Appendix G: New Mexico Noxious Weeds List

NEW MEXICO DEPARTMENT OF AGRICULTURE
Office of the Director/Secretary
MSC 3189
New Mexico State University
P.O. Box 30005
Las Cruces, NM 88003-8005
Phone: (575) 646-3007

July 2, 2020

MEMORANDUM

TO: General Public

FROM: Director/Secretary Jeff Witte

SUBJECT: New Mexico Noxious Weed List Update

Petitions to add new plant species to the state noxious weed list were solicited and received by the New Mexico Department of Agriculture (NMDA) from Cooperative Weed Management Areas, individuals, agencies and organizations. The petitions were reviewed by the New Mexico Weed List Advisory Committee using ecological, distribution, impact, and legal status criteria within the State of New Mexico and adjoining states.

This list does not include every plant species with the potential to negatively impact the state's environment or economy. Landowners and land managers are encouraged to recognize plant species listed on the federal noxious weed list and other western states' noxious weed lists as potentially having negative impacts and to manage them accordingly.

As required by the Noxious Weed Management Act of 1998, the following plant species *(see attached New Mexico Noxious Weed List)* are designated as noxious weeds to be targeted for control or eradication. Thank you to the Cooperative Weed Management Areas, individuals, agencies and organizations who participated in this process.

attachment: New Mexico Noxious Weed List

IMG/jm/jw

New Mexico Noxious Weed List

Updated June 2020

Class A Species

Class A species are currently not present in New Mexico or have limited distribution. Preventing new infestations of these species and eradicating existing infestations is the highest priority.

Common Name	Scientific Name
Black henbane	*Hyoscyamus niger*
Camelthorn	*Alhagi psuedalhagi*
Canada thistle	*Cirsium arvense*
Dalmation toadflax	*Linaria dalmatica*
Diffuse knapweed	*Centaurea diffusa*
Dyer's woad	*Isatis tinctoria*
Giant salvinia	*Salvinia molesta*
Hoary cress	*Cardaria spp.*
Leafy spurge	*Euphorbia esula*
Oxeye daisy	*Leucanthemum vulgare*
Purple loosestrife	*Lythrum salicaria*
Purple starthistle	*Centaurea calcitrapa*
Ravenna grass	*Saccharum ravennae*
Scentless chamomile	*Matricaria perforata*
Scotch thistle	*Onopordum acanthium*
Spotted knapweed	*Centaurea biebersteinii*
Yellow starthistle	*Centaurea solstitialis*
Yellow toadflax	*Linaria vulgaris*

Class B Species

Class B species are limited to portions of the state. In areas with severe infestations, management should be designed to contain the infestation and stop any further spread.

Common Name	Scientific Name
African rue	*Peganum harmala*
Bull thistle	*Cirsium vulgare*
Chicory	*Cichorium intybus*
Halogeton	*Halogeton glomeratus*
Malta starthistle	*Centaurea melitensis*
Perennial pepperweed	*Lepidium latifolium*
Poison hemlock	*Conium maculatum*
Quackgrass	*Elytrigia repens*
Spiny cocklebur	*Xanthium spinosum*
Teasel	*Dipsacus fullonum*

Class C Species

Class C species are widespread in the state. Management decisions for these species should be determined at the local level, based on feasibility of control and level of infestation.

Common Name	Scientific Name
Cheatgrass	*Bromus tectorum*
Curlyleaf pondweed	*Potamogeton crispus*
Eurasian watermilfoil	*Myriophyllum spicatum*
Giant cane	*Arundo donax*
Hydrilla	*Hydrilla verticllata*
Jointed goatgrass	*Aegilops cylindrica*
Musk thistle	*Carduus nutans*
Parrotfeather	*Myriophyllum aquaticum*
Russian knapweed	*Acroptilon repans*
Russian olive	*Elaeagnus angustifolia*
Saltcedar	*Tamarix spp.*
Siberian elm	*Ulmus pumila*
Tree of heaven	*Ailanthus altissima*

Watch List Species

Watch List species are species of concern in the state. These species have the potential to become problematic. More data is needed to determine if these species should be listed. When these species are encountered, please document their location and contact appropriate authorities.

Common Name	Scientific Name
Buffelgrass	*Pennisetum ciliaris*
Crimson fountaingrass	*Pennisetum setaceum*
Meadow knapweed	*Centaurea pratensis*
Myrtle spurge	*Euphorbia myrsinites*
Pampas grass	*Cortaderia sellonana*
Yellow bluestem	*Bothriochloa ischaemum*

Appendix H: Observed Flora

Common Name	Scientific Name
Agavaceae - Century-plant Family	
Soapweed Yucca	*Yucca glauca*
Asteraceae - Aster Family	
Common Yarrow	*Achillea millefolium*
Pussytoes	*Antennaria sp.*
Big Sagebrush	*Artemisia tridentata*
Ragleaf Bahia	*Bahia dissecta*
Longflower Rabbitbrush	*Chrysothamnus depressus*
Bigelow's Tansyaster	*Dieteria bigelovii*
Rubber Rabbitbrush	*Ericameria nauseosa*
Trailing Fleabane	*Erigeron flagellaris*
Broom Snakeweed	*Gutierrezia sarothrae*
Pingue Rubberweed	*Hymenoxys richardsonii*
Upright Prairie Coneflower	*Ratibida columnifera*
Common Dandelion	*Taraxacum officinale*
Spiny Cocklebur*	*Xanthium spinosum*
Brassicaceae - Mustard Family	
Desert Madwort	*Alyssum desertorum*
Common Peppergrass	*Lepidium densiflorum*
Tall Tumblemustard*	*Sisymbrium altissimum*
Cactaceae - Cactus Family	
Plains Pricklypear	*Opuntia polyacantha*
Chenopodiaceae - Goosefoot Family	
Slender Russian-Thistle	*Salsola collina*
Prickly Russian Thistle	*Salsola tragus*
Convolvulaceae - Morning Glory Family	
Field Bindweed	*Convolvulus arvensis*
Cupressaceae - Cypress Family	
Rocky Mountain Juniper	*Juniperus scopulorum*
Fabaceae - Legume Family	
Medick	*Medicago sp.*
Yellow Sweetclover	*Melilotus officinalis*
Fagaceae - Oak Family	
Gambel oak	*Quercus gambelii*
Malvaceae - Mallow Family	
Scarlet Globemallow	*Sphaeralcea coccinea*
Pinaceae - Pine Family	
Pinyon Pine	*Pinus edulis*
Ponderosa Pine	*Pinus ponderosa*
Poaceae - Grass Family	
Purple Threeawn	*Aristida purpurea*
Blue Grama	*Bouteloua gracilis*
Cheatgrass*	*Bromus tectorum*

Squirreltail	*Elymus elymoides*
Slender Wheat Grass	*Elymus trachycaulus*
Needle-and-thread Grass	*Hesperostipa comata*
curlyleaf muhly	*Muhlenbergia setifolia*
Polemoniaceae - Phlox Family	
Lonleaf Phlox	*Phlox longifolia*
Polygonaceae - Buckwheat Family	
James' Buckwheat	*Eriogonum jamesii*
Rosaceae - Rose Family	
elegant cinquefoil	*Potentilla concinna*
Scrophulariaceae - Figwort Family	
Great Mullein	*Verbascum thapsus*
Parmeliaceae - Lichen-forming Fungi	
Beard Lichen	*Usnea* sp.

*non-native species

Appendix I: Observed Fauna

Common Name	Scientific Name
Insects	
Speckle-winged Rangeland Grasshopper	*Arphia conspersa*
Harvester Ant	*Pogonomyrmex sp.*
Ground squirrel (burrows)	*Spermophilus sp.*
Abert's squirrel	*Sciurus aberti*
Mammals	
Horse	*Equus ferus*
Elk (scat)	*Cervus canadensis*
Mule deer (tracks)	*Odocoileus hemionus*
Pocket gopher	Family Geomyidae
Birds	
Red-tailed Hawk	*Buteo jamaicensis*
Mourning Dove	*Zenaida macroura*
Broad-tailed Hummingbird	*Selasphorus platycercus*
Virginia Warbler	*Rallus limicola*
Northern Flicker	*Colaptes auratus*
Cassin's Kingbird	*Tyrannus vociferans*
Say's Phoebe	*Sayornis saya*
Plumbeous Vireo	*Vireo plumbeus*
Steller's Jay	*Cyanocitta stelleri*
Woodhouse's Scrub-jay	*Aphelocoma woodhouseii*
Common Raven	*Corvus corax*
Mountain Chickadee	*Poecile gambeli*
Bridled Titmouse	*Baeolophus wollweberi*
Bushtit	*Psaltriparus minimus*
White-breasted Nuthatch	*Sitta carolinensis*
Cassin's Finch	*Haemorhous cassinii*
Brewer's Sparrow	*Spizella breweri*
Spotted Towhee	*Pipilo maculatus*
MacGillivray's Warbler	*Geothlypis tolmiei*
Hepatic Tanager	*Piranga flava*
Black-headed Grosbeak	*Pheucticus melanocephalus*

Appendix J: Field Site Visit Notes and Photographs

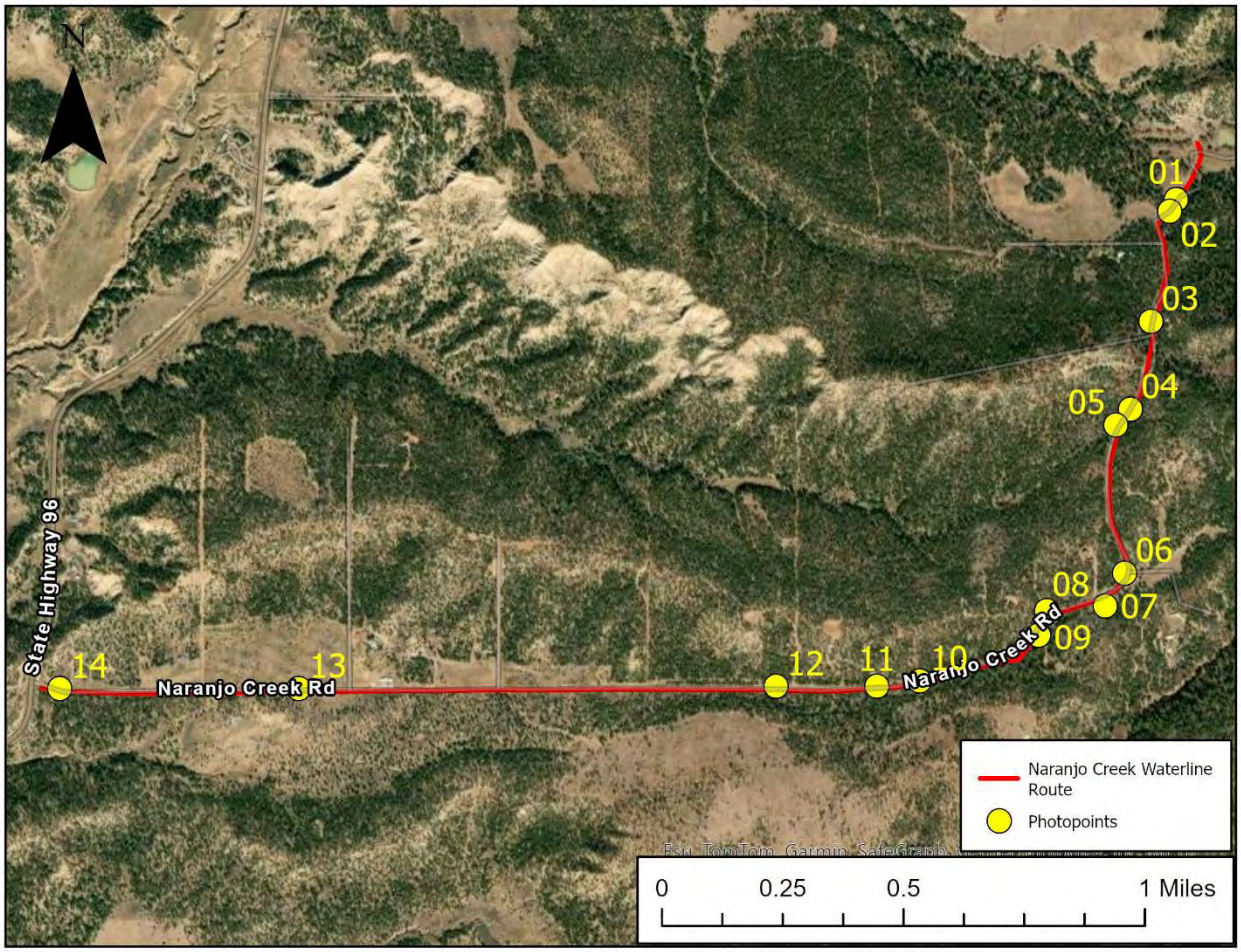
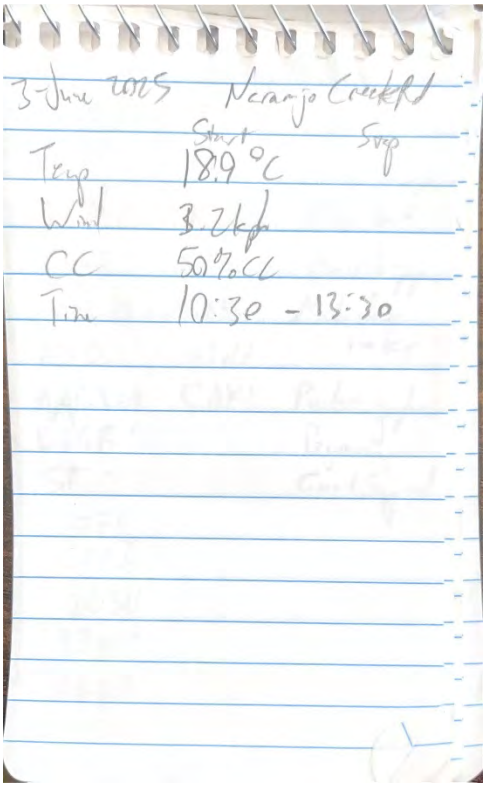
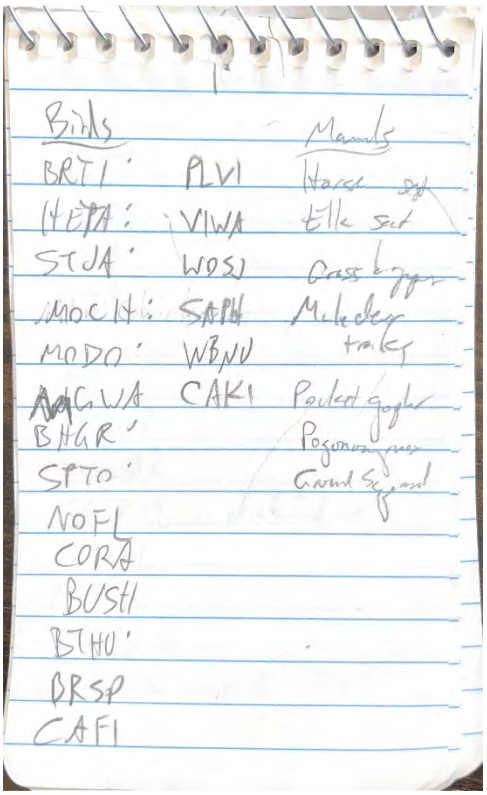


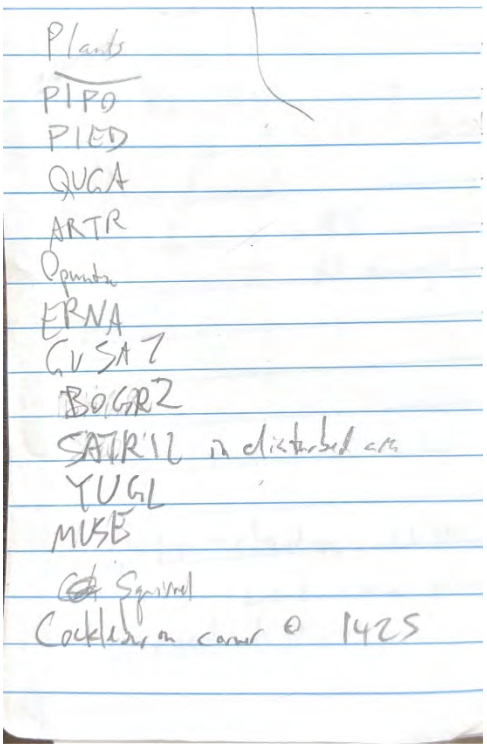
Figure 1. Photopoint locations along the Naranjo Creek Rd waterline improvement project route.

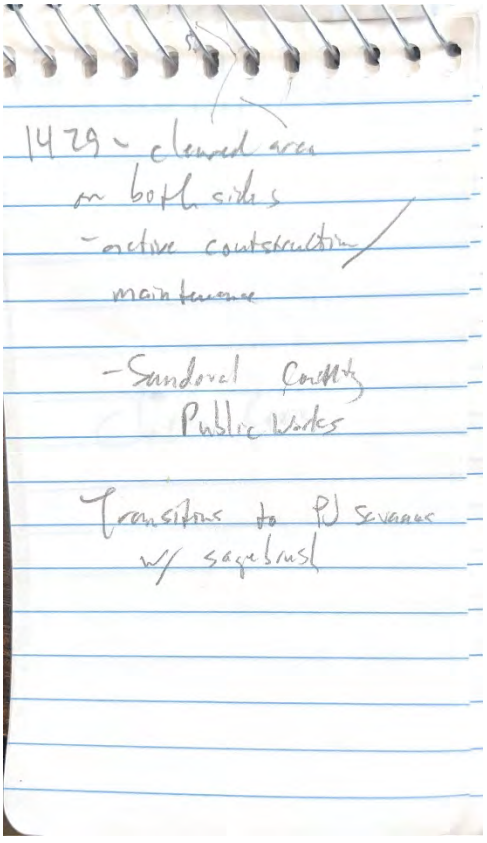
Field notes from the June 3, 2025 project area survey visit.


3-June 2025 Naranjo Creek Rd
Start Stop
Temp 18.9 °C
Wind 3.2 kph
CC 50% CC
Time 10:30 - 13:30


Birds
BRTI · PLVI
HETA: VIWA
STJA · WOSJ
MOCH: SAPH
MODO · WBNU
AGWA CAKI
BHGR ·
SPTO ·
NOFL
CORA
BUSH
BTHU ·
BRSP
CAFI

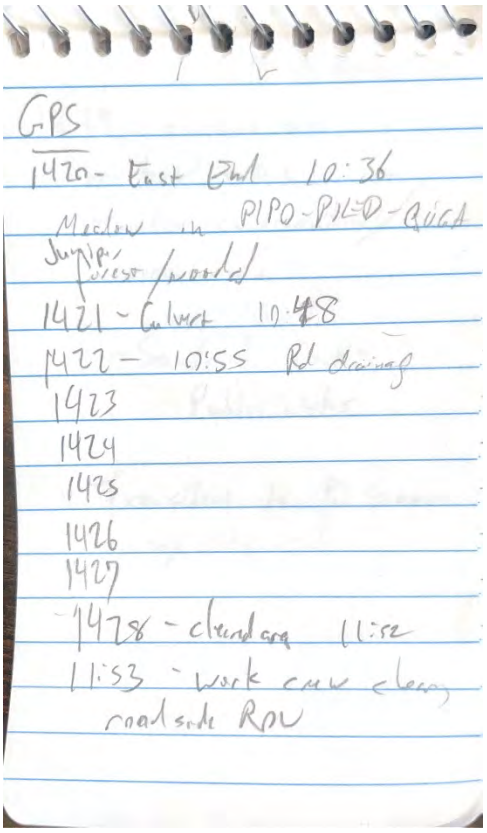
Mammals
Horse sp
Elk sc
Mule deer
tracks
Pocket gopher
Pocket mouse
Ground Squirrel


Plants
PIPO
PIED
QUGA
ARTR
Opuntia
ERNA
GUSA 7
BOGR2
SATR12 in disturbed area
YUGL
MUSE
Squirrel
Cocklebur on corner @ 1425


1429 - cleared area on both sides - active construction/maintenance

- Sandoval County Public Works

Transitions to PJ savannas w/ sagebrush



GPS

1420 - East End 10:36

Meadow in PIPO-PIED-QUGA

Juniper/woodland

1421 - Culvert 10:48

1422 - 10:55 Rd drainage

1423

1424

1425

1426

1427

1428 - clearing 11:52

11:53 - work crew clearing roadside ROW

Photos from the field survey effort

Photo 01-1. Northeastern end of the project route, looking north. A meadow located within ponderosa pine-Gambel's oak-pinon pine-rocky mountain juniper forest and woodland habitat.

Photo 01-2. Northeastern end of the project route, looking south. A meadow located within ponderosa pine-Gambel's oak-pinon pine-rocky mountain juniper forest and woodland habitat.

Photo 03-1. Naranjo Creek Rd waterline route through ponderosa pine-Gambel's oak forest habitat, looking north.

Photo 03-2. Naranjo Creek Rd waterline route through ponderosa pine-Gambel's oak forest habitat, looking west.

Photo 05-1. Pinon-juniper woodland habitat along the Naranjo Creek Rd waterline improvement route.

Photo 05-2. Pinon-juniper woodland habitat along the Naranjo Creek Rd waterline improvement route.

Photo 06-1. Pinon-juniper woodland with scattered big sagebrush understory habitat along the Naranjo Creek Rd waterline improvement route.

Photo 06-2. Pinon-juniper woodland with scattered big sagebrush understory habitat along the Naranjo Creek Rd waterline improvement route.

Photo 07-1. Earthen dam water tank along the south side of the Naranjo Creek Rd waterline improvement project.

Photo 08-1. Open grass/sagebrush area amongst ponderosa pine-pinon-juniper woodland.

Photo 08-2. Open grass/sagebrush area amongst ponderosa pine-pinon-juniper woodland.

Photo 09-1. Ephemeral drainage along the south side of the Naranjo Creek Rd waterline improvement project route.

Photo 09-2. Ephemeral drainage along the south side of the Naranjo Creek Rd waterline improvement project route.

Photo 10-1. Transition to pinon-juniper woodland habitat.

Photo 10-2. Transition to pinon-juniper woodland habitat.

Photo 11-1. Recently cleared roadside right-of-way along Naranjo Creek Rd in pinon-juniper woodland habitat.

Photo 11-2. Recently cleared roadside right-of-way along Naranjo Creek Rd in pinon-juniper woodland habitat.

Photo 12-1. Recently cleared roadside right-of-way along Naranjo Creek Rd in pinon-juniper woodland habitat.

Photo 12-2. Recently cleared roadside right-of-way along Naranjo Creek Rd in pinon-juniper woodland habitat.

Photo 13-1. Actively cleared roadside right-of-way along Naranjo Creek Rd in a mix of pinon-juniper woodland and sagebrush habitats.

Photo 13-2. Actively cleared roadside right-of-way along Naranjo Creek Rd in a mix of pinon-juniper woodland and sagebrush habitats.

Photo 14-1. Western end of the Naranjo Creek Rd waterline improvement project, looking east.

Photo 14-2. Western end of the Naranjo Creek Rd waterline improvement project, looking east.

Appendix K: Information Planning and Consultation Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office
2105 Osuna Road Ne
Albuquerque, NM 87113-1001
Phone: (505) 346-2525 Fax: (505) 346-2542

In Reply Refer To: 05/30/2025 18:54:59 UTC
Project Code: 2025-0103711
Project Name: Naranjo Creek Rd waterline

Subject: List of threatened and endangered species that may occur in your proposed project location 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 as amended (16 USC 701-715), and the Bald and Golden Eagle Protection Act as amended (16 USC 668-668(c)). 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.

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the ESA of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the ESA is to provide a means whereby threatened and endangered species and

the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (NEPA; 42 USC 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf.

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: https://www.emnrd.nm.gov/sfd/rare-plants/

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

In addition to responsibilities to protect threatened and endangered species under the ESA, there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the Service (50 CFR 10.12 and 16 USC 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a Federal nexus) or a Bird/Eagle Conservation Plan (when there is no Federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds. We also recommend review of the Birds of Conservation Concern list (https://www.fws.gov/media/birds-conservation-concern-2021) to fully evaluate the effects to the birds at your site. This list identifies migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent top conservation priorities for the Service, and are potentially threatened by disturbance, habitat impacts, or other project development activities.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 thereby provides additional protection for both migratory birds and migratory bird habitat. Please visit https://www.fws.gov/partner/council-conservation-migratory-birds for information regarding the implementation of Executive Order 13186.

We 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 protected and at-risk species fish, wildlife, and plants.

For further consultation with the Service we recommend submitting inquiries or assessments electronically to our incoming email box at nmesfo@fws.gov, where it will be more promptly routed to the appropriate biologist for review.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New Mexico Ecological Services Field Office
2105 Osuna Road Ne
Albuquerque, NM 87113-1001
(505) 346-2525

PROJECT SUMMARY

Project Code: 2025-0103711
Project Name: Naranjo Creek Rd waterline
Project Type: Wastewater Pipeline - New Constr - Below Ground
Project Description: Waterline along Naranjo Creek.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.1506579,-106.94298249019361,14z

Counties: Sandoval County, New Mexico

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Mexican Wolf *Canis lupus baileyi* Population: Wherever found, except where listed as an experimental population No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3916	Endangered

BIRDS

NAME	STATUS
Mexican Spotted Owl *Strix occidentalis lucida* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8196	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee *Bombus suckleyi* Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885	Proposed Endangered

FLOWERING PLANTS

NAME	STATUS
Knowlton's Cactus *Pediocactus knowltonii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1590	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Charles Britt
Address: 3500 Sedona Hills Parkway
City: Las Cruces
State: NM
Zip: 88001
Email charles.britt@soudermiller.com
Phone: 5756219425

Appendix L: New Mexico Environmental Review Tool Report

PROJECT INFORMATION

Project Title:	Naranjo Creek Rd waterline
Project Type:	WATER MANAGEMENT, WATER DELIVERY (PIPELINES, WATER LINES), WATER LINES-NEW CONSTRUCTION
Latitude/Longitude (DMS):	36.144249 / -106.949349
County(s):	SANDOVAL
Project Description:	2.6 mile waterline along Naranjo Creek Rd.

REQUESTOR INFORMATION

Project Organization:	
Contact Name:	Charles Britt
Email Address:	charles.britt@soudermiller.com
Organization:	Souder, Miller and Associates
Address:	3500 Sedona Hills Parkway, Las Cruces NM 88001
Phone:	5756219425

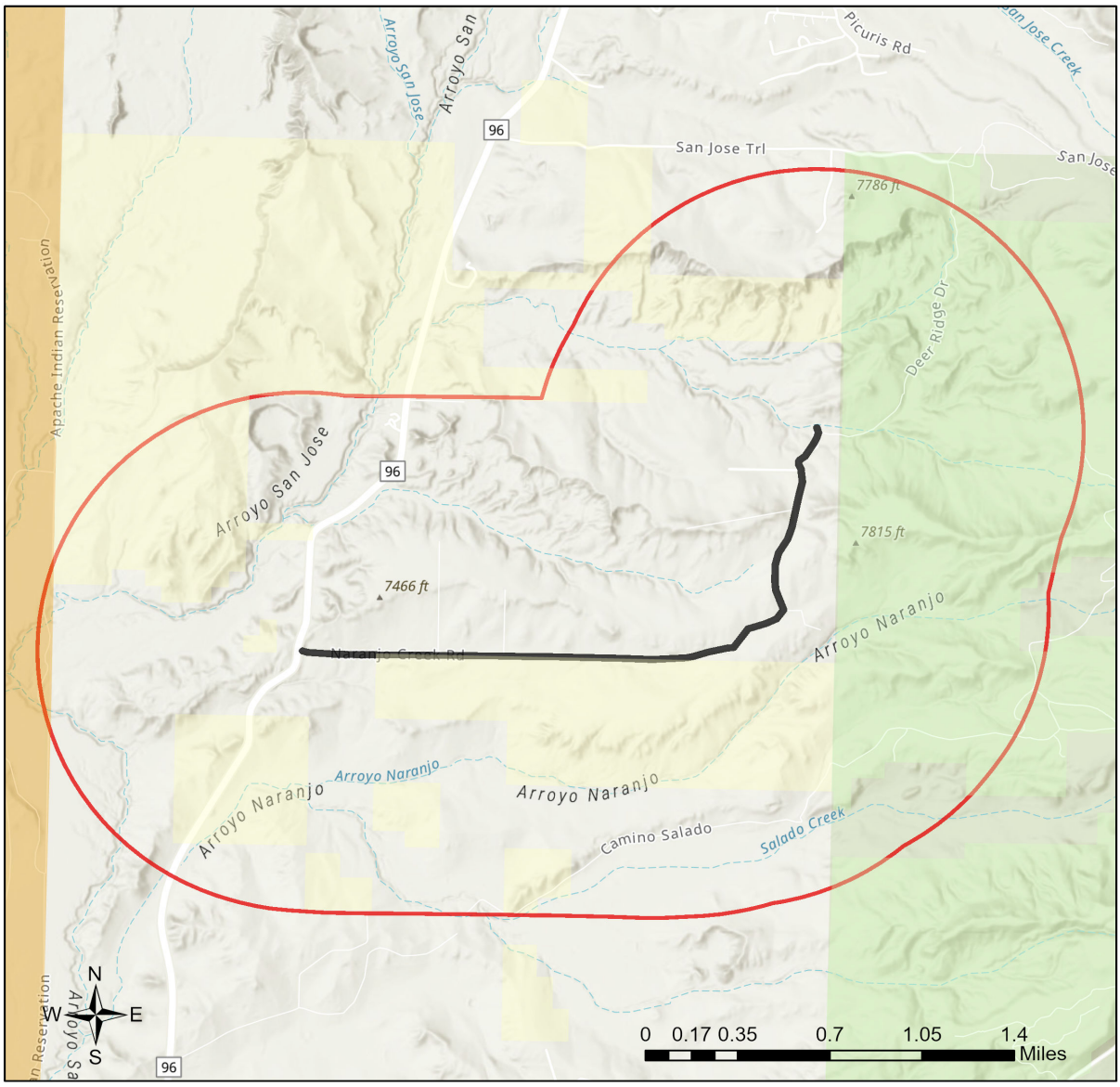
OVERALL STATUS

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.

Naranjo Creek Rd waterline



- Buffered Project Boundary
- Project_Boundary
- Bureau of Land Management
- City Land
- County Land
- Department of Defense
- Department of Energy
- NM Department of Game & Fish
- NM State Forestry Division
- NM State Parks
- National Park Service
- Other Federal Agency
- Other Federal Agency
- State Land Office
- State of New Mexico
- Tribal Land
- U.S. Army Corps of Engineers
- U.S. Bureau of Reclamation
- U.S. Department of Agriculture
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- U.S. Natural Resources Conservation Service

NHNM, USGS, USFS, US Census Bureau, NMDGF
Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, 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
Jemez Mountains Salamander	Plethodon neomexicanus	LE	E	SGCN			
Peregrine Falcon	Falco peregrinus		T	SGCN			BLM WATCH
Mountain Plover	Charadrius montanus			SGCN	Sensitive Species		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			
Black Swift	Cypseloides niger			SGCN		USFS R3 SCC	
Lewis's Woodpecker	Melanerpes lewis			SGCN		USFS R3 SCC	BLM WATCH
Williamson's Sapsucker	Sphyrapicus thyroideus			SGCN			
Olive-Sided Flycatcher	Contopus cooperi			SGCN			
Bank Swallow	Riparia riparia			SGCN			
Pinyon Jay	Gymnorhinus cyanocephalus			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			
Loggerhead Shrike	Lanius ludovicianus			SGCN		USFS R3 SCC	BLM WATCH
Gray Vireo	Vireo vicinior		T	SGCN	Sensitive Species	USFS R3 SCC	BLM WATCH
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

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
Vesper Sparrow	Pooecetes gramineus			SGCN			
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
Gunnison's Prairie Dog	Cynomys gunnisoni			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			

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

Open trenches excavated for underground water or oil and gas pipelines, powerlines, or fiber optic communication lines can unintentionally entrap and cause the unnecessary mortality of amphibians, reptiles, and small mammals, and can cause injury to large mammals. Trapped animals can die from exposure, starvation, crushing from pipe-laying, entombment from trenching backfilling, drowning, and predation. This unnecessary wildlife mortality can be avoided by implementing conservation measures including: concurrent trenching, pipe-laying, and backfilling operations to minimize the amount of trench left open overnight or longer; construction escape ramps; and employing biological monitors to remove trapped animals. Periods of highest activity for amphibians and reptiles vulnerable to entrapment include summer months and wet weather, and they can be active both day and night. Small mammals subject to entrapment are active year-round and generally most active at night.
Implementing the general trenching conservation measures outlined in the Department's Trenching Project Guidelines will help minimize unnecessary mortality of wildlife. Best management practices should include, at minimum, the following mitigation measures.

- Whenever possible, locate trenching activities within previously disturbed areas, such as existing road or pipeline right-of-ways. To the extent possible, avoid trenching in undisturbed habitat.
- Trench during the cooler months (October – March).
- Utilize concurrent trenching, pipe- or cable-laying, and backfilling. Keep trenching, pipe- or cable-laying, and backfilling crews as close together as possible to minimize the amount of open trench at any given time. When trenching activities are temporarily halted (e.g., overnight, weekends, holidays, weather shutdowns), protect wildlife from accessing any open trench between digging and backfilling operations by using one or more of the methods described below.
- Avoid leaving trenches open overnight. When trenches cannot be backfilled immediately, escape ramps should be constructed at least every 90 meters and preferably 30 meters. Escape ramps can be constructed parallel or perpendicular to the existing trench. The escape ramp slope should be less than 45 degrees (1:1). If pipe or cable has been installed but backfilling has not occurred, escape ramps may need to be constructed on both sides of the trench, since, unless the pipe is elevated enough to allow animals to move underneath it, the pipe or cable may block access of amphibians, reptiles, and small mammals to the ramps if only constructed on one side.
- Trenches that have been left open overnight should be inspected the following day by a qualified biological monitor and trapped animals removed as soon as possible, especially where state- or federally-listed threatened or endangered amphibians, reptiles, or small mammals occur. Untrained personnel should not attempt to remove trapped wildlife because of the potential to injure animals and the possibility of injury from venomous snakes. Required tools for removal will include snake tongs for removing snakes and a dip net for capturing and removing amphibians and small mammals. Many animals trapped in a trench will burrow under loose soil. To the extent possible, the biological monitor should disturb loose soil in the trench to uncover and remove trapped animals. Animals should be relocated at least 50 meters away from the open trench in undisturbed habitat.
- When pipe has been laid in the trench, end caps should be placed on the open end(s) of the pipe to preclude animals from entering. Pipe staged outside the trench should be capped until placed in the trench or checked for wildlife before being placed into the trench.
- Most wildlife can be protected by constructing silt fence completely around the open trench. Silt fence should be supported from sagging by t-posts, rebar, or stakes and buried at the base to preclude animals from moving below the fence. If construction of a silt fence is a required best management practice for erosion control, then, to preclude the need for a biological monitor, escape ramps, and concurrent backfilling, the guidelines for silt fence installation and maintenance in the Trenching Project Guidelines should be followed.

Your proposed project activities may require a custom review for assessment of potential effects to wildlife. See the "OVERALL STATUS" section above to determine the likelihood that your project will be reviewed further based on its location. A Department biologist will confirm whether any additional conservation measures are needed. You should expect to receive any additional project recommendations within 30 days of your project submission. If the "OVERALL STATUS" section indicates that no further consultation with the Department is required based on its location, then you will only receive additional project feedback from the Department if a biologist deems it necessary.

It appears that the project area is adjacent to Pueblo/Reservation lands. The Department has no jurisdiction or authority for the wildlife resources on Indian reservations or property. We would recommend that you contact the Pueblo/Reservation regarding general wildlife issues or information they may have.

Your project could affect important components of habitat for large mammals, including important and sensitive seasonal areas, stopover sites, or movement corridors for elk, mule deer, or pronghorn. Mitigation measures should be implemented as appropriate in these high use sites and movement areas that were identified based on data gathered and analyzed by the New Mexico Department of Game and Fish (Department) and partners. Management recommendations within these areas may include the following (as relevant to the proposed project).

- Restrictions on noise-generating activities during wintering and calving/fawning seasons. These seasons are November 15-April 30 for wintering and May 15-June 30 for calving fawning in northern New Mexico; specific timing differs for southern New Mexico. These activities 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.
- Avoid new fence construction where possible and modify unavoidable fences along high use areas to make them wildlife friendly and facilitate large animal movement. Where possible, divide larger fenced sites into smaller fenced areas with movement corridors in between.
- Avoid siting facilities within important habitats such as critical seasonal ranges or parturition sites.
- To minimize surface disturbance, implement directional drilling and co-locate drill holes on a single pad in the least suitable areas for wildlife.
- Avoid construction or development activities during important times, like parturition (May 15 – June 30 in northern New Mexico).
- Where feasible, coordinate with the Department on collection of pre- and post-construction observational or GPS collar data to quantify responses of big game herds to project implementation.

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.

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.