

DRAFT
ENVIRONMENTAL ASSESSMENT
CAMP RIO ARCHERY RANGE
IDEA PUBLIC SCHOOLS
CAMERON COUNTY, TEXAS



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Prepared for IDEA Public Schools



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1.0 Project Introduction, Need, and Purpose

The Texas Parks and Wildlife Department (TPWD), in partnership with IDEA Public School System, is seeking the U.S. Fish and Wildlife Service's (Service) approval (through Federal Assistance grant) for a proposed project to develop, operate, and maintain an archery range on an approximately 3.13-acre portion of the Camp Rio property for hunter education instruction.

Camp Rio is an outdoor education facility north of Brownsville in Cameron County, Texas. Camp Rio is operated by IDEA Public School System on the site of the former Camp Lula Sams, which operated as a Girl Scout Camp from the 1950s until the 1990s. The current facility offers a variety of activities and plans to expand on its current offerings in support of their mission: to provide nature-based education and hands-on experience for youth in south Texas.

1.1 Introduction

Camp Rio is located on an 85-acre parcel, with approximately 75 acres of the parcel under a conservation easement that restricts development on a pocket of Tamaulipan Riverine thorn-scrub. The unprotected portion of the property is in three distinct areas of 6.83 acres, 0.61 acres, and 3.13 acres (**Figure 1, Attachment A**). The 3.13-acre portion is the location of the proposed action (i.e., the action area). It is currently undeveloped, but has been modified by past activities (e.g., the excavation of a manmade pond). **Figures 2 and 3** show alternate, closer views of the action area. Representative photographs of the action area are included in **Attachment B**.

1.2 Project Need

Archery instruction opportunities are lacking in Cameron County (approximate population 225,000) and surrounding areas. The 5-1-1 Shooting Range and Golden Eagle Field operate archery ranges within a 25-mile radius of the proposed facility, but no educational opportunities are offered. One-day classes are offered at Point Blank Sporting Goods, which is approximately 50 miles away in Pharr, Hidalgo County, Texas. Additionally, underprivileged, underserved youth in South Texas lack opportunities for nature-based, outdoor education that can provide them with knowledge related to stewardship and appreciation of the natural environment.

1.3 Project Purpose

Camp Rio seeks to expand their outdoor education offerings through the construction of an archery range. The range would be open to the public, and it would provide outdoor education opportunities to the students at Camp Rio, which would increase the number of South Texas youth served by the facility while providing an example of responsible stewardship.

1.4 Description of the Proposed Action

The proposed action would develop an archery range on an approximately 3.13-acre, undeveloped, unprotected portion of the property. Ancillary to the development of the archery range, Camp Rio intends to construct an ADA-compliant restroom facility, a deck with shade canopy, a parking area, and a driveway that would provide access from the northern parcel boundary. Current designs indicate stalls for two archery lanes north of the existing pond. The other facilities

would be constructed along the eastern portion of the action area. In addition to these new facilities, existing trails would be improved. See **Figure 4**.

1.5 Project Funding

Financial assistance for this project would be provided by funding through a grant under the United States Fish and Wildlife Service's (USFWS) Wildlife and Sport Fish Restoration Program that would be administered by the Texas Parks and Wildlife Department (TPWD). The USFWS program provides grant funds to state fish and wildlife agencies for projects to restore, conserve, manage, and enhance wild birds and mammals and their habitat. Projects also include providing public use and access to wildlife resources, hunter education, and development and management of shooting ranges. The program is authorized by the Wildlife Restoration Act (Pittman-Robertson Act) of 1937.

2.0 Alternatives Analysis

2.1 Alternative 1 – Build Alternative

The Build Alternative, through the development of the facilities described above, would meet both the need and purpose stated above. Camp Rio would provide archery education opportunities to the public and to students at Camp Rio through the development of a minimally invasive facility.

2.2 Alternative 2 – No Build Alternative

The No Build Alternative would result in no action being taken. This alternative would not meet the need or purpose stated above. The site would remain undeveloped and under the current land use with the No Build Alternative. Camp Rio would not expand archery education opportunities for area youth and the public at large beyond those already in place.

3.0 Affected Environment

3.1 Physical Environment

3.1.1 Climate

Camp Rio is in a sub-tropical, sub-humid, marine-influenced portion of South Texas (TWDB, 2012). Precipitation amounts are generally highest through the summer, but can be heavily influenced by tropical storms that are typical of the early fall (USCD, 2017). Temperatures are moderated by the coastal weather influences, which contribute to the area having the highest low temperatures in the state.

3.1.2 Geology and Soils

Camp Rio is underlain by Quaternary alluvium associated with the Rio Grande. Geologic descriptions of the area provided by the U.S. Geologic Survey (USGS) characterize the deposits in the action area as generally muddier other similar, nearby deposits (USGS, 2017). The Natural Resource Conservation Service (NRCS) identifies the soils in the action area as Cameron silty clay, saline and Laredo silty clay loam, 0 to 1 percent slopes, rarely flooded (NRCS, 2017), with

Cameron silty clay the more predominant of the two (**Figure 5**). **Table 1** lists soil map units identified at Camp Rio along with other pertinent soil unit information.

Table 1: Soil Map Units at Camp Rio				
Map Unit Symbol	Map Unit Name	Occurs in the Action Area	Prime Farmland	Hydric Rating ¹
CF	Cameron silty clay, saline	Yes	No	5
LAA	Laredo silty clay loam 0 to 1 percent slopes, rarely flooded	Yes	Yes	0
LC	Laredo Silty clay loam, saline	No	No	0
OM	Olmito silty clay	No	Yes	0
W	Water	No	No	0

1. Percentage of hydric inclusions
Source: NRCS, 2017

3.1.3 Prime and Unique Farmland Soils

Prime farmland soils, as defined by the U.S. Department of Agriculture and categorized as prime or unique per the Farmland Protection Policy Act, are soils that are best suited to producing food, feed, forage, fiber, and oilseed crops. Such soils have properties favorable for the economic production of sustained high yield crops. Prime farmland soils produce the highest yields with minimal inputs of energy and economic resources, and farming these soils results in the least damage to the environment.

Of the two soil map units in the action area, Cameron silty clay, saline is not categorized as prime farmland by the NRCS, and Laredo silty clay loam, 0 to 1 percent slopes, rarely flooded is categorized as prime farmland. See **Table 1**, above and **Figure 5**.

3.1.4 Surface Water

There is no natural surface water within the action area (**Figure 6**). The surrounding area has a network of canals and ditches. Abandoned meanders and larger resacas of the Rio Grande occur on the Camp Rio property and in the vicinity. A man-made pond has been excavated within the action area. According to aerial imagery, the pond was excavated approximately five years ago, and it may have been a source of materials used in the extension of Railroad Street, which borders the action area on the north (NETR, 2017). The pond held water at the time of field investigations (March 2017).

The Texas Commission on Environmental Quality (TCEQ) administers the Texas Pollutant Discharge Elimination System (TPDES) in accordance with Section 402 of the Clean Water Act. The discharge of pollutants to receiving waters is regulated, in part, through the use of the Construction General Permit (CGP), which applies to all construction projects that would result in more than one acre of earth disturbance. According to current design information, the proposed project would result in greater than one acre of earth disturbance; therefore, compliance with the Texas Pollutant

Discharge Elimination System through the Construction General Permit would be required. This would ensure the project's compliance with Section 402 of the Clean Water Act. As part of TPDES compliance, the project would develop and implement a Stormwater Pollution Prevention Plan (SWP3) that would detail erosion and sedimentation Best Management Practices (BMPs) intended to protect water quality.

TCEQ collects data on water quality in the state and reports those data in an integrated report per the requirements in Sections 305(b) and 303(d) of the Clean Water Act. Evaluated waterbodies are assigned a Segment ID for monitoring and reporting purposes. Segment 2302, Rio Grande below Falcon Reservoir, is categorized as an impaired stream segment due to high bacteria counts. There are currently no Total Maximum Daily Loads established for this segment, and additional data or information will be collected and/or evaluated by TCEQ before a management strategy is selected (TCEQ, 2015). Given the current water quality in assessed waterbodies and the nature of the proposed action, the project is not anticipated to result in further degradation of waters protected by Sections 303(d) and 305(b) of the Clean Water Act.

3.1.5 Groundwater

The action area is surrounded by the Southern Portion of the Gulf Coast Aquifer System (TWDB, 2017) (**Figure 7**). However, salinity levels and other dissolved solids in the vicinity of the action area can result in non-potable groundwater, especially at shallow depths below the surface (TWDB, 2007). Water in the pond was not tested, but the clarity is consistent with groundwater sources and the scarcity of aquatic life and use by area wildlife may indicate high salinity levels, which may vary with rain and surface water inputs. Historic aerial imagery of the vicinity indicates that, prior to the development of the railroad easement that lies to the east, the action area may have continuous with a salt pond that is indicated on current maps. Saline water in the pond would be consistent with other groundwater in the area.

3.1.6 Wetlands and other Waters of the United States

The USACE regulates the discharge of dredged and fill material into wetlands and other waters of the U.S. under Section 404, subsection 330.5(a)(21) of the Clean Water Act. Section 10 of the Rivers and Harbors Act of 1899 authorizes the USACE to regulate any work in or affecting navigable waters of the U.S. Authorization is required from the USACE for any activity that would result in the discharge of dredged or fill material into waters of the U.S. Regulated activities may be permitted through the USACE via Individual Permits (IP), Regional General Permits (RGP), Nationwide Permits (NWP), or Letters of Permission.

Qualified wetland ecologists conducted field investigations within the action area in March 2017. The routine method of wetland delineation outlined in the *Field Guide for Wetland Delineation – 1987 Corps of Engineers Manual* (Environmental Laboratory, 1987) and updated in the *Great Plains Regional Supplement* (USACE, 2010) was utilized for wetland determination. Field activities focused on wetland and water of the U.S. delineation and description. Two wetland determination data points were assessed in the action area. No wetlands were identified. Wetland Determination Data Forms are included in **Attachment C**. No linear water features or wetlands were identified in the

action area. One manmade pond was identified on site which has no connection to jurisdictional waters. Manmade ponds are not jurisdictional waters, and therefore not subject to regulation under the Section 404 of the Clean Water Act.

3.1.7 Topography

The action area slopes gently to the northwest with the lowest areas lying just south of Railroad Street near the canal that borders the western edge. Elevations on the site vary between approximately 25 and 30 feet above mean sea level.

3.1.8 Floodplains

Executive Order 11988, Floodplain Management, requires federal agencies to avoid actions, to the extent practicable, which would result in the location of facilities in floodplains and/or affect floodplain values.

According to the Flood Insurance Rate Map, Panel 480101 0325 B (Revised September 1983), which was produced by the Federal Emergency Management Agency, the action area is not within the 100-year floodplain.

3.2 Biological Environment

3.2.1 Vegetation

According to the Ecological Mapping System of Texas (EMST), the majority of Camp Rio is dominated by Rio Grande Delta: Thorn Woodland (MoRAP, 2013). cursory observations of the Camp's property outside of the action area confirmed that a thorn woodland, and more specifically a Tamaulipan thorn-scrub woodland, habitat type dominated undeveloped areas. EMST identifies Coastal: Tidal Flat and Coastal: Sea Ox-eye Daisy Flat habitat types within the action area.

Field observations found three general vegetation assemblages: Sea Ox-eye Daisy Flat, low mixed shrubs, and large woody vegetation (**Figure 8**). Large woody vegetation, typical of Tamaulipan thorn-scrub woodland dominates the southern portion of the action area. Javelina bush (*Condalia ericoides*) is the most frequent species, but the relatively large size of the Texas ebony trees (*Ebenopsis ebano*) make them a substantial component of the canopy. This vegetation assemblage covers approximately 0.5 acres of the action area. Sea Ox-Eye Daisy Flats cover approximately 0.6 acres of the project area. They are dominated by sea ox-eye daisy (*Borrchia frutescens*) and include the grasses and forbs found in the adjacent low shrub areas. There is no clear line between the low shrub and sea ox-eye daisy areas. The two grade together with woody components increasing to the east. The low shrub area (**Figure 8**) covers approximately 1.1 acres. Johnsongrass (*Sorghum halepense*), silver-beard grass (*Bothriochloa laguroides*), King Ranch bluestem (*Bothriochloa ischaemum*), and various forbs occur throughout this area along with prickly pear (*Opuntia engelmannii*) and woody species including Javelina bush, broomweed (*Gutierrezia sphaerocephala*), shrubby Indian mallow (*Abutilon abutiloides*), desert mallow (*Sphaeralcea ambigua*), and balloon-vine (*Cardiospermum halicacabum*). Along the north and east sides, woody vegetation increases and includes lime prickly-ash (*Zanthoxylum fagara*) and net-leaf hackberry (*Celtis reticulata*).

3.2.2 Wildlife Species

The action area is located in the South Texas Plains ecoregion (Gould, 1960) (**Figure 7**). The area is also described as the Western Gulf Coastal Plain or Gulf Coast Prairies and Marshes ecosystem (TPWD, 2017). Observed birds included Black-bellied Whistling Duck (*Dendrocygna autumnalis*), Green Parakeet (*Aratinga holochlora*), Crested Caracara (*Caracara cheriway*), and Mourning Dove (*Zenaida macroura*). Additionally, unoccupied bird nests were observed in various shrubs, which is evidence that the site is being used for nesting by unknown bird species. Several ground-level nests were also observed, which were very likely constructed by mammals. These nests were typically two to three feet tall and equally wide, constructed of sticks, and built at the base of dense woody vegetation (**Photo 7**). A large burrow constructed in the midst of dense woody vegetation and various yuccas was observed in the far northeast corner of the Camp Rio property. This burrow was likely constructed by unknown mammal (e.g., fox) or reptile species (e.g., turtle) (**Photo 8**). A large portion of the action area was marked with circular burrows approximately one inch in diameter. Some of these burrows included “chimneys” that are consistent with those constructed by several species of crayfish (**Photo 5**). Additionally, a portion of a carapace was found near the edge of the pond that included a claw indicating that the area is used by unidentified species of crustaceans (**Photo 9**).

Observations at the manmade pond revealed no aquatic animals (fish, crustaceans, etc.). Soft substrates around the pond had few animal tracks. Tracks from raccoons (*Procyon lotor*) and unidentified shore birds were observed.

Though few direct observations of wildlife species were made during field investigations, and indirect evidence (e.g., nests, tracks, scat) were not diagnostic, the action area is obviously used by wildlife species, and additional species could be expected to occur there. Some of these are discussed further in subsequent sections.

To supplement field observations, various species-occurrence databases were queried. This included a query of the Texas Natural Diversity Database (TXNDD), which was carried out by TPWD staff in March of 2017. The query included each 7.5-minute USGS quadrangle map that was intersected by a 10-mile buffer around the action area. Records are reported as Elements of Occurrence, each of which is assigned a unique identification number (referenced here as EOID#). Select EOIDs are presented in attached figures and particularly relevant records are discussed below. It should be noted that an absence of TXNDD records cannot be equated to a species’ absence from an area.

3.2.3 Threatened and Endangered Species

Federally Protected Species

In accordance with Section 7(a)(2) of the Endangered Species Act of 1973, as amended (ESA), federally funded, constructed, permitted, or licensed projects must take into consideration impacts to federally listed and proposed threatened or endangered species. USFWS’ official list (**Attachment D**) of protected species, queried for the vicinity of the action area, lists 14 species that are recognized as either threatened (three species) or endangered (10 species) or that are

candidates for listing as either threatened or endangered (one species). Five of these species have Critical Habitat designated; however, no Critical Habitat has been established in or adjacent to the action area. Of the 14 species identified by the official USFWS list, six have potential to occur in the action area. Additional discussion for these species is provided below. **Attachment E** includes a summary table that presents both state and federally protected species, their listing status, preferred habitat, and a discussion of potential impacts to the species and their habitats.

South Texas ambrosia (*Ambrosia cheiranthifolia*) – Endangered – This species occurs in Kleberg and Nueces Counties, which are north of Cameron County and the action area. Historic accounts from Cameron County exist, including observations (EOID#7388) and collections in the 1930s from near an area now called Russelltown, which is approximately three miles north of the project area (TXNDD, 2017). Notes filed with the observation record indicate that the plant was rare in the region at the time of collection. Soil texture in the project area is consistent with textures preferred by the species; however, records indicate association with soils derived from the Beaumont formation, which lies north of the action area. No individuals of this species were observed during field investigations, and the species is presumed to be absent from the action area.

Texas ayenia (*Ayenia limitaris*) – Endangered – The historic range of this species included Cameron County. The nearest and most recent TXNDD record for this species (EOID#7196) was recorded in 1963. This record is from plants under cultivation in Brownsville at the former home of prominent collector (USFWS, 2010). Collection notes associated with EOID# 137 mention that the species was only known from areas north of Olmito, Texas, which is north of the action area. Several historic populations are considered extirpated, and natural, extant populations are located north of the action area in northern Cameron County and Willacy County (USFWS, 2010). Soil texture, landform, and vegetation assemblages in the action area are consistent with known preferred habitat, this is especially true of densely vegetated areas with thick canopy cover and the margins of such areas. Morphologically similar species were observed during field observations, but all lacked the distinctive fruit case characteristics of Texas ayenia. Based on field observations and population research, the species is presumed to be absent from the action area.

Northern Aplomado Falcon (*Falco femoralis septentrionalis*) – Threatened – The action area is within the current known range of this species. The proposed action would remove tree species and other plants (e.g., cacti and yucca) that may serve as nesting habitat. Additionally, areas within the action area that would be converted to archery range facilities have a potential to serve as foraging habitat. No individuals of this species were observed during field investigations. Sightings of this species are widely recorded throughout Cameron County via the interactive web-based birdwatching site eBird. The vast majority of these sightings are recorded east of the action area, especially in the Laguna Atascosa National Wildlife Refuge, but sightings have been reported approximately one mile to the southwest of the action area as well (eBird, 2018). Our query of TXNDD records returned one observation (EOID#5542) that was noted to be near San Martin Lake, which is approximately 5 miles east of the action area. Potentially suitable habitat occurs in the action area and the species is known to occur in the vicinity.

Red-crowned Parrot (*Amazona viridigenalis*) – Candidate – The action area is within the currently known range of this species and anecdotal sightings from the Camp Rio property and nearby TPWD facilities have been reported (eBird, 2018). This species typically nests and forages in dense canopy. The proposed project would remove some woody vegetation from the action area; however, this would primarily entail removal of solitary trees that are not associated with closed canopies. More suitable habitat lies on other, protected portions of the Camp Rio property where Tamaulipan thorn scrub forests and gallery forests on resacas and along canals provide more continual canopy cover. This species is highly mobile and may pass through or over the action area, but any use would be incidental. The action area does not provide suitable habitat for this species.

Gulf coast jaguarundi (*Herpailurus [=felis] yagouaroundi cacomitli*) – Endangered – The action area is within the currently known range of this species, and TXNDD records from 1992 (EOID#6920) indicate the presence of the species on the TPWD fish hatchery facility directly south of Camp Rio. The areas of dense scrub that are protected on Camp Rio may provide suitable habitat for the species. The proposed action would not affect these areas. The species may find foraging opportunities in the action area, but the action area does not present optimal habitat.

Ocelot (*Leopardus pardalis*) – Endangered – The action area is within the currently known range of this species. TXNDD records include three observances, all more than 20 years ago, from areas near Brownsville and southward (i.e., south of the action area). Areas of dense thornscrub in other portions of the Camp Rio property may provide suitable habitat for this species. Habitats similar to those found in the action area are rarely used. The proposed action would not affect protected thornscrub habitats.

State Protected Species

The TPWD Annotated List of Rare Species for Cameron County (revised 5/16/2016) lists 92 species that are recognized as either endangered (15 species) or threatened (39 species) or are recognized as Species of Greatest Conservation Need (38 species).

The Texas Natural Diversity Database was queried for Elements of Occurrence in the project vicinity (TXNDD, 2017). Records for the federally protected Texas ayenia (*Ayenia limitaris*) and jaguarundi (*Herpailurus [=felis] yagouaroundi cacomitli*) occur within a 1.5-mile buffer of the action area (**Figure 9**).

Federally listed species and their habitats are protected under the Endangered Species Act of 1973, as amended. State-listed species are protected under state law, but habitat for state-listed species does not currently receive regulatory protection. Species of Greatest Conservation Need are rare and recognized by the State of Texas as potentially imperiled, but they are not currently afforded regulatory protection.

3.2.4 Migratory Birds

The Migratory Bird Treaty Act (MBTA) states that it is unlawful to kill, capture, collect, possess, buy, sell, trade, or transport any migratory bird, nest, young, feather, or egg in part or in whole, without a federal permit issued in accordance within the Act's policies and regulations.

One unoccupied nest was observed in a low bush in the action area (**Photo 6**). The nest was approximately four inches across, two inches deep, and constructed of sticks and debris. Of the bird species discussed in Section 3.2.2 above, all but the Green Parakeet are recognized as migratory and are protected by the MBTA. Additional unknown migratory species are likely to use the action area in addition to these, previously identified species.

3.3 Land Use

Agriculture has dominated the landscape surrounding the action area, which historically has been undeveloped. The most developed areas are west of the action area and are generally focused along the Interstate Highway 69E corridor. Residential use has increased in surrounding areas as have commercial and some industrial uses. The land where Camp Rio is situated is largely undeveloped and had served as Camp Lula Sams before being purchased and developed by the IDEA Public School System. The action area is undeveloped and portions were previously used as a borrow pit for adjacent infrastructure projects.

3.4 Cultural Resources

The proposed action is subject to Section 106 of the National Historic Preservation Act (NHPA). Therefore, a cultural resources background study and a field survey were undertaken for the action area footprint or the area of potential effects (APE). On March 13, 2017, Cox McLain conducted a cultural resources survey investigation for the proposed project area. No cultural materials were recovered and no further archeological investigations were recommended. The report was submitted to the Texas Historical Commission (THC) on April 12, 2017. A concurrence letter from the State Historic Preservation Office (SHPO) was received on April 24, 2017.

3.5 Hazardous Materials

The potential for discovery of hazardous, toxic, and radiological waste (HTRW) material at the proposed action area and the surrounding area was evaluated through examination of historic and current land use, review of environmental data bases, and visual observations. Although no site-specific study has been conducted, the potential for HTRW discovery and significant problems related to HTRW during project construction is believed to be low.

A number of hazardous waste generating facilities are registered within one mile of the action area (NETR, 2017); however, the sites are not adjacent to the action area and no records of violations were found. Field observations did not discover any indicators of contamination or signs of illicit dumping.

The U.S. Environmental Protection Agency (USEPA) maintains records of environmental conditions and analyses of potential impacts to environmental justice populations that can be queried through

a web-based tool known as EJScreen. Proximity to known hazardous materials sites is one environmental parameter tracked by the tool. A site's proximity to known hazardous materials sites is then compared to average proximities at the regional, state, and national level. According to data generated through a query based on a 10-mile buffer, the action area is further from known, tracked hazardous materials sites than any given location at both the state and regional levels. It is slightly more proximal to hazardous material sites than any given location at the national level (USEPA, 2017).

3.6 Air Quality

The action area does not occur in any State Implementation Plan (SIP) areas, as regulated by TCEQ (TCEQ, 2017a). Furthermore, the action area occurs in a region where air quality is better than the state and national averages for indicators including particulate matter, ozone, diesel particulate matter, and the National Air Toxics Assessment respiratory hazard index (USEPA, 2017).

3.7 Noise

Areas surrounding the action area are largely undeveloped and generally quiet. The noise environment in the vicinity of the action area is most consistently influenced by transportation uses. Both rail and automobile corridors occur nearby. The Highway 77 Flea Market, to the east, is open on weekends during the day and contributes to ambient noises. The other land uses surrounding the action area are not significant sources of noise pollution.

3.8 Socioeconomic Conditions

The action area lies within Cameron County. The county has a higher minority population, more low-income residents, and more residents that are linguistically isolated as compared to populations at the state, regional, and national level (USEPA, 2017). Based on the most recent estimates, 90 percent of Cameron County residents are minorities while the population of Texas is 56 percent minority and the U.S. population is 38 percent minority. Eighteen percent of Cameron County residents reported speaking English "less than very well", compared to 8 percent statewide and 5 percent nationally. Sixty percent of Cameron County households are classified as low income (household income is equal to or less than twice the federal poverty level), as compared to 38 percent statewide and 34 percent nationally. Approximately 32 percent of Cameron County residents live below the poverty line. (USEPA, 2017).

3.9 Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, directs federal agencies to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority and low-income populations.

In accordance with CEQ guidance, minority populations should be identified if the minority population in the project area "exceeds 50 percent" or if the percentage of minority population in the project area is meaningfully greater than the "minority population percentage in the general population or other appropriate unit of analysis" (CEQ 1997). Communities should be identified as

“low income” based on the annual statistical poverty thresholds from the U.S. Census Bureau (CEQ, 1997).

Based on the socioeconomic metrics summarized in Section 3.8 above, both minority and low-income populations occur in Cameron County.

4.0 Environmental Consequences

4.1 Physical Environment

4.1.1 Climate

Preferred Alternative and No-Build Alternative – Neither alternative has the ability to substantially affect climactic conditions.

4.1.2 Geology and Soils

Preferred Alternative – The proposed action would result in some soil disturbance. Leveling and construction of the parking facility and driveway would impact soils. Soil loss would be minimized through the use of erosion and sedimentation control BMPs per TPDES requirements. No deep excavation is anticipated that would result in impacts to area geology.

No-Build Alternative – Camp Rio would continue to conduct hiking and other outdoor activities in the action area that would not result in additional impacts to soil or geology.

4.1.3 Prime and Unique Farmland Soils

Preferred Alternative – Prime farmland soils occur in the southern portion of the action area; however, none of these areas are currently used as farmland. The proposed action would not result in irreversible conversion of farmland to non-agricultural uses.

No-Build Alternative – Camp Rio would continue operations in a manner consistent with their current business model. No irreversible conversion of farmland to non-agricultural uses would occur.

4.1.4 Surface Water

Preferred Alternative – The proposed action would result in temporary soil disturbance associated with the construction and grading of the facility. The project would implement erosion and sedimentation control BMPs to prevent pollution in receiving waters. Some grading may be necessary ensure that stormwater drains from the facilities, but this would not measurably alter drainage patterns. All disturbed areas would be revegetated or otherwise stabilized before project completion. The project would not contribute to water quality degradation.

No-Build Alternative – Camp Rio would continue operations in a manner consistent with their current business model. No impacts to water quality would occur.

4.1.5 Groundwater

Preferred Alternative – The proposed action would not result in withdrawals from groundwater and would not introduce pollutants to groundwater; therefore, no effects to groundwater would occur.

No-Build Alternative – Camp Rio would continue operations in a manner consistent with their current business model. No impacts to groundwater would occur.

4.1.6 Wetlands and other Waters of the United States

Preferred Alternative and No-Build Alternative – Neither alternative would result in impacts to waters of the U.S. as none are present in the action area. No USACE authorization or permits would be required, and the proposed action would be in compliance with Executive Order 11990.

4.1.7 Topography

Preferred Alternative – The proposed action would not require substantial changes to the existing grade or topography. Some leveling and grading, as discussed above, would be required; however, the proposed action would not result in significant changes to topography.

No-Build Alternative – Camp Rio would continue operations in a manner consistent with their current business model and no changes in topography would result.

4.1.8 Floodplains

Preferred Alternative and No-Build Alternative – Neither alternative would result in floodplain impacts because the action area is not within the FEMA-designated 100-year floodplain. No coordination with the local floodplain administrator would be required.

4.2 Biological Environment

4.2.1 Vegetation

Preferred Alternative – The proposed archery lanes would be constructed in areas dominated by sea ox-eye daisy and would impact approximately 0.45 acres of this vegetation assemblage. The proposed driveway, parking lot, and restroom would be constructed primarily in the low shrub vegetation assemblage and would impact approximately 0.9 acres of vegetation. Trail improvements would occur in and adjacent to areas of large woody vegetation, but impacts would be minimal.

No-Build Alternative – Camp Rio would continue operations in a manner consistent with their current business model and no additional vegetation impacts would occur.

4.2.2 Wildlife Species

Preferred Alternative – The proposed action would impact low shrubs that are currently used by birds and mammals for nest construction. It would also impact areas that are currently used by crustaceans for burrow construction. Some portion of these and other habitat components would be preserved within the action area and would remain available for use by area wildlife. Facility use would be intermittent, somewhat seasonal, and almost always during daylight hours, which would allow many of the wildlife species in the area to use unaffected portions of the action area as well

as the adjacent, undeveloped areas. Additional impact assessments for particular species are discussed further in the Species Impact Table, which is included in **Attachment E**.

No-Build Alternative – Camp Rio would continue operations in a manner consistent with their current business model and no additional impacts to area wildlife would occur.

4.2.3 Threatened and Endangered Species

Preferred Alternative – Of the species identified in the official USFWS list, the following are more likely to occur in the action area.

South Texas ambrosia (*Ambrosia cheiranthifolia*) – Endangered – The historic range of this species included Cameron County. Extant populations occur in Kleberg and Nueces Counties, north of Cameron County. Soil texture in the project area is consistent with textures preferred by the species; however, records indicate association with soils derived from the Beaumont formation, which lies north of the action area. No individuals of this species were observed during field investigations. The species does not occur in the action area and we have determined that the project would have No Effect on this species.

Texas ayenia (*Ayenia limitaris*) – Endangered – The historic range of this species included Cameron County. The nearest and most recent TXNDD record for this species (EOID#7196) was recorded in 1963. Soil texture, landform, and vegetation assemblages in the action area are consistent with known preferred habitat, this is especially true of densely vegetated areas with thick canopy cover and the margins of such areas. Morphologically similar species were observed during field observations, but all lacked the distinctive fruit case characteristics of Texas ayenia. The species does not occur in the action area and we have determined that the project would have No Effect on this species.

Northern Aplomado Falcon (*Falco femoralis septentrionalis*) – Threatened – The action area is within the current known range of this species. The proposed action would remove tree species and other plants (e.g., cacti and yucca) that may serve as nesting habitat. Additionally, areas within the action area that would be converted to archery range facilities have a potential to serve as foraging habitat. No individuals of this species were observed during field investigations. As discussed in **Section 3.2.3**, anecdotal sightings have been reported in areas surrounding the action area with the majority of these sightings occurring east of the action area. Sightings tracked by TPWD include an observation of several active nests approximately 5 miles east of the action area (EOID#5542). The entirety of the action area is generally consistent with the preferred habitat of this species (i.e., open savanna with scattered trees, yucca, and shrubs); and the majority of the area would be converted. However, the patch size (less than 3 acres) and the land use patterns surrounding the action area (e.g., agricultural and suburban) reduce the suitability of this potential habitat.

To the extent practicable, construction activities that include the destruction of potential nesting habitat will be restricted to periods outside of the prime nesting season (March 1 to August 31). If vegetation clearing operations could not be avoided during this period, pre-construction nest bird surveys would be conducted to ensure that no active nests or individuals of this species are present in the action area. Should nests or individuals be discovered at any time during operations, impacts

would be avoided until consultation with USFWS staff could be concluded. Given that no individuals of this species are known to currently use the action area and that the proposed project would only remove habitat elements with potential to provide nesting opportunities after the above mentioned avoidance measures were carried out, we have determined that the proposed action may affect but is not likely to adversely affect this species.

Red-crowned Parrot (*Amazona viridigenalis*) – Candidate – The action area is within the currently known range of this species and anecdotal sightings from the Camp Rio property and nearby TPWD facilities have been reported. This species typically nests and forages in dense canopy. The proposed project would remove some woody vegetation from the action area; however, this would primarily entail removal of solitary trees that are not associated with closed canopies. More suitable habitat lies on other, protected portions of the Camp Rio property where Tamaulipan thorn scrub forests and gallery forests on resacas and along canals provide more continual canopy cover. This species is highly mobile and may pass through or over the action area, but any use would be incidental. Suitable habitat for this species would not be affected by the proposed action; therefore, we have determined that the project would have No Effect on this species.

Gulf coast jaguarundi (*Herpailurus [=felis] yagouaroundi cacomitli*) – Endangered – The action area is within the currently known range of this species, and TXNDD records from 1992 (E0ID#6920) indicate the presence of the species on the TPWD fish hatchery facility directly south of Camp Rio. The areas of dense scrub that are protected on Camp Rio may provide suitable habitat for the species. The proposed action would not affect these areas. The species may find foraging opportunities in the action area, but use of these areas is unlikely. We have determined that the project would have No Effect on this species.

Ocelot (*Leopardus pardalis*) – Endangered – The action area is within the currently known range of this species. TXNDD records include three observances, all more than 20 years ago, from areas near Brownsville and southward (i.e., south of the action area). Areas of dense thornscrub in other portions of the Camp Rio property may provide suitable habitat for this species. Habitats similar to those found in the action area are rarely used. The proposed action would not affect protected thornscrub habitats. We have determined that the project would have No Effect on this species.

Project biologists have determined that 10 state-listed species may be impacted by the proposed project. Each of these species is listed as threatened, none of these are federally listed. Additionally, the proposed action may impact six species that are listed as Species of Greatest Conservation Need (SGCN).

Additional information on both federally protected and state protected species is included in **Attachment E**. The findings above are also summarized in a Biological Assessment, that is included here as **Attachment F**.

Preferred Alternative – The proposed action would have no effect on all federally listed species, with the exception of the Northern Aplomado Falcon. Given the habitat quality in the action area and the impact-avoidance measures that would be incorporated into the project, we have

determined that the project may affect but would not be likely to adversely affect the Northern Aplomado Falcon.

No-Build Alternative – Camp Rio would continue operations in a manner consistent with their current business model. Effects on federally protected species would not occur.

4.2.4 Migratory Birds

Preferred Alternative – The project area was investigated for any structures containing migratory birds or indications of nesting migratory birds. No migratory birds were observed nesting during field investigations, however, individuals may arrive in the action area to breed during construction of the proposed project. Phasing of work and preventative measures would be employed to avoid the take of migratory birds, their occupied nests, eggs, or young, in accordance with the MBTA. Bird BMPs would be followed to minimize impacts on avian species. Bird BMPs include not disturbing, destroying, or removing active nests, including those of ground-nesting birds, during the nesting season; avoiding the removal of unoccupied, inactive nests, as practicable; preventing the establishment of active nests during the nesting season; and not collecting, capturing, relocating, or transporting birds, eggs, young, or active nests without a permit. Prior to vegetation clearing operations, nesting bird surveys would be conducted to ensure that no active nests or individuals of species protected by the MBTA and or ESA are present in the action area.

No-Build Alternative – Camp Rio would continue operations in a manner consistent with their current business model. No impacts to migratory bird species would result.

4.3 Land Use

Preferred Alternative and No-Build Alternative – Neither alternative would change land use in the action area or in adjacent areas. The proposed action would continue and enhance the current land use in the action area (i.e., nature education). The proposed action would not change land use patterns in the vicinity or preclude the use of surrounding parcels in a manner that is consistent with regional and local practices and land use planning.

4.4 Cultural Resources

Preferred Alternative and No-Build Alternative – No known cultural resources exist within the action area. Through coordination with the THC, a determination has been made that no further investigation prior to construction are warranted. A copy of the concurrence notification from THC is included in **Attachment G**. Tribal consultation was conducted from May 4, 2017 to June 15, 2017. No concerns were indicated during the consultation period.

If any archeological materials, features, or deposits are inadvertently encountered during the proposed construction activities, construction would cease immediately and THC personnel would be notified. Work would not resume until written authorization to proceed is issued by the USFWS after determination of appropriate actions to prevent the loss of significant cultural, religious, or scientific values.

4.5 Hazardous Materials

Preferred Alternative and No-Build Alternative – Neither alternative would encounter known hazardous substance contamination or result in additional contamination at the site.

4.6 Air Quality

Preferred Alternative – The proposed action would result in releases of potential pollutants (e.g., machinery exhaust, fugitive dust, etc.) during the construction of the facility. These releases would be temporary and would not significantly contribute to air quality degradation. Similarly, the long-term operation of the proposed facility would not result in releases of air pollutants.

No-Build Alternative – Camp Rio would continue operations in a manner consistent with their current business model. No temporary or permanent impacts to air quality would result.

4.7 Noise

Preferred Alternative – Construction of the proposed facility would result in a temporary impact to the noise environment. This impact would result from the use of heavy machinery and other power equipment. As discussed above, long-term use of the facility would be episodic, and associated noise would largely result from human voices. Therefore, the operation of the facility would not result in impacts to the noise environment.

No-Build Alternative – Camp Rio would continue operations in a manner consistent with their current business model. Current episodic, low-level noise would continue to result from their use of the area for educational activities.

4.8 Socioeconomic Conditions

Preferred Alternative – IDEA Public Schools seeks to provide education opportunities to underserved youth from local populations. Given the socioeconomic conditions of the area, which are summarized in Section 3.8, the facility would have the potential to improve services to low-income and majority-minority populations. Increasing education opportunities is anticipated to benefit the socioeconomic condition of the area.

No-Build Alternative – This alternative would not affect socioeconomic conditions.

4.9 Environmental Justice

Preferred Alternative and No-Build Alternative – Neither alternative would result in adverse human health or environmental effects for low-income or minority populations in Cameron County.

5.0 Cumulative Effects

Preferred Alternative – The proposed action, when considered in conjunction with past, present, and future impacts which are known or anticipated for the area, does not create a larger impact than has been discussed in this Environmental Assessment. Additionally, the proposed action would allow for a continuation of current practices at Camp Rio and would not significantly alter the use of the facility. In light of these facts, there would be minimal cumulative impacts anticipated from the proposed action.

No-Build Alternative – This alternative would not result in cumulative effects to either the human or natural environment.

6.0 Agency Coordination

Under the USFWS Grant Program, IDEA Public Schools has worked to ensure compliance with grant compliance. Coordination with the THC was carried out concurrently with the preparation of the Draft EA. Additional agency coordination letters were sent to the USEPA, USACE, USFWS, and the TCEQ to inform them of the preparation of the EA and to solicit their input. Coordination letters and responses received are included in **Attachment H**.

7.0 Public Involvement

In order to ensure that the public has an opportunity to review and comment on the Draft EA, appropriate outlets will be identified, notice will be given, and the Draft EA will be made available for a 30 day public comment period. Any comments received will be addressed in the Final EA.

8.0 Environmental Commitments

Through the project's planning and design phases, IDEA Public Schools has sought to minimize environmental consequences that would result from the project. That effort has resulted in a project that would avoid impacts to prime habitats, waters of the U.S., known cultural resources, and various aspects of the human environment. However, the potential exists for impacts to result. Therefore, the following environmental commitments would be followed in an effort to minimize potential environmental consequences.

- The project will be construction in compliance with the TPDES;
- A SWP3 will be developed and implemented;
- Prior to construction, surveys will be conducted to determine whether Northern Aplomado Falcons are present in the Action Area;
- Vegetation clearing will be conducted outside of the breeding season for migratory birds, if clearing must be conducted during the breeding season, surveys will be conducted to determine whether active nests would be impacted; and
- If previously unknown cultural materials are encountered during construction, work will cease immediately and THC personnel will be contacted, work will resume upon completion of THC review and clearance

9.0 Conclusions

The purpose of the new facility is to provide outdoor education opportunities to area underserved youth. The proposed action would include a restroom facility, archery lanes, and a covered deck. Access to the facilities would be provided by existing hiking trails that abut the action area from the south and by a proposed driveway.

Preliminary assessments presented in this Environmental Assessment indicate that no significant impacts to environmental, cultural, or socioeconomic resources would result from the proposed action.

7.0 Preparers

Walt Meitzen – Bachelor of Science Degree in Biology from the University of Texas at Austin, Masters of Earth and Environmental Resource Management from the University of South Carolina at Columbia. Three years of experience in environmental consulting, seven years of experience in state regulatory oversight roles in aquatic environments and habitat preserves, three years of experience in public land management projects in Texas.

Dr. Chris Dayton – PhD in Archeology from Boston University at Boston, Massachusetts, Bachelor of arts in History and Classics from Macalester College at Saint Paul, Minnesota. Ten years of experience in environmental consulting and seventeen years of experience in archeological research.

Claire Parra – Master of Science in Wildlife Ecology from Texas State University at San Marcos, Texas, Bachelor of Science in Biology from Texas State University at San Marcos, Texas, Associate Wildlife Biologist. Three years of environmental consulting experience, three years of experience in avian and other wildlife surveys, two years of experience in anatomical and physiological labs.

Jeff Allen – Master of Rangeland Ecology and Management from Texas A&M at College Station, Texas, Bachelor of Science in Forestry from Stephen F. Austin State University at Huntsville, Texas, Professional Wetland Scientist. Eight years of experience in environmental consulting and six years of experience as a research/environmental technician.

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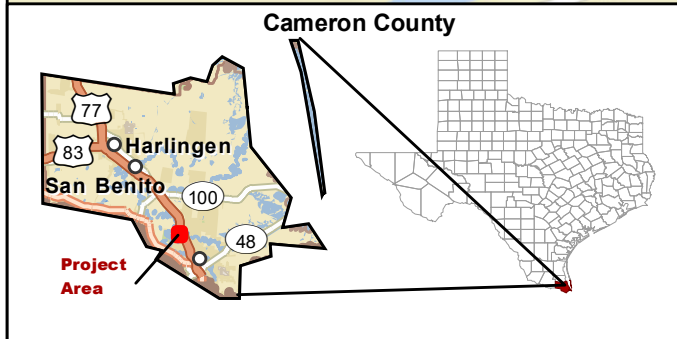
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Attachment A

Figures






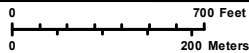


-  Project Location
-  Areas not protected by conservation easement
-  Camp Rio Parcel

Figure 1
Project Overview (Street Base)
Camp Rio Archery Range

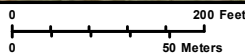


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		Prepared for: IDEA Public Schools	1 in = 700 feet
		Prepared by: LG	Scale: 1:8,400
			Date: 5/15/2017



 Project Location

Figure 2
Project Location (Aerial Base)
Camp Rio Archery Range



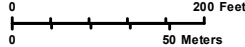
COX | McLAIN
Environmental Consulting

Prepared for: IDEA Public Schools	1 in = 200 feet
Prepared by: LG	Scale: 1:2,400
	Date: 5/15/2017



 Project Location

Figure 3
Project Location (Topographic Base)
Camp Rio Archery Range



COX | McLain
Environmental Consulting

Prepared for: IDEA Public Schools	1 in = 200 feet
Prepared by: LG	Scale: 1:2,400
	Date: 5/15/2017

Basemap Source: USGS West Brownsville (1983) 7.5' Quadrangle

G:\Projects\IDEA_PublicSchools\CampRio\Figure 3 Project Location_Topo_20170511.mxd

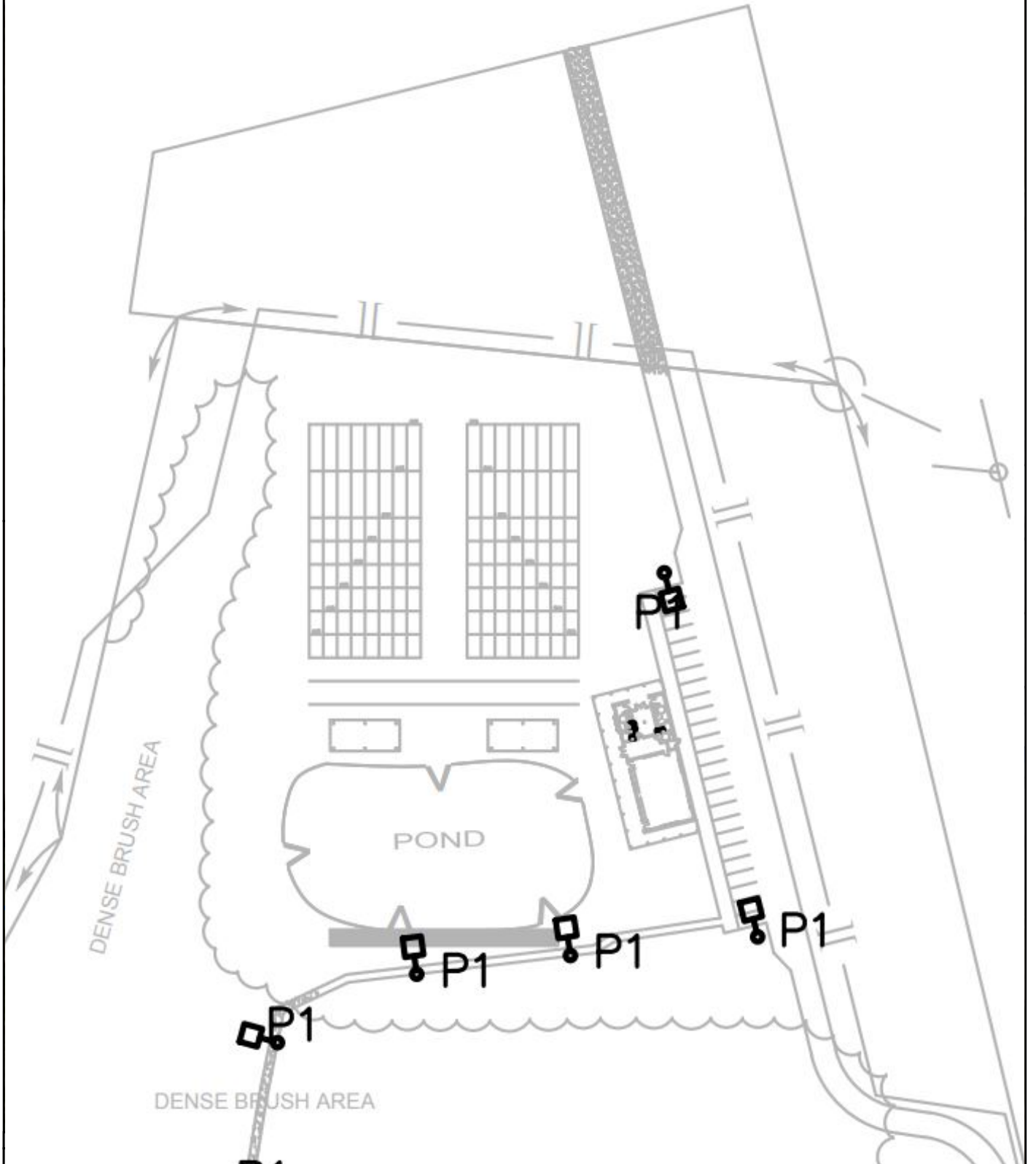


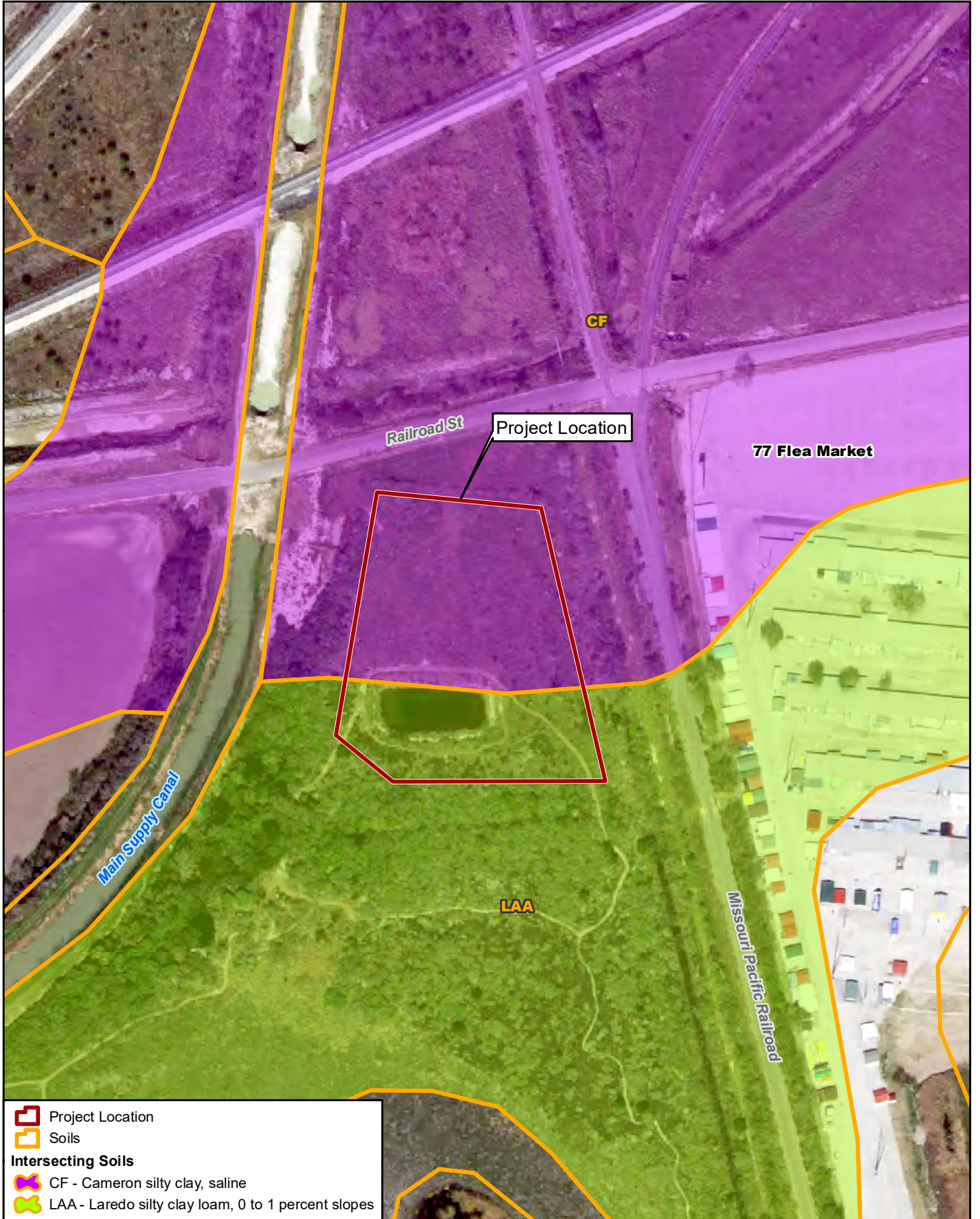


Figure 4
Project Components
Camp Rio Archery Range

	 COX McLain Environmental Consulting	Prepared for: IDEA Public Schools	1 in = 200 feet
		Prepared by: WM	Scale: 1:2,400 Date: 5/15/2017



- Project Location
- Soils
- Intersecting Soils**
- CF - Cameron silty clay, saline
- LAA - Laredo silty clay loam, 0 to 1 percent slopes

Figure 5
Project Area Soils
Camp Rio Archery Range

0 200 Feet
 0 50 Meters

	COX McLain Environmental Consulting
Prepared for: IDEA Public Schools	1 in = 200 feet
Data Source: NRCS (2016) Aerial Source: TNRIS (2015)	Scale: 1:2,400
Prepared by: LG	Date: 5/15/2017




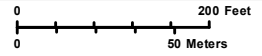


-  Project Location
-  NHD Stream
-  NHD Water
-  NWI Wetland
-  100 - Year Flood Zone

Figure 6
Surface Water Resources
Camp Rio Archery Range



	 COX McLain Environmental Consulting	Prepared for: IDEA Public Schools	1 in = 200 feet
		Prepared by: LG	Date: 5/15/2017

Data Sources: NHD (2017), NWI (2016), FEMA NFHL (2017)
 Aerial Source: TNRIS (2015)

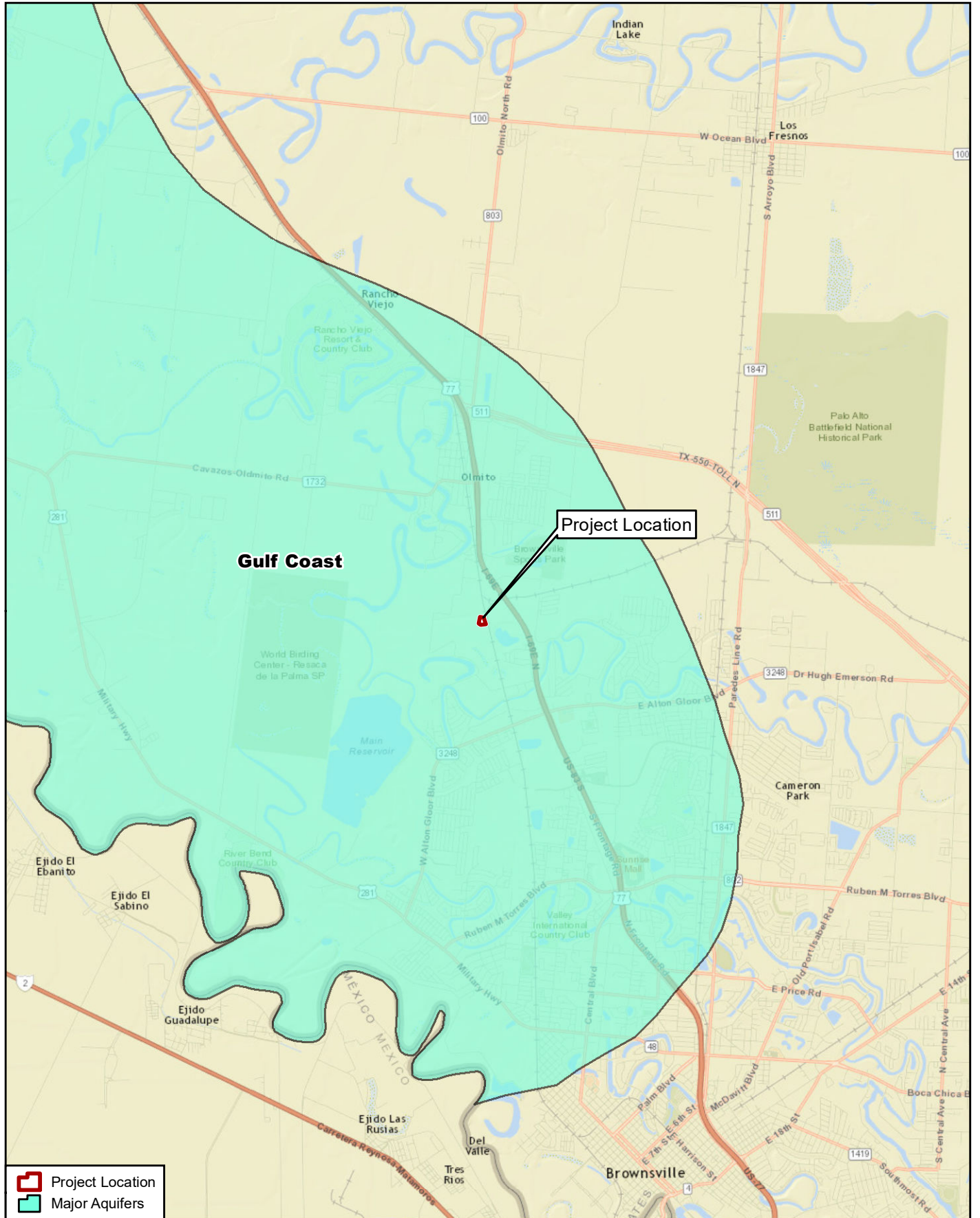
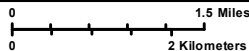
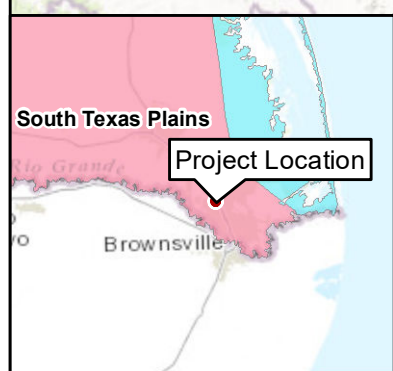


Figure 7
Groundwater
Camp Rio Archery Range



COX | McLAIN
Environmental Consulting

Prepared for: IDEA Public Schools	1 in = 1.5 miles
Prepared by: LG	Scale: 1:95,000
	Date: 5/16/2017














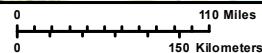
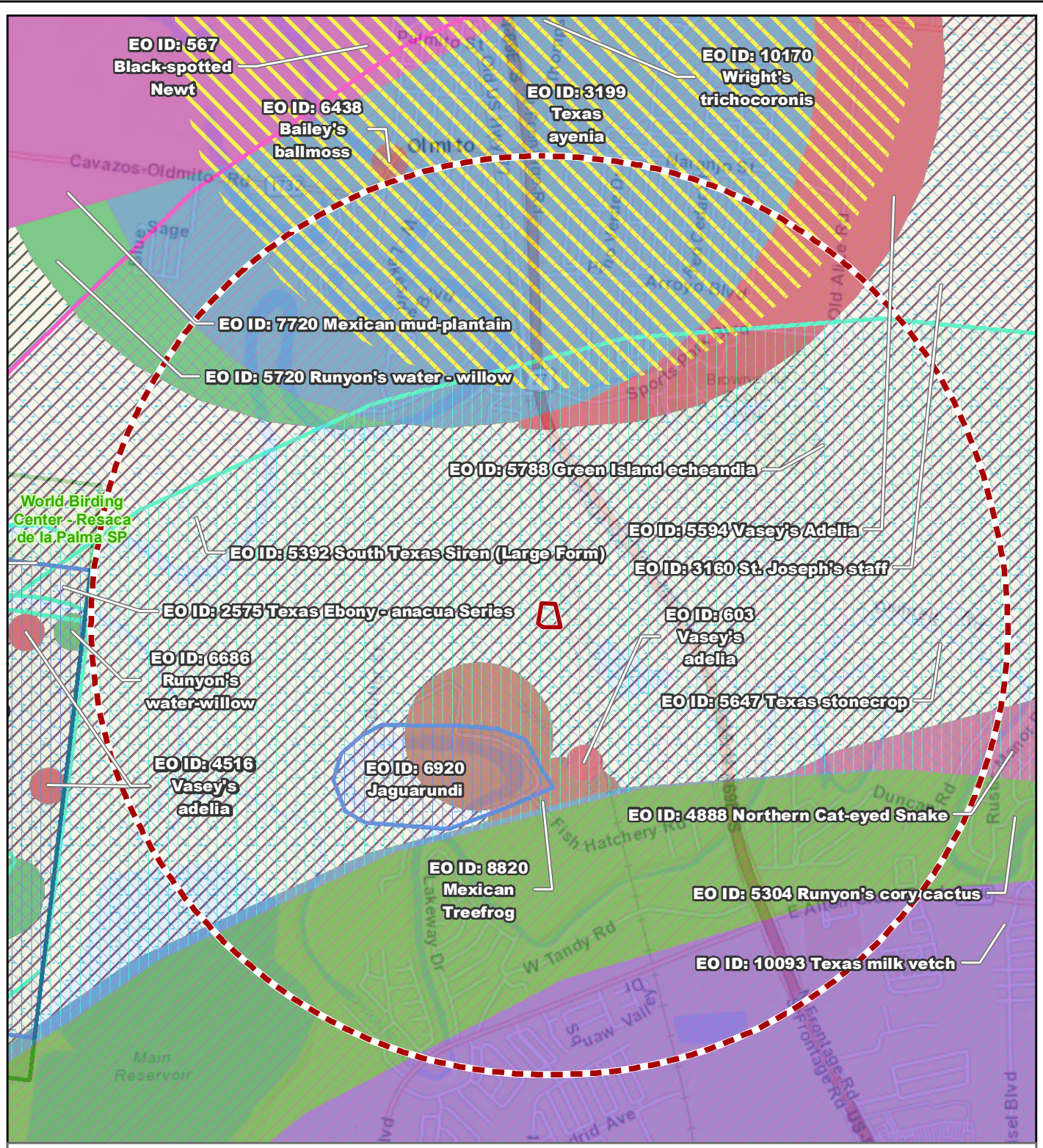
-  Project Location
-  Blackland Prairie
-  Cross Timbers
-  Edwards Plateau
-  Gulf Prairies
-  High Plains
-  Piney Woods
-  Post Oak Savannah
-  Rolling Plains
-  South Texas Plains
-  Trans-Pecos

Figure 8
Ecoregions of Texas
Camp Rio Archery Range



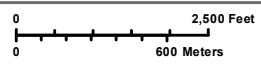
COX | McLAIN
 Environmental Consulting

Data Source: TPWD (2004)/Gould (1960)	Prepared for: IDEA Public Schools	1 in = 110 miles
Basemap Source: ESRI (2017)	Prepared by: LG	Scale: 1:6,969,600
		Date: 5/15/2017



- | | | | |
|----------------------------------|------------------------|---------------------------|--------------------|
| Project Location | Texas ayenia | Northern Cat-eyed Snake | Texas milk vetch |
| 1.5-mile Project Location Buffer | Green Island echeandia | Runyon's cory cactus | Texas stonecrop |
| State Park | Wright's trichocoronis | Runyon's water-willow | Vasey's adelia |
| Bailey's ballmoss | Mexican Treefrog | Black-spotted Newt | St. Joseph's staff |
| South Texas Siren (Large Form) | Mexican mud-plantain | Texas Ebony-anacua Series | Jaguarundi |

Figure 9
TXNDD Elements of Occurrence
Camp Rio Archery Range



Data Source: TPWD (05/10/2017)
 Basemap Source: ESRI (2017)

		Prepared for: IDEA Public Schools	1 in = 2,500 feet
		Prepared by: LG	Scale: 1:30,000
			Date: 5/15/2017

Attachment B

Photographs



Photo 1: Action area, as seen from its southwest corner, facing north. West of the action area, mature woody vegetation lines a canal. In the foreground, low, shrubby vegetation is visible that transitions to sea ox-eye daisy-dominated areas in the background. Railroad Street is also visible in the background. In center frame, a marker is visible that indicates the position of a hiking trail.



Photo 2: Action area, as seen from its southeast corner, facing north. Shrubby vegetation and woody species increase near Camp Rio's eastern parcel boundary (adjacent to the action area and in the left side of the frame).



Photo 3: Action area, as seen from its northwest corner, facing south toward the photo point of Figure 9. The mature, woody, mesquite-dominated vegetation along the left of the frame is associated with the canal mentioned above. The woody vegetation in the background is the Tamaulipan thorn-scrub, which is protected by conservation easement.



Photo 4: View of the manmade pond from its southeast corner, facing west. Vegetation along the canal is visible in the background.



Photo 5: Representative view of burrows, which were observed in some portions of the action area. “Chimneys” were absent in some areas and up to two inches tall in others. Some burrows had excavated soil that was still wet, despite the parched surface. Soil test pits excavated nearby (~16 inches deep) did not reach saturated soil.



Photo 6: Inactive bird nest in low, shrubby vegetation. This nest was observed in the southeast corner of the action area.



Photo 7: Nest of branches and twigs built at ground level within dense vegetation. Potentially built by pack rats. Similar nests were observed in multiple location in and around the action area.



Photo 8: Large burrow (~12 inch opening) observed in the northeast corner of the Camp Rio property (outside of the action area).



Photo 9: Single claw (center of frame) observed near the edge of the pond. No diagnostic characteristics were found.



Photo 10: View of the shoreline in the manmade pond. The water was almost entirely devoid of vegetation and animal tracks were observed only near the southeast corner and included unidentified bird tracks (pictured) and raccoon tracks.



Photo 11: Soil test pit excavated near northwest corner of action area (lowest surface elevation).

Attachment C

Wetland Determination Forms

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Camp Rio City/County: Cameron Sampling Date: 3/30/17
 Applicant/Owner: IDEA Public Schools State: TX Sampling Point: WDP 7
 Investigator(s): W. Meitzen Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): I Lat: 25.994111 Long: -97.529996 Datum: _____
 Soil Map Unit Name: Cameron silty clay, saline NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: _____ _____ _____	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
				_____ = Total Cover
Sapling/Shrub Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
				_____ = Total Cover
Herb Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Borrhichia frutescens</u>	<u>40</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Bothriochloa ischaemum</u>	<u>10</u>	<u>Y</u>	<u>UPL</u>	
3. <u>Bothriochloa laguroides</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
4. <u>Cloris gayana</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
5. _____				
6. _____				
7. <u>40 x .5 = 20</u>				
8. <u>40 x .2 = 8</u>				
9. _____				
10. _____				
				<u>60</u> = Total Cover
Woody Vine Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				
2. _____				
				_____ = Total Cover
% Bare Ground in Herb Stratum <u>10</u>				_____ = Total Cover
Remarks: _____ _____ _____				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: $\frac{1}{2}$ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = _____
FACW species <u>1</u>	x 2 = <u>2</u>
FAC species <u>0</u>	x 3 = _____
FACU species <u>1</u>	x 4 = <u>4</u>
UPL species <u>2</u>	x 5 = <u>10</u>
Column Totals: <u>4</u> (A)	<u>16</u> (B)

Prevalence Index = B/A = $\frac{16}{4} = 4$

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10 YR 3/1	100					Silty Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? Yes _____ No Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
sample point was in lowest elevation and ruts were present nearby (indicating mud at some point)

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Camp Rio City/County: Cameron Sampling Date: 3/30/17
 Applicant/Owner: IDEA Public Schools State: TX Sampling Point: WDP2
 Investigator(s): W. Meitzen Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none Slope (%): 1
 Subregion (LRR): I Lat: 25.993191 Long: -97.529355 Datum: _____
 Soil Map Unit Name: Laredo silty clay loam NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quitierrezia sphaerocephala</u>	<u>60</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Condalia ericoides</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
3. _____				
4. _____				
5. _____				
<u>80</u> = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Bothriochloa ischaemum</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Sphaeralcea ambigua</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Cardiospermum halicacabum</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>	
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>5</u>				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 1/4 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = _____
FACW species <u>0</u>	x 2 = _____
FAC species <u>1</u>	x 3 = <u>3</u>
FACU species <u>0</u>	x 4 = _____
UPL species <u>3</u>	x 5 = <u>15</u>
Column Totals: <u>4</u> (A)	<u>18</u> (B)

Prevalence Index = B/A = 18/4 4.5

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10 YR 3/1	100					Silty loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR F) <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> High Plains Depressions (F16) (MLRA 72 & 73 of LRR H)
	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) <input type="checkbox"/> Dark Surface (S7) (LRR G) <input type="checkbox"/> High Plains Depressions (F16) (LRR H outside of MLRA 72 & 73) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where not tilled) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where tilled) <input checked="" type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? Yes _____ No Depth (inches): _____ (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Burrows were nearby and fresh soil was wet but no wet layers were encountered in soil pit.

Attachment D

**Official USFWS Protected Species List
TPWD Annotated List of Rare Species – Cameron County**



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Texas Coastal Ecological Services Field Office

17629 EL CAMINO REAL #211

HOUSTON, TX 77058

PHONE: (281)286-8282 FAX: (281)488-5882

URL: www.fws.gov/southwest/es/TexasCoastal/;

www.fws.gov/southwest/es/ES_Lists_Main2.html

Consultation Code: 02ETTX00-2017-SLI-0575

February 01, 2017

Event Code: 02ETTX00-2017-E-00887

Project Name: Camp Rio Archery Range

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

To Whom It May Concern:

The U.S. Fish and Wildlife Service (Service) field offices in Clear Lake, Tx, and Corpus Christi, Tx, have combined administratively to form the Texas Coastal Ecological Services Field Office. A map of the Texas Coastal Ecological Services Field Office area of responsibility can be found at: <http://www.fws.gov/southwest/es/TexasCoastal/Map.html>. All project related correspondence should be sent to the field office responsible for the area in which your project occurs. For projects located in southeast Texas please write to: Field Supervisor; U.S. Fish and Wildlife Service; 17629 El Camino Real Ste. 211; Houston, Texas 77058. For projects located in southern Texas please write to: Field Supervisor; U.S. Fish and Wildlife Service; P.O. Box 81468; Corpus Christi, Texas 78468-1468.

The enclosed species list identifies federally threatened, endangered, and proposed to be listed species; designated critical habitat; and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list is provided by the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information from updated surveys, changes in the abundance and distribution of species, changes in habitat conditions, or other factors could change the list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website <http://ecos.fws.gov/ipac/> at regular intervals during project planning and implementation for updates to species list and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

Candidate species have no protection under the Act but are included for consideration because they could be listed prior to the completion of your project. The other species information should help you determine if suitable habitat for these listed species exists in any of the proposed project areas or if project activities may affect species on-site, off-site, and/or result in "take" of a federally listed species.

"Take" is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. In addition to the direct take of an individual animal, habitat destruction or modification can be considered take, regardless of whether it has been formally designated as critical habitat, if the activity results in the death or injury of wildlife by removing essential habitat components or significantly alters essential behavior patterns, including breeding, feeding, or sheltering.

Section 7

Section 7 of the Act requires that all Federal agencies consult with the Service to ensure that actions authorized, funded or carried out by such agencies do not jeopardize the continued existence of any listed threatened or endangered species or adversely modify or destroy critical habitat of such species. It is the responsibility of the Federal action agency to determine if the proposed project may affect threatened or endangered species. If a "may affect" determination is made, the Federal agency shall initiate the section 7 consultation process by writing to the office that has responsibility for the area in which your project occurs.

Is not likely to adversely affect - the project may affect listed species and/or critical habitat; however, the effects are expected to be discountable, insignificant, or completely beneficial. Certain avoidance and minimization measures may need to be implemented in order to reach this level of effects. The Federal agency or the designated non-Federal representative should seek written concurrence from the Service that adverse effects have been eliminated. Be sure to include all of the information and documentation used to reach your decision with your request for concurrence. The Service must have this documentation before issuing a concurrence.

Is likely to adversely affect - adverse effects to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial. If the overall effect of the proposed action is beneficial to the listed species but also is likely to cause some adverse effects to individuals of that species, then the proposed action "is likely to adversely affect" the listed species. An "is likely to adversely affect" determination requires the Federal action agency to initiate formal section 7 consultation with this office.

No effect - the proposed action will not affect federally listed species or critical habitat (i.e., suitable habitat for the species occurring in the project county is not present in or adjacent to the action area). No further coordination or contact with the Service is necessary. However, if the project changes or additional information on the distribution of listed or proposed species becomes available, the project should be reanalyzed for effects not previously considered.

Regardless of your determination, the Service recommends that you maintain a complete record of the evaluation, including steps leading to the determination of affect, the qualified personnel

conducting the evaluation, habitat conditions, site photographs, and any other related articles.

Please be advised that while a Federal agency may designate a non-Federal representative to conduct informal consultations with the Service, assess project effects, or prepare a biological assessment, the Federal agency must notify the Service in writing of such a designation. The Federal agency shall also independently review and evaluate the scope and contents of a biological assessment prepared by their designated non-Federal representative before that document is submitted to the Service.

The Service's Consultation Handbook is available online to assist you with further information on definitions, process, and fulfilling Act requirements for your projects at:

http://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf

Section 10

If there is no federal involvement and the proposed project is being funded or carried out by private interests and/or non-federal government agencies, and the project as proposed may affect listed species, a section 10(a)(1)(B) permit is recommended. The Habitat Conservation Planning Handbook is available at

<http://www.fws.gov/midwest/endangered/permits/hcp/hcphandbook.html>.

Service Response

Please note that the Service strives to respond to requests for project review within 30 days of receipt, however, this time period is not mandated by regulation. Responses may be delayed due to workload and lack of staff. Failure to meet the 30-day timeframe does not constitute a concurrence from the Service that the proposed project will not have impacts to threatened and endangered species.

Candidate Species

Several species of freshwater mussels occur in Texas and five are candidates for listing under the ESA. The Service is also reviewing the status of six other species for potential listing under the ESA. One of the main contributors to mussel die offs is sedimentation, which smothers and suffocates mussels. To reduce sedimentation within rivers, streams, and tributaries crossed by a project, the Service recommends that that you implement the best management practices found at: <http://www.fws.gov/southwest/es/TexasCoastal/FreshwaterMussels.html>.

Candidate Conservation Agreements (CCAs) or Candidate Conservation Agreements with Assurances (CCAAs) are voluntary agreements between the Service and public or private entities to implement conservation measures to address threats to candidate species. Implementing conservation efforts before species are listed increases the likelihood that simpler, flexible, and more cost-effective conservation options are available. A CCAA can provide participants with assurances that if they engage in conservation actions, they will not be required to implement additional conservation measures beyond those in the agreement. For additional information on CCAs/CCAAs please visit the Service's website at <http://www.fws.gov/endangered/what-we-do/cca.html>.

Migratory Birds

The Migratory Bird Treaty Act (MBTA) implements various treaties and conventions for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful. Many may nest in trees, brush areas or other suitable habitat. The Service recommends activities requiring vegetation removal or disturbance avoid the peak nesting period of March through August to avoid destruction of individuals or eggs. If project activities must be conducted during this time, we recommend surveying for active nests prior to commencing work. A list of migratory birds may be viewed at <http://www.fws.gov/migratorybirds/regulationspolicies/mbta/mbtandx.html>.

The bald eagle (*Haliaeetus leucocephalus*) was delisted under the Act on August 9, 2007. Both the bald eagle and the golden eagle (*Aquila chrysaetos*) are still protected under the MBTA and BGEPA. The BGEPA affords both eagles protection in addition to that provided by the MBTA, in particular, by making it unlawful to "disturb" eagles. Under the BGEPA, the Service may issue limited permits to incidentally "take" eagles (e.g., injury, interfering with normal breeding, feeding, or sheltering behavior nest abandonment). For more information on bald and golden eagle management guidelines, we recommend you review information provided at <http://www.fws.gov/midwest/eagle/pdf/NationalBaldEagleManagementGuidelines.pdf>

The construction of overhead power lines creates threats of avian collision and electrocution. The Service recommends the installation of underground rather than overhead power lines whenever possible. For new overhead lines or retrofitting of old lines, we recommend that project developers implement, to the maximum extent practicable, the Avian Power Line Interaction Committee guidelines found at <http://www.aplic.org/>.

Meteorological and communication towers are estimated to kill millions of birds per year. We recommend following the guidance set forth in the Service Interim Guidelines for Recommendations on Communications Tower Siting, Constructions, Operation and Decommissioning, found online at: <http://www.fws.gov/habitatconservation/communicationtowers.html>, to minimize the threat of avian mortality at these towers. Monitoring at these towers would provide insight into the effectiveness of the minimization measures. We request the results of any wildlife mortality monitoring at towers associated with this project.

We request that you provide us with the final location and specifications of your proposed towers, as well as the recommendations implemented. A Tower Site Evaluation Form is also available via the above website; we recommend you complete this form and keep it in your files. If meteorological towers are to be constructed, please forward this completed form to our office.

More information concerning sections 7 and 10 of the Act, migratory birds, candidate species, and landowner tools can be found on our website at: <http://www.fws.gov/southwest/es/TexasCoastal/ProjectReviews.html>.

Wetlands and Wildlife Habitat

Wetlands and riparian zones provide valuable fish and wildlife habitat as well as contribute to

ood control, water quality enhancement, and groundwater recharge. Wetland and riparian vegetation provides food and cover for wildlife, stabilizes banks and decreases soil erosion. These areas are inherently dynamic and very sensitive to changes caused by such activities as overgrazing, logging, major construction, or earth disturbance. Executive Order 11990 asserts that each agency shall provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial value of wetlands in carrying out the agency's responsibilities. Construction activities near riparian zones should be carefully designed to minimize impacts. If vegetation clearing is needed in these riparian areas, they should be re-vegetated with native wetland and riparian vegetation to prevent erosion or loss of habitat. We recommend minimizing the area of soil scarification and initiating incremental re-establishment of herbaceous vegetation at the proposed work sites. Denuded and/or disturbed areas should be re-vegetated with a mixture of native legumes and grasses. Species commonly used for soil stabilization are listed in the Texas Department of Agriculture's (TDA) Native Tree and Plant Directory, available from TDA at P.O. Box 12847, Austin, Texas 78711. The Service also urges taking precautions to ensure sediment loading does not occur to any receiving streams in the proposed project area. To prevent and/or minimize soil erosion and compaction associated with construction activities, avoid any unnecessary clearing of vegetation, and follow established rights-of-way whenever possible. All machinery and petroleum products should be stored outside the floodplain and/or wetland area during construction to prevent possible contamination of water and soils.

Wetlands and riparian areas are high priority fish and wildlife habitat, serving as important sources of food, cover, and shelter for numerous species of resident and migratory wildlife. Waterfowl and other migratory birds use wetlands and riparian corridors as stopover, feeding, and nesting areas. We strongly recommend that the selected project site not impact wetlands and riparian areas, and be located as far as practical from these areas. Migratory birds tend to concentrate in or near wetlands and riparian areas and use these areas as migratory yways or corridors. After every effort has been made to avoid impacting wetlands, you anticipate unavoidable wetland impacts will occur; you should contact the appropriate U.S. Army Corps of Engineers office to determine if a permit is necessary prior to commencement of construction activities.

If your project will involve filling, dredging, or trenching of a wetland or riparian area it may require a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers (COE). For permitting requirements please contact the U.S. Corps of Engineers, District Engineer, P.O. Box 1229, Galveston, Texas 77553-1229, (409) 766-3002.

Beneficial Landscaping

In accordance with Executive Order 13112 on Invasive Species and the Executive Memorandum on Beneficial Landscaping (42 C.F.R. 26961), where possible, any landscaping associated with project plans should be limited to seeding and replanting with native species. A mixture of grasses and forbs appropriate to address potential erosion problems and long-term cover should be planted when seed is reasonably available. Although Bermuda grass is listed in seed mixtures, this species and other introduced species should be avoided as much as possible. The Service also recommends the use of native trees, shrubs, and herbaceous species that are adaptable, drought tolerant and conserve water.

State Listed Species

The State of Texas protects certain species. Please contact the Texas Parks and Wildlife Department (Endangered Resources Branch), 4200 Smith School Road, Austin, Texas 78744 (telephone 512/389-8021) for information concerning fish, wildlife, and plants of State concern or visit their website at:

http://www.tpwd.state.tx.us/huntwild/wild/wildlife_diversity/texas_rare_species/listed_species/.

If we can be of further assistance, or if you have any questions about these comments, please contact 281/286-8282 if your project is in southeast Texas, or 361/994-9005 if your project is in southern Texas. Please refer to the Service consultation number listed above in any future correspondence regarding this project.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Camp Rio Archery Range

Official Species List

Provided by:

Texas Coastal Ecological Services Field Office

17629 EL CAMINO REAL #211

HOUSTON, TX 77058

(281) 286-8282

<http://www.fws.gov/southwest/es/TexasCoastal/>

http://www.fws.gov/southwest/es/ES_Lists_Main2.html

Consultation Code: 02ETTX00-2017-SLI-0575

Event Code: 02ETTX00-2017-E-00887

Project Type: Federal Grant / Loan Related

Project Name: Camp Rio Archery Range

Project Description: Development of archery range and environmental education facility to serve area youth. Associated with the IDEA Public School System.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Camp Rio Archery Range

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-97.53058075904848 25.994242250239648, -97.52890706062318 25.994560484865158, -97.52818822860719 25.991783135436048, -97.53271579742433 25.991667411118613, -97.53170728683473 25.99224603156605, -97.53111720085144 25.992776431140086, -97.53074169158937 25.993403263913834, -97.53058075904848 25.994242250239648)))

Project Counties: Cameron, TX



United States Department of Interior
Fish and Wildlife Service

Project name: Camp Rio Archery Range

Endangered Species Act Species List

There are a total of 14 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Least tern (<i>Sterna antillarum</i>) Population: interior pop.	Endangered		Wind Related Projects Within Migratory Route
northern aplomado falcon (<i>Falco femoralis septentrionalis</i>) Population: Wherever found, except where listed as an experimental population	Endangered		
Piping Plover (<i>Charadrius melodus</i>) Population: except Great Lakes watershed	Threatened	Final designated	
Red Knot (<i>Calidris canutus rufa</i>) Population: Wherever found	Threatened		
red-crowned Parrot (<i>Amazona viridigenalis</i>) Population: Wherever found	Candidate		
Flowering Plants			
South Texas ambrosia (<i>Ambrosia cheiranthifolia</i>) Population: Wherever found	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: Camp Rio Archery Range

Texas ayenia (<i>Ayenia limitaris</i>) Population: Wherever found	Endangered		
Mammals			
Gulf Coast jaguarundi (<i>Herpailurus (=felis) yagouaroundi cacomitli</i>) Population: Wherever found	Endangered		
ocelot (<i>Leopardus (=felis) pardalis</i>) Population: wherever found	Endangered		
West Indian Manatee (<i>Trichechus manatus</i>) Population: Wherever found	Endangered	Final designated	
Reptiles			
Hawksbill sea turtle (<i>Eretmochelys imbricata</i>) Population: Wherever found	Endangered	Final designated	
Kemp's Ridley sea turtle (<i>Lepidochelys kempii</i>) Population: Wherever found	Endangered		
Leatherback sea turtle (<i>Dermochelys coriacea</i>) Population: Wherever found	Endangered	Final designated	
Loggerhead sea turtle (<i>Caretta caretta</i>) Population: Northwest Atlantic Ocean DPS	Threatened	Final designated	



United States Department of Interior
Fish and Wildlife Service

Project name: Camp Rio Archery Range

Critical habitats that lie within your project area

There are no critical habitats within your project area.

CAMERON COUNTY

AMPHIBIANS

		Federal Status	State Status
Black-spotted newt	<i>Notophthalmus meridionalis</i>		T
can be found in wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods; Gulf Coastal Plain south of the San Antonio River			
Mexican treefrog	<i>Smilisca baudinii</i>		T
subtropical region of extreme southern Texas; breeds May-October coinciding with rainfall, eggs laid in temporary rain pools			
Sheep frog	<i>Hypopachus variolosus</i>		T
predominantly grassland and savanna; moist sites in arid areas			
South Texas siren (large form)	<i>Siren sp 1</i>		T
wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods, but does require some moisture to remain; southern Texas south of Balcones Escarpment; breeds February-June			
White-lipped frog	<i>Leptodactylus fragilis</i>		T
grasslands, cultivated fields, roadside ditches, and a wide variety of other habitats; often hides under rocks or in burrows under clumps of grass; species requirements incompatible with widespread habitat alteration and pesticide use in south Texas			

BIRDS

		Federal Status	State Status
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	DL	T
year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.			
Arctic Peregrine Falcon	<i>Falco peregrinus tundrius</i>	DL	
migrant throughout state from subspecies' far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.			
Audubon's Oriole	<i>Icterus graduacauda audubonii</i>		
scrub, mesquite; nests in dense trees, or thickets, usually along water courses			
Brown Pelican	<i>Pelecanus occidentalis</i>	DL	
largely coastal and near shore areas, where it roosts and nests on islands and spoil banks			
Brownsville Common Yellowthroat	<i>Geothlypis trichas insperata</i>		
tall grasses and bushes near ponds, marshes, and swamps; breeding April to July			

CAMERON COUNTY

BIRDS

		Federal Status	State Status
Cactus Ferruginous Pygmy-Owl	<i>Glaucidium brasilianum cactorum</i>		T
<p>riparian trees, brush, palm, and mesquite thickets; during day also roosts in small caves and recesses on slopes of low hills; breeding April to June</p>			
Common Black-Hawk	<i>Buteogallus anthracinus</i>		T
<p>cottonwood-lined rivers and streams; willow tree groves on the lower Rio Grande floodplain; formerly bred in south Texas</p>			
Eskimo Curlew	<i>Numenius borealis</i>	LE	E
<p>historic; nonbreeding: grasslands, pastures, plowed fields, and less frequently, marshes and mudflats</p>			
Gray Hawk	<i>Asturina nitida</i>		T
<p>locally and irregularly along U.S.-Mexico border; mature riparian woodlands and nearby semiarid mesquite and scrub grasslands; breeding range formerly extended north to southernmost Rio Grande floodplain of Texas</p>			
Interior Least Tern	<i>Sterna antillarum athalassos</i>	LE	E
<p>subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also know to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony</p>			
Northern Aplomado Falcon	<i>Falco femoralis septentrionalis</i>	LE	E
<p>open country, especially savanna and open woodland, and sometimes in very barren areas; grassy plains and valleys with scattered mesquite, yucca, and cactus; nests in old stick nests of other bird species</p>			
Northern Beardless-Tyrannulet	<i>Camptostoma imberbe</i>		T
<p>mesquite woodlands; near Rio Grande frequents cottonwood, willow, elm, and great leadtree; breeding April to July</p>			
Peregrine Falcon	<i>Falco peregrinus</i>	DL	T
<p>both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies' listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.</p>			
Piping Plover	<i>Charadrius melodus</i>	LT	T
<p>wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats</p>			
Red Knot	<i>Calidris canutus rufa</i>	T	

CAMERON COUNTY

BIRDS

Federal Status State Status

Red knots migrate long distances in flocks northward through the contiguous United States mainly April-June, southward July-October. A small plump-bodied, short-necked shorebird that in breeding plumage, typically held from May through August, is a distinctive and unique pottery orange color. Its bill is dark, straight and, relative to other shorebirds, short-to-medium in length. After molting in late summer, this species is in a drab gray-and-white non-breeding plumage, typically held from September through April. In the non-breeding plumage, the knot might be confused with the omnipresent Sanderling. During this plumage, look for the knot's prominent pale eyebrow and whitish flanks with dark barring. The Red Knot prefers the shoreline of coast and bays and also uses mudflats during rare inland encounters. Primary prey items include coquina clam (*Donax* spp.) on beaches and dwarf surf clam (*Mulinia lateralis*) in bays, at least in the Laguna Madre. Wintering Range includes- Aransas, Brazoria, Calhoun, Cameron, Chambers, Galveston, Jefferson, Kennedy, Kleberg, Matagorda, Nueces, San Patricio, and Willacy. Habitat: Primarily seacoasts on tidal flats and beaches, herbaceous wetland, and Tidal flat/shore.

- | | | |
|---|------------------------------------|---|
| Reddish Egret | <i>Egretta rufescens</i> | T |
| resident of the Texas Gulf Coast; brackish marshes and shallow salt ponds and tidal flats; nests on ground or in trees or bushes, on dry coastal islands in brushy thickets of yucca and prickly pear | | |
| Rose-throated Becard | <i>Pachyramphus aglaiae</i> | T |
| riparian trees, woodlands, open forest, scrub, and mangroves; breeding April to July | | |
| Sennett's Hooded Oriole | <i>Icterus cucullatus sennetti</i> | |
| often builds nests in and of Spanish moss (<i>Tillandsia unioides</i>); feeds on invertebrates, fruit, and nectar; breeding March to August | | |
| Snowy Plover | <i>Charadrius alexandrinus</i> | |
| formerly an uncommon breeder in the Panhandle; potential migrant; winter along coast | | |
| Sooty Tern | <i>Sterna fuscata</i> | T |
| predominately 'on the wing'; does not dive, but snatches small fish and squid with bill as it flies or hovers over water; breeding April-July | | |
| Sprague's Pipit | <i>Anthus spragueii</i> | |
| only in Texas during migration and winter, mid September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges. | | |
| Texas Botteri's Sparrow | <i>Aimophila botterii texana</i> | T |
| grassland and short-grass plains with scattered bushes or shrubs, sagebrush, mesquite, or yucca; nests on ground of low clump of grasses | | |
| Tropical Parula | <i>Parula pitiayumi</i> | T |
| dense or open woods, undergrowth, brush, and trees along edges of rivers and resacas; breeding April to July | | |
| Western Burrowing Owl | <i>Athene cunicularia hypugaea</i> | |
| 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 | | |

CAMERON COUNTY

BIRDS

		Federal Status	State Status
Western Snowy Plover	<i>Charadrius alexandrinus nivosus</i>		
uncommon breeder in the Panhandle; potential migrant; winter along coast			
White-faced Ibis	<i>Plegadis chihi</i>		T
prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats			
White-tailed Hawk	<i>Buteo albicaudatus</i>		T
near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite and oak savannas, and mixed savanna-chaparral; breeding March-May			
Wood Stork	<i>Mycteria americana</i>		T
forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960			
Zone-tailed Hawk	<i>Buteo albonotatus</i>		T
arid open country, including open deciduous or pine-oak woodland, mesa or mountain county, often near watercourses, and wooded canyons and tree-lined rivers along middle-slopes of desert mountains; nests in various habitats and sites, ranging from small trees in lower desert, giant cottonwoods in riparian areas, to mature conifers in high mountain regions			

FISHES

		Federal Status	State Status
American eel	<i>Anguilla rostrata</i>		
coastal waterways below reservoirs to gulf; spawns January to February in ocean, larva move to coastal waters, metamorphose, then females move into freshwater; most aquatic habitats with access to ocean, muddy bottoms, still waters, large streams, lakes; can travel overland in wet areas; males in brackish estuaries; diet varies widely, geographically, and seasonally			
Mexican goby	<i>Ctenogobius claytonii</i>		T
Southern coastal area; brackish and freshwater coastal streams			
Opossum pipefish	<i>Microphis brachyurus</i>		T
brooding adults found in fresh or low salinity waters and young move or are carried into more saline waters after birth; southern coastal areas			
Rio Grande shiner	<i>Notropis jemezianus</i>		
Rio Grande and upper Pecos River basins; large, open, weedless rivers or large creeks with bottom of rubble, gravel and sand, often overlain with silt			

CAMERON COUNTY

FISHES

		Federal Status	State Status
Rio Grande silvery minnow	<i>Hybognathus amarus</i>	LE	E
extirpated; historically Rio Grande and Pecos River systems and canals; reintroduced in Big Bend area; pools and backwaters of medium to large streams with low or moderate gradient in mud, sand, or gravel bottom; ingests mud and bottom ooze for algae and other organic matter; probably spawns on silt substrates of quiet coves			
River goby	<i>Awaous banana</i>		T
Southern coastal waters; clear water with slow to moderate current, sandy or hard bottom, and little or no vegetation; also enters brackish and ocean waters			
Smalltooth sawfish	<i>Pristis pectinata</i>	LE	E
different life history stages have different patterns of habitat use; young found very close to shore in muddy and sandy bottoms, seldom descending to depths greater than 32 ft (10 m); in sheltered bays, on shallow banks, and in estuaries or river mouths; adult sawfish are encountered in various habitat types (mangrove, reef, seagrass, and coral), in varying salinity regimes and temperatures, and at various water depths, feed on a variety of fish species and crustaceans			

INSECTS

		Federal Status	State Status
A Royal moth	<i>Sphingicampa blanchardi</i>		
woodland - hardwood; Tamaulipan thornscrub with caterpillar's host plant, Texas Ebony (<i>Pitheocellobium flexicaule</i>) an important element			
Manfreda giant-skipper	<i>Stallingsia maculosus</i>		
most skippers are small and stout-bodied; name derives from fast, erratic flight; at rest most skippers hold front and hind wings at different angles; skipper larvae are smooth, with the head and neck constricted; skipper larvae usually feed inside a leaf shelter and pupate in a cocoon made of leaves fastened together with silk			
Smyth's tiger beetle	<i>Cicindela chlorocephala smythi</i>		
most tiger beetles are active, usually brightly colored, and found in open, sunny areas; adult tiger beetles are predaceous and feed on a variety of small insects; larvae of tiger beetles are also predaceous and live in vertical burrows in soil of dry paths, fields, or sandy beaches			
Subtropical blue-black tiger beetle	<i>Cicindela nigrocoerulea subtropica</i>		
most tiger beetles are active, usually brightly colored, and found in open, sunny areas; adult tiger beetles are predaceous and feed on a variety of small insects; larvae of tiger beetles are also predaceous and live in vertical burrows in soil of dry paths, fields, or sandy beaches			
Tamaulipan agapema	<i>Agapema galbina</i>		
Tamaulipan thornscrub with adequate densities of the caterpillar foodplant <i>Condalia hookeri hookeri</i> (= <i>obovata</i>); adults occur Sep - Oct; eggs hatch within two weeks and larvae mature 'rapidly'			

CAMERON COUNTY

MAMMALS

		Federal Status	State Status
Coues' rice rat	<i>Oryzomys couesi</i>		T
cattail-bulrush marsh with shallower zone of aquatic grasses near the shoreline; shade trees around the shoreline are important features; prefers salt and freshwater, as well as grassy areas near water; breeds April-August			
Jaguar	<i>Panthera onca</i>	LE	E
extirpated; dense chaparral; no reliable TX sightings since 1952			
Jaguarundi	<i>Herpailurus yaguarondi</i>	LE	E
thick brushlands, near water favored; 60 to 75 day gestation, young born sometimes twice per year in March and August, elsewhere the beginning of the rainy season and end of the dry season			
Mexican long-tongued bat	<i>Choeronycteris mexicana</i>		
deep canyons where uses caves and mine tunnels as day roosts; also found in buildings and often associated with big-eared bats (<i>Plecotus</i> spp.); single TX record from Santa Ana NWR			
Ocelot	<i>Leopardus pardalis</i>	LE	E
dense chaparral thickets; mesquite-thorn scrub and live oak mottes; avoids open areas; breeds and raises young June-November			
Plains spotted skunk	<i>Spilogale putorius interrupta</i>		
catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie			
Southern yellow bat	<i>Lasiurus ega</i>		T
associated with trees, such as palm trees (<i>Sabal mexicana</i>) in Brownsville, which provide them with daytime roosts; insectivorous; breeding in late winter			
West Indian manatee	<i>Trichechus manatus</i>	LE	E
Gulf and bay system; opportunistic, aquatic herbivore			
White-nosed coati	<i>Nasua narica</i>		T
woodlands, riparian corridors and canyons; most individuals in Texas probably transients from Mexico; diurnal and crepuscular; very sociable; forages on ground and in trees; omnivorous; may be susceptible to hunting, trapping, and pet trade			

MOLLUSKS

		Federal Status	State Status
Mexican fawnsfoot mussel	<i>Truncilla cognata</i>		T
largely unknown; possibly intolerant of impoundment; possibly needs flowing streams and rivers with sand or gravel bottoms based on related species needs; Rio Grande basin			
Salina mucket	<i>Potamilus metnecktayi</i>		T
lotic waters; submerged soft sediment (clay and silt) along river bank; other habitat requirements are poorly understood; Rio Grande Basin			

CAMERON COUNTY

MOLLUSKS

		Federal Status	State Status
Texas hornshell	<i>Popenaias popeii</i>	C	T
<p>both ends of narrow shallow runs over bedrock, in areas where small-grained materials collect in crevices, along river banks, and at the base of boulders; not known from impoundments; Rio Grande Basin and several rivers in Mexico</p>			

REPTILES

		Federal Status	State Status
Atlantic hawksbill sea turtle	<i>Eretmochelys imbricata</i>	LE	E
<p>Gulf and bay system, warm shallow waters especially in rocky marine environments, such as coral reefs and jetties, juveniles found in floating mats of sea plants; feed on sponges, jellyfish, sea urchins, molluscs, and crustaceans, nests April through November</p>			
Black-striped snake	<i>Coniophanes imperialis</i>		T
<p>extreme south Texas; semi-arid coastal plain, warm, moist micro-habitats and sandy soils; proficient burrower; eggs laid April-June</p>			
Green sea turtle	<i>Chelonia mydas</i>	LT	T
<p>Gulf and bay system; shallow water seagrass beds, open water between feeding and nesting areas, barrier island beaches; adults are herbivorous feeding on sea grass and seaweed; juveniles are omnivorous feeding initially on marine invertebrates, then increasingly on sea grasses and seaweeds; nesting behavior extends from March to October, with peak activity in May and June</p>			
Keeled earless lizard	<i>Holbrookia propinqua</i>		
<p>coastal dunes, barrier islands, and other sandy areas; eats insects and likely other small invertebrates; eggs laid underground March-September (most May-August)</p>			
Kemp's Ridley sea turtle	<i>Lepidochelys kempii</i>	LE	E
<p>Gulf and bay system, adults stay within the shallow waters of the Gulf of Mexico; feed primarily on crabs, but also snails, clams, other crustaceans and plants, juveniles feed on sargassum and its associated fauna; nests April through August</p>			
Leatherback sea turtle	<i>Dermochelys coriacea</i>	LE	E
<p>Gulf and bay systems, and widest ranging open water reptile; omnivorous, shows a preference for jellyfish; in the US portion of their western Atlantic nesting territories, nesting season ranges from March to August</p>			
Loggerhead sea turtle	<i>Caretta caretta</i>	LT	T
<p>Gulf and bay system primarily for juveniles, adults are most pelagic of the sea turtles; omnivorous, shows a preference for mollusks, crustaceans, and coral; nests from April through November</p>			
Northern cat-eyed snake	<i>Leptodeira septentrionalis septentrionalis</i>		T
<p>Gulf Coastal Plain south of the Nueces River; thorn brush woodland; dense thickets bordering ponds and streams; semi-arboreal; nocturnal</p>			
Speckled racer	<i>Drymobius margaritiferus</i>		T
<p>extreme south Texas; dense thickets near water, Texas palm groves, riparian woodlands; often in areas with much vegetation litter on ground; breeds April-August</p>			

CAMERON COUNTY

REPTILES

		Federal Status	State Status
Texas horned lizard	<i>Phrynosoma cornutum</i>		T
open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September			
Texas indigo snake	<i>Drymarchon melanurus erebennus</i>		T
Texas south of the Guadalupe River and Balcones Escarpment; thornbush-chaparral woodlands of south Texas, in particular dense riparian corridors; can do well in suburban and irrigated croplands if not molested or indirectly poisoned; requires moist microhabitats, such as rodent burrows, for shelter			
Texas scarlet snake	<i>Cemophora coccinea lineri</i>		T
mixed hardwood scrub on sandy soils; feeds on reptile eggs; semi-fossorial; active April-September			
Texas tortoise	<i>Gopherus berlandieri</i>		T
open brush with a grass understory is preferred; open grass and bare ground are avoided; when inactive occupies shallow depressions at base of bush or cactus, sometimes in underground burrows or under objects; longevity greater than 50 years; active March-November; breeds April-November			

PLANTS

		Federal Status	State Status
Bailey's ballmoss	<i>Tillandsia baileyi</i>		
epiphytic on various trees and tall shrubs, perhaps most common in mottes of Live oak on vegetated dunes and flats in coastal portions of the South Texas Sand Sheet, but also on evergreen sub-tropical woodlands along resacas in the Lower Rio Grande Valley; flowering (February-)April-May, but conspicuous throughout the year			
Buckley's spiderwort	<i>Tradescantia buckleyi</i>		
Occurs on sandy loam or clay soils in grasslands or shrublands underlain by the Beaumont Formation.			
Green Island echeandia	<i>Echeandia texensis</i>		
on somewhat saline clays of lomas along the Gulf Coast near the mouth of Rio Grande, a habitat shared with <i>E. chandleri</i> ; both species grow in areas dominated by herbaceous species with scattered brush and stunted trees, or in grassy openings in subtropical thorn shrublands; flowers April, June, and November, and likely in other months, as well			
Large selenia	<i>Selenia grandis</i>		
GLOBAL RANK: G4; Occurs in seasonally wet clayey soils in open areas; Annual; Flowering Jan-April; Fruiting Feb-April			
Lila de los llanos	<i>Echeandia chandleri</i>		
most commonly encountered among shrubs or in grassy openings in subtropical thorn shrublands on somewhat saline clays of lomas along Gulf Coast near mouth of Rio Grande; also observed in a few upland coastal prairie remnants on clay soils over the Beaumont Formation at inland sites well to the north and along railroad right-of-ways and cemeteries; flowering (May-) September-December, fruiting October-December			

CAMERON COUNTY

PLANTS

Federal Status

State Status

Marsh-elder dodder

Cuscuta attenuata

GLOBAL RANK: G1G3; Parasitizes a particular sumpweed (*Iva annua*) almost exclusively as well as ragweed and heath aster. Host plants typically found in open, disturbed habitats like fallow fields and creek bottomlands; Annual; Flowering late summer through October

Mexican mud-plantain

Heteranthera mexicana

wet clayey soils of resacas and ephemeral wetlands in South Texas and along margins of playas in the Panhandle; flowering June-December, only after sufficient rainfall

Plains gumweed

Grindelia oolepis

coastal prairies on heavy clay (blackland) soils, often in depressional areas, sometimes persisting in areas where management (mowing) may maintain or mimic natural prairie disturbance regimes; 'crawfish lands'; on nearly level Victoria clay, Edroy clay, claypan, possibly Greta within Orelia fine sandy loam over the Beaumont Formation, and Harlingen clay; roadsides, railroad rights-of-ways, vacant lots in urban areas, cemeteries; flowering April-December

Runyon's cory cactus

Coryphantha macromeris var runyonii

gravelly to sandy or clayey, calcareous, sometimes gypsiferous or saline soils, often over the Catahoula and Frio formations, on gentle hills and slopes to the flats between, at elevations ranging from 10 to 150 m (30 to 500 ft); ?late spring or early summer, November, fruit has been collected in August

Runyon's water-willow

Justicia runyonii

margins of and openings within subtropical woodlands or thorn shrublands on calcareous, alluvial, silty or clayey soils derived from Holocene silt and sand floodplain deposits of the Rio Grande Delta; can be common in narrow openings such as those provided by trails through dense ebony woodlands and is sometimes restricted to microdepressions; flowering (July-) September-November

Shinners' rocket

Thelypodopsis shinnersii

mostly along margins of Tamaulipan thornscrub on clay soils of the Rio Grande Delta, including lomas near the mouth of the river; Tamaulipas, Mexico specimens are from mountains, with no further detail; flowering mostly March-April, with one collection in December

Siler's huaco

Manfreda sileri

GLOBAL RANK: G3; Rare in a variety of grasslands and shrublands on dry sites; Perennial; Flowering April-July; Fruiting June-July

South Texas ambrosia

Ambrosia cheiranthifolia

LE

E

Grasslands and mesquite-dominated shrublands on various soils ranging from heavy clays to lighter textured sandy loams, mostly over the Beaumont Formation on the Coastal Plain; in modified unplowed sites such as railroad and highway right-of-ways, cemeteries, mowed fields, erosional areas along small creeks; Perennial; Flowering July-November

South Texas spikesedge

Eleocharis austrotexana

GLOBAL RANK: G3; Occurring in miscellaneous wetlands at scattered locations on the coastal plain; Perennial; Flowering/Fruiting Sept

Star cactus

Astrophytum asterias

LE

E

CAMERON COUNTY

PLANTS

Federal Status

State Status

gravelly clays or loams, possibly of the Catarina Series (deep, droughty, saline clays), over the Catahoula and Frio formations, on gentle slopes and flats in sparsely vegetated openings between shrub thickets within mesquite grasslands or mesquite-blackbrush thorn shrublands; plants sink into or below ground during dry periods; flowering from mid March-May, may also flower in warmer months after sufficient rainfall, flowers most reliably in early April; fruiting mid April-June

Texas ayenia

Ayenia limitaris

LE

E

Subtropical thorn woodland or tall shrubland on loamy soils of the Rio Grande Delta; known site soils include well-drained, calcareous, sandy clay loam (Hidalgo Series) and neutral to moderately alkaline, fine sandy loam (Willacy Series); also under or among taller shrubs in thorn woodland/thorn shrubland; flowering throughout the year with sufficient rainfall

Texas milk vetch

Astragalus reflexus

GLOBAL RANK: G3; Grasslands, prairies, and roadsides on calcareous and clay substrates; Annual; Flowering Feb-June; Fruiting April-June

Texas stonecrop

Lenophyllum texanum

GLOBAL RANK: G3; Found in shrublands on clay dunes (lomas) at the mouth of the Rio Grande and on xeric calcareous rock outcrops at scattered inland sites; Perennial; Flowering/Fruiting Nov-Feb

Vasey's adelia

Adelia vaseyi

Mostly subtropical evergreen/deciduous woodlands on loamy soils of Rio Grande Delta, but occasionally in shrublands on more xeric sandy to gravelly upland sites; Perennial; Flowering January-June

Wright's trichocoronis

Trichocoronis wrightii var. *wrightii*

GLOBAL RANK: G4T3; Most records from Texas are historical, perhaps indicating a decline as a result of alteration of wetland habitats; Annual; Flowering Feb-Oct; Fruiting Feb-Sept

Yellow-flowered alicocha

Echinocereus papillosus

GLOBAL RANK: G3; Under shrubs or in open areas on various substrates; Perennial; Flowering Jan-April

Attachment E
Species Impact Table

Threatened and Endangered Species and Species of Greatest Conservation Need with Potential to Occur in Cameron County, Texas

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/ Impact	Pertinent Project Information
	Plants						
	Bailey's ballmoss <i>Tillandsia baileyi</i>	NL	SGCN	Epiphytic on various trees and tall shrubs, most common in Live Oak mottes on vegetated dunes and flats in coastal portions of South Texas; also on evergreen sub-tropical woodlands along resacas in the Lower Rio Grande Valley.	No	No Impact	Few woody species occur in the action area, many that do would not be impacted by the proposed action. This species was not observed during field investigations.
	Buckley's spiderwort <i>Tradescantia buckleyi</i>	NL	SGCN	Occurs on sandy loam or clay soils in grasslands or shrublands underlain by the Beaumont Formation.	No	No Impact	The Beaumont Formation occurs in more northern portions of Cameron County. This species was not observed during field investigations.
	Green Island echeandia <i>Echeandia texensis</i>	NL	SGCN	On somewhat saline clays of lomas along the Gulf Coast near the mouth of the Rio Grande, a habitat shared with <i>E. chandleri</i> ; Areas dominated by herbaceous species with scattered brush and stunted trees, or in grassy openings.	Yes	No Impact	Potentially suitable soils and compatible vegetation communities are present in the action area; however, no individuals of this species were observed during field investigations.
	Large selenia <i>Selenia grandis</i>	NL	SGCN	Occurs in seasonally wet clayey soils in open areas.	Yes	No Impact	Potentially suitable soils and compatible vegetation structure are present in the action area; however, no individuals of this species were observed during field investigations.
	Lila de los llanos <i>Echeandia chandleri</i>	NL	SGCN	Most commonly encountered among shrubs or grassy openings in subtropical thorn shrublands on somewhat saline clays of lomas along Gulf Coast near mouth of Rio Grande; also observed in a few upland coastal prairie remnants on clay soils over the Beaumont Formation at inland sites well to the north and along railroad ROWs and cemeteries.	Yes	No Impact	Potentially suitable soils and compatible vegetation structure are present in the action area; however, no individuals of this species were observed during field investigations.
	Marsh-elder dodder <i>Cuscuta attenuata</i>	NL	SGCN	Parasitizes a particular sumpweed (<i>Iva annua</i>) almost exclusively as well as ragweed and heath aster. Host plants typically found in open, disturbed habitats like fallow fields and creek bottomlands.	No	No Impact	No individuals of this species or suitable host plants were observed during field investigations.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/ Impact	Pertinent Project Information
	Mexican mud-plantain <i>Heteranthera mexicana</i>	NL	SGCN	Wet clayey soils of resacas and ephemeral wetlands in South Texas and along margins of playas in the Panhandle.	Yes	No Impact	Potentially suitable soils occur in the action area; however, this species was not observed during field observations.
	Plains gumweed <i>Grindelia oolepsis</i>	NL	SGCN	Coastal prairies on heavy clay (blackland) soils, often in depressional areas, sometimes persisting in areas where management (mowing) may maintain or mimic natural prairie disturbance regimes; 'crawfish lands'; on nearly level Victoria clay, Edroy clay, claypan, possibly Greta within Orelia fine sandy loam over the Beaumont Formation, and Harlingen clay; roadsides, railroad rights-of-ways, vacant lots in urban areas, cemeteries.	No	No Impact	Portions of the action area are consistent with the landforms preferred by this species; however, preferred geologic formations and soils do not occur there, and no individuals of this species were observed during field investigations.
	Runyon's cory cactus <i>Coryphantha macromeris var runyonii</i>	NL	SGCN	Gravelly to sandy or clayey, calcareous, sometimes gypsiferous or saline soils, often over the Catahoula and Frio formations, on gentle hills and slopes to the flats between, at elevations ranging from 30-500 feet; late spring or early summer, November, fruit has been collected in August	No	No Impact	This species was not observed during field investigations. The proposed project does not lie over the Catahoula or Frio formations.
	Runyon's water-willow <i>Justicia runyonii</i>	NL	SGCN	Margins of and openings within subtropical woodlands or thorn shrublands on calcareous, alluvial, silty or clayey soils derived from Holocene silt and sand floodplain deposits of the Rio Grande Delta; can be common in narrow openings such as those provided by trails through dense ebony woodlands and is sometimes restricted to micro-depressions; flowering (July-) September-November	Yes	No Impact	Potentially suitable soils and vegetation community structure occur in the southern portions of the action area. These areas would be minimally impacted by the proposed action.
	Shinners' rocket <i>Thelypodopsis shinnersii</i>	NL	SGCN	Mostly along margins of Tamaulipan thornscrub on clay soils of the Rio Grande Delta, including lomas near the mouth of the river.	Yes	No Impact	Potentially suitable vegetation community structure occur in the southern portions of the action area. These areas would be minimally impacted by the proposed action.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/ Impact	Pertinent Project Information
	Siler's huaco <i>Manfreda sileri</i>	NL	SGCN	Rare in a variety of grasslands and shrublands on dry sites.	Yes	No Impact	The action area may provide suitable habitat; however, this species was not observed during field investigations.
	South Texas ambrosia <i>Ambrosia cheiranthifolia</i>	LE	E	Grasslands and mesquite-dominated shrublands on various soils ranging from heavy clays to lighter textured sandy loams, mostly over the Beaumont Formation on the Coastal Plain; in modified unplowed sites such as railroad and highway right-of-ways, cemeteries, mowed fields, erosional areas along small creeks.	No	No Effect	The action area is in the historic range of the species, but this species was not observed during field investigations. The action area does not occur over the Beaumont formation, which lies to the north. Known extant populations occur north of Cameron County.
	South Texas spikesedge <i>Eleocharis austrotexana</i>	NL	SGCN	Occurring in miscellaneous wetlands at scattered locations on the coastal plain.	No	No Impact	No suitable habitats occur in the action area.
	Star cactus <i>Astrophytum asterias</i>	LE	E	Gravelly clays or loams, possibly of the Catarina Series (deep, droughty, saline clays), over the Catahoula and Frio formations, on gentle slopes and flats in sparsely vegetated openings between shrub thickets within mesquite grasslands or mesquite-blackbrush thorn shrublands; plants sink into or below ground during dry periods.	No	No Effect	No gravelly soils occur in the action area. The action area does not lie over the Catahoula or Frio formations. This species was not observed during field investigations.
	Texas ayenia <i>Ayenia limitaris</i>	LE	E	Subtropical thorn woodland or tall shrubland on loamy soils of the Rio Grande Delta; known site soils include well-drained, calcareous, sandy clay loam (Hidalgo Series) and neutral to moderately alkaline, fine sandy loam (Willacy Series); also under or among taller shrubs in thorn woodland/thorn shrubland.	No	No Effect	This species was not observed during field investigations. Other, similar species of the Malvaceae were observed (e.g., <i>Abutilon abutiloides</i> , <i>Sphaeralcea ambigua</i>). All plants had fresh or dehisced seed pods, none with the characteristic appendages. Soils in the action area are not sandy.
	Texas milk vetch <i>Astragalus reflexus</i>	NL	SGCN	Grasslands, prairies, and roadsides on calcareous and clay substrates.	Yes	No Impact	This species was not observed during field investigations.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/Impact	Pertinent Project Information
	Texas stonecrop <i>Lenophyllum texanum</i>	NL	SGCN	Found in shrublands on clay dunes (lomas) at the mouth of the Rio Grande and on xeric calcareous rock outcrops at scattered inland sites.	No	No Impact	No shrublands on clay dunes occur in the action area, and this species was not observed during field investigations.
	Vasey's adelia <i>Adelia vaseyi</i>	NL	SGCN	Mostly subtropical evergreen/deciduous woodlands on loamy soils of Rio Grande Delta, but occasionally in shrublands on more xeric sandy to gravelly upland sites; Perennial; Flowering January-June	No	No Impact	No subtropical evergreen/deciduous woodlands on loamy soils or sandy to gravelly upland sites occur in the action area. This species is more likely to occur in other areas of the Camp Rio property, such as the woodlands that are protected by conservation easement.
	Wright's trichocoronis <i>Trichocoronis wrightii</i> var. <i>wrightii</i>	NL	SGCN	Most records from Texas are historical, perhaps indicating a decline as a result of alteration of wetland habitats; Annual; Flowering Feb-Oct; Fruiting Feb-Sept	No	No Impact	No suitable habitat occurs in the action area. The species was not observed during field investigations.
	Yellow-flowered alicocha <i>Echinocereus papillosus</i>	NL	SGCN	Under shrubs or in open areas on various substrates; Perennial; Flowering Jan-April	Yes	No Impact	Potentially suitable habitat may occur in the action area; however, this species was not observed during field investigations.
	Mollusks						
	Mexican fawnsfoot <i>Truncilla cognata</i>	NL/UR	T	Largely unknown; possibly intolerant of impoundment; possibly needs flowing streams and rivers with sand or gravel bottoms based on related species needs; Rio Grande basin	No	No Effect	No perennial waterbodies would be affected by the proposed action.
	Salina mucket <i>Potamilus metnecktayi</i>	NL/UR	T	Lotic waters; submerged soft sediment (clay and silt) along river bank; other habitat requirements poorly understood; Rio Grande basin	No	No Effect	No perennial waterbodies would be affected by the proposed action.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/ Impact	Pertinent Project Information
	Texas hornshell <i>Popenaias popeii</i>	C/PE	T	Both ends of narrow, shallow runs over bedrock, in areas where small-grained materials collect in crevices, along river banks, and at the base of boulders; not known from impoundments; Rio Grande basin and several rivers in Mexico	No	No Effect	No perennial waterbodies would be affected by the proposed action.
	Insects						
	A royal moth <i>Sphingicampa blanchardi</i>	NL	SGCN	Woodland - hardwood; Tamaulipan thornscrub with caterpillar's host plant, Texas Ebony (<i>Pitheocellobium flexicaule</i>) an important element	No	No Impact	Woodlands with Texas ebony occur to the south of the action area. Woody species in the action area are isolated, more similar to a savanna or motte structure. The proposed action would not affect suitable woodland habitats.
	Manfreda giant-skipper <i>Stallingsia maculosus</i>	NL	SGCN	Most skippers are small and stout-bodied; with fast, erratic flight. At rest, most hold front and hind wings at different angles; larvae are smooth, with head and neck constricted, and usually feed inside a leaf shelter and pupate in a cocoon made of leaves fastened together with silk	Yes	May Impact	Potentially suitable habitat occurs within the action area, and this species may occur there.
	Smyth's tiger beetle <i>Cicindela chlorocephala smythi</i>	NL	SGCN	Bare or sparsely vegetated, dry, hard-packed soil; typically in previously disturbed areas; peak adult activity in July	Yes	May Impact	Potentially suitable habitat occurs within the action area, and this species may occur there.
	Subtropical blue-black tiger beetle <i>Cicindela nigrocoerulea subtropica</i>	NL	SGCN	Most tiger beetles are active, usually brightly colored, and found in open, sunny areas; adults are predaceous and feed on insects; larvae are also predaceous and live in vertical burrows in soil of dry paths, fields, or sandy beaches	Yes	May Impact	Potentially suitable habitat occurs within the action area, and this species may occur there.
	Tamaulipan agapema <i>Agapema galbina</i>	NL	SGCN	Tamaulipan thornscrub with adequate densities of the caterpillar food plant <i>Condalia hookeri hookeri</i> (=obovata); adults occur Sep - Oct; eggs hatch within two weeks and larvae mature 'rapidly'	No	No Impact	Woodlands with Texas ebony occur to the south of the action area. Woody species in the action area are isolated, more similar to a savanna or motte structure. The proposed action would not affect suitable woodland habitats.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/ Impact	Pertinent Project Information
	Fishes						
	American eel <i>Anguilla rostrata</i>	NL	SGCN	Coastal waterways below reservoirs to gulf. Spawns January to February in ocean, larva move to coastal waters, metamorphose, then females move into freshwater. Most aquatic habitats with access to ocean, muddy bottoms, still waters, large streams, lakes. Can travel overland in wet areas;	No	No Impact	No inland, perennial waterbodies or brackish waters connected to the Gulf of Mexico would be affected by the proposed action.
	Mexican goby <i>Ctenogobius claytonii</i>	NL	T	Southern coastal area; brackish and freshwater coastal streams	No	No Impact	No inland, perennial waterbodies or brackish waters connected to the Gulf of Mexico would be affected by the proposed action.
	Opossum pipefish <i>Microphis brachyurus</i>	NL	T	Brooding adults found in fresh or low salinity waters and young move or are carried into more saline waters after birth; southern coastal areas	No	No Impact	No inland, perennial waterbodies or brackish waters connected to the Gulf of Mexico would be affected by the proposed action.
	Rio Grande shiner <i>Notropis jemezanus</i>	NL	SGCN	Rio Grande and upper Pecos River basins; large, open, weedless rivers or large creeks with substrates of rubble, gravel, and sand, often overlain with silt	No	No Impact	No perennial waterbodies would be affected by the proposed action.
	Rio Grande silvery minnow <i>Hybognathus amarus</i>	LE	E	Extirpated; historically Rio Grande and Pecos River systems and canals; reintroduced in Big Bend area; pools and backwaters of medium to large streams with low or moderate gradient in mud, sand, or gravel substrate; probably spawns on silt substrates of quiet coves	No	No Effect	No perennial waterbodies, including canals, would be affected by the proposed action.
	River goby <i>Awaous banana</i>	NL	T	Southern coastal waters; clear water with slow to moderate current, sandy or hard bottom, and little or no vegetation; also enters brackish and ocean waters	No	No Impact	No perennial waterbodies would be affected by the proposed action.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/Impact	Pertinent Project Information
	Smalltooth sawfish <i>Pristis pectinata</i>	LE	E	Young found very close to shore on muddy and sandy bottoms in sheltered bays, on shallow banks, and in estuaries or river mouths; adults in mangrove, reef, seagrass, and coral habitats (among others) in varying salinity regimes and temperatures and at various depths. Feed on a variety of fish and crustaceans.	No	No Effect	No inland, perennial waterbodies or brackish waters connected to the Gulf of Mexico would be affected by the proposed action.
	Amphibians						
	Black-spotted newt <i>Notophthalmus meridionalis</i>	NL/UR	T	Wet or sometimes wet areas, such as arroyos, canals, ditches, or shallow depressions; aestivates in the ground during dry periods; Gulf Coastal Plain south of San Antonio River	Yes	No Effect	Potentially suitable habitat occurs in the action area adjacent to the manmade pond; however, no work is proposed in these areas.
	Mexican treefrog <i>Smilisca baudinii</i>	NL	T	Subtropical region of extreme southern Texas; breeds May-October coinciding with rainfall; eggs laid in temporary rain pools	No	No Impact	No areas where pools of water form were evident, and areas adjacent to the manmade pond will not be disturbed by the proposed action.
	Sheep frog <i>Hypopachus variolosus</i>	NL	T	Predominantly grassland and savanna; moist sites in arid areas	Yes	May Impact	Potentially suitable habitat occurs in portions of the action area where various project elements would be constructed.
	South Texas siren (large form) <i>Siren sp 1</i>	NL	T	Wet or sometimes wet areas, such as arroyos, canals, ditches, or shallow depressions; aestivates in the ground during dry periods, but does require some moisture to remain; southern Texas south of Balcones Escarpment; breeds February-June	Yes	No Effect	Potentially suitable habitat occurs in the action area adjacent to the manmade pond; however, no work is proposed in these areas.
	White-lipped frog <i>Leptodactylus fragilis</i>	NL	T	Grasslands, cultivated fields, roadside ditches, and a wide variety of other habitats; often hides under rocks or in burrows under clumps of grass; species requirements incompatible with widespread habitat alteration and pesticide use in south Texas	Yes	May Impact	Potentially suitable habitat occurs in portions of the action area where various project elements would be constructed.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/ Impact	Pertinent Project Information
	Reptiles						
	Atlantic hawksbill sea turtle <i>Eretmochelys imbricata</i>	LE	E	Gulf and bay system, warm shallow waters especially in rocky marine environments, such as coral reefs and jetties, juveniles found in floating mats of sea plants; feed on sponges, jellyfish, sea urchins, mollusks, and crustaceans, nests April through November	No	No Effect	Critical Habitat Units have been established for this species; however, all units are in the vicinity of the island of Puerto Rico. No suitable habitat occurs in or adjacent to the action area. No coastal waterbodies or potential nesting areas would be affected by the proposed action.
	Black-striped snake <i>Coniophanes imperialis</i>	NL	T	Extreme south Texas; semi-arid coastal plain, warm, moist micro-habitats and sandy soils; proficient burrower; eggs laid April-June	Yes	May Impact	Given the moist micro-habitats, variability of soils, and the species' mobility, it may occur in the action area; however, the preferred sandy soils are not present and burrowing habitat would be marginal.
	Green sea turtle <i>Chelonia mydas</i>	LT	T	Gulf and bay system; shallow water seagrass beds, open water between feeding and nesting areas, barrier island beaches; adults are herbivorous feeding on sea grass and seaweed; juveniles are omnivorous feeding initially on marine invertebrates, then increasingly on sea grasses and seaweeds; nesting behavior extends from March to October, with peak activity in May and June	No	No Effect	No coastal waterbodies or potential nesting areas would be affected by the proposed action.
	Keeled earless lizard <i>Holbrookia propinqua</i>	NL	SGCN	Coastal dunes, barrier islands, and other sandy areas; eats insects and other small invertebrates; eggs laid underground March-September (most May-August)	No	No Impact	The action area is far removed from coastal environments, and no sandy soils occur there.
	Kemp's Ridley sea turtle <i>Lepidochelys kempii</i>	LE	E	Gulf and bay system, adults stay within the shallow waters of the Gulf of Mexico; feed primarily on crabs, but also snails, clams, other crustaceans and plants, juveniles feed on sargassum and its associated fauna; nests April through August	No	No Effect	No coastal waterbodies or potential nesting areas would be affected by the proposed action.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/ Impact	Pertinent Project Information
	Leatherback sea turtle <i>Dermochelys coriacea</i>	LE	E	Gulf and bay systems, and open water; omnivorous, prefers jellyfish; nesting season ranges from March to August	No	No Effect	Critical Habitat Units have been established for this species; however, all units are in the vicinity of the islands of the U.S. Virgin Islands. No suitable habitat occurs within or adjacent to the action area. No coastal waterbodies or potential nesting areas would be affected by the proposed action.
	Loggerhead sea turtle <i>Caretta caretta</i>	LT	T	Gulf and bay system primarily for juveniles, mostly pelagic adults; omnivorous, prefer mollusks, coral, and crustaceans; nests April to November	No	No Effect	Critical Habitat Units have been established for this species; however, none are located in Texas. No suitable habitat occurs within or adjacent to the action area. No coastal waterbodies or potential nesting areas would be affected by the proposed action.
	Northern cat-eyed snake <i>Leptodeira septentrionalis septentrionalis</i>	NL	T	Gulf Coastal Plain south of the Nueces River; thorn brush woodland; dense thickets bordering ponds and streams; semi-arboreal; nocturnal	Yes	May Impact	This species may use portions of the action area that are adjacent to woodlands and sources of water.
	Speckled racer <i>Drymobius margaritiferus</i>	NL	T	Extreme south Texas; dense thickets near water, Texas palm groves, riparian woodlands; often in areas with much vegetation litter on ground; breeds April-August	Yes	May Impact	This species may use portions of the action area that are adjacent to woodlands and sources of water.
	Texas horned lizard <i>Phrynosoma cornutum</i>	NL	T	Open, arid, and semi-arid regions with sparse vegetation; soil varies in texture from sandy-rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September; eats red/harvester ants	No	No Impact	No sandy to rocky soils occur in the action area.
	Texas indigo snake <i>Drymarchon melanurus erebennus</i>	NL	T	Texas south of the Guadalupe River and Balcones Escarpment; thornbush-chaparral woodlands of south Texas, in particular dense riparian corridors; can do well in suburban and irrigated croplands if not molested or indirectly poisoned; requires moist microhabitats for shelter	Yes	May Impact	Potentially suitable habitat for this species occurs in the action area adjacent to woodlands and the nearby canal.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/Impact	Pertinent Project Information
	Texas scarlet snake <i>Cemophora coccinea lineri</i>	NL	T	Mixed hardwood scrub on sandy soils; feeds on reptile eggs; semi-fossorial; active April-September	No	No Impact	No suitable soils occur in the project area. This species is more likely to occur in other areas of the Camp Rio property, such as those protected by conservation easement.
	Texas tortoise <i>Gopherus berlandieri</i>	NL	T	Open brush with a grass understory is preferred; open grass and bare ground are avoided; when inactive, occupies shallow depression at base of bush or cactus, sometimes in underground burrows or under objects; active March-November; breeds April-November	Yes	May Impact	Potentially suitable habitat occurs within and adjacent to the action area and a potential tortoise burrow was observed adjacent to the action area during field investigations.
	Birds						
	American peregrine falcon <i>Falco peregrinus anatum</i>	DL	T	Year-round resident in west Texas, nests in tall cliff eyries; also, migrant across state from northern breeding areas in U.S. and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, with stopovers at leading landscape edges	No	No Impact	No suitable nesting habitat would be affected by the proposed action. The species is a potential migrant through the action area.
	Arctic peregrine falcon <i>Falco peregrinus tundrius</i>	DL	SGCN	Migrant throughout state from subspecies' northern breeding range, winters along coast and farther south. Habitat, migration habits, and appearance very similar to American peregrine falcon.	No	No Impact	No suitable nesting habitat would be affected by the proposed action. The species is a potential migrant through the action area.
	Audubon's oriole <i>Icterus graduacauda audubonii</i>	NL	SGCN	Scrub; mesquite; nests in dense trees or thickets, usually along watercourses	Yes	No Impact	Some dense shrub occurs in the southern portions of the action area; however, these areas would be minimally disturbed by the proposed action.
	Brown Pelican <i>Pelecanus occidentalis</i>	DL	SGCN	Largely coastal and near shore areas, where it roosts and nests on islands and spoil banks	No	No Impact	The action area is far removed from coastal habitats, and no suitable habitat occurs within the action area.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/Impact	Pertinent Project Information
	Brownsville common yellowthroat <i>Geothlypis trichas insperata</i>	NL	SGCN	Tall grasses and bushes near ponds, marshes, and swamps; breeding April-July	Yes	May Impact	Potentially suitable habitat occurs in the action area and although no individuals of this species were observed in the action area during field investigations, they may occur there.
	Cactus ferruginous pygmy-owl <i>Glaucidium brasilianum cactorum</i>	NL	T	Riparian trees, brush, palm, and mesquite thickets; during day also roosts in small caves and recesses on slopes of low hills; breeding April-June	Yes	No Impact	This species may find potentially suitable nesting habitat in the riparian areas adjacent to the action area; however, these areas would not be disturbed by the proposed action.
	Common black-hawk <i>Buteogallus anthracinus</i>	NL	T	Cottonwood-lined rivers and streams; willow tree groves on the lower Rio Grande floodplain; formerly bred in south Texas	No	No Impact	No suitable habitat occurs in the action area.
	Eskimo curlew <i>Numenius borealis</i>	LE	E	Historic; nonbreeding: grasslands, pastures, plowed fields, and less frequently, marshes and mudflats	No	No Effect	The species does not breed in this region. Official USFWS species lists do not recognize the potential for the species to occur in the action area. It is a potential, but unlikely, migrant through the action area. The species is presumed extinct.
	Gray hawk <i>Asturina nitida</i>	NL	T	Locally and irregularly along U.S.-Mexico border; mature riparian woodlands and nearby semiarid mesquite and scrub grasslands; breeding range formerly extended north to southernmost Rio Grande floodplain of Texas	Yes	No Impact	The species may find suitable nesting habitat in the scrub/shrub areas in the southern portions of the action area; however, these areas would be minimally disturbed by the proposed action.
	Interior least tern <i>Sterna antillarum athalassos</i>	LE	E	Subspecies listed only when inland (more than 50 miles from a coastline); sand and gravel bars within braided streams, rivers; man-made structures such as water treatment plants	No	No Effect	No suitable habitat occurs in the action area, the action area is approximately 25 miles from the coast, and the proposed action is not wind related.

Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/Impact	Pertinent Project Information
Northern Aplomado falcon <i>Falco femoralis septentrionalis</i>	LE	E	Open country, especially savanna and open woodland, and sometimes in very barren areas; grassy plains and valleys with scattered mesquite, yucca, and cactus; nests in old stick nests of other bird species	Yes	May affect, not likely to adversely affect	Anecdotal and official observations have been reported surrounding the action area, especially to the east. Potentially suitable habitat occurs in the action area in the form of isolated woody species, and some woody vegetation that could provide nesting opportunities may be removed. The action area represents a relatively small patch size, when combined with the surrounding agricultural and suburban land uses, the action area presents sub-optimal habitat. Avoidance measures including timing vegetation removal to occur outside of prime nesting season and pre-construction surveys, as appropriate, would be incorporated into the project to reduce the likelihood of impacts. If individuals of the species or active nests are discovered, USFWS would be contacted.
Northern beardless-tyrannulet <i>Camptostoma imberbe</i>	NL	T	Mesquite woodlands; near Rio Grande frequents cottonwood, willow, elm, and great leadtree; breeding April-July	No	No Impact	No suitable habitat occurs in the action area.
Piping plover <i>Charadrius melodus</i>	LT	T	Wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats.	Yes	No Effect	Critical Habitat units are established east of the Action area in the vicinity of Laguna Madre and the Gulf of Mexico. These areas are approximately 25 miles from the action area. No suitable habitat occurs in or near the action area.
Red knot <i>Calidris canutus rufa</i>	LT	SGCN	Red knots migrate northward mainly April-June, southward July-October. Prefers shoreline of coast and bays, also uses mudflats during rare inland encounters. Wintering Range includes Cameron County. Habitat: Primarily seacoasts.	Yes	No Effect	No suitable habitat occurs in or near the action area.
Red-crowned parrot <i>Amazona viridigenalis</i>	C	NL	Lush areas in arid lowlands and foothills, particularly gallery forests, deciduous woodlands, and dry, open pine-oak woodlands on ridges up to 3,281 feet above mean sea level.	No	No effect	No suitable habitat is present in or near the action area.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/Impact	Pertinent Project Information
	Reddish egret <i>Egretta rufescens</i>	LT	T	Resident of the Texas Gulf Coast; brackish marshes and shallow salt ponds and tidal flats; nests on ground or in trees or bushes, on dry coastal islands in brushy thickets of yucca and prickly pear	No	No effect	Suitable habitat does not occur within the action area.
	Rose-throated becard <i>Pachyrhamphus aglaiae</i>	NL	T	Riparian trees, woodlands, open forest, scrub, and mangroves; breeding April-July	Yes	No Impact	The species may find suitable nesting habitat in the scrub/shrub areas in the southern portions of the action area; however, these areas would be minimally disturbed by the proposed action.
	Sennett's hooded oriole <i>Icterus cucullatus sennetti</i>	NL	SGCN	Often builds nests in and of Spanish moss (<i>Tillandsia usniodes</i>); feeds on invertebrates, fruit, and nectar; breeding March-August	No	No Impact	No suitable habitat occurs within the action area.
	Snowy plover <i>Charadrius alexandrinus</i>	NL	SGCN	Formerly an uncommon breeder in the Panhandle; potential migrant; winter along coast	No	No Impact	No suitable habitat occurs within the action area.
	Sooty tern <i>Sterna fuscata</i>	NL	T	Predominately 'on the wing'; does not dive, but snatches small fish and squid with bill as it flies or hovers over water; breeding April-July	No	No Impact	No suitable habitat occur within the action area.
	Sprague's pipit <i>Anthus spragueii</i>	NL	SGCN	Only in Texas during migration and winter, mid-September to early April; diurnal migrant; strongly tied to native upland prairie; uncommon to rare west of coast; sensitive to patch size and avoids edges	No	No Impact	No suitable habitat occurs within the action area. The action area contains edge.
	Texas Botteri's sparrow <i>Aimophila botterii texana</i>	NL	T	Grassland and short-grass plains with scattered bushes or shrubs, sagebrush, mesquite, or yucca; nests on ground of low clump of grasses	Yes	No Impact	The species may find suitable nesting habitat in the scrub/shrub areas in the southern portions of the action area; however, these areas would be minimally disturbed by the proposed action.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/ Impact	Pertinent Project Information
	Tropical parula <i>Parula pitaiayumi</i>	NL	T	Dense or open woods, undergrowth, brush, and trees along edges of rivers and resacas; breeding April-July	Yes	No Impact	The species may find suitable nesting habitat in the scrub/shrub areas in the southern portions of the action area; however, these areas would be minimally disturbed by the proposed action.
	Western burrowing owl <i>Athene cunicularia hypugaea</i>	NL	SGCN	Open grasslands, vacant lots near human habitation or airports; nests and roosts in abandoned burrows	Yes	May Impact	Potentially suitable habitat occurs within the action area.
	Western snowy plover <i>Charadrius alexandrinus nivosus</i>	NL	T	Uncommon breeder in the Panhandle; potential migrant; winter along coast	No	No Impact	The action area is not located in the Panhandle or along the coast.
	White-faced ibis <i>Plegatus chihi</i>	NL	T	Prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats	Yes	No Impact	Potentially suitable habitat occurs south of the manmade pond in the form of low scrub shrubs near water. These areas would be minimally impacted by the proposed action.
	White-tailed hawk <i>Buteo albicaudatus</i>	NL	T	Near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite and oak savannas, and mixed savanna-chaparral; breeding March-May	Yes	May impact	Potentially suitable habitat occurs within the action area. The species may find suitable nesting opportunities in the low scrub/savannah ecotone. Isolated woody species may be removed during development of the proposed action.
	Wood stork <i>Mycteria americana</i>	NL	T	Forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including saltwater; usually roosts communally in tall snags often in active heronries; breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas	Yes	No Impact	Potentially suitable habitat occurs within the action area; however, no active heronries occur within the action area. Furthermore, species no longer nests within the state of Texas.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/ Impact	Pertinent Project Information
	Zone-tailed hawk <i>Buteo albonotatus</i>	NL	T	Arid, open country, including open, deciduous or pine-oak woodland, mesa, or mountain country; often near watercourses, and wooded canyons and tree-lined rivers along middle-slopes of desert mountains; nests in various habitats and sites, ranging from small trees in lower desert, giant cottonwoods in riparian areas, to mature conifers in high mountain regions	Yes	May impact	Potentially suitable habitat occurs within the action area. The species may find suitable nesting opportunities in the low scrub/savannah ecotone. Isolated woody species may be removed during development of the proposed action.
	Mammals						
	Coues' rice rat <i>Orzomys couesi</i>	NL	T	Cattail-bulrush marsh with shallower zone of aquatic grasses near the shoreline; shade trees around the shoreline are important features; prefers salt and freshwater, as well as grassy areas near water; breeds April-August	No	No Impact	No suitable habitat occurs within the action area.
	Jaguar <i>Panthera onca</i>	LE	E	Extirpated; dense chaparral; no reliable TX sightings since 1952	No	No Impact	No suitable habitat occurs within the action area. Species is presumed extirpated.
	(Gulf Coast) Jaguarundi <i>Herpailurus [=Felis] yagouaroundi cacomitli</i>	LE	E	Thick brushlands, near water favored; young born in March and August, or beginning of rainy season and end of dry season	No	No Effect	No suitable habitat occurs within the action area. Adjacent evergreen woodlands may provide habitat and individuals may be those areas; however, the areas are already sporadically used for hiking and other outdoor education activities, and the proposed action would not substantially alter human use patterns.
	Mexican long-tongued bat <i>Choeronycteris mexicana</i>	NL	SGCN	Deep canyons; caves and mine tunnels used as day roosts; also found in buildings; often associated with big-eared bats (<i>Plecotus</i> spp); single Texas record from Santa Ana NWR	No	No Impact	No suitable habitat occurs within the action area.

	Species	Federal Status	State Status	Species/Habitat Description	Habitat Present in Action Area?	Species Effect/Impact	Pertinent Project Information
	Ocelot <i>Leopardus pardalis</i>	LE	E	Dense chaparral thickets; mesquite-thorn scrub and live oak mottes; avoids open areas; breeds and raises young June-November	No	No Effect	No suitable habitat occurs within the action area. Adjacent evergreen woodlands may provide habitat; however, the areas are already sporadically used for hiking and other outdoor education activities, and the proposed action would not substantially alter human use patterns.
	Plains spotted skunk <i>Spilogale putorius interrupta</i>	NL	SGCN	Catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie	Yes	May impact	Potentially suitable habitat occurs within the action area.
	Southern yellow bat <i>Lasiurus ega</i>	NL	T	Associated with trees, such as palm trees (<i>Sabal mexicana</i>) in Brownsville, which provide them with daytime roosts; insectivorous; breeding in late winter	Yes	May Impact	While no palm trees occur in the action area, other isolated trees may be removed during construction.
	West Indian manatee <i>Trichechus manatus</i>	LE	E	Gulf and bay system; opportunistic, aquatic herbivore	No	No Effect	Critical Habitat has been established for this species; however, all critical habitat units are located in Florida. No suitable habitat occurs within or near the action area.
	White-nosed coati <i>Nasua narica</i>	NL	T	Woodlands, riparian corridors, and canyons; most individuals in Texas probably transients from Mexico; diurnal and crepuscular; very sociable; forages on ground and in trees	No	No Impact	No suitable habitat occurs within the action area. Adjacent evergreen woodlands may provide habitat and individuals may be transient through the action area.
	<u>Federal Status Codes:</u> LE = Endangered LT = Threatened NL = Not listed	C = Candidate DL = Delisted PE = Proposed Endangered UR = Under Review		<u>State Status Codes:</u> E = Endangered T = Threatened NL = Not listed	SGCN = Species of Greatest Conservation Need		

Attachment F
Biological Assessment

Proposed Archery Range Development
 IDEA Public School System
 Camp Rio
 280 Fish Hatchery Road
 Brownsville, Texas 78520

Dawn Gardiner
 Assistant Field Supervisor
 U.S. Fish and Wildlife Service
 P.O. Box 81468
 Corpus Christi, Texas 78468-1468

Ms. Gardiner,

IDEA Public School System is proposing to construct an archery range at Campo Rio near Brownsville Texas. Based on the information presented in the Environmental Assessment prepared for this project and the information summarized below, we have determined that the project would have either no effect or may affect, but is not likely to adversely affect the following species, as summarized below.

Species Protected under the Endangered Species Act

Species	Listing Status	Impact	Justification
Birds			
Interior least tern <i>Sterna antillarum athalassos</i>	LE	No Effect	No suitable habitat occurs in the action area, the action area is approximately 25 miles from the coast, and the proposed action is not wind related.
Northern Aplomado falcon <i>Falco femoralis septentrionalis</i>	LT	May affect, not likely to adversely affect	Anecdotal and official observations have been reported surrounding the action area, especially to the east. Potentially suitable habitat occurs in the action area in the form of isolated woody species, and some woody vegetation that could provide nesting opportunities may be removed. The action area represents a relatively small patch size, when combined with the surrounding agricultural and suburban land uses, the action area presents sub-optimal habitat. Avoidance measures including timing vegetation removal to occur outside of prime nesting season and pre-construction surveys, as appropriate, would be incorporated into the project to reduce the likelihood of impacts. If individuals of the species or active nests are discovered, USFWS would be contacted.
Piping plover <i>Charadrius melodus</i>	LT	No Effect	Critical Habitat units are established east of the Action area in the vicinity of Laguna Madre and the Gulf of Mexico. These areas are approximately 25 miles from the action area. No suitable habitat occurs in or near the action area.
Red knot <i>Calidris canutus rufa</i>	LT	No Effect	No suitable habitat occurs in or near the action area.
Red-crowned parrot <i>Amazona viridigenalis</i>	C	No Effect	No suitable habitat is present in or near the action area.
Flowering Plants			

Species	Listing Status	Impact	Justification
South Texas ambrosia <i>Ambrosia cheiranthifolia</i>	LE	No Effect	The action area is in the historic range of the species, but this species was not observed during field investigations. The action area does not occur over the Beaumont formation, which lies to the north. Known extant populations occur north of Cameron County.
Texas ayenia <i>Ayenia limitaris</i>	LE	No Effect	This species was not observed during field investigations. Other, similar species of the Malvaceae were observed (e.g., <i>Abutilon abutiloides</i> , <i>Sphaeralcea ambigua</i>). All plants had fresh or dehisced seed pods, none with the characteristic appendages.
Mammals			
(Gulf Coast) Jaguarundi <i>Herpailurus [=Felis] yagouaroundi cacomitli</i>	LE	No Effect	No suitable habitat occurs within the action area. Adjacent evergreen woodlands may provide habitat and individuals may be those areas; however, the areas are already sporadically used for hiking and other outdoor education activities, and the proposed action would not substantially alter human use patterns.
Ocelot <i>Leopardus pardalis</i>	LE	No Effect	No suitable habitat occurs within the action area. Adjacent evergreen woodlands may provide habitat and individuals may be those areas; however, the areas are already sporadically used for hiking and other outdoor education activities, and the proposed action would not substantially alter human use patterns.
West Indian manatee <i>Trichechus manatus</i>	LE	No Effect	Critical Habitat has been established for this species; however, all critical habitat units are located in Florida. No suitable habitat occurs within or near the action area.
Reptiles			
Atlantic hawksbill sea turtle <i>Eretmochelys imbricata</i>	LE	No Effect	Critical Habitat Units have been established for this species; however, all units are in the vicinity of the island of Puerto Rico. No suitable habitat occurs within or near the action area.
Kemp's Ridley sea turtle <i>Lepidochelys kempii</i>	LE	No Effect	No suitable habitat occurs within or near the action area.
Leatherback sea turtle <i>Dermochelys coriacea</i>	LE	No Effect	Critical Habitat Units have been established for this species; however, all units are in the vicinity of the islands of the U.S. virgin Islands. No suitable habitat occurs within or adjacent to the action area. No coastal waterbodies or potential nesting areas would be affected by the proposed action.
Loggerhead sea turtle <i>Caretta caretta</i>	LT	No Effect	Critical Habitat Units have been established for this species; however, none are located in Texas. No suitable habitat occurs within or adjacent to the action area. No coastal waterbodies or potential nesting areas would be affected by the proposed action.

Based on our assessment, we have determined that the proposed action would not result in effects that would rise above insignificant and discountable levels. We would like the Service to concur on these effects calls.

Attachment G

Cultural Resources Coordination

From: Info_Tech@thc.state.tx.us [mailto:Info_Tech@thc.state.tx.us]
Sent: Monday, April 24, 2017 5:17 PM
To: Chris Dayton <chris@coxmcclain.com>; reviews@thc.state.tx.us
Subject: Project Review: 201706062



Re: Project Review under Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas
Permit 7948
201706062
IDEA Camp Rio Archery Range
Fish Hatchery Road
Brownsville, TX 78520

Dear Chris Dayton:

Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act.

The review staff led by Casey Hanson and Justin Kockritz has completed its review and has made the following determinations based on the information submitted for review:

Above-Ground Resources

- No historic properties present or affected

Archeology Comments

- No historic properties present or affected
- THC/SHPO concurs with information provided
- THC/SHPO has comments on the draft report submitted to this office for review
- Draft report acceptable. Please submit another copy as a final report along with shapefiles showing the area where the archeological work was conducted. Shapefiles should be submitted electronically to [email].

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: casey.hanson@thc.texas.gov, justin.kockritz@thc.texas.gov.

Sincerely,

Mark Wolfe, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.

Attachment H

Agency Coordination



October 6, 2017

United States Environmental Protection Agency
Fountain Place 12th Floor, Suite 1200
1445 Ross Avenue
Dallas, TX 75202-2733

Re: IDEA Public Schools, Camp Rio Archery Range – Environmental Assessment

Dear Sir or Madam,

This letter is to notify you that IDEA Public Schools is preparing an Environmental Assessment (EA) pursuant to Section 102 of the National Environmental Policy Act as implemented by the regulations promulgated by the Council on Environmental Quality (40 Code of Federal Regulations Parts 1500-1508). Financial assistance for this project is being provided through a grant under the Wildlife and Sport Fish Restoration Program from the United States Fish and Wildlife Service that will be administered by the Texas Parks and Wildlife Department.

The Proposed Action consists of constructing an outdoor archery range with ancillary facilities that will provide archery education opportunities to the general public and to students enrolled in IDEA Public School programs. The Proposed Action would occur on the grounds of Camp Rio, an outdoor education facility operated by IDEA Public Schools in Cameron County, Texas (see attached maps). The majority of Camp Rio is under a conservation easement that protects Tamaulipan Thornscrub habitats. The Action Area is not covered by the conservation easement and has been previously disturbed in association with adjacent infrastructure projects. Ancillary facilities would include a driveway, hiking trail improvements, parking lot, restrooms, instruction area, and deck.

The EA will describe the need for and purpose of the proposed project, alternatives under consideration, and the affected environment. It will also assess the potential environmental effects of the alternatives.

To help ensure that the EA addresses environmental resource categories for which your agency manages or has the responsibility to regulate, we request that you provide any comments or recommendations you may have regarding the preparation of the EA. We look forward to receiving your comments.

Please send any correspondence and information regarding this request to the attention of Mr. Walt Meitzen at Cox | McLain Environmental Consulting, 8401 Shoal Creek Boulevard, Austin, Texas 78757. Additional inquiries can be directed to Mr. Meitzen via email at waltm@coxmcclain.com or by phone at (512) 338-2223. Thank you for your consideration of this matter.

Sincerely,

Omar Garza,
Project Manager



October 6, 2017

United States Fish and Wildlife Service
Texas Coastal Ecological Services Field Office
P.O. Box 81468 Corpus Christi, TX 78468-1468

Re: IDEA Public Schools, Camp Rio Archery Range – Environmental Assessment

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Sincerely,

Omar Garza,
Project Manager



October 6, 2017

United States Army Corps of Engineers, Galveston District
Regulatory Division
P.O. Box 1229
Galveston, TX 77553-1229

Re: IDEA Public Schools, Camp Rio Archery Range – Environmental Assessment

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Sincerely,

Omar Garza,
Project Manager



October 6, 2017

Texas Parks and Wildlife Department
Biological and Conservation Data System, Resource Protection Division
4200 Smith School Road
Austin, TX 78744

Re: IDEA Public Schools, Camp Rio Archery Range – Environmental Assessment

Dear Sir or Madam,

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Sincerely,

Omar Garza,
Project Manager



October 6, 2017

Texas Commission on Environmental Quality
Water Quality – MC-148
P.O. Box 13087
Austin, TX 78711-3087

Re: IDEA Public Schools, Camp Rio Archery Range – Environmental Assessment

Dear Sir or Madam,

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Sincerely,

Omar Garza,
Project Manager



October 6, 2017

Texas Commission on Environmental Quality
Air Quality – MC-163
P.O. Box 13087
Austin, TX 78711-3087

Re: IDEA Public Schools, Camp Rio Archery Range – Environmental Assessment

Dear Sir or Madam,

This letter is to notify you that IDEA Public Schools is preparing an Environmental Assessment (EA) pursuant to Section 102 of the National Environmental Policy Act as implemented by the regulations promulgated by the Council on Environmental Quality (40 Code of Federal Regulations Parts 1500-1508). Financial assistance for this project is being provided through a grant under the Wildlife and Sport Fish Restoration Program from the United States Fish and Wildlife Service that will be administered by the Texas Parks and Wildlife Department.

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Sincerely,

Omar Garza,
Project Manager

Attachment I

**Public Involvement Comments
(if applicable for Final EA)**