



PROJECT INFORMATION

Project Title: DPEA Addressing Air Force Research Laboratory Research, Development, Test, and Evaluation Activities

Project Type: MILITARY, GENERAL (OPERATIONS, INFRASTRUCTURE), MAINTENANCE OR CONTINUING OPERATIONS, INFRASTRUCTURE

Latitude/Longitude (DMS): 34.996686 / -106.491005

County(s): BERNALILLO

Project Description: AFRL has been conducting RDT&E activities on Kirtland AFB since the 1960s. There are many existing Environmental Assessments and EIAP documents, including Air Force Form 813s, spanning the decades from 1970 to present day. The Proposed Action consolidates all current and proposed future AFRL RDT&E activities into one Programmatic Environmental Assessment (PEA), ensuring these activities can continue to occur on Kirtland AFB into the future. Two units of AFRL conduct these activities, AFRL's Directed Energy Directorate (AFRL/RD) and AFRL's Space Vehicle Directorate (AFRL/RV). AFRL/RD develops directed energy weapons (including high energy lasers, high-power microwave, and high-power electromagnetic system prototypes) to counter, disable, and attack adversary sources. Equipment, components, and designs for warfighter weapons are created and tested in laboratories across Kirtland AFB before being tested outdoors at the High Energy Research and Technology Facility (HERTF)/HERTF Canyon, Frustration Canyon, Starfire Optical Range/1-Mile and 2-Mile sites, and Outdoor Laser Propagation and Firing Area to evaluate performance of the new technology. AFRL/RV ensures that the United States and its allies maintain space superiority by developing and transitioning technologies that provide space-based capabilities to the nation. Equipment, components, and designs for space-based technologies are created in laboratories across Kirtland AFB and then tested outdoors at the Skywave Technologies Laboratory, Improved Solar Observing Optical Network, and South Park Antenna Field.

REQUESTOR INFORMATION

Project Organization:

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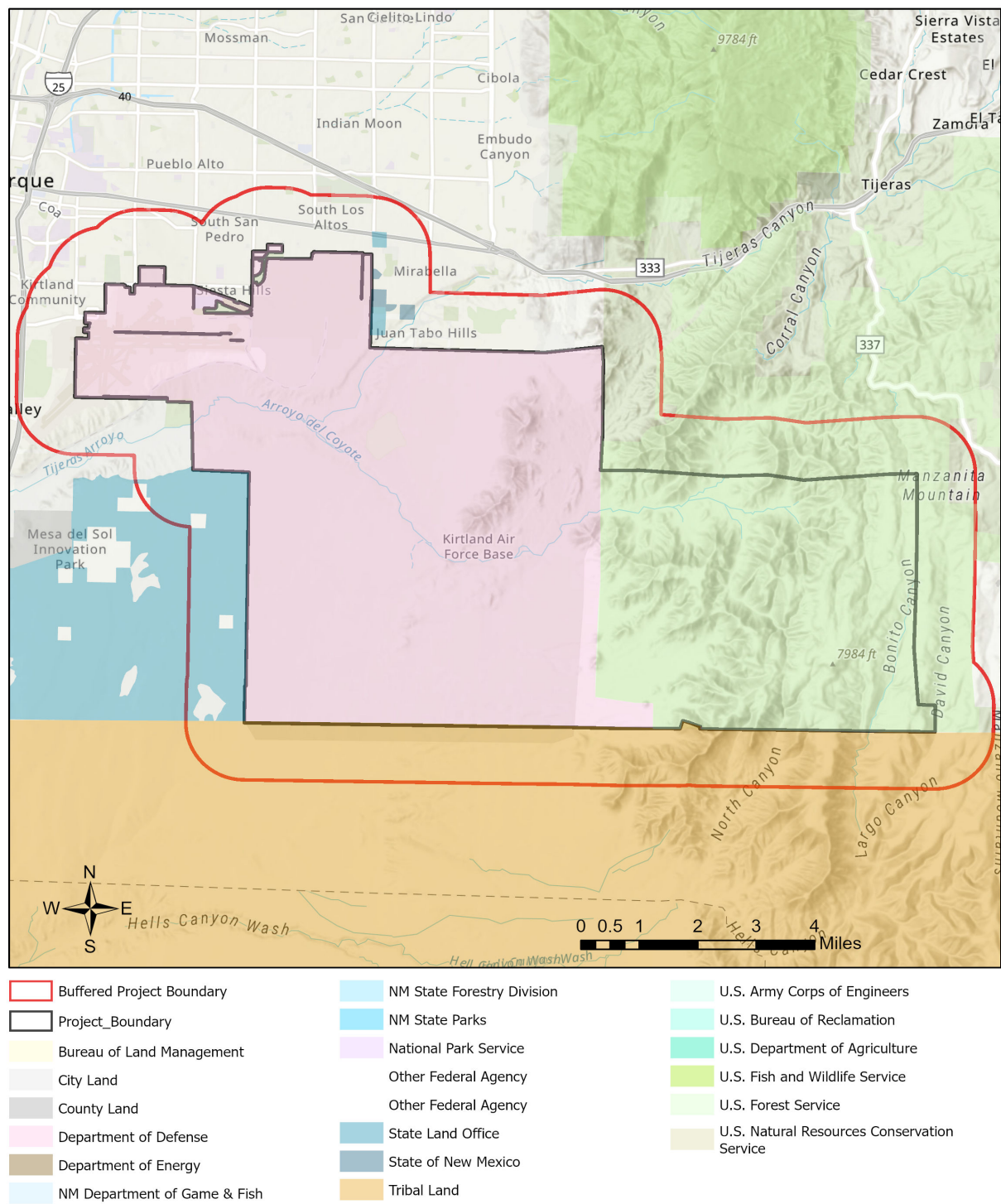
OVERALL STATUS

This report contains an initial list of recommendations regarding potential impacts to wildlife or wildlife habitats from the proposed project; see the Project Recommendations section below for further details. Your project proposal is being forwarded to a New Mexico Department of Game and Fish (Department) biologist for review to determine whether there are any additional recommendations regarding the proposed actions. A Department biologist will be in touch within 30 days if there are further recommendations regarding this project proposal.

About this report:

- This environmental review is based on the project description and location that was entered. The report must be updated if the project type, area, or operational components are modified.
- This is a preliminary environmental screening assessment and report. It is not a substitute for the potential wildlife knowledge gained by having a biologist conduct a field survey of the project area. Federal status and plant data are provided as a courtesy to users. The review is also not intended to replace consultation required under the federal Endangered Species Act (ESA), including impact analyses for federal resources from the U.S. Fish and Wildlife Service (USFWS) using their [Information for Planning and Consultation tool](#).
- This report contains information on wildlife species protected under the ESA and the [Wildlife Conservation Act \(WCA\)](#), [Species of Greatest Conservation Need \(SGCN\)](#), and Species of Economic and Recreational Importance (SERI). Species listed under the ESA are protected from take at the federal level and under the WCA are protected from take at the state level. SGCN are identified in the [State Wildlife Action Plan \(SWAP\) for New Mexico](#); all of these species are considered to be of conservation concern but not all of them are protected from take at the state or federal level. The harvest of all SERI is regulated at the state level. The Department has no authority to designate critical habitat for species listed under the WCA; only the USFWS can designate critical habitat for species listed under the ESA.
- The New Mexico Environmental Review Tool (ERT) utilizes species observation locations and species habitat suitability models, both of which are subject to ongoing change and refinement. Inclusion or omission of a species within a report cannot guarantee species presence or absence within your project area. To determine occurrence of any species listed in this report, or other wildlife that may be present within your project area, onsite surveys conducted by a qualified biologist during appropriate, species-specific survey timelines may be necessary.
- The Department encourages use of the ERT to modify proposed projects for avoidance, minimization, or mitigation of wildlife impacts. However, the ERT is not intended to be used in a repeatedly iterative fashion to adjust project attributes until a previously determined recommendation is generated. The ERT serves to assess impacts once project details are developed. The [New Mexico Crucial Habitat Assessment Tool](#), the data layers from which are included in the ERT, is the appropriate system for advising early-stage project planning and design to avoid areas of anticipated wildlife concerns and associated regulatory requirements.

Air Force Research Laboratory Research, Development, Test, and E



NHNM, USGS, USFS, US Census Bureau, NMDGF
Esri, CGIAR, USGS
Bernalillo County, NM, Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Special Status Animal Species Potentially within 1 Miles of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI	USFS	USFS SCC	BLM
Boreal Chorus Frog	Pseudacris maculata			SGCN			
Northern Leopard Frog	Lithobates pipiens			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
American Bittern	Botaurus lentiginosus			SGCN			BLM WATCH
Aplomado Falcon	Falco femoralis		E	SGCN			
Peregrine Falcon	Falco peregrinus		T	SGCN			BLM WATCH
American Peregrine Falcon	Falco peregrinus anatum		T	SGCN	Sensitive Species	USFS R3 SCC	
Mountain Plover	Charadrius montanus			SGCN	Sensitive Species		BLM WATCH
Long-Billed Curlew	Numenius americanus			SGCN			BLM WATCH
Flammulated Owl	Otus flammeolus			SGCN			BLM WATCH
Western Burrowing Owl	Athene cunicularia hypugaea			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Common Nighthawk	Chordeiles minor			SGCN			
Lewis's Woodpecker	Melanerpes lewis			SGCN		USFS R3 SCC	BLM WATCH
Red-Headed Woodpecker	Melanerpes erythrocephalus			SGCN			
Williamson's Sapsucker	Sphyrapicus thyroideus			SGCN			
Olive-Sided Flycatcher	Contopus cooperi			SGCN			
Bank Swallow	Riparia riparia			SGCN			
Pinyon Jay	Gymnorhinus cyanocephalus	UR		SGCN		USFS R3 SCC	BLM SENSITIVE
Clark's Nutcracker	Nucifraga columbiana			SGCN			
Juniper Titmouse	Baeolophus ridgwayi			SGCN		USFS R3 SCC	BLM WATCH
Pygmy Nuthatch	Sitta pygmaea			SGCN			
Western Bluebird	Sialia mexicana			SGCN			
Mountain Bluebird	Sialia currucoides			SGCN			
Bendire's Thrasher	Toxostoma bendirei			SGCN		USFS R3 SCC	BLM SENSITIVE

Special Status Animal Species Potentially within 1 Miles of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI	USFS	USFS SCC	BLM
Loggerhead Shrike	Lanius ludovicianus			SGCN		USFS R3 SCC	BLM WATCH
Gray Vireo	Vireo vicinior		T	SGCN	Sensitive Species	USFS R3 SCC	BLM WATCH
Virginia's Warbler	Leiothlypis virginiae			SGCN			BLM SENSITIVE
Black-Throated Gray Warbler	Setophaga nigrescens			SGCN			BLM WATCH
Grace's Warbler	Setophaga graciae			SGCN		USFS R3 SCC	BLM WATCH
Painted Redstart	Myioborus pictus			SGCN			
Black-Chinned Sparrow	Spizella atrogularis			SGCN			BLM WATCH
Thick-billed Longspur	Rhynchophanes mccownii			SGCN			BLM SENSITIVE
Chestnut-Collared Longspur	Calcarius ornatus			SGCN			BLM SENSITIVE
Cassin's Finch	Haemorhous cassinii			SGCN			BLM WATCH
Evening Grosbeak	Coccothraustes vespertinus			SGCN			
Spotted Bat	Euderma maculatum		T	SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Pale Townsend's Big-Eared Bat	Corynorhinus townsendii pallescens			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Black-Tailed Prairie Dog	Cynomys ludovicianus			SGCN	Sensitive Species		BLM SENSITIVE
Gunnison's Prairie Dog	Cynomys gunnisoni			SGCN	Sensitive Species		BLM SENSITIVE
New Mexican Meadow Jumping Mouse	Zapus hudsonius luteus	LE	E	SGCN	Sensitive Species		BLM SENSITIVE
Black Bear	Ursus americanus			SERI			
Mountain Lion	Puma concolor			SERI			
Elk	Cervus canadensis			SERI			
Mule Deer	Odocoileus hemionus			SERI			
Pronghorn	Antilocapra americana			SERI			

Special Status Animal Species Potentially within 1 Miles of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI	USFS	USFS SCC	BLM
Desert Massasauga	Sistrurus catenatus edwardsii			SGCN			

Common Name hyperlink takes you to species account in bison-m.org; Scientific Name hyperlink takes you to information in [NatureServe Explorer](#); ESA = Endangered Species Act, C = Candidate, LE = Listed Endangered, LT = Listed Threatened, XN = Non-essential Experimental Population, for other ESA codes see this [website](#); WCA = Wildlife Conservation Act, E = Endangered, T = Threatened; SERI = Species of Economic and Recreational Importance; SGCN = Species of Greatest Conservation Need; USFS = U.S. Forest Service, Sensitive Species = A species likely to occur on USFS lands that is of concern for a potential reduction in population viability; SCC = Species of Conservation Concern; BLM = Bureau of Land Management, BLM SENSITIVE = A species that occurs on BLM lands and whose viability is at risk, BLM WATCH = Species that may be added to the sensitive species list in future pending new information regarding species status.

Special Status Plant Species Potentially within 1 Miles of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMAC	NMRPCS	USFS	USFS SCC	BLM
Santa Fe Milkvetch	Astragalus feensis			SS			BLM WATCH

NMAC = New Mexico Administrative Code, E = Endangered; NMRPCS = [New Mexico Rare Plant Conservation Strategy](#), SS = NM Rare Plant Conservation Strategy Species; USFS = U.S. Forest Service, Sensitive Species = A species likely to occur on USFS lands that is of concern for a potential reduction in population viability; SCC = Species of Conservation Concern; BLM = Bureau of Land Management, BLM SENSITIVE = A species that occurs on BLM lands and whose viability is at risk, BLM WATCH = Species that may be added to the sensitive species list in future pending new information regarding species status.

Project Recommendations

With implementation of the applicable mitigation or avoidance measures included in the project description, and incorporation of the guidance listed below, the Department does not anticipate significant impacts to wildlife or sensitive wildlife habitats from the proposed project activities. See the "OVERALL STATUS" section above to determine the likelihood that your project will be reviewed further based on its location. If a Department biologist determines that additional conservation measures are needed, then you should expect to receive notification and/or any additional project recommendations within 30 days of your project submission.

Burrowing owl (*Athene cunicularia*) may occur within your project area. Burrowing owls are protected from take by the Migratory Bird Treaty Act and under New Mexico state statute. Before any ground disturbing activities occur, the Department recommends that a preliminary burrowing owl survey be conducted by a qualified biologist using the Department's [Burrowing Owl Survey Protocol](#). Should burrowing owls be documented in the project area, please contact the Department or USFWS for further recommendations regarding relocation or avoidance of impacts.

The proposed project occurs near an important bat area. This area may contain important bat roosting resources, such as caves or mines, that potentially could be affected by certain project activities. Follow the guidelines below to minimize disturbance to roosting bats.

- Avoid use of pesticides, firearms, open-flame torches, or heavy smoke-producing equipment, especially from April through September.
- If artificial lighting is needed, use only light sources powered by batteries, or cyalume glow/light sticks. Keep the site clean by picking up refuse or materials from project lighting or operations whenever they are shut down.
- If the use of permanent outdoor lights cannot be avoided, design all outdoor lighting in accordance with the New Mexico Night Sky Protection Act, which requires that outdoor lighting be fitted with shielding that directs light downward, rather than upward or laterally, to prevent sky glow and associated impacts to bats.
- For any surface disturbing activities, the project footprint (including a 350 foot buffer) should avoid potential roost sites such as caves or mines, especially from April through July. Tree clearing activities and prescribed burns should include a minimum 0.5 miles buffer from any such features.
- If caves, mines, bridges, or other man-made structure suitable as potential bat roosts are encountered within the project area, they should not be entered during any time of year, and no roosting or hibernating bats should be contacted or disturbed. Report any dead or injured bats to the Department, which can facilitate contacts with other appropriate personnel.

Prairie dog colonies may occur within the vicinity of your project area. Both black-tailed prairie dogs (*Cynomys ludovicianus*) and Gunnison's prairie dogs (*Cynomys gunnisoni*) are designated as New Mexico SGCN, and their colonies provide important habitat for other grassland wildlife. Wherever possible, occupied prairie dog colonies should be left undisturbed, and all project activities should be directed off the colony. Any burrows that are located on the project site should be surveyed by a qualified biologist to determine whether burrows are active or inactive and whether burrowing owls may be utilizing the site. Colonies within the range of the black-tailed prairie dog can be surveyed by a qualified biologist diurnally, year-round using binoculars. Colonies within the range of the Gunnison's prairie dog can be surveyed by a qualified biologist diurnally, using binoculars during the warmer months from April through October and by searching for fairly fresh scat and lack of cobwebs or debris at the mouths of burrows during the cold months (November through March). If ground-disturbing activities cannot be relocated off the prairie dog colony, or if project activities involve control of prairie dogs, the Department recommends live-trapping and relocation of prairie dogs. The Department can provide recommendations regarding suitability of potential translocation areas and procedures.

The proposed project occurs within or near a riparian area. Because riparian areas are important wildlife habitats, the project footprint should avoid removing any riparian vegetation or creating ground disturbance either directly within or affecting the riparian area, unless the project is intended to restore riparian habitat through non-native plant removal and replanting with native species. If your project involves removal of non-native riparian trees or planting of native riparian vegetation, please refer to the Department's habitat handbook guideline for [Restoration and Management of Native and Non-native Trees in Southwestern Riparian Ecosystems](#). The [New Mexico Riparian Habitat Map \(NMRipMap\)](#) may also provide useful information on local riparian habitat composition and structure.

Your proposed project occurs within an area where springs or other important natural water features occur. This may result in the presence of a high use area for wildlife relative to the surrounding landscape. To ensure continued function of these important wildlife habitats, your project should consider measures to avoid the following.

- Altering surface or groundwater flow or hydrology,
- Disturbance to soil that modifies geomorphic properties or facilitates invasion of non-native vegetation.
- Affecting local surface or groundwater quality.
- Creating disturbance to wildlife utilizing these water features. Disturbance to wildlife can be reduced through practices including clustering infrastructure and activity wherever possible, avoiding large visual obstructions around water features, and limiting nighttime project operations or activities.

Department biologists are available for site-specific consultation regarding measures to assist with management and conservation of these habitat resources.

Disclaimers regarding recommendations:

- The Department provides technical guidance to support the persistence of all protected species of native fish and wildlife, including game and nongame wildlife species. Species listed within this report include those that have been documented to occur within the project area, and others that may not have been documented but are projected to occur within the project vicinity.
- Recommendations are provided by the Department under the authority of § 17-1-5.1 New Mexico Statutes Annotated 1978, to provide "communication and consultation with federal and other state agencies, local governments and communities, private organizations and affected interests responsible for habitat, wilderness, recreation, water quality and environmental protection to ensure comprehensive conservation services for hunters, anglers and nonconsumptive wildlife users".
- The Department has no authority for management of plants or Important Plant Areas. The [New Mexico Endangered Plant Program](#), under the Energy, Minerals, and Natural Resources Department's Forestry Division, identifies and develops conservation measures necessary to ensure the survival of plant species within New Mexico. Plant status information is provided within this report as a courtesy to users. Recommendations provided within the ERT may not be sufficient to preclude impacts to rare or sensitive plants, unless conservation measures are identified in coordination with the Endangered Plant Program.
- Additional coordination and/or consultation may also be necessary under the federal ESA or National Environmental Policy Act (NEPA). Further site-specific mitigation recommendations may be proposed during ESA consultation and/or NEPA analyses or through coordination with affected federal agencies.