

APPENDIX B

Biological Evaluation Report

BIOLOGICAL EVALUATION

NEW MEXICO DEPARTMENT OF TRANSPORTATION, AVIATION DIVISION

CITY OF LAS CRUCES

LAS CRUCES AIRPORT MASTER PLAN DEVELOPMENT

PROJECT

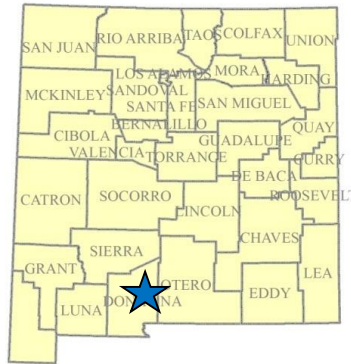
DONA ANA COUNTY, NEW MEXICO

NMDOT DISTRICT #1

NMDOT GRANT NUMBER: LRU - 15 - 01

CONTRACT NUMBER: AVA 774

Project Location



PREPARED FOR:

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1.0 INTRODUCTION

Delta Airport Consultants, Inc. (DAC) is preparing a 20-year Master Plan for the Las Cruces International Airport (LRU), which is owned and operated by The City of Las Cruces (City). The Master Plan will propose new airport infrastructure, in addition to rehabilitation of existing airport facilities. Existing airport facilities are inadequate for the forecast needs of LRU. Upon project completion, the 20-year LRU aviation demand would be met. Construction would be conducted by the City and phased over 20 years. Funding for the Master Plan is from the New Mexico Department of Transportation (NMDOT), Aviation Division (Division). It occurs approximately 8 miles (mi) (13 kilometers (km)) west of Las Cruces, New Mexico within Dona Ana County, New Mexico (Figure 1).

The project area occurs entirely on private lands owned by the City. The project area is located on the Picacho Mountain, NM 2013 U.S. Geological Survey (USGS) 7.5-minute quadrangle map, within Sections 21, 22, 26, 27 & 28 of Township 23 South, Range 1 West (Figure 2).

Exact project specifications are unknown at this time, however, the general scope of work includes construction of new airfield facilities such as aircraft aprons, taxiways and hangars. Landside facilities are also proposed to include aviation terminal building(s), maintenance building(s), airport circulation roads, auto parking and fencing. The scope of work would also include rehabilitation of existing airfield facilities. All construction and rehabilitation activities would be phased over 20 years. Disturbance area is not currently known, however localized areas of impact could be incurred across the entire 725.2 acre (ac) (293.5 hectares (ha)) planning area. All activities would occur on lands owned by the City.

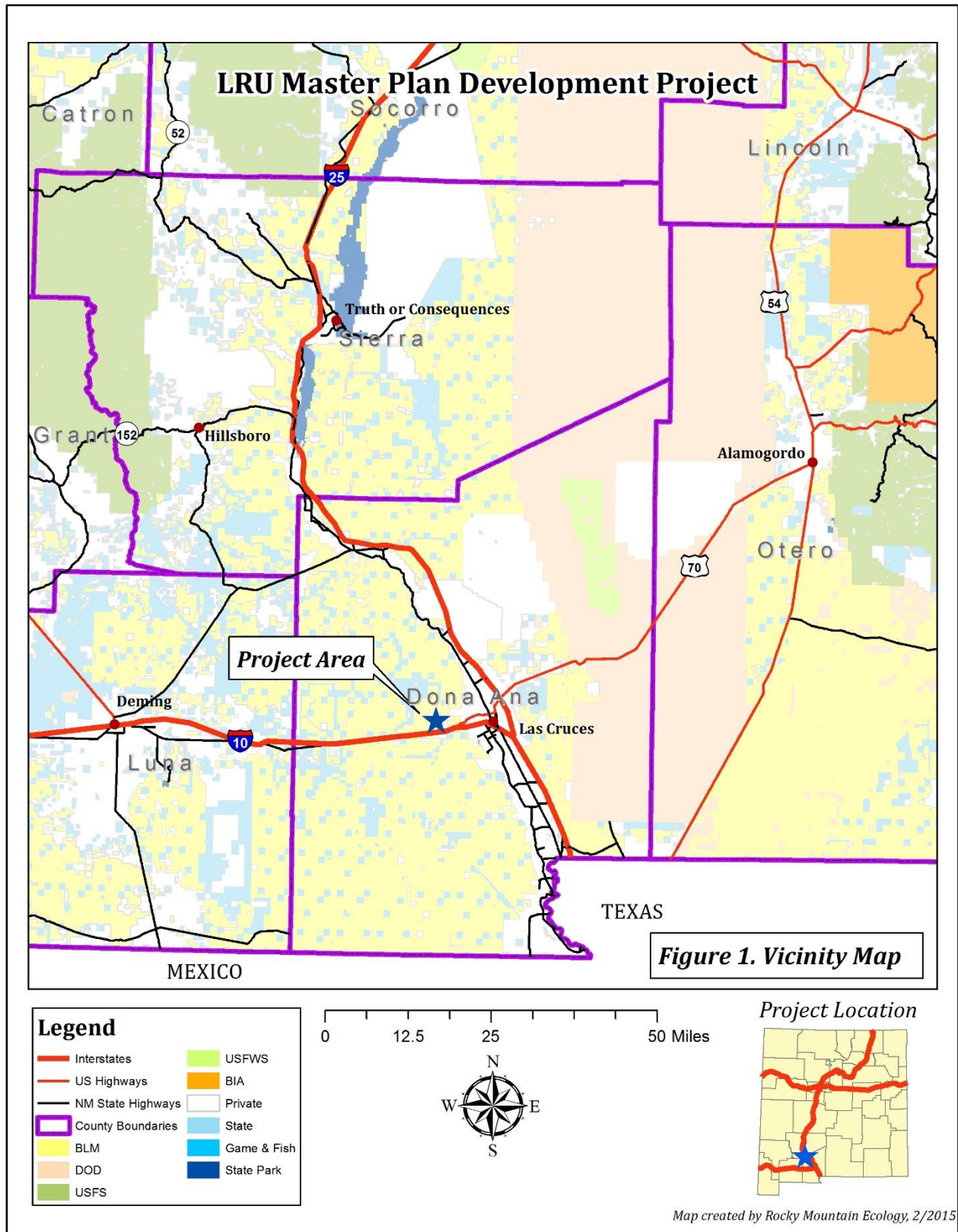
This Biological Evaluation (BE) addresses the findings of the biological survey for the project area, and provides recommendations for minimizing biological impacts during construction activities.

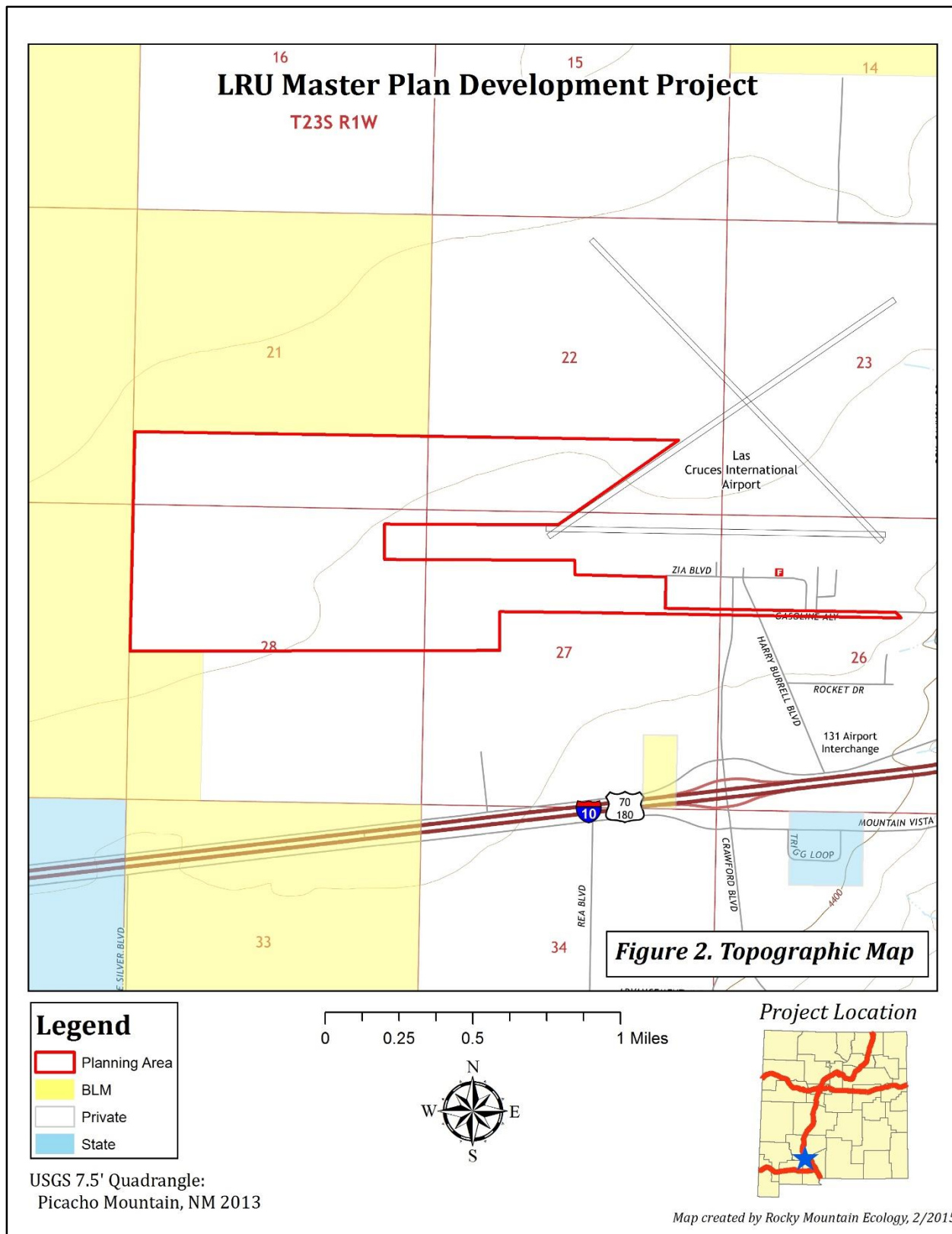
2.0 PROJECT HISTORY

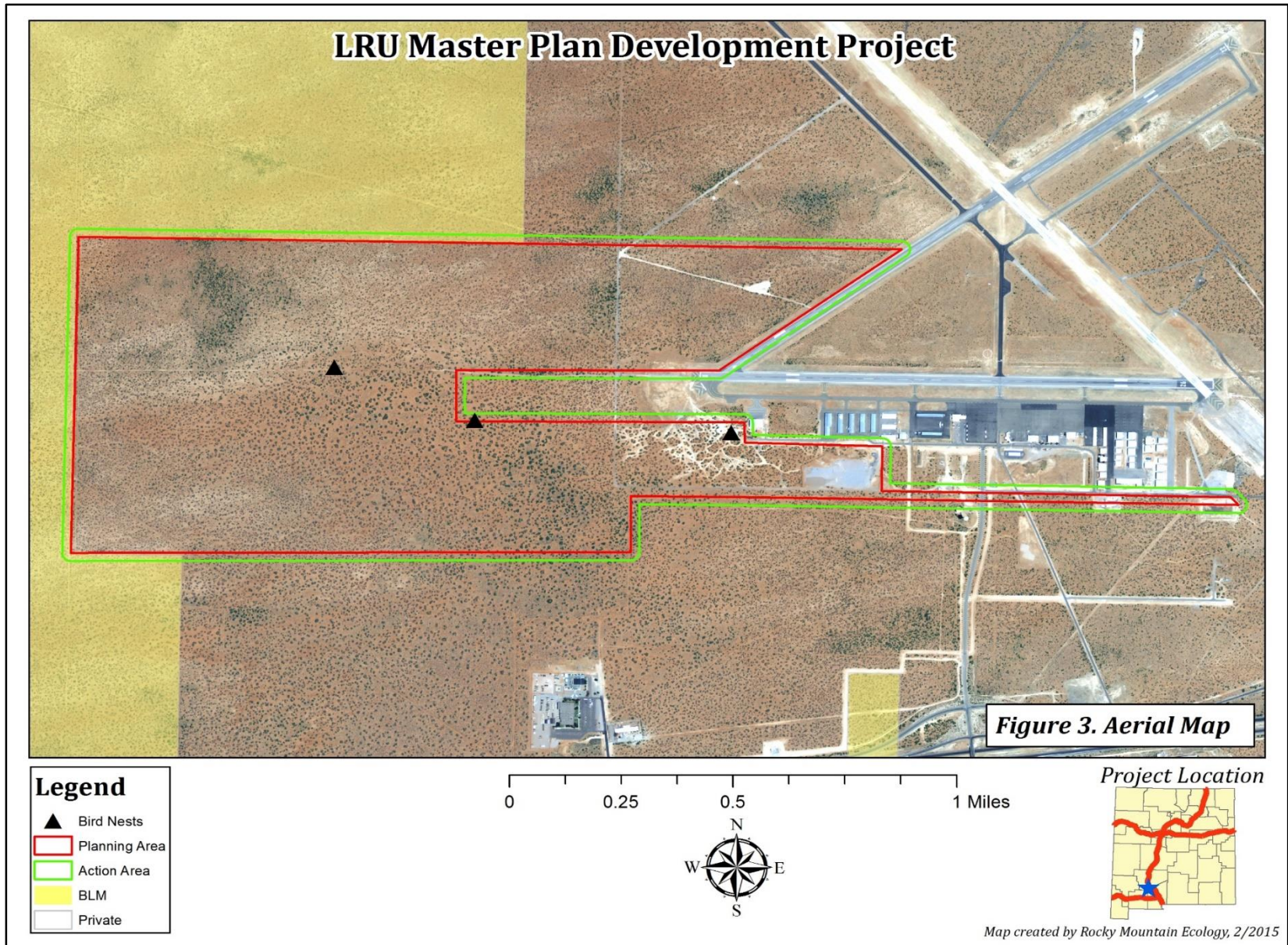
Development of the 20-year Master Plan for LRU is in the early stages. The finished Master Plan would provide a framework for augmenting airfield infrastructure to meet future demand.

3.0 ACTION AREA

According to NMDOT's 2013 *Biological Report and Format Standards*, an "Action Area" or buffer zone shall be defined "based on the location of the project, the findings of the biological survey, and the type of project impacts (direct and indirect) as they relate to (1) species (listed or non-listed as appropriate); (2) critical habitat; and (3) stormwater runoff from the project." Figure 3 depicts the limits of the Action Area, which measures approximately 100 feet (ft) (31 meters (m)) outward from the planning area boundary. The total Action Area includes approximately 774 ac (313 ha), while the total planning area includes 725.2 ac (293.5 ha).







4.0 METHODS

The Endangered Species Act of 1973 (ESA) requires the evaluation of potential impacts on federally-listed species and their critical habitat. The U.S. Fish and Wildlife Service (USFWS), the New Mexico Department of Game and Fish (NMDGF), and NM Rare Plant Technical Council (NMRPTC) databases were reviewed to determine potential occurrence of state or federal proposed, threatened, endangered, and candidate species in the project area. Specifically, the USFWS New Mexico Ecological Services website (<http://ecos.fws.gov/>) was verified for federally-listed flora and fauna species (Consultation Tracking No. 02ENNM00-2015-SLI-0151 – Appendix B; USDI 2015). The BISON-M database (<http://www.bison-m.org/>) was searched for state-listed fauna species (Appendix B) (BISON-M 2015). The NM Rare Plants website (<http://nmrareplants.unm.edu>) was searched for information on potential state threatened or endangered flora species (NMRPTC 1999) (Appendix B). Habitat associations and species descriptions for the targeted species were derived from these websites, and their habitat requirements were then compared to the habitat found in the project area to identify which species were likely to occur. Species considered unlikely to occur and for which suitable habitat does not exist within the project area, were removed from further consideration. A list of target species—those species that are likely to occur or have potential habitat within the project area—was developed from these comprehensive lists prior to the biological survey.

A 100-percent pedestrian biological survey was conducted by Clayton Bowers, a Rocky Mountain Ecology qualified biologist (hereafter referred to as the biological survey) in accordance with NMDOT's 2013 Biological Report and Format Standards. The biological survey included the entire 725.2 ac (293.5 ha) planning area, and a 100-ft (31-m) buffer from the project area boundary (hereafter referred to as the survey area). The biological survey was conducted on December 16, 2014 from 9:00 am to 5:00 pm Mountain Standard Time (MST). During the survey, air temperature was 40 degrees Fahrenheit (°F) (4 degrees Celsius (°C)) with overcast skies and a southwest breeze of 5 miles per hour (8 kilometers per hour). During the biological survey, searches for the presence of noxious weeds as defined by the New Mexico Department of Agriculture (NMDA) and for the presence of potential wetlands as defined by the U.S. Army Corps of Engineers (USACE) were also conducted. Lists of the fauna and flora located during the surveys were then compiled (Tables 1 and 3).

The Action Area included an additional 100-ft (31-m) buffer beyond the planning area boundary to account for potential adjacent bird nests and drainages. Thus, the total Action Area acreage is approximately 774 ac (313 ha).

5.0 REGULATORY CONTEXT

The following regulatory laws have bearing on this project and have been considered under the scope of this analysis:

- Bald and Golden Eagle Protection Act
- Clean Water Act Section 401
- Clean Water Act Section 402
- Clean Water Act Section 404
- Endangered Species Act (ESA)
- Executive Order 11988 (Floodplain Management)

- Executive Order 11990 (Protection of Wetlands)
- Migratory Bird Treaty Act (MBTA)
- Noxious Weed Management Act
- Farmland Protection Policy Act

6.0 GENERAL ENVIRONMENTAL SETTING

The project area is located within the Chihuahuan Basins and Playas sub-region of the Chihuahuan Deserts ecoregion (Griffith et al. 2006), which includes alluvial fans, internally drained basins and river valleys. The playas and basin floors have saline or alkaline soils and areas of salt flats, dunes and windblown sands. The sub-region represents some of the hottest and arid climates in New Mexico.

The elevation of the project area ranges from approximately 4,425 to 4,460 ft (1,349 to 1,359 m) above sea level, with very flat topography. Generally, topography throughout the project area slopes gradually at less than one percent with an eastern aspect. Average temperatures in the general area range from a minimum of 28.4 °F (-2.0°C) in December to a maximum of 96.5 °F (35.8°C) in June. Annual precipitation averages 8.84 inches (22.5 centimeters) (WRCC 2015).

According to <http://www.airnav.com/airport/klru>, LRU averages approximately 224 aircraft operations/ day (67% military, 15% local general aviation, 13% transient general aviation, and 6% air taxi). The surrounding landscape receives very little human use; and the dominant land use is livestock grazing.

Within the far eastern portion of the project area, a water detention structure collects water from airfield surfaces during significant rainfall events. The area exhibited a robust grass component, but did not possess indicators of wetlands. The project area does not have any connection to Waters of the U.S. (WOUS).

No prime farmland exists within the project area (Appendix C).

7.0 SURVEY RESULTS

7.1 Fauna

A list of all fauna observed (with corresponding scientific nomenclature) is provided in Table 1, below.

Table 1- List of Fauna Observed

Fauna Type	Common Name	Scientific Name	Indicator	Abundance
Birds Observed	Cactus wren	<i>Campylorhynchus brunneicapillus</i>	Live animals	Few
	House finch	<i>Haemorhous mexicanus</i>	Live animals	Abundant
	House sparrow	<i>Passer domesticus</i>	Live animals	Few
	White-crowned sparrow	<i>Zonotrichia leucophrys</i>	Live animals	Abundant
	Chihuahuan raven	<i>Corvus cryptoleucus</i>	Live animals	Common
	Coyote	<i>Canis latrans</i>	Track / Scat	Common

Mammals Observed	Collared peccary	<i>Pecari tajacu</i>	Track / Scat	Minimal
	Small mammals	<i>Dipodomys spp.;</i> <i>Neotoma spp. etc.</i>	Burrows	Abundant
Reptiles Observed	N/A	N/A	N/A	N/A
Amphibians Observed	N/A	N/A	N/A	N/A
Fish Observed	N/A	N/A	N/A	N/A
Invertebrates Observed	N/A	N/A	N/A	N/A

No reptiles, amphibians, fish or invertebrates were observed during the biological survey.

Birds Observed:

Cactus wrens (*Campylorhynchus brunneicapillus*), house finches (*Haemorhous mexicanus*), house sparrows (*Passer domesticus*), white-crowned sparrows (*Zonotrichia leucophrys*) and Chihuahuan ravens (*Corvus cryptoleucus*) were observed during the field survey. Cactus wrens were observed flying and foraging throughout the western project area, while house finches, house sparrows and white-crowned sparrows were observed in close proximity to airfield facilities. Chihuahuan ravens were observed perching at various locations atop power lines and fences throughout the project area.

All migratory birds are protected through the MBTA of 1918, which is enforced by the USFWS. Three inactive bird nests were discovered during the biological survey. Two of the nests were indicative of small passerines, while one was larger and likely a raven/raptor nest (Figure 3, Table 2). Due to seasonal timing of the biological survey, none of the observed bird nests were active. In addition, multiple burrows were observed throughout the project area and may be utilized by Western burrowing owls (*Athene cunicularia*). No owls were observed, and all burrows were noted to be inactive. No whitewash, feathers, pellets or dung were observed at any of the burrows, suggesting that inactivity has likely been prolonged. Further, personal communication with LRU staff revealed that no burrowing owls had been sighted at the facility in at least two years.

Mammals Observed:

No mammals were observed during the biological survey, however coyote (*Canis latrans*) and collared peccary (*Pecari tajacu*) tracks and scat were observed within the project area. In addition, many small mammal burrows were observed throughout the project area under mesquite and other shrubs where soil has collected.

No wildlife corridors or trails were apparent throughout the project area.

Table 2. Project Area Bird Nests

Suspected Type	Location (UTM Zone 13 S)	Nesting Strata
Raptor/Raven	316729 Easting 3573697 Northing	Mesquite
Passerine	317232 Easting 3573485 Northing	Mesquite
Passerine	318151 Easting 3573445 Northing	Mesquite

7.2 Flora

The biological survey determined that the project area is located within the Chihuahuan Desert Scrub vegetative community (Dick-Peddie 1993). The project area is dominated by a honey mesquite (*Prosopis glandulosa*) / black grama (*Bouteloua eriopoda*) / alkali sacaton (*Sporobolus airoides*) vegetative community (See Table 3 for all observed flora species).

Table 3- List of Flora Observed

Common Name	Scientific Name	Abundance
Honey mesquite	<i>Prosopis glandulosa</i>	Dominant
Small soapweed	<i>Yucca glauca</i>	Few
Tree cholla	<i>Opuntia imbricata</i>	Few
Purple prickly pear	<i>Opuntia macrocentra</i>	Common
Tarbush	<i>Flourensia cernua</i>	Common
Longleaf jointfir	<i>Ephedra trifurca</i>	Common
Creosotebush	<i>Larrea tridentata</i>	Few
Mariola	<i>Parthenium incanum</i>	Common
Four-wing saltbush	<i>Atriplex canescens</i>	Few
Broom snakeweed	<i>Gutierrezia sarothrae</i>	Dominant
Alkali sacaton	<i>Sporobolus airoides</i>	Dominant
Giant sacaton	<i>Sporobolus wrightii</i>	Locally dominant
Blue grama	<i>Bouteloua gracilis</i>	Subdominant
Black grama	<i>Bouteloua eriopoda</i>	Dominant
Silver bluestem	<i>Bothriochloa saccharoides</i>	Few
Sideoats grama	<i>Bouteloua curtipendula</i>	Subdominant
Sand dropseed	<i>Sporobolus cryptandrus</i>	Subdominant
Plains bristlegrass	<i>Setaria leucopila</i>	Few
Purple threeawn	<i>Aristida purpurea</i>	Common
Buffalograss	<i>Buchloe dactyloides</i>	Few
Bush muhly	<i>Muhlenbergia porteri</i>	Dominant
Fluffgrass	<i>Erioneuron pulchellum</i>	Common
New Mexico feathergrass	<i>Stipa neomexicana</i>	Few
Tobosa	<i>Pleuraphis mutica</i>	Subdominant
Silverleaf nightshade	<i>Solanum elaeagnifolium</i>	Few
Russian thistle	<i>Kali tragus</i>	Locally dominant
Desert holly	<i>Perezia nana</i>	Common

The majority of the project area is dominated by honey mesquite. In fact, within the western project area, honey mesquite comprises approximately 90 percent of the total vegetation composition. Soils in this area are sandy, and very little herbaceous coverage was present (Appendix A. Photos). Herbaceous diversity in other portions of the project area increased, and was dominated by black grama, alkali sacaton and bush muhly (*Muhlenbergia porteri*). Disturbed areas in the project area are dominated by broom snakeweed (*Gutierrezia sorathrae*) and Russian thistle (*Kali tragus*). Within the detention structure at the far eastern extent of the project area, vegetation was mostly comprised of giant sacaton (*Sporobolus wrightii*), four-wing saltbush (*Atriplex canescens*) and honey mesquite. Subdominant plant species within the project area include sideoats grama (*Bouteloua curtipendula*), sand dropseed (*Sporobolus cryptandrus*), tobosa (*Pleuraphis mutica*), and blue grama (*Bouteloua gracilis*).

7.2.1 Noxious Weeds

No noxious weed species, as defined by the NMDA (NMDA 2009), were located within the project area during the biological survey.

7.2.2 Rare Plants

No New Mexico rare plants were located within the project area during the biological survey.

7.3 Observed Soils and Waterways

7.3.1 Soils

Soils within the project area consist of two types: 1) Wink-Pintura complex, and; 2) Cacique-Cruces association. These soils are well-drained and occur within the Deep Sand (R042XB011NM) and Shallow Sandy (R042XB015NM) Ecological Sites (Natural Resource Conservation Service (NRCS) 2015). They are typically found on basin floors, and on interdunes on fan pediments, with parent material of mixed calcareous coarse-loamy alluvium and mixed sandy alluvium derived from eolian sands. The surface horizon of these soils is fine to loamy sand. These soils have no frequency of ponding or flooding (NRCS 2015). Available water storage in these soils ranges from very low to low (approximately 1.2 to 4.6 inches (3.1 to 11.7 centimeters)). No significant erosion was noted across the project area.

No farmlands regulated by the NRCS are present within the project area (Appendix C). No further consultation is necessary.

7.3.2 Floodplains

No 100-year floodplains exist within the project area.

7.3.3 Surface Water

There are no perennial surface water bodies within or adjacent to the project area. Stormwater runoff or drainage from the project area varies, but generally flows to the East toward the Rio Grande River Valley. No drainages were observed in the project area that could potentially reach the Rio Grande River.

7.3.4 Wetlands

Wetlands are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (EPA, 40 CFR 230.3 and 33 CFR

328.3). Compliance with EO 11990, *Wetlands Protection*, is applicable to federal projects or to projects funded by federal money.

Prior to the biological survey, the USFWS National Wetland Inventory (NWI) website was accessed to determine potential wetland presence within the project area. The database indicated that one Freshwater Forested/Shrub Wetland was present along a runway area. However, field verification indicated this NWI-depicted feature does not exist, and is a misprint (Figure 4). During the biological survey, the project area was evaluated for the presence of wetland indicators (e.g., hydrophytic vegetation or wetland hydrology). Within the far eastern extent of the project area, a water detention feature was located. Upon field analyzation, the feature was noted to likely collect water from nearby impervious surfaces associated with airfield facilities (i.e. runways, parking areas etc.) during significant rainfall events. At the time of the biological survey, no water was observed within the structure, and while the area exhibited a relatively robust grass community, wetland vegetation was not present. The biological survey concluded that no wetlands were present within the project area.

7.3.5 Waters of the U.S.

The Clean Water Act (CWA) of 1972 regulates activities that have the potential to impact WOUS. Section 404 of the CWA regulates discharge of dredged and fill materials within the ordinary high water mark (OHWM) of WOUS, and is administered by the USACE. Section 401 of the CWA regulates water quality and, for the purposes of the project, is administered by the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB).

No drainages or WOUS were present within the project area.



7.4 Observed Surrounding Landscape and Land Use

The character of the project area can be defined as a relatively small airport facility with little to moderate activity. During the biological survey, it was noted that most of the activity at LRU was limited to small private aircraft. LRU is situated within a broad Chihuahuan desert and expansive rural landscape located 8 mi (13 km) west of the City of Las Cruces. It is surrounded by a rural setting that is dominated by agricultural use and recreation (i.e., hunting, hiking etc.) in the surrounding public lands. No residential or other commercial developments are located near the project area.

7.5 Observed Human or Natural Disturbance

Human use of the project area is evident across the existing LRU facilities. Beyond the facilities, the project area receives little human use, however, air traffic is present throughout the entire project area. Various dirt roads bisect and loop LRU property for access, and multiple areas were noted to have been disturbed from previous development activities. No dumping or significant trash debris were noted in the area. No abnormal circumstances were noted during the biological survey.

8.0 LISTED SPECIES AND CRITICAL HABITAT ANALYSIS

The ESA of 1973 requires the evaluation of potential impacts on federally-listed species and their critical habitat. The USFWS and the NMDGF databases were reviewed to determine potential occurrence of state or federal endangered, threatened, proposed or candidate species in the project corridor.

No (1) federally listed species protected under the ESA (e.g., threatened, endangered, proposed); (2) federal candidate species, which although not receiving protection under ESA are likely to become listed as a result of the USFWS settlement agreement with WildEarth Guardians dated September 9, 2011 or their habitats are likely to occur within the project area. Two state listed species protected under the New Mexico Wildlife Conservation Act (e.g., threatened and endangered) and two state listed New Mexico rare plants and their habitats have potential to occur within the or near project area. Habitat suitability for all federal proposed, threatened, endangered, candidates, and state threatened or endangered species is described below in Tables 4 and 5. Habitat descriptions were derived from the BISON-M (2015) and NM Rare Plants (NMRPTC 1999) websites.

8.1 Listed Species Eliminated from Further Consideration

Table 4 below describes all federally proposed, threatened, endangered, candidate, and state threatened or endangered species with *no potential to occur* within the project area; therefore, these species will not be discussed further in this BE.

Table 4 - Listed Species with No Potential to Occur in the Project Area and Eliminated from Further Consideration

Species Category	Common Name	Scientific Name	Habitat	Rationale for Elimination for Further Consideration	Status	Determination
USFWS Threatened, Endangered & Proposed Species and Critical Habitat, Dona Ana County, NM						
BIRD	Least tern	<i>Sterna antillarum</i>	Near water, on sandbars, islands or sandy shores.	No water or sandy shores exist within the immediate project vicinity. The project site does not exhibit any of the habitat characteristics necessary for inhabitation by terns.	USFWS Endangered	No Effect
BIRD	Northern aplomado falcon	<i>Falco femoralis septentrionalis</i>	Associated with yucca grasslands with proximity to lower elevation shrub habitats.	No yucca-grassland associations were observed to be present within the greater project area. The closest yucca grassland associations reside well to the East.	USFWS Experimental Non-Essential	No Effect
BIRD	Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Mature riparian habitats, most commonly associated with cottonwood or other native forests.	No mature riparian habitats associated with cottonwood, are present within the project area.	USFWS Threatened	No effect
CRITICAL HABITAT	Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Proposed	Nearest proposed critical habitat exists over 80 mi (129 km) to the North along the Rio Grande River.	USFWS Threatened	No Effect
PLANT	Sneed's pincushion cactus	<i>Coryphantha sneedii var. sneedii</i>	Cracks in limestone in areas of broken mountainous terrain and steep slopes.	No limestone features, mountainous terrain or steep slopes exist within the project area.	USFWS Endangered	No Effect

Species Category	Common Name	Scientific Name	Habitat	Rationale for Elimination for Further Consideration	Status	Determination
<i>State-Listed Threatened and Endangered Species and USFWS Candidates, Dona Ana County, NM</i>						
BIRD	Sprague's pipit	<i>Anthus spragueii</i>	Shortgrass prairie habitats within the Great Plains ecoregion.	The project area is not defined as a shortgrass prairie habitat type.	USFWS Candidate	No impact
BIRD	Northern aplomado falcon	<i>Falco femoralis septentrionalis</i>	See above	See above	USFWS Experimental Non-Essential	No Impact
BIRD	Varied bunting	<i>Passerina versicolor</i>	Dense stands of mesquite or shrubs in canyon bottoms.	No dense stands of shrubs or canyon bottoms exist within the project area.	State NM Endangered	No Impact
MAMMAL	Spotted bat	<i>Euderma maculatum</i>	Prefer subalpine coniferous and ponderosa forests in summer. Can be found in lower elevation desert habitats in winter, but these habitats must possess suitable cliff habitats in close proximity.	No cliff habitat exists within or near the project area.	State NM Threatened	No Impact
PLANT	Organ Mountains pincushion cactus	<i>Escobaria organensis</i>	Broken mountainous terrain on andesite, quartz-monzonite, rhyolite and limestone.	No mountainous terrain exists within the project area.	State NM Endangered	No Impact
PLANT	Villard pincushion cactus	<i>Escobaria villardii</i>	Chihuahuan desert scrub and grasslands on broad limestone benches in broken mountainous terrain.	No limestone features or broken mountainous terrain exist within the project area.	State NM Endangered	No Impact

Species Category	Common Name	Scientific Name	Habitat	Rationale for Elimination for Further Consideration	Status	Determination
PLANT	Arizona crested coralroot	<i>Hexalectris arizonica</i>	Oak, pine and juniper woodlands in heavy leaf litter over limestone.	No woodlands, leaf litter or limestone are present within the project area.	State NM Endangered	No Impact
PLANT	Mescalero milkwort	<i>Polygala rimulicola var. mescalerorum</i>	Montane scrub, in crevices of limestone cliffs.	No montane scrub or limestone crevices exist within the project area.	State NM Endangered	No Impact

8.2 Listed Species Evaluated Further

Table 5 below lists the four state-listed threatened and endangered species that have the potential to occur or have habitat within the project area.

Table 5 - Listed Species with Potential to Occur in the Project Area

Species Category	Common Name (Scientific Name)	Status	Habitat& Location	Species Present or Absent during Survey
BIRD	Common ground dove (<i>Columbina passerina</i>)	State NM Threatened	Can be found in a variety of habitats, including desert shrub habitats dominated by mesquite and <i>Opuntia</i> spp.	Absent
BIRD	Peregrine falcon/ Arctic peregrine falcon (<i>Falco peregrinus anatum/ tundrius</i>)	State NM Threatened	Steep, sheer cliffs overlooking woodlands, riparian areas or other habitats supporting avian prey species in abundance; nearest cliffs more than 10 mi (16 km) away.	Absent
PLANT	Sand prickly pear (<i>Opuntia arenaria</i>)	State NM Endangered	Open Chihuahuan desert with mesquite and sandy soils.	Absent
PLANT	Night blooming cereus (<i>Peniocereus greggii</i> var. <i>greggii</i>)	State NM Endangered	Sandy soils in level terrain in Chihuahuan desert scrub and grassland. Typically found growing up through and supported by shrubs such as mesquite and creosotebush.	Absent

8.2.1 Listed Birds

COMMON GROUND DOVE

An assessment of common ground dove (*Columbina passerine*) presence/absence was conducted as part of the biological survey for the proposed undertaking. Extensive, species-specific surveys for common ground doves were not conducted.

This species is known to inhabit Chihuahuan desert scrub in open areas of creosotebush and mesquite, with a considerable succulent component (e.g. *Opuntia* spp., *Echinocactus* spp.). It prefers undeveloped and agricultural areas at elevations below 5,400 ft (1,645 m). The species normally nests within 6.0 ft (1.8 m) of the ground, in shrubs or low trees. The species could utilize the project area for nesting and foraging, as suitable habitat is present.

Impact Evaluation

Eventual project construction could directly impact the foraging options for common ground doves by temporary harassment from heavy equipment noise and construction worker presence. Direct nesting impacts could also be incurred should the proposed work occur inside the migratory bird breeding season (1 April – 15 August). No indirect or adverse impacts are expected as the availability of large, intact Chihuahuan desert scrub habitat adjacent to the project area is expansive. Moreover, the project would not likely result in a trend towards federal listing or loss of population viability because foraging doves would likely use adjacent areas that were void of construction activities.

AMERICAN AND ARCTIC PEREGRINE FALCON

An assessment of peregrine falcon presence/absence was conducted during the biological survey; however, an extensive, species-specific survey for peregrine falcons was not conducted. This species normally nests in steep vertical cliffs in a variety of vegetation types with prey abundance apparently being a major limiting factor. No steep or vertical cliffs that could provide suitable nesting habitat were located within or near the project area; however, the entire project area is suitable foraging habitat.

Impact Evaluation

Eventual project construction could directly affect the foraging options for peregrine falcons due to temporary construction activities; however, foraging falcons would likely use adjacent areas that were void of construction activities. Further, no indirect impacts to this species are anticipated. Moreover, individuals of this species would not likely be adversely impacted by the project, nor would it result in a trend towards federal listing or loss of population viability because no suitable nesting habitat exists within the project area, and foraging habitat exists adjacent to the project area.

8.2.2 Listed Plants

SAND PRICKLY PEAR

An assessment of sand prickly pear (*Opuntia arenaria*) presence/absence was conducted as part of the biological survey for the proposed undertaking. The species is most commonly found in “sandy areas, particularly semi-stabilized sand dunes among open Chihuahuan desert scrub, often with mesquite and a sparse cover of grasses; 3,800 to 4,300 ft (1,160 to 1,300 m) in New Mexico” (NMRPTC 1999). Suitable habitat exists throughout the project area. Particularly, the western portion of the project area is well-suited for the species, where frequent and prominent mesquite-

dune formations are present. However, no individuals of this species were found during the biological survey.

Impact Evaluation

The proposed planning effort will have no impact on the sand prickly pear. Until specific construction plans are developed, definitive impacts from site disturbance are unknown. When and if the project moves to a construction phase, impacts from heavy equipment on potentially undetected, or newly populated areas by the species could include excavation or crushing of individuals. Indirect impacts could include loss of future expansion habitat. When definitive construction plans are developed, a species-specific survey could be conducted in proposed disturbance areas of suitable habitat to definitively determine presence/ absence.

NIGHT-BLOOMING CEREUS

An assessment of night blooming cereus (*Peniocereus greggii* var. *greggii*) presence/absence was conducted as part of the biological survey for the proposed undertaking. The species is found “mostly in sandy to silty gravelly soils in gently broken to level terrain in desert grassland or Chihuahuan desert scrub. It is typically found growing up through or supported by shrubs such as *Larrea tridentata* or *Prosopis glandulosa*.” (NMRPTC 1999). Suitable habitat exists throughout the project area. However, no individuals of this species were found during the biological survey.

Impact Evaluation

The proposed planning effort will have no impact on the night-blooming cereus. Until specific construction plans are developed, definitive impacts from site disturbance are unknown. When and if the project moves to a construction phase, impacts from heavy equipment on potentially undetected, or newly populated areas by the species could include excavation or crushing of individuals. Indirect impacts could include loss of future expansion habitat. When definitive construction plans are developed, a species-specific survey could be conducted in proposed disturbance areas of suitable habitat to definitively determine presence/ absence.

9.0 PROJECT AREA DIRECT EFFECTS ANALYSIS

9.1. Flora

The project proposes to construct additional airfield and landside facilities, in addition to rehabilitation of existing airfield facilities. Until specific construction plans are developed, definitive areas of impact are unknown. Rehabilitation of existing facilities would have no impact on flora. Generally, where new construction occurs, vegetation would likely be excavated, covered or removed. Due to the permanent nature of proposed facilities, vegetation in these areas would be permanently lost. These activities would not adversely impact any plant community as a whole given the monotypic and expansive nature of the vegetative community within and surrounding the project area.

9.2 Fauna

Impacts to wildlife are expected to be very minimal because the project area is contained within an operating airport, rendering the habitat quality in the immediate area for most birds and large mammals moderate to poor. Until specific construction plans are developed, definitive areas of impact are unknown. Rehabilitation of existing facilities would have little impact to fauna, and would be limited to noise associated with construction activities. Generally, where new construction occurs, certain mammal, bird and reptiles may be temporarily displaced from the

immediate area. It is expected that any displacement of species due to construction activities would be temporary and not significant, as adjacent, undisturbed and widely available habitat exists adjacent to the project area. Direct mortality of ground dwelling mammals and reptiles could be incurred as excavation will be necessary for project completion. The project could impact raptors such as burrowing owls, given the presence of multiple burrow features throughout the project area. Project construction is not likely to have direct impacts on raptors, such as hawks, because they would likely shift their forage area to sites removed from the activity.

Currently, the project timeframe is unknown. Should construction activities take place during the migratory bird breeding and nesting season (1 April to 31 August), direct impacts to nesting birds could be incurred. Construction activities could induce nesting birds to vacate active nests, and if for a prolonged period, could result in mortality to young.

9.3 Observed Soils and Waterways

9.3.1 Soils

The eventual construction phase of the project is expected to result in permanent and temporary impacts to soils and vegetation. Until specific construction plans are developed, definitive areas of impact are unknown. The planning area consists of a 725.2-ac (293.5-ha) parcel. Eventual construction could impact areas of unknown size and exact location across the planning area. Construction could impact previously disturbed and undisturbed areas.

Both permanent and temporary impacts would include disturbance to soils and removal of vegetation, which may perpetuate soil erosion in some areas. Other direct impacts could include soil compaction, wind erosion, and loss of topsoil.

No farmlands regulated by the NRCS are present within the project area (Appendix C). Federal form AD-1006 is included in Appendix C for documentation purposes only; it needs not be completed if prime, unique, statewide or local farmlands are not present within the project area. No further consultation is necessary.

9.3.2 Floodplains

Protection of floodplains and floodways is required by Executive Order (EO) 11988, *Floodplain Management* and 23 CFR 650, Subpart A, *Location and Hydraulic Design of Encroachment on Floodplains*. These guidelines require that any potential impacts to drainage conditions of floodplain areas be studied, assessed, and identified to reduce the risk of flood loss; to minimize the impact of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial values served by floodplains. Impacts to floodplains occur when the floodplain is substantially modified either by the placement of structures and materials or the removal of materials within the floodplain.

The project would not impact the drainage conditions of the area's floodplain, including altering the base flood elevations, boundaries, or flow velocities, and would therefore be in compliance with EO 11988 and 23 CFR 650, Subpart A.

9.3.3 Surface Water

No surface water was located within the project area, and no impacts would be incurred.

9.3.4 Wetlands

No wetlands exist within the project area; therefore, the project would neither directly nor indirectly impact wetlands and would be in compliance with EO 11990.

9.3.5 Waters of the U.S.

No WOUS exist within the project area; therefore, the project would neither directly nor indirectly impact WOUS and would not fall under USACE jurisdiction.

9.4 Threatened and Endangered Species

The biological survey concluded that no federal threatened or endangered species, or important wildlife habitat exists within or adjacent to the project area. Temporary direct impacts to common ground doves (state threatened) and American peregrine falcons (state threatened) could be incurred during construction activities in the form of noise and other disturbance that may induce nearby individuals to vacate the project area. Further, direct effects to two state endangered plant species could be incurred in the form of crushing or excavation should construction occur where the species was undetected, or in newly populated areas by the species. See Sections 8.2.1 & 8.2.2 for additional detail regarding direct effects to state threatened species.

10.0 PROJECT AREA INDIRECT EFFECTS ANALYSIS

- Loss of potential *future* expansion habitat (into the project area) for sand prickly pear and night-blooming cereus, both state endangered species. Note: neither species is known to occur within or adjacent to the project area, at present.
- Noise generated during the construction activity could disrupt normal foraging or movement patterns of small mammals, reptiles, or amphibians within the immediate project area, and temporary or permanent abandonment of the immediate area could occur due to this disruption. Indirect effects to avifauna could include temporarily shifting foraging activities to other areas to avoid construction equipment and personnel.
- Temporary increases in sediment content in stormwater runoff could occur during construction activities. Until specific construction plans are developed, the amount of increase is unknown.

11.0 ACTION AREA DIRECT AND INDIRECT EFFECTS ANALYSIS

- Temporary increases in sediment content in stormwater runoff are expected in the Action Area. However, until specific construction plans are developed, the amount of increase is unknown.
- Indirect effects to large mammals that utilize the project area could occur during construction activities. However, this effect is expected to be temporary, as these mammals would be able to continue to use the area upon completion of project activities.

12.0 RECOMMENDATIONS FOR AVOIDANCE, MINIMIZATION AND MITIGATION

12.1. Flora

Until specific construction plans are developed, the extent and location of disturbance is unknown. Upon completion of construction, it is recommended that disturbed areas be seeded with a native, weed free vegetative mix that replicates the existing vegetative communities.

12.1.1 Noxious Weeds

The contractor should thoroughly clean all equipment with a high pressure washer prior to entering and leaving the project area. Materials transported in to or out of the project area should be carefully inspected to avoid the introduction of additional noxious weed species. Material sources containing noxious weed seeds shall not be utilized by the contractor.

12.2 Fauna

All tree/shrub removal or trimming should be conducted in accordance with the MBTA of 1918 (16 United States Code [USC] 703, et seq.), which protects against the “taking” of migratory birds, their nests, and their eggs, except as permitted by the USFWS. To avoid direct impacts to migratory birds protected by the MBTA, a migratory bird nesting survey should be conducted prior to construction if work will occur during the avian breeding and nesting period (1 April – 31 August), as defined by the USFWS New Mexico Ecological Services Field Office. Any located active nests should be flagged for avoidance. If trimming or removal of trees/shrubs is performed outside the nesting season, little or no impacts to migratory bird species are anticipated. A permit from the USFWS should be obtained as required by MBTA if active bird nests require removal.

12.3 Observed Soils and Waterways

12.3.1 Soils

It is recommended that the contractor use erosion control structures as necessary to minimize sediment from leaving the construction site. Moreover, it is recommended that a native, weed-free seed mix be applied to all disturbed soils to further minimize potential erosion.

No farmlands regulated by the NRCS are present within the project area (Appendix C). No further consultation is necessary.

12.3.2 Floodplains

The project area does not occur within a 100-year floodplain, and thus no avoidance or mitigation measures are recommended.

12.3.3 Surface Water

The Environmental Protection Agency (EPA) requires National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) coverage for stormwater discharges from construction projects (including common plans of development, construction support or staging areas) that would result in the disturbance (or re-disturbance) of ≥ 1 acres (0.4 hectares). Therefore, NPDES permit coverage for the project would be required. It is recommended to carry out the project during non-rainy seasons. Typically, this includes all time frames except the summer monsoon season, loosely defined as July through early September. However, if

construction must occur during the summer monsoon season, it is recommended that construction activities cease during heavy rain events.

The project is not anticipated to have any adverse impacts on ground water quality in the project area; however, implementation of the project may involve the use of heavy equipment and asphalt products, thereby leading to a possibility of contaminant releases (e.g., fuel, asphalt, hydraulic fluid, etc.) associated with equipment malfunctions. Standard controls that protect groundwater are recommended to be implemented as part the construction contracting requirements. If evidence of soil or groundwater contamination is identified during construction, it is recommended that work cease at the affected area and the construction contractor contact NMED for instructions on how to proceed.

12.3.4 Wetlands

No impacts to wetlands are anticipated, therefore no avoidance, minimization, or mitigation measures are being recommended.

12.3.5 Waters of the U.S.

No impacts to WOUS are anticipated, therefore no avoidance, minimization or mitigation measures are being recommended.

12.4 Threatened and Endangered Species

The biological survey concluded that no federally threatened or endangered species, or important wildlife habitat exists within or adjacent to the project area. Although unlikely, temporary and permanent direct and indirect effects to two state threatened and two state endangered species could be incurred from project activities. Impacts to the avian species would be temporary, as these species would have expansive, undisturbed adjacent habitat in which they could utilize / occupy during construction. Impacts to sand prickly pear and night-blooming cereus could include permanent loss of individuals via unearthing or crushing during construction activities to individuals potentially undetected during the biological survey, or to newly propagated populations. Species-specific surveys for sand prickly pear and night-blooming cereus could be conducted on proposed disturbance sites in suitable habitat, prior to work, to ascertain definitive presence/ absence of the species, so they may be avoided or transplanted

13.0 CONCLUSION

- All report findings and recommendations are described above.
- No listed species or critical habitat occurs within the project area.
- Three inactive bird nests within the planning area were located. These nests varied in size and shape and are likely indicative of ravens, raptors and passerines. Locations and mitigation / avoidance measures are described above.
- Habitat for two state endangered plants exists within the project area. Mitigation / avoidance measures are described above.

14.0 REPORT PREPARERS AND CERTIFICATION

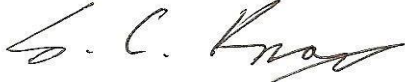
“It is believed by Rocky Mountain Ecology, LLC that the Proposed Project would not violate any of the provisions of the Endangered Species Act of 1973, as amended. Results and conclusions contained in this report are based on actual field examination and represent my (our) best professional judgment, based on information provided by the project proponent, applicable agencies, and other sources.”

Co-Author Clayton Bowers:



Clayton P. Bowers, Qualified Biologist
Rocky Mountain Ecology, LLC
505.992.6150

Co-Author & QA/QC Shawn Knox:



Shawn Knox, Co-owner/Director
Sites Southwest, LLC
505.992.6150

15.0 REFERENCES

BISON-M. 2014. Biota Information System of New Mexico. Version 01/2004. <http://www.bison-m.org/>. Accessed 5 February 2015.

Dick-Peddie, W.A. 1993. New Mexico Vegetation: Past, Present, and Future. UNM Press.

Griffith, G.E., Omernik, J.M., McGraw, M.M., Jacobi, G.Z., Canavan, C.M., Schrader, T.S., Mercer, D., Hill, R., and Moran, B.C., 2006. Ecoregions of New Mexico (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,400,000).

New Mexico Rare Plant Technical Council (NMRPTC). 1999. New Mexico Rare Plants. Albuquerque, NM: New Mexico Rare Plants Home Page. <http://nmrareplants.unm.edu> (Version 15 March 2001).

NMDA. 2009. New Mexico Department of Agriculture. New Mexico Noxious Weed List. Update April 2009. http://www.nmda.nmsu.edu/wp-content/uploads/2012/01/weed_memo_list.pdf

NRCS. 2015. Natural Resource Conservation Service Web Soil Survey Website. Version 1.1. <http://websoilsurvey.nrcs.usda.gov/>

USDI. 2015. U.S. Department of Interior. U.S. Fish and Wildlife Service. 2015. New Mexico Ecological Services Field Office Database. (<http://ecos.fws.gov/>)

WRCC. 2015. Western Regional Climate Center. Web. *Cooperative Climatological Data Summaries*. <http://www.wrcc.dri.edu/climatedata/climsum/>

APPENDICES

Appendix A
Photos

Appendix B
Agency Correspondence / Species Lists

Appendix C
NRCS Prime Farmland Determination

Appendix A - Photos

Photo 1. Facing west in southern project area, south of terminal building.



Photo 2. Detention feature in southeast portion of project area, facing northwest.



Photo 3. Disturbed area in south-central project area, facing west.



Photo 4. Western project area, facing northwest. Habitat represented in photo indicative of entire western portion of project area.



Photo 5. Raptor or raven nest in mesquite in western project area, facing northwest.



Appendix B – Agency Correspondence / Species Lists



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office
2105 OSUNA ROAD NE
ALBUQUERQUE, NM 87113
PHONE: (505)346-2525 FAX: (505)346-2542
URL: www.fws.gov/southwest/es/NewMexico/;
www.fws.gov/southwest/es/ES_Lists_Main2.html

Consultation Code: 02ENNM00-2015-SLI-0151

January 12, 2015

Event Code: 02ENNM00-2015-E-00172

Project Name: Las Cruces Airport Management Plan

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:

Thank you for your recent request for information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) has responsibility for certain species of New Mexico wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et seq.), the Migratory Bird Treaty Act (MBTA) as amended (16 USC 701-715), and the Bald and Golden Eagle Protection Act (BGEPA) as amended (16 USC 668-668c). We are providing the following guidance to assist you in determining which federally imperiled species may or may not occur within your project area and to recommend some conservation measures that can be included in your project design.

FEDERALLY-LISTED SPECIES AND DESIGNATED CRITICAL HABITAT

Attached is a list of endangered, threatened, and proposed species that may occur in your project area. Your project area may not necessarily include all or any of these species. Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

If you determine that your proposed action may affect federally-listed species, consultation with the Service will be necessary. Through the consultation process, we will analyze information

contained in a biological assessment that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a habitat conservation plan) is necessary to harm or harass federally listed threatened or endangered fish or wildlife species. In either case, there is no mechanism for authorizing incidental take "after-the-fact." For more information regarding formal consultation and HCPs, please see the Service's Consultation Handbook and Habitat Conservation Plans at www.fws.gov/endangered/esa-library/index.html#consultations.

The scope of federally listed species compliance not only includes direct effects, but also any interrelated or interdependent project activities (e.g., equipment staging areas, offsite borrow material areas, or utility relocations) and any indirect or cumulative effects that may occur in the action area. The action area includes all areas to be affected, not merely the immediate area involved in the action. Large projects may have effects outside the immediate area to species not listed here that should be addressed. If your action area has suitable habitat for any of the attached species, we recommend that species-specific surveys be conducted during the flowering season for plants and at the appropriate time for wildlife to evaluate any possible project-related impacts.

Candidate Species and Other Sensitive Species

A list of candidate and other sensitive species in your area is also attached. Candidate species and other sensitive species are species that have no legal protection under the ESA, although we recommend that candidate and other sensitive species be included in your surveys and considered for planning purposes. The Service monitors the status of these species. If significant declines occur, these species could potentially be listed. Therefore, actions that may contribute to their decline should be avoided.

Lists of sensitive species including State-listed endangered and threatened species are compiled by New Mexico state agencies. These lists, along with species information, can be found at the following websites:

Biota Information System of New Mexico (BISON-M): www.bison-m.org

New Mexico State Forestry. The New Mexico Endangered Plant Program: www.emnrd.state.nm.us/SFD/ForestMgt/Endangered.html

New Mexico Rare Plant Technical Council, New Mexico Rare Plants: nmrareplants.unm.edu

Natural Heritage New Mexico, online species database: nhnm.unm.edu

WETLANDS AND FLOODPLAINS

Under Executive Orders 11988 and 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value.

We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. The Service's NWI program website, www.fws.gov/wetlands/Data/Mapper.html integrates digital map data with other resource information. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

MIGRATORY BIRDS

The MBTA prohibits the taking of migratory birds, nests, and eggs, except as permitted by the Service's Migratory Bird Office. To minimize the likelihood of adverse impacts to migratory birds, we recommend construction activities occur outside the general bird nesting season from March through August, or that areas proposed for construction during the nesting season be surveyed, and when occupied, avoided until the young have fledged.

We recommend review of Birds of Conservation Concern at website www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html to fully evaluate the effects to the birds at your site. This list identifies birds that are potentially threatened by disturbance and construction.

BALD AND GOLDEN EAGLES

The bald eagle (*Haliaeetus leucocephalus*) was delisted under the ESA on August 9, 2007. Both the bald eagle and 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 information on bald and golden eagle management guidelines, we recommend you review information provided at www.fws.gov/midwest/eagle/guidelines/bgepa.html.

On our web site www.fws.gov/southwest/es/NewMexico/SBC_intro.cfm, we have included conservation measures that can minimize impacts to federally listed and other sensitive species. These include measures for communication towers, power line safety for raptors, road and highway improvements, spring developments and livestock watering facilities, wastewater facilities, and trenching operations.

We also suggest you contact the New Mexico Department of Game and Fish, and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division for information regarding State fish, wildlife, and plants.

Thank you for your concern for endangered and threatened species and New Mexico's wildlife habitats. We appreciate your efforts to identify and avoid impacts to listed and sensitive species in your project area. For further consultation on your proposed activity, please call 505-346-2525 or email nmesfo@fws.gov and reference your Service Consultation Tracking Number.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Las Cruces Airport Management Plan

Official Species List

Provided by:

New Mexico Ecological Services Field Office

2105 OSUNA ROAD NE

ALBUQUERQUE, NM 87113

(505) 346-2525

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

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

Consultation Code: 02ENNM00-2015-SLI-0151

Event Code: 02ENNM00-2015-E-00172

Project Type: Land - Management Plans

Project Name: Las Cruces Airport Management Plan

Project Description: Las Cruces Airport requests a biological survey on approximately 700 acres for use in a land management plan.

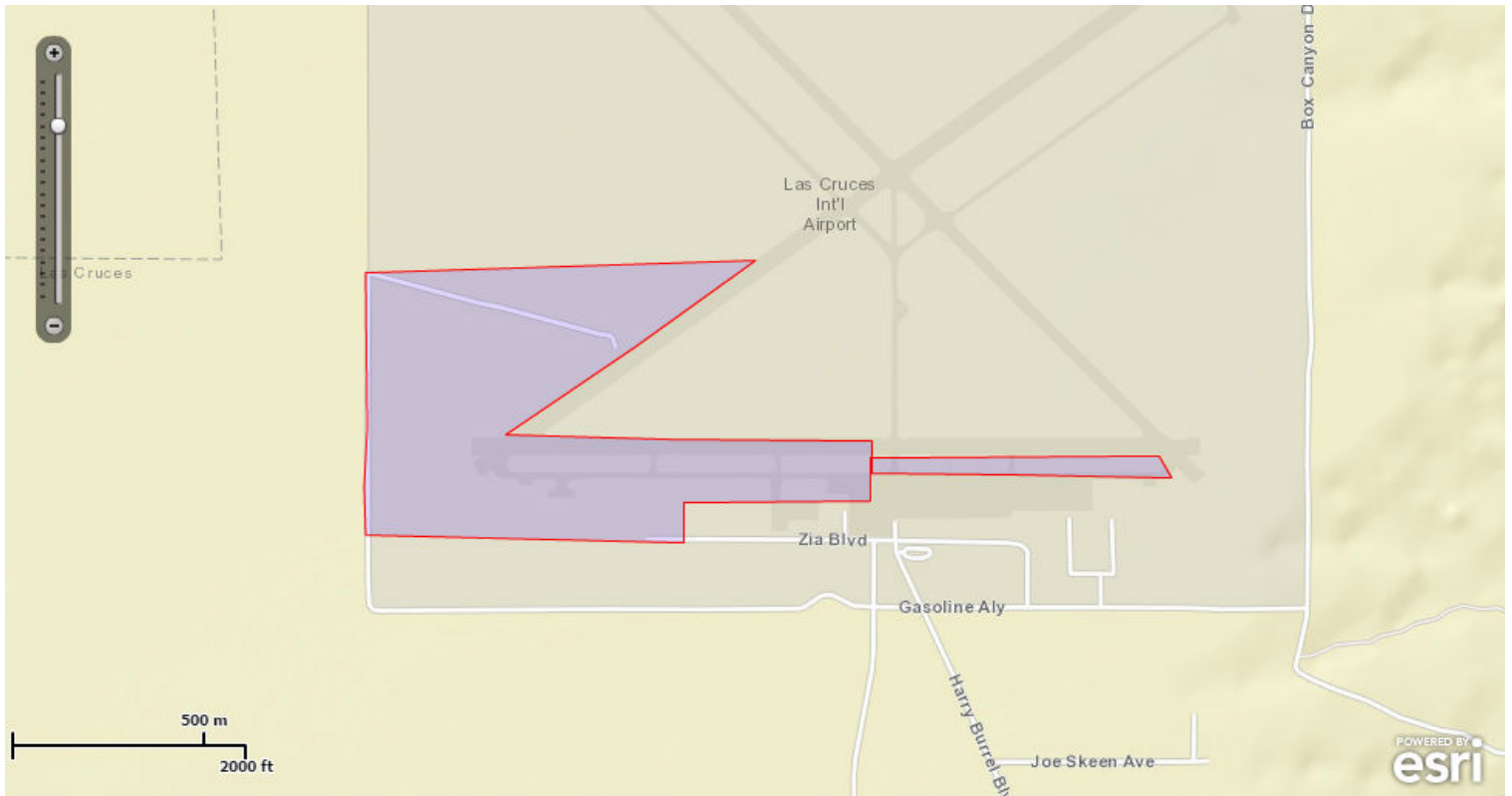
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your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



United States Department of Interior
Fish and Wildlife Service

Project name: Las Cruces Airport Management Plan

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-106.9213989 32.28469232, -106.9147899 32.2847284, -106.9133737 32.2847284, -106.9130304 32.2842205, -106.9213989 32.2843293, -106.9213989 32.28469232)), ((-106.9213989 32.28469232, -106.9214397 32.2846921, -106.9214397 32.2836763, -106.9266324 32.28364, -106.9266346 32.2826967, -106.9354751 32.2828781, -106.935518 32.2840028, -106.9354322 32.2853815, -106.9354751 32.2890457, -106.9246154 32.289336, -106.9279628 32.2873061, -106.9315698 32.2852364, -106.9270208 32.2851275, -106.9213989 32.2850912, -106.9213989 32.28469232)))

Project Counties: Dona Ana, NM



United States Department of Interior
Fish and Wildlife Service

Project name: Las Cruces Airport Management Plan

Endangered Species Act Species List

There are a total of 5 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. 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		
northern aplomado falcon (<i>Falco femoralis septentrionalis</i>) Population: U.S.A (AZ, NM)	Experimental Population, Non-Essential		
Sprague's Pipit (<i>Anthus spragueii</i>)	Candidate		
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Flowering Plants			
Sneed Pincushion cactus (<i>Coryphantha sneedii</i> var. <i>sneedii</i>)	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: Las Cruces Airport Management Plan

Critical habitats that lie within your project area

There are no critical habitats within your project area.

State Threatened & Endangered Species

Common Name	Scientific Name	County	Status	GapVeg
Varied Bunting	Passerina versicolor	Dona Ana	State NM: Threatened	CHIH DESERT tarbush/mesquite/ocotillo
Aplomado Falcon	Falco femoralis	Dona Ana	State NM: Endangered	CHIH DESERT tarbush/mesquite/ocotillo
Peregrine Falcon	Falco peregrinus anatum	Dona Ana	State NM: Threatened	CHIH DESERT tarbush/mesquite/ocotillo
Common Ground-dove	Columbina passerina	Dona Ana	State NM: Endangered	CHIH DESERT tarbush/mesquite/ocotillo
Spotted Bat	Euderma maculatum	Dona Ana	State NM: Threatened	CHIH DESERT tarbush/mesquite/ocotillo



Results of County Search

DOÑA ANA	
Scientific name	County-NM
Agastache cana	Doña Ana, Grant, Luna, Sierra
Agastache pringlei var. verticillata	Doña Ana
Astragalus castetteri	Doña Ana, Sierra
Castilleja organorum	Doña Ana
Draba standleyi	Doña Ana, Otero, Sierra, Socorro
Escobaria organensis	Doña Ana
Escobaria sandbergii	Doña Ana, Sierra
Escobaria sneedii var. sneedii	Doña Ana
Escobaria villardii	Doña Ana, Otero
Hexalectris arizonica	Doña Ana, Hidalgo, Otero, Sierra
Hymenoxys vaseyi	Doña Ana, Sierra
Oenothera organensis	Doña Ana
Opuntia arenaria	Doña Ana, Luna, Socorro
Peniocereus greggii var. greggii	Doña Ana, Grant, Hidalgo, Luna
Penstemon alamosensis	Doña Ana, Lincoln, Otero
Perityle cernua	Doña Ana
Perityle staurophylla var. staurophylla	Doña Ana, Otero, Sierra
Polygala rimulicola var. mescalerorum	Doña Ana
Salvia summa	Chaves, Doña Ana, Eddy
Scrophularia laevis	Doña Ana
Silene plankii	Bernalillo, Doña Ana, Sandoval, Sierra, Socorro, Torrance

Appendix C – NRCS Prime Farmland Determination

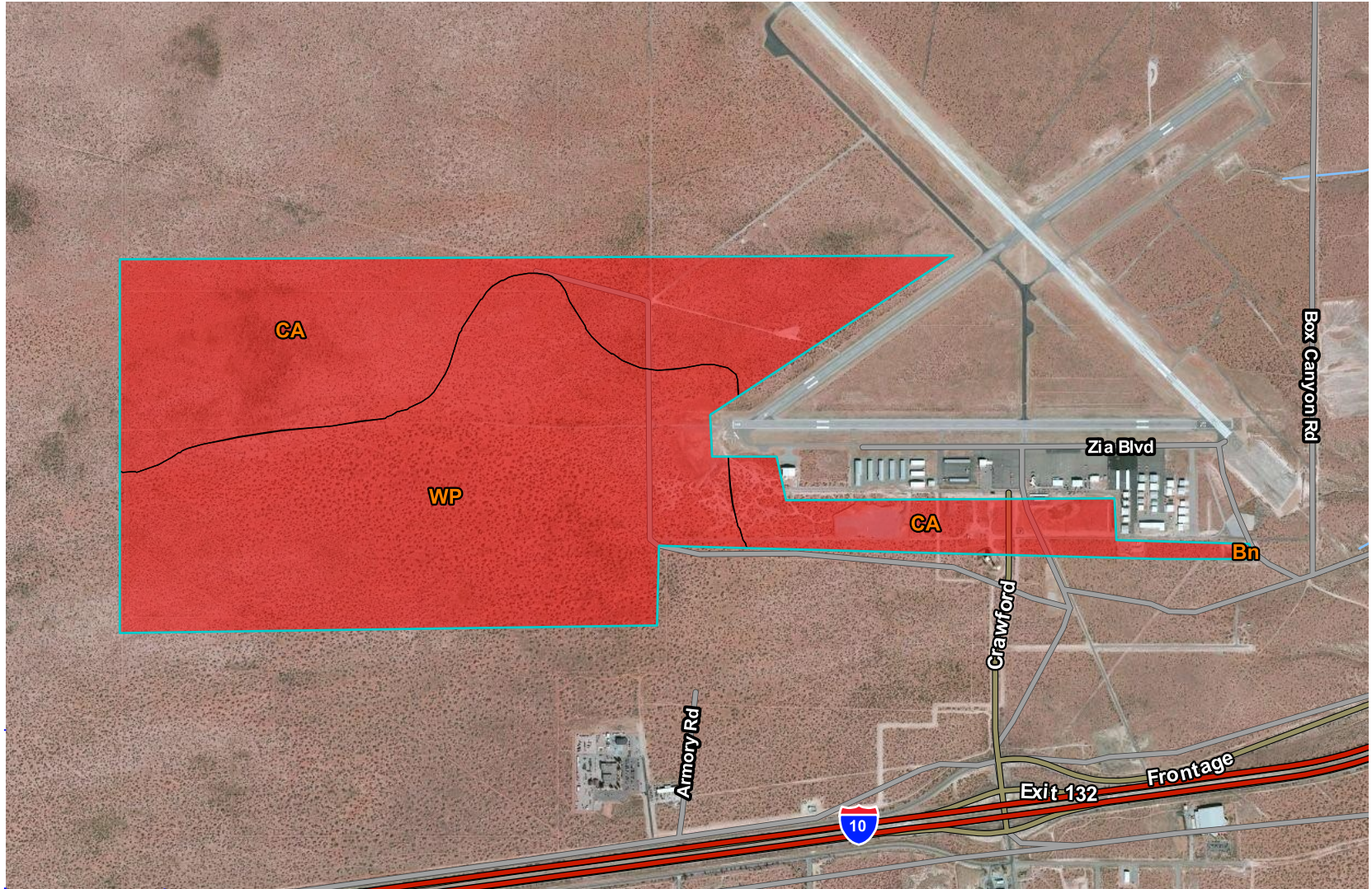
Farmland Classification—Dona Ana County Area, New Mexico

106° 57' 38" W

106° 54' 26" W

32° 17' 56" N

32° 17' 56" N

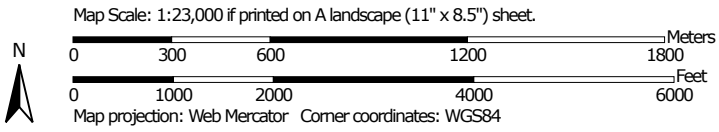


32° 16' 10" N

32° 16' 10" N


106° 57' 38" W

106° 54' 26" W











MAP LEGEND








Area of Interest (AOI)

 Area of Interest (AOI)




Soils








Soil Rating Polygons






-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available







Soil Rating Lines










-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained

-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available


Soil Rating Points

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Water Features

MAP INFORMATION

 Streams and Canals


Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dona Ana County Area, New Mexico
Survey Area Data: Version 12, Sep 26, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 13, 2011—Mar 16, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Farmland Classification— Summary by Map Unit — Dona Ana County Area, New Mexico (NM690)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Bn	Bluepoint loamy sand, 5 to 15 percent slopes MLRA 42	Not prime farmland	0.6	0.1%
CA	Cacique-Cruces association	Not prime farmland	398.7	45.2%
WP	Wink-Pintura complex	Not prime farmland	482.7	54.7%
Totals for Area of Interest			882.0	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %			
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS			
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or local site assessment)		160			
TOTAL POINTS (Total of above 2 lines)		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

(See Instructions on reverse side)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.