

# Biological Evaluation

## Bridge Replacement

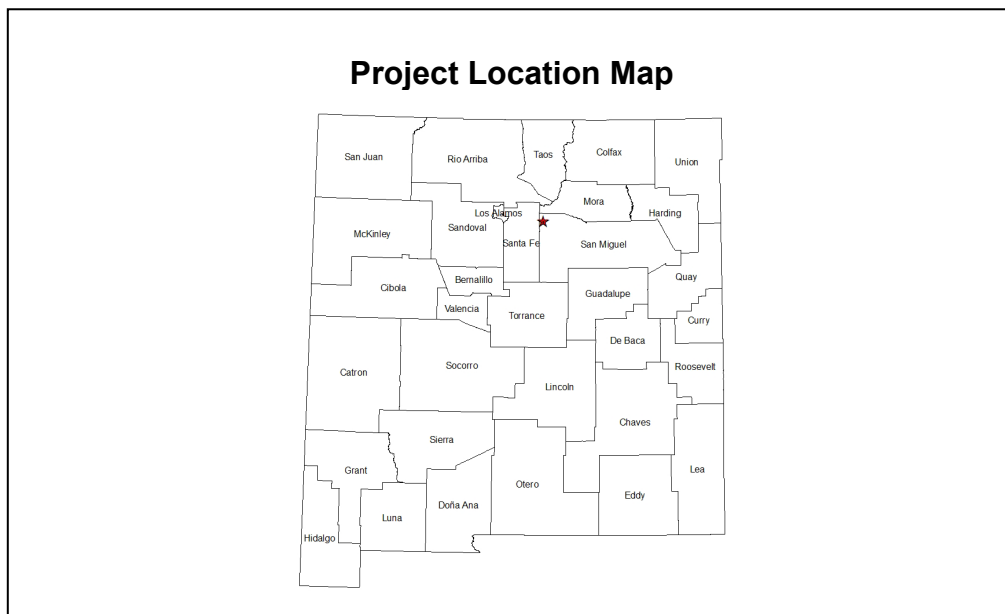
NM 63 MP 21.6 – 22.7

Bridge #3926

San Miguel County - New Mexico

NMDOT District # 4

Control Number 4101410



**New Mexico Department of Transportation  
Environmental Bureau**

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**January 2024**

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## **Introduction**

The New Mexico Department of Transportation (NMDOT) District 4 is proposing a bridge replacement project on NM 63 between MPs 21.6 and 22.7 within San Miguel County, New Mexico (Figure 1). The existing bridge is 57-feet long and 25-feet wide, and spans the Rio Mora that is a tributary to the Pecos River. The driving surface on the bridge is 24-feet wide with no shoulders (2 12-foot driving lanes). The bridge was originally built in 1940 and reconstructed in 1964. The channel concrete girder contains some cracks and spalling. The bridge pier had cracks, spalling and exposed rebar, which was address in 2012 by encasing the pier in concrete. Scour is still being observed at the bridge pier. It is unknown how deep or the conditions of the bridge abutments and piers below ground. Given the unknown conditions of the abutment and pier foundations, and that, this is the only roadway that provides access to residents and recreational sites in the Pecos Canyon, the existing bridge should be replaced.

The project area occurs within the Cowles, New Mexico, USGS 7.5-minute quadrangle map. Specifically, the project occurs at 440,365 E, 3,359,343 N (Universal Transverse Mercator (UTM) coordinates in North American Datum, 1983 (NAD 83)).

The project area is within a prescriptive right-of-way that goes through New Mexico State Game Commission-owned property. A Construction Maintenance Easement (CME) must be established for the current roadway alignment but also the new alignment encompassing the replacement bridge.

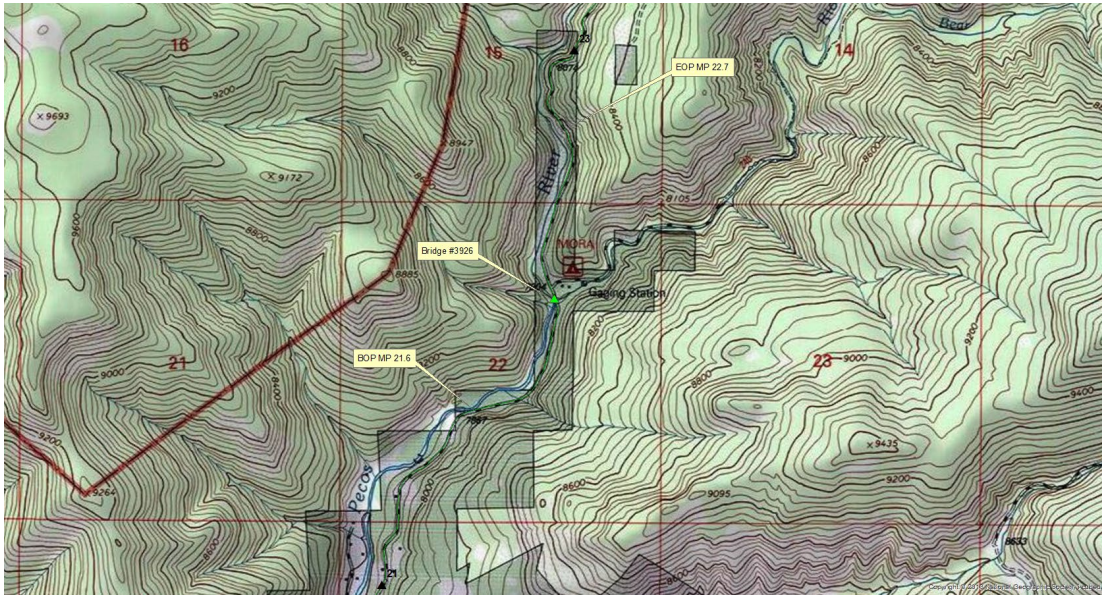


Figure 1: Topographic map showing NM 63 Bridge Replacement Project located within San Miguel County, New Mexico.

### **Purpose and Need**

The purpose of the project is to provide safe and reliable access to the Pecos Canyon. The driving surface on the bridge is 24-foot wide with no shoulders (2 12-foot driving lanes). Residents and recreationists frequently haul horse trailers and travel trailers across the existing bridge. The concrete girder contains some cracks and spalling, and scour is occurring at the bridge pier. It is unknown how deep or the conditions of the bridge abutments and piers below ground. The bridge's below ground condition is questionable and it is functionally deficient because of the lack of shoulders. This is the only roadway that provides access to the Pecos Canyon, which adds to the need for bridge replacement.

### **Project Description**

NMDOT District 4 in partnership with the Federal Highway Administration (FHWA) is proposing to replace bridge #3926 with a longer pre-cast concrete bridge that would completely span the Rio Mora. The new bridge would be constructed on an alignment located east of the current roadway to maintain traffic flow during construction. When new bridge construction is complete the existing bridge and roadway would be completely removed.



Surface water flows would be separated from work areas using non-erodible barriers such as concrete wall barrier, sandbags, steel piles or other materials when the existing bridge is removed. It is anticipated that about a 300 square feet of non-erodible temporary fill would be used to perform this. The contractor shall submit for review and approval a Clean Water Act Compliance Work Plan that would outline a coffer dam detail.

Heavy machinery would be cleaned prior to entering the project area and prior to leaving the area to prevent the spread of noxious weeds.

When construction and removals are complete, disturbed ground would be capped with imported topsoil and be re-seeded per NMDOT's Revegetation Standard Specification. Willow (*Salix sp.*) and Narrowleaf cottonwood (*Populus angustifolia*) cuttings harvested on-site would be planted along disturbed banks of the Rio Mora.

## **Project History**

Bridge #3926 was originally built in 1940. In 1964, the bridge deck and metal barrier were replaced. In addition, miscellaneous work was performed on the bridge abutment and pier caps. Later on, the bridge pier was observed to have cracks, spalling and exposed rebar, which was address in 2012 by encasing the pier in concrete.

## **Action Area**

A 100-foot buffer around bridge #3926 and 100-foot buffer downstream along the Rio Mora to the confluence with the Pecos River, then 400-feet downstream along the Pecos River is defined as the action area. This action area is not within designated or proposed critical habitat for any federally listed species.

## **Methods**

A pedestrian survey was performed within the project area on July 23 and August 26, 2020. Flora and fauna were observed and documented in this report.



## Regulatory Context

*Regulatory laws applicable to the project and Action Area include, but are not limited to:*

- *Endangered Species Act*
- *Migratory Bird Treaty Act*
- *Bald and Golden Eagle Protection Act*
- *Clean Water Act Sections 401, 402 and 404*
- *Executive Order 11988 (Floodplain Management)*
- *Executive Order 11990 (Protection of Wetlands)*
- *New Mexico Wildlife Conservation Act*
- *New Mexico Noxious Weed Management Act*
- *New Mexico Endangered Plant Species Act*

## General Environmental Setting

### Topography, Soils and Climate

The project area occurs at approximately 7,915 feet in elevation above mean sea level (Figure 1), and is located near the confluence of the Rio Mora and Pecos River. This is approximately 3-miles south of Cowles.

The project area encompasses the Morenda-Fiesta-Dula complex, 0 to 35 percent slopes, flooded, and the Etown, moderately deep-Derecho families-Rock outcrop association, 15 to 120 percent slopes (NRCS 2020). The Morenda-Fiesta-Dula complex is primarily a sandy loam or sandy clay loam that is primarily derived from alluvium derived from granite and gneiss. The Etown soil is primarily a very cobbly loam that also contains bedrock and whose parent material is a colluvium derived from sandstone and shale. These soils are not considered prime farmland.

The climate at nearby Cowles, New Mexico has an average annual precipitation of 23.27 inches. Average annual snowfall is 79.2 inches. Average monthly maximum temperatures range from 41.3 °F in January to 76.7°F in July. Average minimum monthly temperatures range from 10.2°F in January to 42.0°F in July with freezing being common from October through May. Most snowfall occurs from December



through March and rainfall usually peaks during July, August and September (Western Regional Climate Summaries 2020).

### **Vegetation Communities**

The project area occurs within the Southern Rockies ecoregion located within southern Colorado and in the Sangre del Cristo Mountains of northern New Mexico (Griffith et al. 2006). This ecoregion mostly contains coniferous forest with deciduous riparian along perennial streams. Upper elevations of this ecoregion are dominated by Douglas-fir (*Pseudotsuga menziesii*) and white fir (*Abies concolor*) with scattered quaking aspen (*Populus tremuloides*).

Coyote willow (*Salix exigua*), bebb's willow (*Salix bebbiana*), shining willow (*Salix lucida*) speckled alder (*Alnus incana*) and narrowleaf cottonwood (*Populus angustifolia*) were observed along the banks of the Rio Mora. Douglas-fir (*Pseudotsuga menziesii*), Ponderosa pine (*Pinus ponderosa*) Common juniper (*Juniperus communus*), and Engleman spruce (*Picea engelmannii*), along with scattered Gambel's oak (*Quercus gambelii*) were some commonly observed in upland areas. State or federally listed plant species were not observed within the project area.

A complete list of plants observed within the project area can be found in Appendix B.

### **Observed Fauna**

An active American dipper (*Cinclus mexicanus*) nest was observed under bridge #3926. Various songbirds and mule deer (*Odocoileus hemionus*) have been observed during field visits and during several incidental drive-through.

### **Waterways and Floodplains**

Bridge #3926 spans the Rio Mora and is within the Pecos Headwaters (Hydrological Unit 13060001). Wetlands and Waters of the US were observed and documented in a separate wetlands delineation report. Approximately 0.02 acres of palustrine emergent (PEM) and 0.29 acres of palustrine scrub-shrub (PSS) wetlands were delineated in the project area.

### **Land Use and Disturbance**





Land within the right-of-way of NM 63 is managed by NMDOT for the purposes of maintaining the roadway. Part of the project area is within the Mora Campground, which is owned by the State Game Commission but is currently managed by State Parks through a Joint Powers Agreement. This agreement allows to State Parks to maintain and improve the campground. This area is heavily utilized by anglers and other recreationists between Memorial Day weekend and Labor Day weekend. Moderate recreational and angler use continues into the fall until cooler temperatures and snowy conditions arrive.

## Listed Species and Critical Habitat Analysis

This section analyzes project impacts on Listed Species and Designated Critical Habitat. The impact analysis includes both the project area and action area; since these areas are both relatively small.

### Critical Habitat Analysis

The proposed project is 3-miles from Designated Critical Habitat for the Mexican spotted owl (*Strix occidentalis lucida*) (Figure 2).

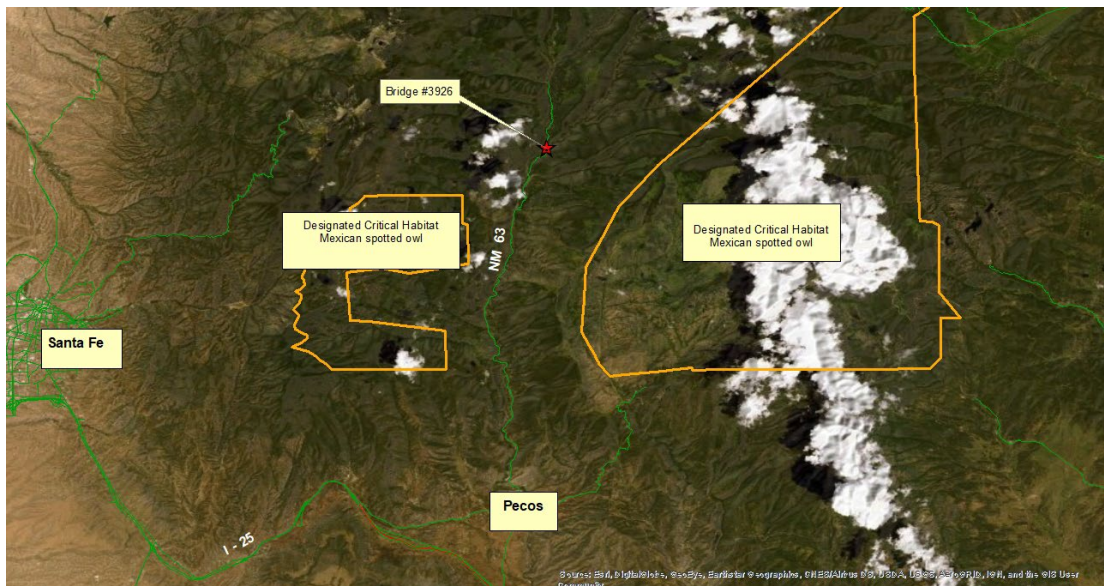


Figure 2: Aerial photo map showing Designated Critical Habitats for Mexican spotted owl in the vicinity of the NM 63 Bridge Replacement Project located within San Miguel County, New Mexico.



## Listed Species Eliminated from Further Consideration

Twelve (12) species were considered in this evaluation based on lists from the US Fish and Wildlife Service, New Mexico Department of Game and Fish, the New Mexico Rare Plant Technical Council and New Mexico State Forestry Endangered Plant List. Nine (9) species were eliminated from consideration based on the location and vegetation occurring within the project area and the environment and location that species are found (Table 1).

**Table 1: Listed Species with No Potential Habitat in the Project Area and/or Action Area and Eliminated From Further Consideration**

Species	Status	Habitat Associations	Rationale for Elimination from Further Consideration
<b>Listed Plants Eliminated From Further Consideration</b>			
Yellow lady's slipper ( <i>Cypripedium parviflorum</i> var. <i>pubescens</i> )	NM Endangered Plant List	Mesic deciduous and coniferous forest, openings, thickets, prairies, meadows and fens.	No suitable habitat and not observed.
Holy Ghost ipomopsis ( <i>Ipomopsis sancti-spiritus</i> )	NM Endangered Plant List; Federal - Endangered	Found only on dry, steep, west to southwest facing slopes within Holy Ghost Canyon.	Project area is outside of Holy Ghost Canyon.
Wood lily ( <i>Lilium philadelphicum</i> var. <i>andinum</i> )	NM Endangered Plant List	Moist woodlands and meadows in mixed conifer forests and canyon bottoms.	No suitable habitat and not observed.
Pecos mariposa lily ( <i>Calochortus gunnisonii</i> var. <i>perpulcher</i> )	NM Rare Plant List	Meadows and aspen glades in upper montane coniferous forests.	No suitable habitat.
Pecos fleabane ( <i>Erigeron subglaber</i> )	NM Rare Plant List	Rocky, open meadows in subalpine coniferous forests.	No suitable habitat.



New Mexico stickseed ( <i>Hackelia hirsute</i> )	NM Rare Plant List	<i>Dry sites of shaley or igneous soils in lower to upper montane coniferous forests.</i>	<i>No suitable habitat.</i>
Listed Fish Eliminated From Further Consideration			
Rio Grande cutthroat trout ( <i>Oncorhynchus clarkia virginalis</i> )	Federal - Candidate	<i>Found in clear, cold headwater streams that do not contain non-native fish.</i>	The Pecos River and Rio Mora contain non-native brown and rainbow trout.
Invertebrates Eliminated From Further Consideration			
NA	NA	NA	NA
Listed Bird Eliminated From Further Consideration			
Southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> )	Federal – Endangered	<i>Breeds and migrates in well vegetated riparian areas.</i>	<i>No suitable habitat.</i>
Listed Mammals Eliminated From Further Consideration			
New Mexico meadow jumping mouse ( <i>Zapus hudsonius luteus</i> )	Federal - Endangered	Found in undisturbed riparian areas that are dominated by native grasses and forbs.	No suitable habitat.

## Listed Species Evaluated Further

**Table 2: Listed Species with the Potential to Occur In the Project Area and/or Action Area**

Species Category	Species	Status	Location of Habitat	Species Present or Absent at Time of Survey within the Survey Area
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<b>Listed Plants</b>	Not Applicable			
<b>Listed Invertebrates</b>	Monarch butterfly ( <i>Danaus plexippus</i> )	Federal - Candidate	Areas that contain milkweed ( <i>Asclepias</i> spp.) and nectar resources.	Absent – Potential foraging habitat but milkweed not detected during field surveys.
<b>Listed Fish</b>				
<b>Listed Amphibians</b>	Not Applicable			
<b>Listed Reptiles</b>	Not Applicable			
<b>Listed Birds</b>	Mexican spotted owl ( <i>Strix occidentalis lucida</i> )	Federal - Threatened		Absent – Foraging habitat is not suitable because of human disturbance from road and campground.
	Peregrine falcon ( <i>Falco peregrinus</i> )	State – Threatened	Breeds in cliffs and hunts aerially in open habitats.	Absent – Potential migration/foraging habitat.
<b>Listed Mammals</b>				

**Mexican Spotted Owl (*Strix occidentalis lucida*) – Federal Threatened**

*Species Ecology/Threats*

The Mexican spotted owl is protected as a federally threatened species with designated critical habitat within New Mexico. The range of the Mexican spotted owl extends from Aguas Calientes, Mexico, through the mountains of Arizona, New Mexico, and western Texas, to the canyons of southern Utah, southwestern Colorado, and the Front Range of central Colorado. The owl occupies a fragmented distribution corresponding to the availability of forested mountains and canyons.



They nest, roost, forage, and disperse in many biotic communities. Nesting habitat is typically located in complex forests or canyons with mature or old-growth stands that are uneven-aged, multi-storied, and have high canopy closure (BISON-M). A variety of trees are used for roosting. However, Douglas fir is the most common (BISON-M). Spotted owls generally use a wider variety of forest conditions (mixed conifer, pine-oak, ponderosa pine, pinyon-juniper) for foraging than for nesting or roosting.

*Data Sources (Including Surveys Conducted)*

Mexican spotted owl survey data and information was obtained from Natural Heritage New Mexico and from the Pecos/Las Vegas Ranger District of the Santa Fe National Forest. Surveys were performed in 2019 1-mile northeast and 2 ½ miles south of the project area with no Mexican spotted owl detections. These surveys were done by Bird Conservancy of the Rockies for the Santa Fe National Forest Office. The surveys done in 2019 were not considered formal protocol surveys. Survey data prior to 2019 obtained from Natural Heritage New Mexico indicated that Mexican spotted owls have never been documented within or adjacent to the project area.

*Affected Habitat Description*

The proposed project area occurs along a popular roadway within a forested campground that is heavily used from Memorial Day weekend through Labor Day weekend. The campground is moderately used through the fall predominately by anglers and big game hunters. No designated critical habitat occurs within or adjacent to the project area. Mexican spotted owls are not known to occur within the vicinity of the project area.

*Finding: Mexican spotted owl*

- No Effect
- May Affect, Not Likely to Adversely Affect
- May Affect, Likely to Adversely Affect

**Monarch Butterfly (*Danaus plexippus*) – Federal Candidate**

*Species Ecology/Threats*

The Monarch butterfly has a global distribution and are well known for their phenomenal long-distance migration in North America. Descendants of these



migratory populations expanded from North America to other areas of the world where milkweed was already present or introduced. Many monarch populations outside of North America are non-migratory because of the year-round presence of milkweed and suitable temperatures (USFWS 2020).

Migratory populations are located east and west of the Rocky Mountains. The western population winters in southern California, while the eastern population overwinters in Mexico. Overwinter populations have been monitored since the mid-1990s with long-term population declines documented.

Major threats to monarchs in North America are: loss and degradation of habitat (conversion of native grasslands to agriculture, widespread use of herbicides, logging/thinning at overwinter sites in Mexico, incompatible management of overwinter sites in California, urban development and drought), exposure to insecticides, and effects of climate change. Conservation efforts that protect or enhance the abundance of milkweed and other nectar resources can help reduce the impacts of these threats.

#### *Affected Habitat Description*

The project area is within the Southern Rockies ecoregion and contains mid-elevation coniferous forest with deciduous riparian along perennial streams (Griffith et. al. 2006). Limited native forbs occur in the project area because of shade within the forested habitat. Trampling from campground visitors could also contribute to the limited forbs in the area. Milkweed was not observed within the project area during an intensive botanical survey that was performed on August 26, 2020.

#### *Analysis of Effects*

The project area may provide migratory habitat for monarchs but isn't suitable breeding habitat because of the lack of milkweed in the area. An intensive flora survey done in 2020 did not document the presence of milkweed. Shade from overstory coniferous trees limit the availability of nectar resources. Disturbed ground within the project area would be revegetated with a seed mix that contains native forbs. Overall, the proposed project would not impact a significant amount of native forbs.

#### *Finding – Monarch Butterfly*

X No effect



\_\_\_ May affect, not likely to adversely affect

\_\_\_ May affect, likely to adversely affect

### **Peregrine falcon (*Falco peregrinus anatum*) – State Threatened**

Peregrine falcons have been observed State-wide and nest on isolated cliffs and canyons (BISON-M). They are fast fliers and commonly take prey while in flight. Foraging habitat is primarily in the open sky over any type of habitat. The proposed project area and adjacent land does not contain cliff habitat. Foraging falcons may incidentally pass over the areas. The proposed project will not impact falcon nesting habitat but activities could temporarily disturb individuals that may incidentally fly over the area.

## **Project Direct Effects Analysis**

A direct effect of an action is defined by the Council on Environmental Quality (CEQ) as: “caused by the action and occur at the same time and place”.

The proposed project would have direct effects to birds, mammals, reptiles and invertebrates. Habitat use would be disrupted from the noise and activity of the project.

The project would not impact or have limited impacts to habitats for various bird species. Construction activities would temporarily disturb individuals if they incidentally pass through the Action Area.

Impacts to vegetation would be temporary and localized. The Contractor would revegetate disturbed ground within the project area per NMDOT’s Revegetation Standard Specifications, and willows and other native vegetation would naturally re-colonize disturbed streamside areas. Willow (*Salix sp.*) and Narrowleaf cottonwood (*Populus angustifolia*) cuttings harvested on-site would be planted along disturbed banks of the Rio Mora.





## Project Indirect Effects Analysis

As defined in the Council on Environmental Quality (CEQ) regulations (40 CFR 1508.8(b)), indirect effects are those caused by the proposed project and either occur later in time or are farther removed in distance but are reasonably foreseeable.

The proposed project is small in scale. Indirect impacts would be minor and temporary since the project would not permanently increase roadway volume or speed and would not create additional long-term impacts to wildlife and plants in the area.

## Recommendations for Avoidance, Minimization, and Mitigation

Mulch socks or other structures would be installed during construction within the project area to minimize the introduction of sediment into the Rio Mora. Project activities within the river channel shall be done during low-flow conditions and work areas within the stream channel shall be separated from surface flows using non-erodible material such as sandbags, concrete wall barriers, steel piles or other materials. A catchment system would be constructed using canvas or other durable non-permeable material to prevent construction debris and materials from entering the river channel. Ground disturbance from project activities shall be minimized. The contractor shall comply with the Clean Water Act including 404 and 401 authorizations and conditions.

Project activities would be performed outside of the migratory bird breeding season. If this is not possible, efforts would be performed to maintain nest-free conditions prior to the commencement of construction. A migratory bird pre-construction nest survey would be performed to ensure that active nests are not impacted.

Willow (*Salix sp.*) and Narrowleaf cottonwood (*Populus angustifolia*) cuttings harvested on-site would be planted along disturbed banks of the Rio Mora.

## Conclusion

Proposed project activities would have temporary impacts on vegetation and wildlife populations. Utilizing recommendations for avoidance and minimization would result





in slight impacts. After completion of the project, native vegetation and habitat would become re-established.

Mexican spotted owl, Monarch butterfly, and Peregrine falcon were evaluated for potential impacts by the proposed project.

The proposed project would have no effect on the Mexican spotted owl and Monarch butterfly. It was also determined that the proposed project would not adversely impact the Peregrine falcon.

## Prepared by:

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## **Appendix A Species Lists**

## IPaC resource list

This resource (collected by jurisdiction) may also

IPaC is experiencing problems with the National Wetlands Inventory map service and you may get an "Unexpected error" dialog if you have that layer displayed or add that layer to your map. We are working on the issue and hope to have it resolved soon.

habitat  
The list  
cially be

directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

### Location

San Miguel County, New Mexico



### Local office

New Mexico Ecological Services Field Office

☎ (505) 346-2525

📅 (505) 346-2542

2105 Osuna Road Ne

Albuquerque, NM 87113-1001

<http://www.fws.gov/southwest/es/NewMexico/>

[http://www.fws.gov/southwest/es/ES\\_Lists\\_Main2.html](http://www.fws.gov/southwest/es/ES_Lists_Main2.html)

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [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.

The following species are potentially affected by activities in this location:

## Mammals

NAME

STATUS

New Mexico Meadow Jumping Mouse *Zapus hudsonius luteus* Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/7965>

## Birds

NAME

STATUS

Mexican Spotted Owl *Strix occidentalis lucida*

Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/8196>

Southwestern Willow Flycatcher *Empidonax traillii extimus*

Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/6749>

## Fishes

NAME

STATUS

Rio Grande Cutthroat Trout *Oncorhynchus clarkii virginalis*

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/920>

## Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

## Flowering Plants

NAME

STATUS

Holy Ghost Ipomopsis *Ipomopsis sancti-spiritus*

Endangered

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/8231>

# Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Evening Grosbeak *Coccothraustes vespertinus*

Breeds May 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Virginia's Warbler *Vermivora virginiae*

Breeds May 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9441>

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any



week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

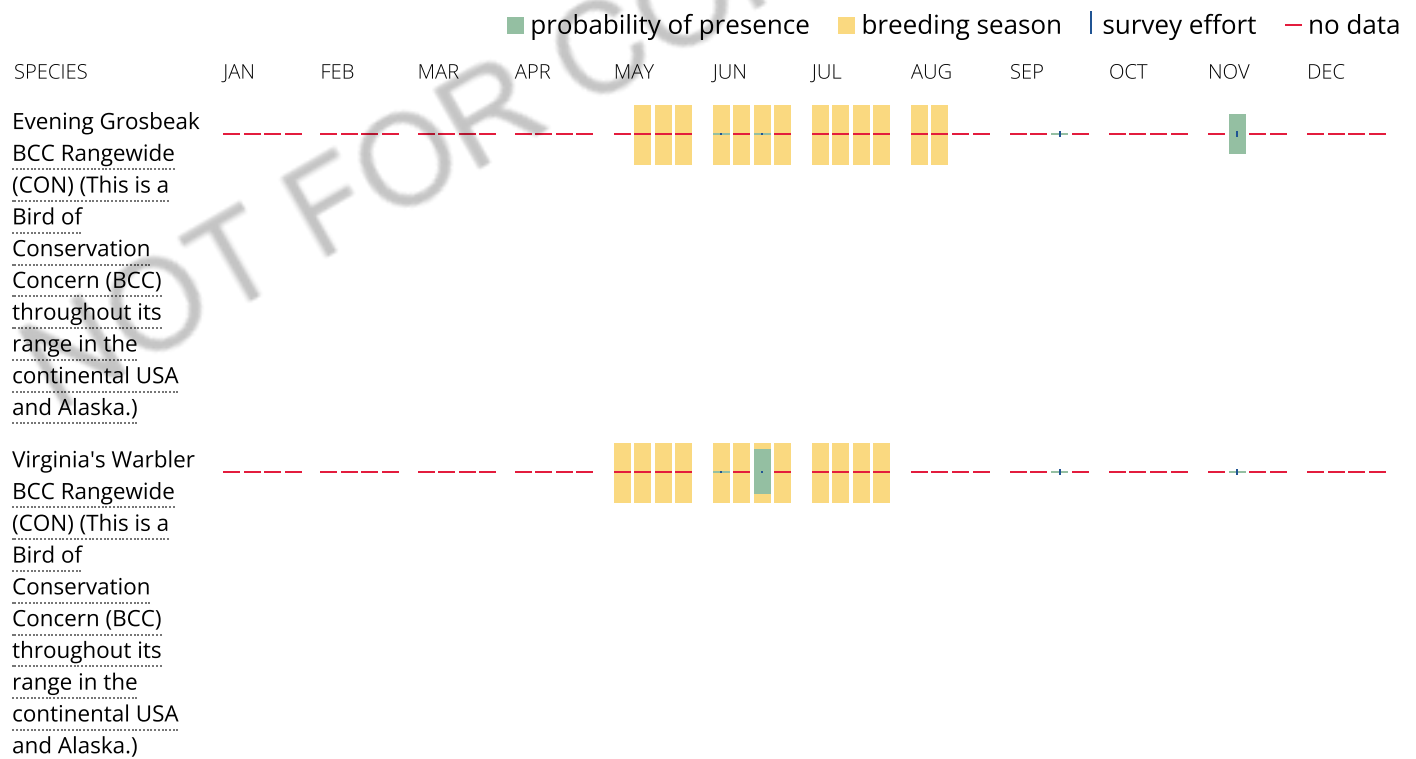
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and

avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### **What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird

impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

# Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal,

state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



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## PROJECT INFORMATION

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**Project Title:** NM 63 Bridge Replacement Project  
**Project Type:** TRANSPORTATION, ROADS AND BRIDGES, ROADS AND BRIDGES-NEW CONSTRUCTION OR MAJOR EXPANSION/RETROFIT  
**Latitude/Longitude (DMS):** 35.775589 / -105.659687  
**County(s):** SAN MIGUEL  
**Project Description:** A new Pre-Cast Concrete girder bridge that is 75-feet long and fully span the Rio Mora would be constructed just east (upstream) of an existing bridge. The existing bridge including the center pier and roadway approaches would be removed after new bridge construction is complete. This project is currently scheduled to be implemented in 2023 and would likely be built during the snow-free time of year.

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## REQUESTOR INFORMATION

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**Project Organization:**  
**Contact Name:** James Hirsch  
**Email Address:** james.hirsch@state.nm.us  
**Organization:** New Mexico Dept. of Transportation  
**Address:** 1120 Cerrillos Road, Room 206, Santa Fe NM 87505  
**Phone:** 505-469-5535

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## OVERALL STATUS

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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.



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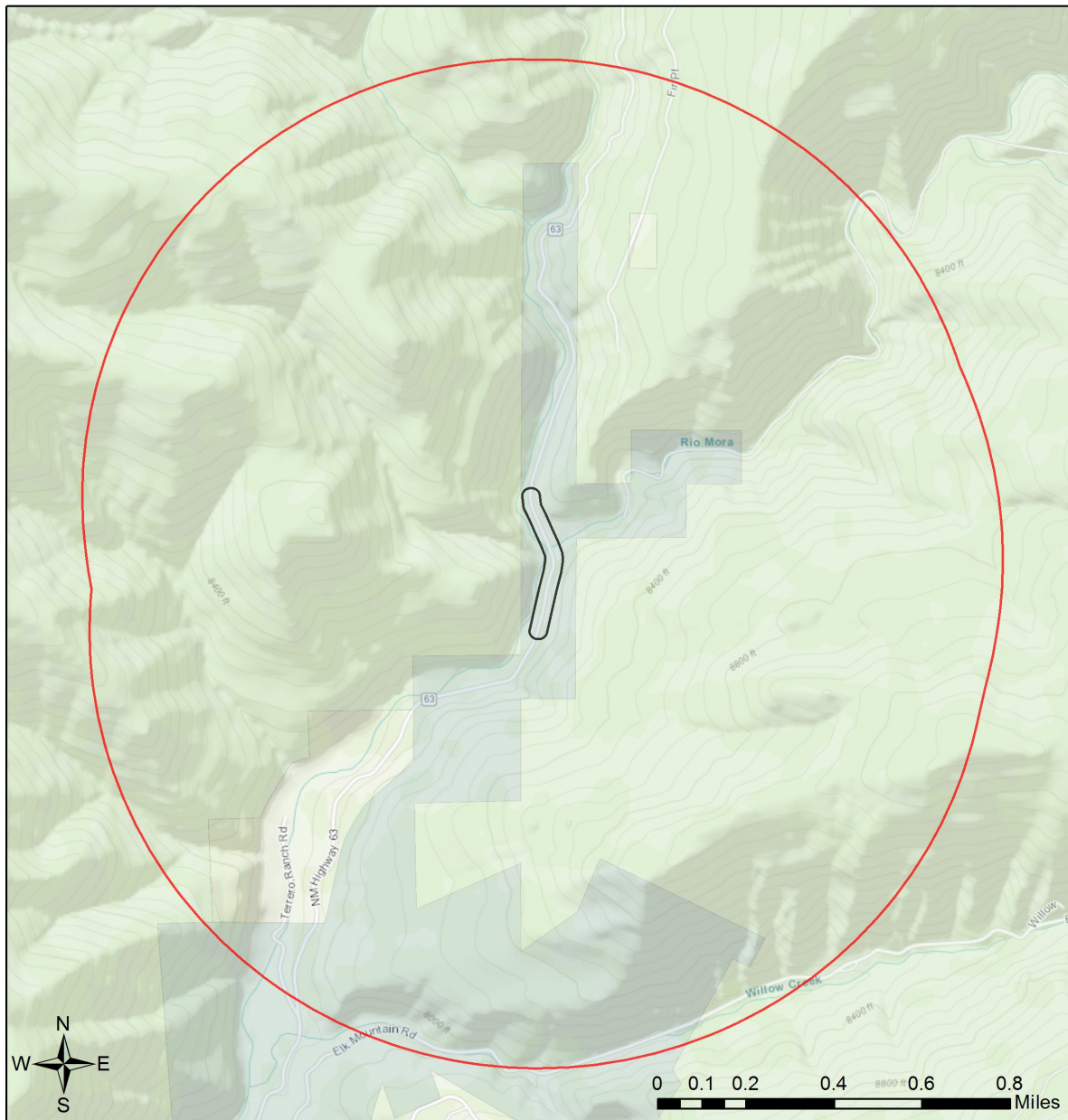
**About this report:**

- 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 distribution models, both of which are subject to ongoing change and refinement. Inclusion or omission of a species within a report can not guarantee species presence or absence at a precise point location, as might be indicated through comprehensive biological surveys. Specific questions regarding the potential for adverse impacts to vulnerable wildlife populations or habitats, especially in areas with a limited history of biological surveys, may require further on-site assessments.
- 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.





## NM 63 Bridge Replacement Project



- |                                 |                      |                      |
|---------------------------------|----------------------|----------------------|
| Project Boundary                | Military             | Private              |
| Buffered Project Boundary       | Dept. of Energy      | State Land Office    |
| <b>NM_SurfaceOwnership_2016</b> |                      |                      |
| Bureau of Land Management       | US Forest Service    | NM Game & Fish Dept. |
| Bureau of Reclamation           | Wildlife Area/Refuge | State Park           |
| US Dept. of Agriculture         | Tribal               |                      |
|                                 | National Park/Mon.   |                      |

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community





### Special Status Animal Species within 1 Miles of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI
<a href="#">Northern Leopard Frog</a>	<a href="#">Lithobates pipiens</a>			SGCN
<a href="#">Peregrine Falcon</a>	<a href="#">Falco peregrinus</a>		T	SGCN
<a href="#">Mountain Plover</a>	<a href="#">Charadrius montanus</a>			SGCN
<a href="#">Lewis's Woodpecker</a>	<a href="#">Melanerpes lewis</a>			SGCN
<a href="#">Red-Headed Woodpecker</a>	<a href="#">Melanerpes erythrocephalus</a>			SGCN
<a href="#">Williamson's Sapsucker</a>	<a href="#">Sphyrapicus thyroideus</a>			SGCN
<a href="#">Olive-Sided Flycatcher</a>	<a href="#">Contopus cooperi</a>			SGCN
<a href="#">Bank Swallow</a>	<a href="#">Riparia riparia</a>			SGCN
<a href="#">Pinyon Jay</a>	<a href="#">Gymnorhinus cyanocephalus</a>			SGCN
<a href="#">Clark's Nutcracker</a>	<a href="#">Nucifraga columbiana</a>			SGCN
<a href="#">Juniper Titmouse</a>	<a href="#">Baeolophus ridgwayi</a>			SGCN
<a href="#">Pygmy Nuthatch</a>	<a href="#">Sitta pygmaea</a>			SGCN
<a href="#">Western Bluebird</a>	<a href="#">Sialia mexicana</a>			SGCN
<a href="#">Loggerhead Shrike</a>	<a href="#">Lanius ludovicianus</a>			SGCN
<a href="#">Brown-Capped Rosy-Finch</a>	<a href="#">Leucosticte australis</a>			SGCN
<a href="#">Brown Trout</a>	<a href="#">Salmo trutta</a>			SERI
<a href="#">Gunnison's Prairie Dog</a>	<a href="#">Cynomys gunnisoni</a>			SGCN
<a href="#">Black Bear</a>	<a href="#">Ursus americanus</a>			SERI
<a href="#">Cougar</a>	<a href="#">Puma concolor</a>			SERI
<a href="#">Elk</a>	<a href="#">Cervus canadensis nelsoni</a>			SERI
<a href="#">Mule Deer</a>	<a href="#">Odocoileus hemionus</a>			SERI

ESA = Endangered Species Act, WCA = Wildlife Conservation Act, SGCN = Species of Greatest Conservation Need, SERI = Species of Economic and Recreational Importance

### Project Recommendations

Since the proposed highway project includes bridge or road construction activities, the Department recommends implementation of its [Bridge and Road Reconstruction Guidelines for Wetland and Riparian Areas](#) for any rivers, streams, washes, springs, seeps, or riparian areas that are fall within the impact footprint of this project. These guidelines should assist in minimizing impacts to the river or wetland, and should be incorporated into the standard best management practices for these types of construction activities.

The Department also recommends that preconstruction bat surveys be conducted during summer months to determine if bats occur are present, and if they are determined to occur at bridge sites, work be scheduled to avoid impacting bats that may roost there (i.e., conduct work in winter months).

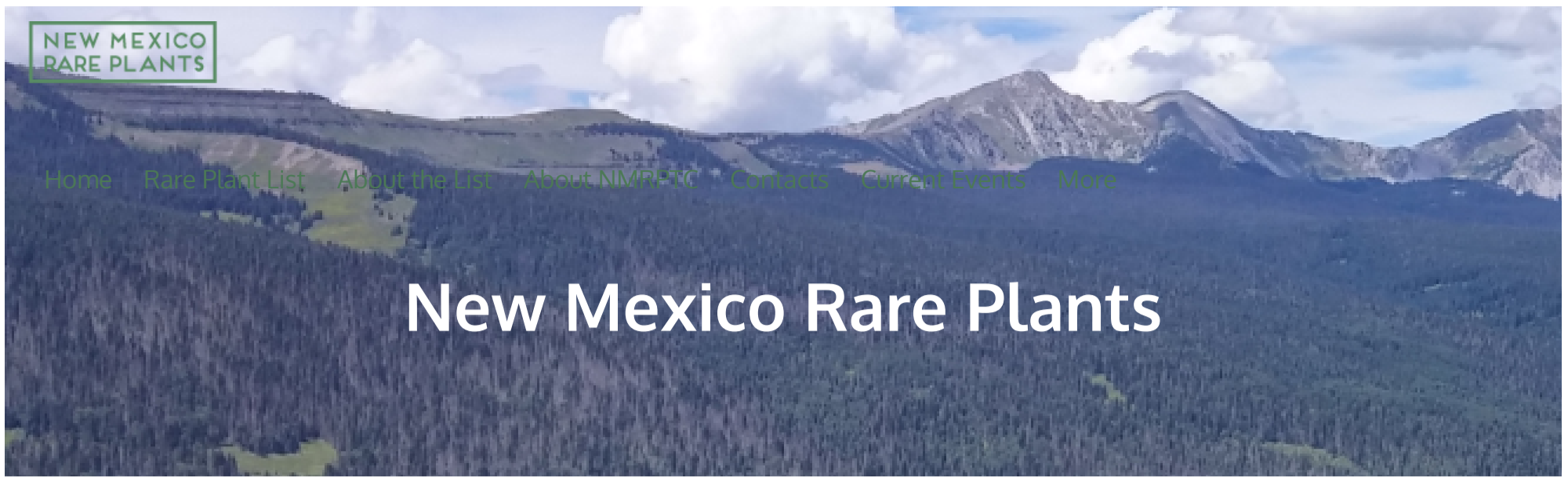
The proposed project occurs within or near a riparian area. Because riparian areas are important wildlife habitats, the project footprint should avoid removing any riparian vegetation or creating ground disturbance either directly within or affecting the riparian area. If your project involves removal 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](#).



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**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 may also be necessary under the federal ESA or National Environmental Policy Act (NEPA). Further site-specific recommendations may be proposed during ESA and/or NEPA analyses, or through coordination with affected federal agencies.



## Rare Plant List

### Search Parameters:

This search is not limited by plant name

Counties: SAN MIGUEL

Is on the Rare Plant Technical Council List

Results found: 4

Export CSV	Modify Search								
Scientific Name	NMRPTC	FWS	State of NM	USFS	BLM	Navajo Nation	State Rank	Global Rank	Counties
<a href="#">Calochortus gunnisonii var. perpulcher</a>	R			SEN			S4?	G5T4?	COLFAX,MORA,SAN MIGUEL
<a href="#">Erigeron subglaber</a>	R			SEN			S1	G1	MORA,SAN MIGUEL
<a href="#">Hackelia hirsuta</a>	R						S4	G4	COLFAX,MORA,RIO ARRIBA,SAN MIGUEL,SANTA FE,TAOS,UNION
<a href="#">Ipomopsis sancti-spiritus</a>	R	E	E				S1	G1	SAN MIGUEL

Click on any name in the list below or type any portion of the scientific or common name into the search box. The search uses wild cards before and after your terms, so for example, typing "vetch" (without the quotation marks) into the search box will bring up all records with vetch in either the scientific or common name. The search also allows for the use of the % and \_ wild cards with the same behavior as a SQL LIKE clause

*Note: This search function includes synonyms of scientific names. If you are familiar with a New Mexico rare plant under a certain scientific name, but do not see it in the list, try typing in the name you know, or any portion of it, to see if its nomenclature has been updated (e.g., Lesquerella aurea is now Physaria aurea).*

[Click here for more information about the list.](#)

### Scientific Name

### Common Name

**2. Allium gooddingii**



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**3. Astragalus humillimus**



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**4. Cypridium parviflorum var. pubescens**



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**5. Erigeron rhizomatus**



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**6. Pediocactus knowltonii**



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**7. Puccinellia parishii**



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**8. Sclerocactus cloverae**



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**9. Sclerocactus mesae-verdae**



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## **San Miguel**

**1. Cypridium parviflorum var. pubescens**



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**2. Ipomopsis sancti-spiritus**



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**3. Lilium philadelphicum**



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## **Santa Fe**

## **Appendix B Observed Flora**

Common Name	Scientific Name	Comments
White fir	<i>Abies concolor</i>	
Rocky Mountain maple	<i>Acer glabrum</i>	
Columbian monkshood	<i>Aconitum columbianum</i>	
Roadside agrimony	<i>Agrimonia striata</i>	
Creeping bentgrass	<i>Agrostis stolonifera</i>	
Grey alder	<i>Alnus incana</i>	
Powell's amaranth	<i>Amaranthus powellii</i>	
Flatspine bur ragweed	<i>Ambrosia acanthicarpa</i>	
Prairie sage	<i>Artemisia fraserioides</i>	
Colorado barberry	<i>Berberis fendleri</i>	
Blue grama	<i>Bouteloua gracilis</i>	
Cheatgrass	<i>Bromus sp.</i>	
Sedge	<i>Carex sp.</i>	
Alderleaf mountain mahogany	<i>Cercocarpus montanus</i>	
White goosefoot	<i>Chenopodium album</i>	
Spotted cowbane	<i>Cicuta maculata</i>	
Canada thistle	<i>Cirsium arvense</i>	Class A Noxious Weed
Horseweed	<i>Conyza canadensis</i>	
Red osier dogwood	<i>Cornus stolonifera</i>	
Cat grass	<i>Dactylis glomerata</i>	
Fringed willowherb	<i>Epilobium watsonii</i>	
Field horsetail	<i>Equisetum arvense</i>	
Fescue	<i>Festuca sp</i>	
Pineywoods geranium	<i>Geranium caespitosa</i>	
Fowl mannagrass	<i>Glyceria striata</i>	
Cow parsnip	<i>Heracleum maximum</i>	
Golden-aster	<i>Heterotheca villosa</i>	
Newberry's hymenopappus	<i>Humenopappus newberryi</i>	
Common hop	<i>Humulus lupus</i>	
Scarlet gilia	<i>Ipomopsis aggregate</i>	
Rush	<i>Juncus sp.</i>	
Common juniper	<i>Juniperus communus</i>	
Pea	<i>Lathyrus sp</i>	
Twinberry honeysuckle	<i>Lonicera involucrate</i>	
Black medic	<i>Medicago lupulina</i>	
Yellow sweet clover	<i>Melilotus officinalis</i>	
Hooker's evening primrose	<i>Oenothera hookeri</i>	
Violet wood-sorrel	<i>Oxalis violaceae</i>	
Western wheatgrass	<i>Pascopyrum smithii</i>	
Beardlip penstemon	<i>Penstemmon barbatus</i>	
Penstemon	<i>Penstemmon sp</i>	
Timothy	<i>Phleum pretense</i>	
Mountain ninebark	<i>Physocarpus monogynus</i>	

Engelman spruce	<i>Picea engelmannii</i>	
Ponderosa pine	<i>Pinus ponderosa</i>	
Ribwort plantain	<i>Plantago lanceolata</i>	
Kentucky bluegrass	<i>Poa pratensis</i>	
Common knotweed	<i>Polygonum arenastrum</i>	
Narrowleaf cottonwood	<i>Populus angustifolia</i>	
Slender cinquefoil	<i>Potentilla gracilis</i>	
Douglas-fir	<i>Pseudotsuga menziesii</i>	
Gambel's oak	<i>Quercus gambelii</i>	
Currant	<i>Ribes sp</i>	
Rose	<i>Rosa sp</i>	
American red raspberry	<i>Rubus idaeus</i>	
Cutleaf coneflower	<i>Rudbeckia laciniata</i>	
Curly dock	<i>Rumex crispus</i>	
Bebb's willow	<i>Salix bebbiana</i>	
Coyote willow	<i>Salix exigua</i>	
Shining willow	<i>Salix lucida</i>	
Star-flowered lily-of-the-valley	<i>Smilacina stellata</i>	
Mt. Albert goldenrod	<i>Solidago simplex</i>	
White prairie aster	<i>Symphoricarum falcatum</i>	
Common dandelion	<i>Taraxacum officinale</i>	
Fendler's meadow-rue	<i>Thalictrum fendleri</i>	
Mountain goldenbanner	<i>Thermopsis montana</i>	
Yellow salsify	<i>Tragopogon dubius</i>	
Great mullein	<i>Verbascum thapsus</i>	
MacDougal verbena	<i>Verbena macdougalii</i>	
Canada violet	<i>Viola canadensis</i>	
Rough cocklebur	<i>Xanthium strumarium</i>	