Chapter 2 (Section 2.1), under the no action alternative, USDA APHIS would not provide any funding toward the installation of high game fencing in Southern Kenedy County, Texas. The lack of effective barriers or the reliance on the existing cattle fencing, which can be easily breached by certain wildlife hosts, contributes to the continued spread of CFTs by ungulates among the cattle populations in ranches and other tick-free areas across the region. The existing four-foot-high cattle fences are not high enough to deter the movement of such ungulates, which usually jump over these structures to forage alongside cattle populations while spreading CFTs and, thereby, compromising the effectiveness of the CFTEP.

On the other hand, under the preferred action alternative, USDA APHIS would fund the installation of a 14-mile-long high game fencing in Southern Kenedy County by adding a four-foot-high section to the existing four-foot-high cattle fencing, resulting in an eight-foot-tall game proof structure. This would be a cost-effective solution to reduce CFT infestations beyond the permanent tick quarantine zone. The proposed high game fencing would run parallel to the southern border of Kenedy County (King Ranch Norias Division) and the northern border of Willacy County (Figure 4).

In either alternative, CFTEP will continue its ongoing control operations as described in Chapter 2.

4.1 Soil

Under the no action alternative, the existing four-foot-high cattle fencing would remain unchanged as USDA APHIS would not fund its modification. So, no soil effect linked to this alternative is expected. Any potential soil disturbances under this alternative would be related to ongoing program activities including the maintenance of existing fences, and such disturbances are usually temporary and minimal because they would be limited in time and scope.

Under the preferred alternative (proposed program), the existing four-foot-high cattle fences would be raised to eight feet. This would enhance their effectiveness in preventing certain wildlife species (like white-tailed deer and nilgai), from crossing. Minor, temporary soil effects are expected due to the fencing activities, including relative soil compaction, potential for limited erosion, runoff, and sedimentation. These effects would be minimal as the program involves raising existing fences rather than building new ones. Also, the installation of berms (as needed) to control erosion near the fences could control such effects. Since fences are permeable to water, they would not obstruct any

water flow or cause flood risks during rain in the program area. Following the game fencing installation, the vegetation regrowth would help restore soil stability to its pre-installation condition.

4.2 Vegetation

Under the no action alternative, no vegetation clearing would occur, and existing vegetation would follow its natural growth patterns. While ongoing, small-scale land cultivation (affecting less than 1% of the county) could promote the spread of weeds and invasive plants, these effects are not a direct result of the proposed action. Similarly, vegetation trampling would continue in areas with high use by livestock and patrolling agents. Over time, vegetation in these areas would continue to recover naturally from existing disturbances.

Under the preferred alternative, raising the existing four-foot-high cattle fences to eight feet is expected to have minimal to no effect on the local vegetation and habitat in the proposed program area. While much of Kenedy County is characterized by brush and scrubby mesquite, with limited prime farmland, the specific location for the preferred alternative is different due to ongoing ranch maintenance. TAHC determined there is no native brush habitat or thorn shrub along the existing cattle fence line. Since this area, including a 20-foot road on either side, is already routinely cleared by ranches, raising the fences to eight feet will not necessitate any additional vegetation removal and therefore will have minimal to no effect on the local vegetation and habitat.

4.3 Agriculture and Livestock

Under the no action alternative, the existing four-foot cattle fence would remain in place and be accessible to wildlife, including CFT-infected deer and nilgai. This continued accessibility may allow for the spread of CFTs and babesiosis to livestock on agricultural lands, including ranches.

Under the preferred alternative, the increase in fencing height would provide an effective physical barrier to CFT wildlife hosts by restricting their access to cattle ranches and, therefore, decreasing the spread of ticks and tick-borne disease. As a result, overall livestock health would improve.

4.4 Wildlife

Under the no action alternative, wildlife, including white-tailed deer and nilgai hosts, would continue to move through unfenced areas in Kenedy County, increasing the risk of CFT spread. The continued, unrestricted movement of wildlife would compromise existing eradication efforts, potentially leading to more frequent and widespread CFT infestations in southern Texas.

Under the preferred alternative, the movements of the target wildlife (white-tailed deer and nilgai) will be deterred by raising the height of the existing four-foot fence to eight feet. Although a

heightened barrier might negatively affect the movement of some non-target species, the fence has been designed with 7- by 12-inch openings. These openings are like those used in prior USDA APHIS programs and are intended to allow smaller animals to pass through. This design ensures that the movement of small and some medium-sized animals (e.g., American badger (*Taxidea taxus*), desert cottontail (*Sylvilagus audubonii*), Mexican ground squirrel (*Ictidomys mexicanus*), desert shrew (*Notiosorex crawfordi*), and southern plains woodrat (*Neotoma micropus*)) are unlikely to be substantially affected. Furthermore, these openings facilitate the movement of ocelots (*Leopardus pardalis*), jaguarundi (*Herpailurus yagouaroundi cacomitli*), and Texas tortoises (*Gopherus berlandieri*), crucial for genetic exchange between populations, according to USDA APHIS (2018). For larger non-target species unable to use the openings, such as coyotes (*Canis latrans*) and foxes (Canidae), provisions would be made for passage through managed fence breaks. Fence heightening may temporarily impact ground-dwelling birds like wild turkey (*Meleagris gallopavo*) and Northern bobwhite quail (*Colinus virginianus*) by causing some loss of corridor connectivity. However, this disturbance is expected to be minimal and temporary as fences are designed with bottom gaps to allow non-targets including ground-dwelling birds to pass through. Also, known nesting brood rearing or lekking sites for these ground-dwelling birds will not be fenced. Vegetation regrowth will continue to provide cover for ground birds, and fences will not isolate any critical habitat patches. Furthermore, since the program involves raising an existing fence rather than constructing a new one, the overall effect on groundcover vegetation crucial for these birds is anticipated to be negligible. In general, species other than white-tailed deer and nilgai are not preferred CFT hosts. So, their crossing of the game fence would not substantially affect the spread of CFTs.

Some negative effects to wildlife from the proposed program may include accidental collisions with fencing by ungulates with poor depth perception, especially when chased by predators. Literature suggests that fences can be used by predators as hunting perches, and some woven wire fences, particularly those with barbed wire strands, can entangle animals (USDA APHIS, 2018). However, the program does not propose using barbed wire in its game fencing. USDA APHIS utilizes the best available science to guide its decisions regarding fence design, materials, and locations. The game fence design under the preferred alternative specifically minimizes entanglement risks and allows species passage to access critical resources.

Endangered Species Act

Section 7 of the Endangered Species Act (ESA) and ESA's implementing regulations require Federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed T&E species or result in the destruction or adverse modification of critical habitat. A report generated from the USFWS' Information for Planning and Consultation (IPaC) tool provides the T&E species, species proposed for listing, candidate species, and designated and proposed critical habitat in the proposed fencing area.

In its final biological assessment of the CFTEP fence deterrent in Kenedy County, USDA APHIS (2021 and 2022a, b) determined that the proposed action will have no effect on the following species or their designated or proposed critical habitats: tricolored bat (*Perimyotis subflavus*), West Indian manatee (*Trichechus manatus*); eastern black rail (*Laterallus jamaicensis* spp. *jamaicensis*); piping plover (*Charadrius melodus*) and its critical habitat; red knot (*Calidris canutus rufa*) and its proposed critical habitat; hawksbill sea turtle (*Eretmochelys imbricata*) and its critical habitat; green sea turtle (*Chelonia mydas*); Kemp's ridley sea turtle (*Lepdochelys kempii*); Mexican fawnsfoot (*Truncilla cognata*) and its critical habitat; Texas hornshell (*Popenaias popeii*) and its proposed critical habitat; ashy dogweed (*Thymophylla tephroleuca*); prostrate milkweed (*Asclepias prostrata*) and its critical habitat; South Texas ambrosia (*Ambrosia cheiranthifolia*); Texas ayenia (*Ayenia limitaris*); and Zapata bladderpod (*Physaria thamnophila*) and its critical habitat.

USDA APHIS determined that the proposed action “may affect but is not likely to adversely affect” the Gulf Coast jaguarundi (*Puma yagouaroundi cacomitli*), ocelot (*Leopardus pardalis*), northern aplomado falcon (*Falco femoralis*), and cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*). Concurrence with these determinations was received from the USFWS on August 28, 2025 (USFWS, 2025).

Bald and Golden Eagle Protection Act

Southern Kenedy County lies over 150 miles from known eagle breeding areas, meaning potential effects of the program action on these eagle species are unlikely. While sightings of bald eagles have been recorded in South Texas, their distance from the program area implies minimal risk. Likewise, golden eagles are rare in Texas, especially in the eastern region, including Kenedy County. Sightings are more common in western Texas (TAMU, undated), making it unlikely for golden eagles to be present in Kenedy County. Fencing could potentially disturb nests of bald or golden eagles; however, neither species is known to nest in the program area, so no nest disturbance is expected. Non-breeding eagles are also unlikely to be found in the U.S., minimizing the chance of disruption. If an eagle or nest is identified in the program area, proposed fencing activities would be adjusted to minimize effect, and program personnel would coordinate with the State Wildlife Service to follow eagle management protocols (TPWD, undated).

Migratory Bird Treaty Act

Migratory birds contend with numerous threats, such as habitat loss, human disturbance, predation by domestic cats, invasive bird species, and collisions with tall structures (Shackelford et al., 2005). To mitigate the program's potential impact on migratory birds and nesting sites from vegetation removal, USDA APHIS will implement FWS' recommendations, including:

- Surveying migratory birds before clearing any vegetation between March 15 and September 15; and
- Establishing vegetation buffers (at least 100 feet for songbirds and 500 feet for other species)

around detected nests until the birds fledge or abandon the site (USFWS, 2022).

4.5 Water Quality

Under the no-action alternative, USDA APHIS would not fund modifications to existing cattle fences. The program would continue routine activities like surveying, border patrols, and chemically treating livestock. These actions could cause some environmental effects, including contaminating surface and groundwater through chemical runoff, leaching, or improper acaricide disposal. The bioaccumulation of acaricides could disrupt aquatic food webs, and nutrient runoff might lead to water eutrophication and oxygen depletion. Since no funding would be provided, these effects would not be associated with game fencing.

In addition, routine control measures would contribute to regional impacts. According to the Kenedy County Groundwater Conservation District (2023), groundwater discharge from inland pastures, affected by dominant livestock grazing, transports nutrients and dissolved substances into Baffin Bay and Laguna Madre. This could alter water temperature and chemistry, trigger algal blooms, and increase the risk of eutrophication.

Under the preferred alternative, the proposed heightening of the existing cattle fence at Norias Division of King Ranch in Kenedy County is not expected to affect water quality. While general fencing materials and construction activities can pose risks to aquatic ecosystems through some erosion and runoff, the Norias fencing's design utilizes materials that are made in other locations outside of the program area, and that are specifically chosen to prevent the leaching of harmful substances like chlorine, zinc, heavy metals, and particulates during installation and operation (USDA APHIS, 2018 and 2021). The existing cattle fence elevation will not lead to water sedimentation, and normal water flow will be unaffected. The fence's permeable and corrosion-resistant nature is designed to facilitate stormwater runoff without causing long-term water quality concerns. Furthermore, the fence heightening will not involve spanning of any waterways. Similar programs in nearby counties (e.g., Cameron and Willacy Counties) received no water quality-related objections from the International Boundary and Water Commission (IBWC), provided the fence did not cross waterways (USDA APHIS, 2022a). USDA APHIS employs established best management practices (BMPs) during fence installation and monitoring activities to minimize environmental effects. These BMPs include avoiding sensitive water body areas during fence layout, promoting water flow through permeable fence designs, minimizing habitat disturbance and promoting vegetation recovery, and implementing erosion and sedimentation control measures such as regular inspections and diversion berms.

4.6 Air Quality

Under the no action alternative, USDA APHIS would not provide funding for increasing the existing

cattle fences. Instead, the program would continue its routine operations, as detailed in Chapter 2, and ranchers would maintain vegetation along the fences as they normally would. While some air pollutants might be released during these routine activities, their effects on the environment would remain very limited in time and scope.

Under the preferred alternative, air pollutant releases may potentially stem from three main sources: (1) production of fence materials (emissions occur off-site and are outside USDA APHIS control); (2) fencing installation; and (3) service vehicle travel for fence maintenance. A limited quantity of pollutants may be released during fence installation and vehicle movements. However, USDA APHIS will minimize vehicle trips to reduce emissions. Best practices such as preserving the vegetation, mulching, and spraying water on exposed soil would help manage dust emissions.

Given the small scale of the CFTEP in Kenedy County, potential airborne pollutants are expected to be low, temporary, and quickly dissipate, resulting in no long-term air quality effects under either alternative.

4.7 Tribal and Historical Properties

Under either alternative, there would be no effect on Tribal or historic properties in Kenedy County (BIA, 2016) because there are no federally recognized active tribes or ceded lands there.

USDA APHIS identified two main historical properties within Kenedy County - Mansfield Cut Underwater Archeological District and King Ranch:

- The proposed game fence location is over 12 miles Northwest of the historic Mansfield Cut Archaeological site at Port Mansfield. So, the proposed high game fencing would have no effect on the historic Mansfield Cut Archaeological site.
- The proposed game fence would be installed in the Norias Division of the historic King Ranch in South Texas (TSHA, 2014), which is a landscape with a substantial value in Texas history. While the 14-mile Norias game fencing may affect the historic integrity and visual landscape of King Ranch, this effect is less than the proposed program action that aims at improving the efficiency of an existing cattle fence by raising its height from four to eight feet to deter the movement of white-tailed deer and nilgai and ultimately limit the spread of CFTs and tick diseases. The fence type and materials would be the same as those USDA APHIS has used in Cameron, Willacy, and other neighboring counties in South Texas. The USDA APHIS proposed action would not alter, change (restore or rehabilitate), modify, relocate, abandon, or destroy any historic property or nearby infrastructure. USDA APHIS program activities would not directly or indirectly alter the characteristics of any listed historic property that qualifies it for inclusion in the National Register of Historic Properties. USDA APHIS activities would not use heavy equipment that could create noise levels requiring auditory protection. Any visual,

atmospheric, or auditory effects during the installation of high game fencing would be limited in duration, intensity, and area. So, by using targeted game fencing within the existing quarantine zone, King Ranch can effectively manage CFTs and safeguard the health of its cattle herds, a critical part of its legacy. The long-term ecological health and cattle protection at King Ranch are paramount considerations that outweigh the potential negative effects of fencing on the ranch's heritage.

In July 2025, USDA APHIS consulted with the Texas Historical Commission (THC) to ensure the Agency's compliance with section 106 of the National Historic Preservation Act (NHPA). The THC concurred with the USDA APHIS's analysis and conclusion of no substantial effect of its action on the historic King Ranch property.

4.8 Human Health and Socioeconomics

While CFTs pose no direct public health risk, unrestricted movement of CFT hosts (particularly white-tailed deer and nilgai) under the no action alternative can have implications for ranchers and human health. For instance, not heightening the existing cattle fences may allow unchecked tick dissemination across the region, increasing risks to human health as humans can also be hosts to various tick species carrying diseases (USDA APHIS, 2018).

Under the proposed action alternative (preferred), which involves raising the cattle fencing to eight-foot-high game fencing, there would be many health and socioeconomic opportunities Kenedy County residents would benefit from, including:

- Reducing tick spread and disease transmission among livestock.
- Mitigating human health risks associated with other pests and diseases carried by wildlife.
- Promoting more productive animal husbandry practices.
- Potentially lowering the cost of meat and animal products for U.S. consumers; and
- Providing hunters with access to tick-free, healthier deer.

The proposed fencing will not overlap any colonias as there are none in the proposed program area. Likewise, the proposed fencing will not overlap any human populated areas or properties (nearest schools or hospitals are several miles away). The risk of potential adverse effects on construction workers involved in fencing activities is unlikely, as program personnel are trained and use appropriate personal protective equipment. While white-tailed deer and nilgai can cross most four-foot-tall (cattle) fences, they are unlikely to cross the eight-foot-tall (game) fences proposed by the program. This suggests that such high barriers would be effective in managing the spread of CFTs and overall beneficial to the ranchers in the program area.

4.9 Executive Orders Compliance

Census data (USCB 2024) indicate that children under 5 years old make up 4.8% of Kenedy County's population, while youth under 18 represent 16.7%. USDA APHIS's proposed action is several miles away from residential areas, schools, and places used by children. This minimizes potential risks to children, prioritizing child safety and, therefore, complying with EO 13045, "Protection of Children from Environmental Health Risks and Safety Risks."

Although the Hispanic or Latino community constitutes the majority of Kenedy County's population (73.2%), with 38.5% of residents being foreign-born and 90.4% of those aged 5 and older speaking a language other than English at home, USDA APHIS complies with Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency," by taking reasonable steps to ensure meaningful access and participation in its programs and decision-making processes for individuals with limited English proficiency. The agency actively involves Spanish speakers and other non-English speakers in its program activities.

Under either alternative (maintaining the existing cattle fences or modifying them to control game movement), no negative impacts on children's health and safety or on the community's standard of living and sociocultural practices (including language use) are expected. Overall, USDA APHIS anticipates no adverse effect from heightening the existing fences. Instead, the proposed action will support local ranching communities including non-English speakers under the preferred alternative, while minimizing or eliminating potential exposure to risks associated with controlling the movement of CFT vectors and related diseases.

5 Reasonably Foreseeable Effects

NEPA 42 U.S.C. § 4321 *et seq.* requires that agencies consider reasonably foreseeable environmental effects associated with the agency's proposed action. Such reasonably foreseeable effects may include effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Such effects can also result from actions with individually minor but collectively substantial effects taking place over a period.

USDA APHIS has past and ongoing programs in South Texas (including Kenedy County), primarily related to plant health and animal pest control. Examples of such programs include, but are not limited to, citrus greening and Asian citrus psyllid, imported fire ants, Mediterranean fruit fly, Oriental fruit fly, Mexican fruit fly, European cherry fly, European grapevine moth, flighted spongy moth complex, spotted lanternfly, giant African snail, Asian longhorn beetle, coconut rhinoceros beetle, Emerald ash borer, boll weevil and cattle fever tick eradication programs, and vertebrate pest control (see Appendix B).

In general, when the detection of a pest (e.g., CFT, boll weevil, imported fire ant, or Mexican fruit fly) triggers an action, a chemical treatment is applied to the specific affected site(s) or to an extended quarantine area. Targeted treatments are infrequent and made in the action area using pesticide products that are registered by the EPA for a wide variety of agricultural and non-agricultural uses.

USDA APHIS works with other Federal agencies to minimize aggregate effects on the environment. For instance, effects on vegetation and soil occur to a limited degree because of activity coordination between APHIS CFTEP (conducting trail maintenance to survey for cattle coming from Mexico), U.S. Department of Homeland Security (using sites associated with potential illegal border crossings), and USFWS (using trail to monitor wildlife).

Chemical use in the CFTEP, fruit fly programs, and other pest control initiatives, is carefully regulated to minimize effects on non-target fish and wildlife species. As a result, the chemicals employed in these USDA APHIS programs pose minimal to no risk to most non-target populations. Since 1938, trails established for CFTEP surveillance along the Rio Grande have impacted native habitats. However, a collaborative approach involving CFTEP, landowners, and public agencies through land management practices (like mitigation and maintenance) helps minimize further ecological harm. Trail lengths are expected to remain stable.

The reasonably foreseeable effects of USDA APHIS activities including the actions evaluated in this

EA are minimal relative to the effects of other ongoing and future activities in Kenedy County, such as agriculture and ranching, energy production, highway maintenance and construction, and property development. When assessed against the current environmental baseline and other past, present, and near future activities, these reasonably foreseeable effects amount to a small, incremental, and generally transient change to the human environment, making them negligible. Additionally, some of these effects may be beneficial, including reduced CFT population and tick-borne diseases (e.g., babesiosis), and increased economic advantages to the cattle industry and local communities.

6 Persons and Agencies Consulted

USDA APHIS CFTEP operates as a collaborative initiative involving the Federal government, the State of Texas, local governments, and individual livestock producers, all of whom share the program's costs. To compile, share, and review information for this EA, USDA APHIS consulted several individuals and agencies, including:

State Historic Preservation Officer (SHPO)/Texas Historical Commission (THC)
P.O. Box 12276
Austin, TX 78711-2276

Texas Animal Health Commission, Field Operations Office
25833 Zinnia County Road
Raymondville, Texas 78580

U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS),
Policy and Program Development (PPD), Environmental Risk and Analysis Services (ERAS)
5607 Sunnyside Avenue
Beltsville, MD 20705

U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS),
Veterinary Services (VS), Strategy and Policy
National Cattle Fever Tick Eradication Program (CFTEP)
2150 Centre Avenue, Bldg. B, 3E89
Fort Collins, CO 80526-8117

U.S. Fish and Wildlife Service (USFWS), Ecological Services, Alamo Sub-Office
3325 Green Jay Rd
Alamo, Texas 78516

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Appendix B. Examples of USDA APHIS Programs in Texas and the United States

Program Title	Document	Scope	Year
Cattle Fever Tick Eradication Program Use of Ivermectin-treated Corn in 41 Counties, Texas: Final Environmental Assessment, July 2026	EA and FONSI	Texas	2025
Cattle Fever Tick Eradication Program Fence Deterrent in Cameron and Willacy Counties, Texas Final Supplemental Environmental Assessment, May 2025	EA and FONSI	Texas	2025
Cattle Fever Tick Eradication Program Fence Deterrent in Cameron and Starr Counties, Texas: Final Environmental Assessment, June 2024	EA and FONSI	Texas	2024
Emergency Response for Highly Pathogenic Avian Influenza Outbreaks in the United States Migratory Bird Flyways: Final Supplemental Environmental Assessment	EA and FONSI	U.S.	2024
Final Environmental Assessment for Field Release of <i>Lophodiplosis indentata</i> (Diptera: Cecidomyiidae), for classical biological control of <i>Melaleuca quinquenervia</i> (Myrtaceae), in the contiguous United States	EA and FONSI	U.S.	2024
Predator Damage Management in the Canyon District of Texas	EA and FONSI	Texas	2024
Spotted Lanternfly Cooperative Control Program for the Conterminous United States Final Programmatic Environmental Assessment, January 2024	EA and FONSI	U.S.	2024
Final Environmental Assessment: Cattle Fever Tick Eradication Program Fence Deterrent in Cameron and Zapata Counties, Texas, March 2023	EA and FONSI	Texas	2023
Predator Damage Management in the Canyon District of Texas	EA and FONSI	Texas	2023
Field Evaluation of HOGGONE® Sodium Nitrite Toxicant Bait for Feral Swine	SEA and FONSI	Texas	2022
Final Supplemental Environmental Assessment: Cattle Fever Tick Eradication Program Fence Deterrent in Cameron and Willacy Counties, Texas, April 2022	SEA and FONSI	Texas	2022
Final Environmental Assessment: Release of <i>Psyllaephagus euphyllurae</i> (Hymenoptera: Encyrtidae) for Biological Control of Olive Psyllid, <i>Euphyllura olivina</i> (Hemiptera: Liviidae), in the Contiguous United States, May 2022	EA and FONSI	U.S.	2022
Field Evaluation of HOGGONE; Sodium Nitrite Toxicant Bait for Feral Swine in Texas	SEA and FONSI	Texas	2022
Bird Damage Management in Texas, APHIS-2021-0067	EA and FONSI	Texas	2021
<i>Anastrepha</i> spp. Cooperative Eradication Program Rio Grande Valley, Texas	EA and FONSI	Texas	2021
Oral Vaccination to Control Specific Rabies Virus Variants with Human Adenovirus Type 5 Vector in Maine, New Hampshire, New York, Ohio, Pennsylvania, Tennessee, Texas, Vermont, Virginia, and West Virginia [Docket #: APHIS-2019-0034]	SEA and FONSI	National	2021
Field Evaluation of HOGGONE® Sodium Nitrite Toxicant Bait for Feral Swine	SEA and FONSI	Texas	2021

Program Title	Document	Scope	Year
Bird Damage Management in Texas, [Docket #APHIS- 2021-0067]	EA and FONSI	Texas	2021
A Small-Scale Field Evaluation of HOGGONE® 2 Sodium Nitrite Toxicant Bait for Feral Swine in Texas	EA and FONSI	Texas	2019
Small-Scale Field Evaluation of HOGGONE; Sodium Nitrite Toxicant Bait for Feral Swine	EA and FONSI	Texas	2019
Oral Vaccination to Control Specific Rabies Virus Variants with Human Adenovirus Type 5 Vector, APHIS-2019-0034	EA and FONSI	National	2019
Field Evaluation of HOGGONE; Sodium Nitrite Toxicant Bait for Feral Swine in Texas	EA and FONSI	Texas	2017
Predator Damage Management in Corpus Christi District	EA and FONSI	Texas	2017
Field Evaluation of HOGGONE® Sodium Nitrite Toxicant Bait for Feral Swine	EA	Texas	2017
Predator Damage Management in Corpus Christi District in Texas	EA and FONSI	Texas	2016
Aquatic Mammal Damage Management in Texas, APHIS-2016-0075	EA and FONSI	Texas	2016
Predator Damage Management in Kerrville District	EA and FONSI	Texas	2016
Aquatic Mammal Damage Management in Texas, [Docket #: APHIS-2016-0075]	EA and FONSI	Texas	2016
Predator Damage Management in Kerrville District in Texas	EA and FONSI	Texas	2015
Predator Damage Management in Fort Worth District in Texas	EA and FONSI	Texas	2015
Predator Damage Management in San Angelo District	EA and FONSI	Texas	2015
Predator Damage Management in Fort Worth District	EA and FONSI	Texas	2015
Predator Damage Management in College Station District	EA and FONSI	Texas	2015
Feral Swine Damage Management in Texas	EA and FONSI	Texas	2014
Predator Damage Management in Uvalde District	EA and FONSI	Texas	2014
Predator Damage Management in Fort Stockton District	EA and FONSI	Texas	2014
Predator Damage Management in Canyon District	EA and FONSI	Texas	2014
Feral Swine Damage Management in Texas	EA and FONSI	Texas	2014
Predator Damage Management in Uvalde District in Texas	EA and FONSI	Texas	2014

Appendix C. Certification Statement for Page Limit and Deadline

In accordance with the National Environmental Policy Act 7 CFR § 1b.5(c)(6), I certify that I have reviewed this Environmental Assessment (EA) and I confirm that it meets the requirements of NEPA regulations.

As the Responsible Official, I certify that this EA:

- Demonstrates the agency has thoroughly considered the factors mandated by NEPA;
- Represents the agency's good-faith effort to prioritize documentation of the substantive issues and most important considerations required by NEPA within the congressionally mandated page limits;
- Reflects the agency's expert judgment;
- Addressed briefly, or left unaddressed, any issues or considerations that were, in the agency's judgment, comparatively not of a substantive nature;
- Represents the agency's good-faith effort to fulfill NEPA's requirements within the Congressional timeline (or within the minimally extended timeline) and this effort is substantially complete; and
- Contains analysis that is adequate to inform and reasonably explains the responsible official's final decision regarding the proposed action or selected alternative.