



PROJECT INFORMATION

Project Title: NM15-105 Roughneck

Project Type: COMMUNICATIONS, TOWERS (CELLULAR AND OTHER), CELL TOWERS 200 FT OR HIGHER, SUPPORT WIRES OR ON UNDISTURBED GROUND

Latitude/Longitude (DMS): 32.354383 / -103.311903

County(s): LEA

Project Description: Our client proposes to install a new 199-foot self-support tower in a proposed 50-foot by 50-foot lease area. A proposed approximately 12-foot-wide access and utility easement will extend approximately 140 feet east from Delaware Basin Road, connecting with a new 50-foot-wide access and utility easement extending approximately 60 feet north to the lease area. A proposed 8-foot-wide utility easement will extend approximately 90 feet east from Delaware Basin Road to the lease area. A proposed fiber conduit will be routed within the 8-foot-wide easement from a new fiber vault immediately south of the lease area 85 feet west to another new fiber vault. A proposed power conduit will be routed within the 50-foot-wide easement and 8-foot-wide easement from a new junction box immediately south of the lease area 115 feet west to a new utility pole. The site is located in undeveloped desert scrubland off the east side of Delaware Basin Road.

REQUESTOR INFORMATION

Project Organization:

Contact Name: Amanda Wrona

Email Address: a.wrona@trileaf.com

Organization: Trileaf Corporation

Address: 2121 W Chandler Boulevard, Suite 108, Chandler AZ 85224

Phone: 480-850-0575

OVERALL STATUS

The information contained within this report comprises the recommendations of the New Mexico Department of Game and Fish (Department) for management and mitigation of proposed project impacts to wildlife and habitat resources; see the Project Recommendations section below for further details. No further consultation with the Department is required based on the project's location and, with implementation of mitigation measures described in the Project Recommendations section below, no adverse effects to wildlife or important habitats are anticipated. However, a Department biologist may be in touch within 30 days if they determine that further review is required.

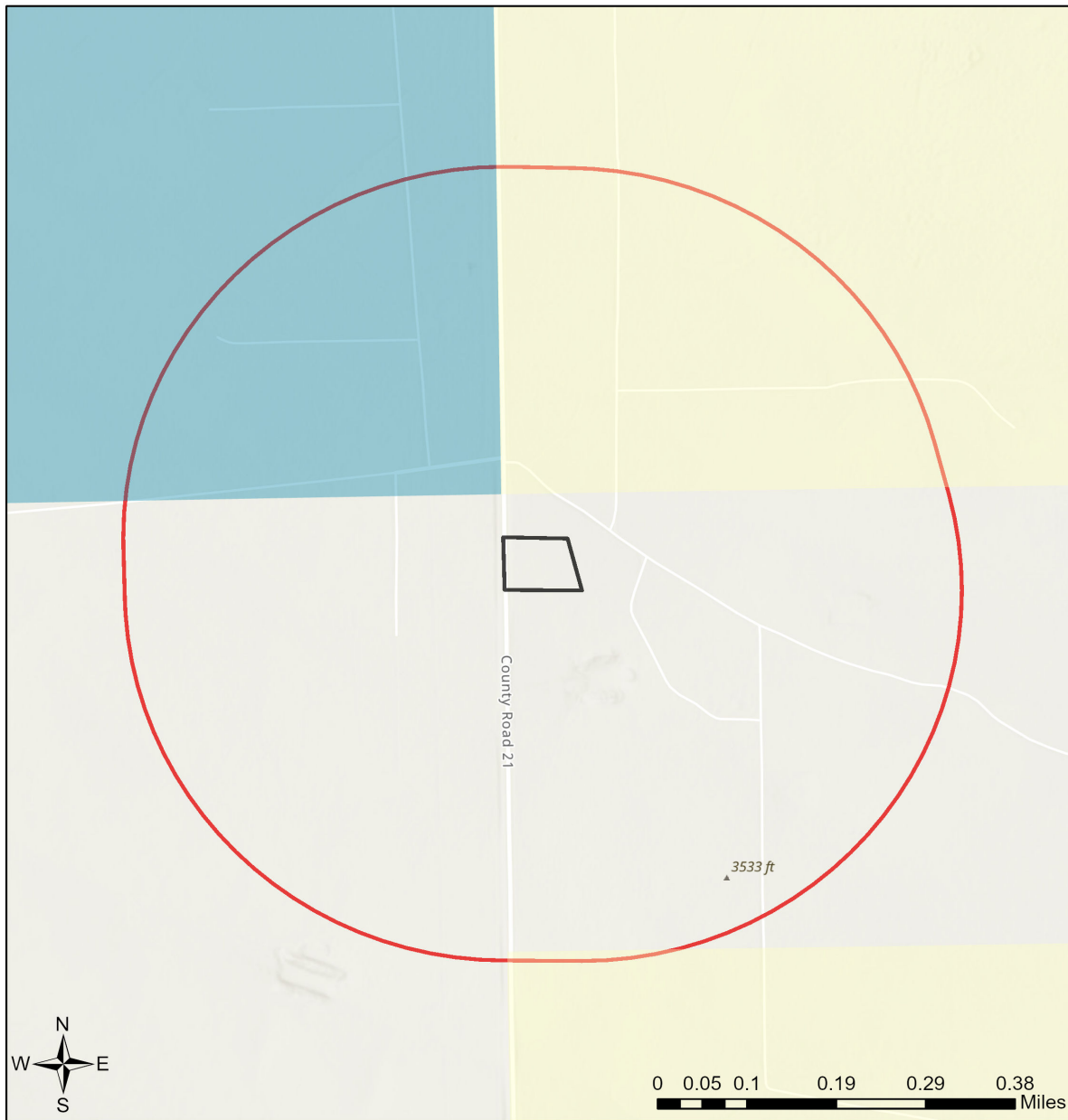


About this report:

- 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.



NM15-105 Roughneck



NHNM, USGS, USFS, US Census Bureau, NMDGF
Esri, NASA, NGA, USGS, FEMA
Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



Special Status Animal Species Potentially within 650 Meters of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI	USFS	USFS SCC	BLM
Aplomado Falcon	Falco femoralis		E	SGCN			
Peregrine Falcon	Falco peregrinus		T	SGCN			BLM WATCH
Lesser Prairie-Chicken	Typanuchus pallidicinctus	LE		SGCN	Sensitive Species		BLM SENSITIVE
Western Burrowing Owl	Athene cucularia hypugaea			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Common Nighthawk	Chordeiles minor			SGCN			
Sprague's Pipit	Anthus spragueii			SGCN			BLM SENSITIVE
Loggerhead Shrike	Lanius ludovicianus			SGCN		USFS R3 SCC	BLM WATCH
Vesper Sparrow	Pooecetes gramineus			SGCN			
Thick-billed Longspur	Rhynchophanes mccownii			SGCN			BLM SENSITIVE
Chestnut-Collared Longspur	Calcarius ornatus			SGCN			BLM SENSITIVE
Black-Tailed Prairie Dog	Cynomys ludovicianus			SGCN	Sensitive Species		BLM SENSITIVE
Pronghorn	Antilocapra americana			SERI			
Gray-Checkered Whiptail	Aspidoscelis tessellata		E	SGCN			BLM SENSITIVE
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.



Project Recommendations

Because of the potential for communications towers to cause significant impacts to night-migrating migratory bird populations, we submit the following recommendations:

- We recommend co-locating communications equipment, antennas, etc. on existing towers or buildings (e.g., water towers) or within existing groups of towers or "antenna farms", if feasible.
- Research has shown that lights on towers attract night-migrating birds and can cause large mortality events when birds strike the tower or guy cables. It is our understanding that towers taller than 200 feet (61 m) above ground level (AGL) are required by the Federal Aviation Administration (FAA) to have lighting for aircraft safety. Therefore, if construction of new towers is required, we recommend that they be less than 200 feet AGL, if possible, so lighting is not necessary.
- Research has also shown that solid or pulsating red lights attract night-migrating birds at a much higher rate than white strobe lights. Therefore, where permissible by FAA and local zoning regulations, we recommend that white strobe lights be used and solid or pulsating red incandescent warning lights be avoided. Also, the minimum amount of lighting required by the FAA should be used, with minimum intensity and number of flashes per minute (i.e., the longest duration between flashes, currently three seconds) allowed by the FAA.
- To the extent possible, construction techniques should be used that do not require guy wires, as these components are thought to be a primary cause of bird mortality associated with communications towers. More acceptable construction techniques include using a lattice structure or a monopole.
- If possible, towers should not be located in or near wetlands, riparian areas, playas, lakes, or other known bird concentration areas (e.g., state or federal waterfowl refuges, staging areas, rookeries); in known migratory or daily movement flyways; or in habitat of threatened or endangered bird species that could be prone to tower-caused mortality (i.e., night-migrating species). If location near or within one of these areas is deemed necessary, the Department requests the opportunity for additional consultation.
- Local meteorological conditions should be reviewed, and areas with an especially high incidence of fog, mist, and low cloud ceilings should be avoided, if possible.
- Towers using guy wires for support constructed in known raptor, waterfowl, or shorebird concentration areas, stopover sites, or daily movement or migratory routes should install daytime visual markers (i.e., bird diverter devices) on the guy wires to prevent collisions by diurnally active bird species. (For guidance on markers, see *Avian Power Line Interaction Committee, 1994. Mitigating Bird Collisions with Power Lines: The State of the Art in 1994. Edison Electric Institute, Washington, D.C., 78 pp*, and *Avian Power Line Interaction Committee, 1996. Suggested Practices for Raptor Protection on Power Lines. Edison Electric Institute/Raptor Research Foundation, Washington, D.C., 128 pp*. Copies can be obtained by calling 1-800/334-5453).
- If significant numbers of breeding, feeding, or roosting birds are known to habitually use a proposed tower construction site, relocation of the tower to an alternate site is recommended. If this is not an option, seasonal restrictions on construction may be advisable in order to avoid disturbance during nesting (i.e., avoid construction during spring and summer).
- If possible, new towers should be designed structurally and electrically to accommodate the applicant's antenna(s), and comparable antennas for at least two additional users, to reduce the number of future towers, unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or unguyed tower.
- Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site and minimize its potential attraction for birds.
- Tower construction, including road access and fencing, should be implemented to minimize habitat loss and fragmentation and to reduce above-ground obstacles that might impact birds in flight. A larger tower footprint, however, is preferable to construction of a guy-supported tower.
- Towers that involve any trenching activities, especially creation of any trenches that may be left open overnight, should follow the Department's [Trenching Guidelines](#).



- If constructing multiple towers, project proponents should consider the cumulative impacts of all of those towers on migratory birds, as well as the impacts of each individual tower.
- Towers no longer in use or determined to be obsolete should be removed within 12 months of the cessation of use.

See [Communication Tower Project Guidelines NMDGF](#) and [Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning](#) from the USFWS for more information.

Our preliminary assessment indicates your project occurs in Lesser Prairie-chicken Crucial Habitat Category 3 (Modeled Habitat Zone).

The Lesser Prairie-chicken (*Tympanuchus pallidicinctus*) (LPC) was designated as a SGCN in New Mexico and the southern Distinct Population Segment, including populations in New Mexico and Texas, is federally listed as Endangered. The LPC Interstate Working Group has developed the Southern Great Plains Crucial Habitat Assessment Tool ([SGP-CHAT](#)) to designate and prioritize areas for LPC conservation activities and development. Our preliminary assessment indicates your project occurs in LPC habitat. For more information on the SGP-CHAT, contact Chanda Pettie, Industry LPC Program Contact with the Western Association of Fish and Wildlife Agencies, at (719) 207-5053 or chanda.pettie@wafwa.org.

If your project has potential to lead to take (including harassment, harm, pursuit, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in these activities) of a LPC, the Department recommends you contact Lauren Rangel, at 505-761-4745 or lauren_rangel@fws.gov, who is the species lead for the LPC in the Ecological Services Office with USFWS. She is also the contact for the rangewide renewable energy Habitat Conservation Plan (HCP) if relevant for your project. The Department recommends a qualified, permitted biologist conduct surveys for the LPC according to these [lesser prairie-chicken survey protocols](#) (or others recommended by USFWS) and following any training as required by USFWS.

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.

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.



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.