



PROJECT INFORMATION

Project Title: Sugar Sand Bridge Soil Analysis

Project Type: OTHER

Latitude/Longitude (DMS): 32.855490 / -107.298854

County(s): SIERRA

Project Description: The project consists of obtaining soil samples for foundation recommendations and other subgrade recommendations for the bridge and pavement. (See attached for locations.) The soil borings will be advanced vertically using a rubber-tire, truck-mounted CME 75 drilling equipment, using hollow-stem auger drilling techniques (up to the depth of the groundwater table), and mud-rotary drilling techniques (below the groundwater table where applicable) to the planned termination depths, or to a depth of bedrock, whichever occurs first. Should bedrock be encountered more than 5 feet prior to our proposed boring termination depth(s), we will obtain 5-foot runs of rock core every 5 feet to a maximum of 15 feet of penetration into rock. Typical sampling intervals (every 2½ feet within the top 10 feet, and every 5 feet thereafter) are considered applicable to this project. Our exploration team will prepare field logs of soil borings as part of standard drilling operations including sampling depths, penetration distances, and other relevant sampling information. Samples will be obtained while the boring is being advanced by our drilling operations working under the direction of our field engineering staff or his/her representative. The field exploration will also include observations for free or perched groundwater (if encountered). This will occur during the exploration program while the boring is being advanced. No provisions have been made to collect water level data other than the observations made during the advancement of the borings. The borings will be backfilled immediately after their completion with auger cuttings or cement bentonite as required by the state engineer, if groundwater is exposed. The backfilled holes will be patched at the surface with cold (emulsified) asphaltic patch mixture if pavement was penetrated. Excess auger cuttings will be disposed of at the site by spreading them in areas immediately adjacent to each exploration point. No tap water used during mud rotary operations will be discharged in the area. It'll be recycled throughout the operation with a water pump attached to the drill rig. A mud pan will be used to prevent a flood area. When the holes are being backfilled with cement bentonite, the groundwater will be displaced at the surface of the hole but not in excess so as to cause damage away from the hole. The hole will not be more than 10-in in diameter. The project is expected to last 5 business days.

REQUESTOR INFORMATION

Project Organization:

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OVERALL STATUS

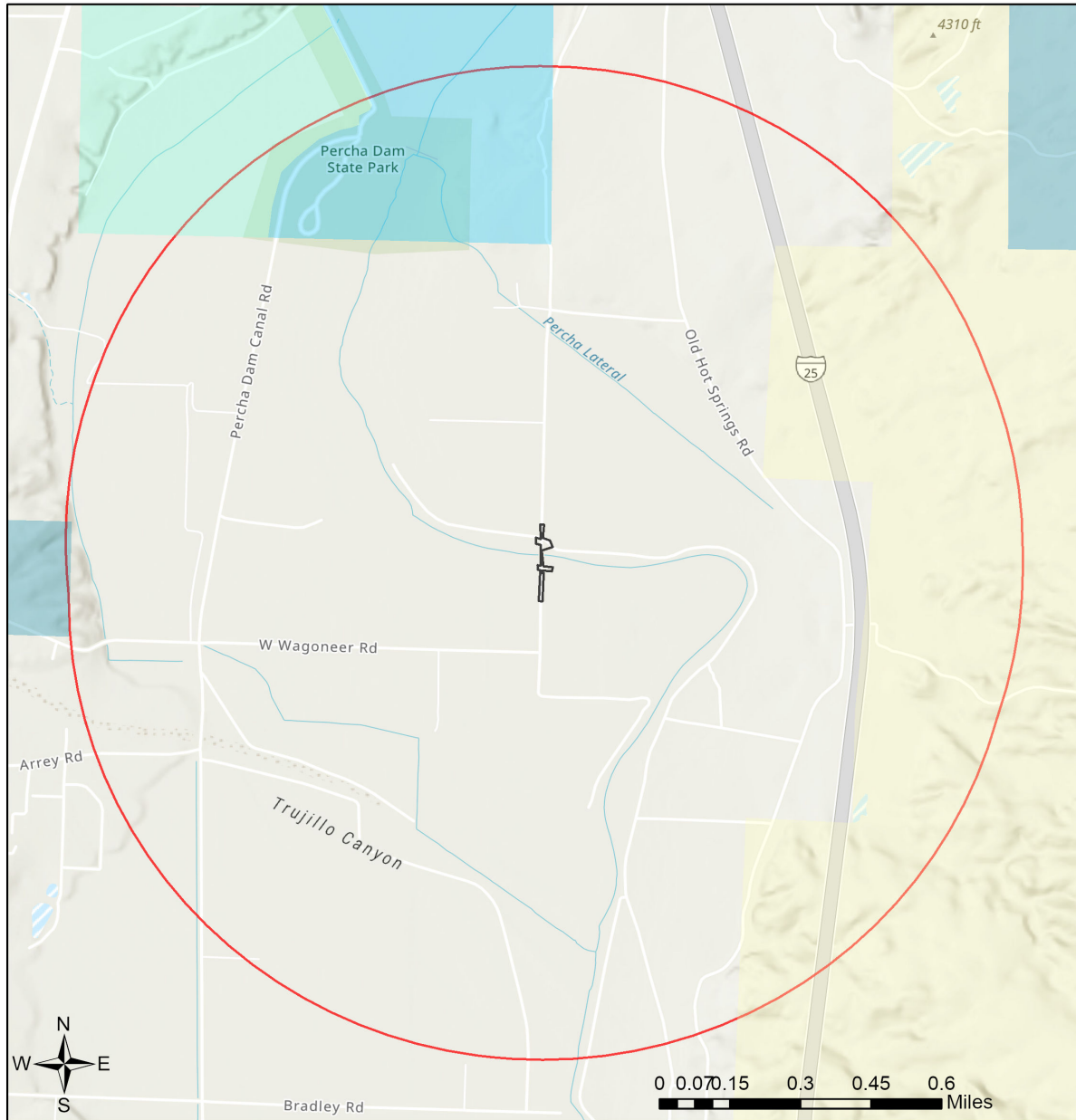
This report contains an initial list of recommendations regarding potential impacts to wildlife or wildlife habitats from the proposed project; see the Project Recommendations section below for further details. Your project proposal is being forwarded to a New Mexico Department of Game and Fish (Department) 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](#).
- 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](#) is the appropriate system for advising early-stage project planning and design to avoid areas of anticipated wildlife concerns and associated regulatory requirements.



Sugar Sand Bridge Soil Analysis



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

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, Geodastysreisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community



Special Status Animal Species Potentially within 1 Miles of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI
Barking Frog	Craugastor augusti			SGCN
Chiricahua Leopard Frog	Lithobates chiricahuensis	LT		SGCN
Northern Leopard Frog	Lithobates pipiens			SGCN
Eared Grebe	Podiceps nigricollis			SGCN
American Bittern	Botaurus lentiginosus			SGCN
Bald Eagle	Haliaeetus leucocephalus		T	SGCN
Common Black-hawk	Buteogallus anthracinus		T	SGCN
Aplomado Falcon	Falco femoralis		E	SGCN
Peregrine Falcon	Falco peregrinus		T	SGCN
American Peregrine Falcon	Falco peregrinus anatum		T	SGCN
Snowy Plover	Charadrius nivosus			SGCN
Long-Billed Curlew	Numenius americanus			SGCN
Yellow-Billed Cuckoo	Coccyzus americanus	LT		SGCN
Elf Owl	Micrathene whitneyi			SGCN
Western Burrowing Owl	Athene cunicularia hypugaea			SGCN
Common Nighthawk	Chordeiles minor			SGCN
Lewis's Woodpecker	Melanerpes lewis			SGCN
Bank Swallow	Riparia riparia			SGCN
Pinyon Jay	Gymnorhinus cyanocephalus			SGCN
Juniper Titmouse	Baeolophus ridgwayi			SGCN
Pygmy Nuthatch	Sitta pygmaea			SGCN
Bendire's Thrasher	Toxostoma bendirei			SGCN
Sprague's Pipit	Anthus spragueii			SGCN
Loggerhead Shrike	Lanius ludovicianus			SGCN
Bell's Vireo	Vireo bellii		T	SGCN
Gray Vireo	Vireo vicinior		T	SGCN
Virginia's Warbler	Oreothlypis virginiae			SGCN
Lucy's Warbler	Oreothlypis luciae			SGCN
Black-Throated Gray Warbler	Setophaga nigrescens			SGCN
Black-chinned Sparrow	Spizella atrogularis evura			SGCN
Vesper Sparrow	Pooecetes gramineus			SGCN
McCown's Longspur	Rhynchophanes mccownii			SGCN
Chestnut-collared Longspur	Calcarius ornatus			SGCN
Spotted Bat	Euderma maculatum		T	SGCN
Pale Townsend's Big-Eared Bat	Corynorhinus townsendii pallescens			SGCN
Mexican Plateau Slider	Trachemys gaigeae			SGCN
Common Checkered Whiptail	Aspidoscelis tessellata		E	SGCN
Plainbelly Water Snake	Nerodia erythrogaster		E	SGCN

**Special Status Animal Species Potentially within 1 Miles of Project Area**

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI
Rock Rattlesnake	Crotalus lepidus			SGCN
Desert Massasauga	Sistrurus catenatus edwardsii			SGCN

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: <https://nhnm.unm.edu/node/1378928>.

Project Recommendations

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.

Burrowing owl (*Athene cunicularia*) may occur within your project area. 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.
- 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 mile 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 New Mexico Department of Game and Fish, who can facilitate contacts with other appropriate personnel.

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](#).



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 [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.