

| PROJECT INFORMATION       |  |  |  |
|---------------------------|--|--|--|
| Project Title:            | NM04-186 BURRO / NM6 SUN RANCH   |  |  |
| Project Type:             | COMMUNICATIONS, TOWERS (CELLULAR AND OTHER), CELL TOWERS 200 FT OR                         |  |  |
|                           | HIGHER, SUPPORT WIRES OR ON UNDISTURBED GROUND   |  |  |
| Latitude/Longitude (DMS): | 33.614850 / -105.743779  |  |  |
| County(s):                | LINCOLN  |  |  |
| Project Description:      | Our client proposes to construct a 199-foot self-support tower in a new 50-foot by 50-foot |  |  |
|                           | lease area. A proposed fiber conduit will be routed within a new 20-foot-wide              |  |  |
|                           | utility/access easement extending from the lease area west then northwest for a total of   |  |  |
|                           | approximately 430 feet, terminating at a proposed fiber vault within the right-of-way. A   |  |  |
|                           | proposed 12-foot-wide utility easement will connect with the west end of the 20-foot-wide  |  |  |
|                           | access/utility easement, extending approximately 300 feet southwest. Another proposed      |  |  |
|                           | 12-foot-wide access easement will run approximately 30 feet along the west side of the     |  |  |
|                           | lease area. The site is located in undeveloped dirt and grass covered land off the east    |  |  |
|                           | side of Snell Road.  |  |  |
|                           |  |  |  |

## **REQUESTOR INFORMATION**

| Project Organization: | :                                       |
|-----------------------|---|
| Contact Name:         | Jessica Potter                          |
| Email Address:        | j.potter@trileaf.com                    |
| Organization:         | Trileaf Corporation                     |
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| Phone:                | 6028199196                              |

## 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.

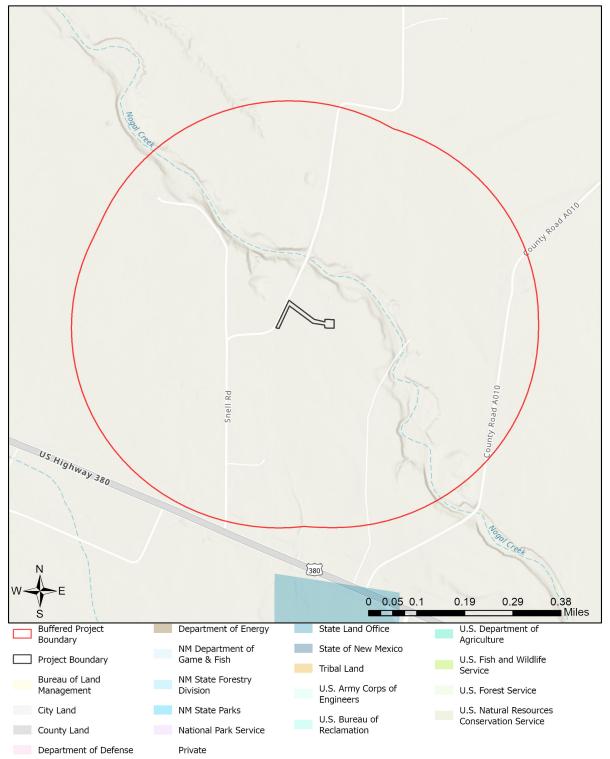


# About this report:

- 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.
- 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 <u>New Mexico Crucial Habitat Assessment Tool</u> is the appropriate system for advising early-stage project planning and design to avoid areas of anticipated wildlife concerns and associated regulatory requirements.



# NM04-186 BURRO / NM6 SUN RANCH



USGS, New Mexico Department of Game and Fish (NMDGF), Natural Heritage New Mexico (NHNM), and USDA Forest Service,

Compiled by Richard Norwood of NHNM over the period 2020 to 2021. Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community



| Special Status Animal Species Potentially within 650 Meters of Project Area |                               |             |             |                    |  |  |
|---|-------------------------------|-------------|-------------|--------------------|--|--|
| Common Name   | Scientific Name               | USFWS (ESA) | NMDGF (WCA) | NMDGF<br>SGCN/SERI |  |  |
| Barking Frog  | Craugastor augusti            |             |             | SGCN               |  |  |
| Northern Leopard Frog   | Lithobates pipiens            |             |             | SGCN               |  |  |
| American Bittern  | Botaurus lentiginosus         |             |             | SGCN               |  |  |
| Common Black-Hawk   | Buteogallus anthracinus       |             | Т           | SGCN               |  |  |
| Aplomado Falcon   | Falco femoralis               |             | E           | SGCN               |  |  |
| Peregrine Falcon  | Falco peregrinus              |             | Т           | SGCN               |  |  |
| Mountain Plover   | Charadrius montanus           |             |             | SGCN               |  |  |
| Western Burrowing Owl   | Athene cunicularia hypugaea   |             |             | SGCN               |  |  |
| Mexican Spotted Owl   | Strix occidentalis lucida     | LT          |             | SGCN               |  |  |
| Common Nighthawk  | Chordeiles minor              |             |             | SGCN               |  |  |
| Lewis's Woodpecker  | Melanerpes lewis              |             |             | SGCN               |  |  |
| Williamson's Sapsucker  | Sphyrapicus thyroideus        |             |             | SGCN               |  |  |
| Pinyon Jay  | Gymnorhinus cyanocephalus     |             |             | SGCN               |  |  |
| Juniper Titmouse  | <u>Baeolophus ridgwayi</u>    |             |             | SGCN               |  |  |
| Pygmy Nuthatch  | Sitta pygmaea                 |             |             | SGCN               |  |  |
| Western Bluebird  | Sialia mexicana               |             |             | SGCN               |  |  |
| Mountain Bluebird   | Sialia currucoides            |             |             | SGCN               |  |  |
| Bendire's Thrasher  | Toxostoma bendirei            |             |             | SGCN               |  |  |
| Sprague's Pipit   | Anthus spragueii              |             |             | SGCN               |  |  |
| Loggerhead Shrike   | Lanius Iudovicianus           |             |             | SGCN               |  |  |
| Grace's Warbler   | Setophaga graciae             |             |             | SGCN               |  |  |
| Black-Chinned Sparrow   | Spizella atrogularis          |             |             | SGCN               |  |  |
| Vesper Sparrow  | Pooecetes gramineus           |             |             | SGCN               |  |  |
| Chestnut-Collared Longspur  | Calcarius ornatus             |             |             | SGCN               |  |  |
| Cassin's Finch  | Haemorhous cassinii           |             |             | SGCN               |  |  |
| Evening Grosbeak  | Coccothraustes vespertinus    |             |             | SGCN               |  |  |
| Spotted Bat   | Euderma maculatum             |             | Т           | SGCN               |  |  |
| Black Bear  | Ursus americanus              |             |             | SERI               |  |  |
| Mountain Lion   | Puma concolor                 |             |             | SERI               |  |  |
| Elk   | Cervus canadensis             |             |             | SERI               |  |  |
| Mule Deer   | Odocoileus hemionus           |             |             | SERI               |  |  |
| Pronghorn   | Antilocapra americana         |             |             | SERI               |  |  |
| Gray-Checkered Whiptail   | Aspidoscelis tesselata        |             | E           | SGCN               |  |  |
| Desert Massasauga   | Sistrurus catenatus edwardsii |             |             | SGCN               |  |  |

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ESA = Endangered Species Act, WCA = Wildlife Conservation Act, SGCN = Species of Greatest Conservation Need, SERI = Species of Economic and Recreational Importance, C = Candidate, E = Endangered, LE = Listed Endangered, LT = Listed Threatened, T = Threatened, XN = Non-essential Experimental Population, for other ESA codes see this website: <u>https://nhnm.unm.edu/node/1378928</u>.



## **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.
- 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 <u>Communication Tower Project Guidelines NMDGF</u> and <u>Recommended Best Practices for Communication Tower</u> <u>Design, Siting, Construction, Operation, Maintenance, and Decommissioning</u> from the U.S. Fish and Wildlife Service for more information.

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 <u>burrowing owl survey protocol</u>. Should burrowing owls be documented in the project area, please contact the Department or USFWS for further recommendations regarding relocation or avoidance of impacts.

Your project could affect important components of wildlife habitat, including fawning/calving or wintering areas for species such as deer and elk, or general high wildlife movement and activity areas for large mammals. Mitigation measures should focus on high use sites and movement areas based on collar data and expert knowledge of Department of Game and Fish and land management agency personnel. Management recommendations within these areas may include the following.

- Restrictions on noise-generating activities during wintering and calving/fawning seasons, specific timing of which may vary throughout the state. These activities would include oil and gas well pad development and operations that expose wildlife to loud noises from drilling, compressors, and pumping stations within 400 feet of the source.
- Modifying fences along high use areas to make them wildlife friendly and facilitate large animal movement.



## **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 <u>New Mexico</u> <u>Endangered Plant Program</u>, 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.