

FINAL
Environmental Assessment

Pueblo of Pojoaque
Tribal Administration Building
Santa Fe, New Mexico



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**Environmental Assessment
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*This Environmental Assessment (EA) was prepared by Souder, Miller & Associates as per
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1.0 PURPOSE AND NEED OF PROPOSAL

This Environmental Assessment (EA) is prepared in accordance with the NEPA Council on Environmental Quality (CEQ) issued regulations (40 CFR 1500–1508) establishing a standard environmental impact assessment and review process for the federal government. This EA has been developed following the National Environmental Policy Act of 1969 (NEPA), to assist the Pueblo of Pojoaque to comply with 42 U.S.C. § 4371 et. seq., and all applicable federal regulations.

The Pueblo was awarded, through the State of New Mexico, a grant under the Indian Affairs Department to plan construction of a New Tribal Administration Building.

This Environmental Assessment (EA) has been developed following the National Environmental Policy Act of 1969 (NEPA). Souder, Miller & Associates (SMA) met with Tribal staff at the Pueblo of Pojoaque and obtained existing information about the Project.

The scope of the EA includes the following components:

- Purpose and Need of the Project
- Proposed Action and Alternatives
- Affected Environment (at a minimum, for the Proposed Action and the No Action Alternative)
- Mitigation Measures, if necessary
- Work with the Pueblo of Pojoaque THPO officer on Cultural Resources Survey and Biological Assessment
- Compliance of Section 106 of the National Historic Preservation Act with assistance from the Pueblo of Pojoaque THPO officer
- Environmental Consequences (at a minimum, for the Proposed Action and the No Action Alternative)
- Provide public Notice of Availability for Public Review and Comment and respond to all public and agency comments
- List of Agencies Contacted
- References
- List of Preparers
- Figures, Tables, and Appendices

The purpose of this report is to evaluate the project and potential impacts on environmental conditions for the proposed housing development project on Rodeo Drive.

1.1 Project Description

The Pueblo of Pojoaque is seeking to expand on the current Tribal Administration Building which will become the Tribal Officials' Office. A new Tribal Administration Building has been proposed to be constructed across the street, south of the current structure. Currently the construction site is comprised of a fenced-in basketball court and a grass field. The project site is located in Santa Fe County, New Mexico on the Pueblo of Pojoaque. The physical address of

the building is 39 Camino Del Rincon, Santa Fe, NM 87506.

The proposed project consists of expansion and renovation of the existing Tribal Administration Building structure (future Tribal Officials' Office) and construction of a new Tribal Administration Building, as shown in Figure 1 (Appendix A). SMA performed an environmental review for the proposed project in compliance with the National Environmental Policy Act of 1969 (NEPA).

1.2 Purpose and Need of the Project

The project is intended to provide the necessary renovations to the existing structure to offer improved accommodations for the Tribal Officials' Office. Additionally, there is a need for a new Tribal Administration Building to support the growth and expansion of the Pueblo of Pojoaque and to best provide effective management of all services to the community.

2.0 ALTERNATIVES TO THE PROPOSED ACTION

Alternatives to the proposed action are described in this section.

2.1 Proposed Action – Construction of Tribal Administrative Building

The proposed action is the construction of the new Tribal Administrative Building as described in Section 1 of this report.

2.1 Alternative #1 – No Action

Alternative #1 includes No Action. Under the No Action alternative, the existing building would continue to be utilized for all Tribal Administration operations. No action would result in limited space and resources for the Tribal Official's to be as efficient and effective as possible in providing necessary services to the Pueblo of Pojoaque.

The No Action alternative was not considered further.

2.2 Other Alternatives Considered

Currently, there are no other alternatives under consideration.

3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES

The project site is located within Santa Fe County, New Mexico on the Pueblo of Pojoaque, approximately 0.35 miles east-northeast of the intersection of Santa Fe Highway and Los Alamos Highway. The project location is in a vacant field within a sparsely populated community. The property to the north includes the existing current Tribal Administration Building and the Our Lady of Guadalupe Cemetery. The Cities of Gold Casino is located 0.30 miles southwest, and to the east is a small residential area.

The Figure 1 (Appendix A) includes a site topographic map on the United States Geologic Survey (USGS) Pueblo of Pojoaque, Espanola Quadrangle map. Figure 2 (Appendix A) illustrates the area of potential effect (APE). The APE is the geographic extent of anticipated impacts of the proposed project.

Environmental impacts that may result from the Proposed Action are evaluated below, including the affected environment, environmental consequences, and mitigation measures to reduce potential impacts.

3.1 Land Use, Important Farmland, Formally Classified Lands

3.1.1 Affected Environment

Land Use

Santa Fe County is one of three counties in New Mexico that are part of the Northern Rio Grande National Heritage Area, a program administered by the National Park Service. This program assists local communities to preserve their unique cultural and historic resources, including natural landscapes and land uses. Santa Fe County also directs land use planning according to its Sustainable Growth Management Plan. Land use planning for Pueblo-owned lands is managed by the Pueblo government, while private land is managed by both Santa Fe County and the Pueblo government (Bureau of Reclamation, 2017).

The Pojoaque Valley area is a small community of mixed uses, agriculture, and rural lifestyles that centers around the native history of the area. According to the 2015 Pojoaque Valley Community Plan Update, the Pojoaque Valley was divided into two land use categories: traditional community and mixed-uses (Santa Fe County, 2015).

Traditional community land use includes areas suitable for residential, small-scale commercial, and traditional agricultural uses consistent with the existing development patterns of the Pojoaque Valley traditional communities. This land use category accommodates traditional community patterns, preserves historic and cultural landscapes, and protects agricultural uses from encroachment by development, such as agriculture found in traditional communities with acequia systems.

The mixed-use areas include low-density residential, parks and recreational, commercial, public institutions, small agricultural plots, and undeveloped open spaces. Developed areas are to be compatible with the existing land use patterns, land ownership characteristics, and geographic features.

Important Farmland

Soil: The United States Department of Agriculture Natural Resources Conservation Service (NRCS) provides soil maps and identifies soils as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland; those soils best suited to food, feed, fiber, forage, and oilseed crops. The majority of the project area is a former gravel pit, comprised of very gravelly, coarse, and sandy loam to as deep as 7 feet below ground surface. Currently, a

thin layer of topsoil has replaced the surface layer, allowing vegetation to return. A smaller portion of the project area consists of very fine, sandy loam near the surface, and loams deeper in the deeper profiles. It is a highly saline soil with a high infiltration rate. The NRCS Web Soil Survey report is included in Appendix B.

The NRCS also identifies soils as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland - those soils best suited to food, feed, fiber, forage, and oilseed crops. Small-scale farming and livestock grazing is still practiced within the Pojoaque Valley, as it is a traditional use of the land, though it tends to be more centrally located around water sources or land available for irrigation.

The NRCS Soil Survey Report indicates that soils within the project area are not comprised of soils indicated by the NRCS as prime farmland soils. A site visit confirmed that the project area is not currently used for farming, nor does it appear to be suitable for farming.

Rangeland: The NRCS Soil Survey Report indicates that soils within the project area are not conducive to rangeland or any sustainable grazing. However, small plots of land within the Pojoaque Valley are still being used for family-sized grazing operations. The affected project area (APE) is not currently being used as rangeland, nor does it appear to be suitable for rangeland.

Forestland: No forestland soils are identified within the project area by the NRCS. Though lack of development has allowed the site to naturally revegetate, the project location is not suitable for a healthy and self-sustaining forest.

Formally Classified Lands

The U.S. government recognizes that Pueblos have superior title to their lands, unlike Tribes that were removed to reservations created by the federal government. The U.S. has no ownership interest in the land grants. However, through subsequent federal actions and court decisions, the current land of the sovereign Pojoaque Pueblo has been incorporated into the reservation system as restricted fee lands. These lands are subject to the federal trust relationship and protections; they are treated as trust lands for the beneficial interest of the Pueblo (GAO 2004). Lands purchased or re-acquired by the Pueblo within its grant boundary is treated as trust land per the Pueblo Lands Act of 1924.

National Parks, Preserves, or Monuments: The United States Department of the Interior National Park Service (NPS) Interactive Systems Map indicates that the project area is outside of any national park. However, located approximately 15 miles southwest of the project area is the Bandelier National Monument. Approximately 23 miles west of the project area is the Valles Caldera National Preserve. Both are protected under the NPS.

Landmarks: The NPS National Natural Landmarks (NNL) Program recognizes and encourages the conservation of sites that contain outstanding biological and geological resources, regardless of land ownership, and recognizes the best examples of biological and geological features in both public and private ownership. NNLs are owned by a variety of land stewards, and participation in the program is voluntary.

There are 12 designated NNL sites in New Mexico, the closest being Valles Caldera and Ghost Ranch (NPS, 2024). Valles Caldera, located approximately 22 miles west of the project area, is one of the largest calderas in the world and is home to abundant geological features and wildlife. Ghost Ranch is located 38 miles northwest of the project area and is the site of prehistoric reptilian fossil preserves. Both NNL sites are located outside of the APE.

Historical Sites: A National Historic Landmark (NHL) is a historic building, site, structure, object, or district that represents an outstanding aspect of American history and culture. The NPS National Historic Landmarks Program maintains a list of nationally significant historic places designated by the Secretary of the Interior. According to the NPS online web site, the nearest listed historical site is the Manhattan Project National Historic Park – Los Alamos, located approximately 18 miles west of the project area.

Wilderness Areas: There are 26 designated wilderness areas in New Mexico. The project area is located between one wilderness to the east (Pecos Wilderness), and two wildernesses to the west (Bandelier Wilderness and Dome Wilderness). Pecos Wilderness, the largest of the three with a total area of 221,819 acres, is managed by the US Forest Service. Bandelier Wilderness has a total area of 23,267 acres and is managed by the NPS. Dome Wilderness has a total area of 5,183 acres and is managed by the US Forest Service.

The United States Department of the Interior Fish and Wildlife Service (FWS) National Wildlife Refuge System map was reviewed to confirm that the APE is outside of any wilderness area or wildlife refuge.

Wild and Scenic Rivers: New Mexico has approximately 108,014 miles of river, of which 124 miles are designated as wild and scenic. The 124 miles of wild and scenic river are segments of the upper Rio Grande, Rio Chama, Pecos River, and the east fork of the Jemez River (National Wild and Scenic Rivers System, 2024). The upper Rio Grande is designated wild and scenic from the Colorado-New Mexico border to just before the town of Rinconada. The project area is located downstream of the designated reach of river.

Though the project area sits within the geographic center of those four designated wild and scenic rivers, these rivers will not be within the APE.

Grasslands: No identified grassland areas are located within the project area.

State Parks: There are 35 New Mexico State Parks. The nearest state park is the Hyde Memorial State Park, located approximately 15 miles southeast of the project area. Hyde Memorial State Park was New Mexico's first state park and is within the headwaters of the Rio Tesuque, which flows adjacent to the project area. No State Parks should be affected by the APE.

Native American Owned Lands: The APE is located within the Tribally owned land of the Pojoaque Pueblo. There are three other Pueblos located adjacent to the Pojoaque Pueblo: the Tesuque, Nambe, and San Ildefonso Pueblos.

3.1.2 Environmental Consequences

Land Use

The proposed project is located within the Tribal land of the Pojoaque Pueblo. No other classified land administered by the federal, tribal, state, or local agency is located within the APE.

Important Farmland

A site visit confirmed that the project area is not currently used for farming or grazing, nor does it appear to be suitable for farming or grazing. No direct impacts to farmland or forestland are anticipated, since the NRCS soil report indicates no prime farmland or forestland in the project area. No restrictions with respect to Rangeland soil disturbance are indicated in the NRCS web site, therefore no direct impacts to rangeland are expected.

Disturbance to soils is limited to the construction area, and potentially to areas where buried water, sewer, or electric lines may occur. Sensitive soils, such as expansive clays, corrosive soils, and erosive soils, tend to be of greatest concern when reducing impacts to native soils. Of the sensitive soils, only erosive soils are likely to be encountered at the project location and during construction.

Indirect effects to farmland, rangeland, or forestland are not anticipated, as construction will be within a small, localized area, not adjacent to or near any of the aforementioned land uses.

No cumulative impacts to farmland, rangeland or forestland will result from completion of the proposed project.

Erosive soils would only be impacted for the short-term during construction activities. Impacts include loose soils exposed to wind erosion (dust generation) and surface runoff, formation of rills or gullies if surface runoff is not controlled, and delays to project construction if time and effort is spent towards re-contouring and re-grading.

Indirect effects include an increase of sediment load to receiving water.

Cumulative effects to soils may include health hazards as a result of increased fugitive dust generation and general loss of fertile topsoil.

Improved long-term effects would include stabilization of the current soils due to landscaping and contouring that provides controlled drainage off the site.

Formally Classified Lands

No direct effects to identified lands are anticipated from the proposed project except for temporary soil disturbance during construction.

No indirect effects to identified lands are anticipated, as construction of the new Tribal Administration Building and associated components will not be in areas of any formally classified land. The site is also not a forestland, nor will it likely support a forestland.

Long term or cumulative effects to formally classified lands may include an increase in awareness and education to the community and visitors with regards to the history of the area. Understanding the significance and history of Tribal-owned lands help celebrate and preserve their unique past and current ways of living.

3.1.3 Mitigation

Land Use

As the area of the APE is managed by the Pueblo of Pojoaque, mitigation will include restrictions or requirements set forth by the Pueblo. These include preservation of cultural resources and historic properties (see Section 3.4), protection and preservation of natural resources, human health and safety, and other measures as outlined in Sections 3.2 – 3.14.

Important Farmland

Mitigation efforts are minimal since no farmland, rangeland, or forestland are anticipated to be impacted. However, general Best Management Practices (BMPs) will be utilized to preserve the air, soil, and water quality of the project area, since those features are often tied to the general well-being of a larger ecosystem.

Mitigation efforts for direct effects of construction will include BMPs to reduce erosion where soil is disturbed. For example, contractors will be consulted for erosion control during and after construction and site restoration. Contract construction notes will include the requirement that contractors are required to provide dust and erosion control protection, and that all fill slopes be graded to no steeper than 3:1 slope, or as deemed appropriate by a certified engineer.

The United States Environmental Protection Agency (EPA) online guidance information indicates that operators of construction sites that are one acre or larger may be required to obtain authorization to discharge stormwater under a National Pollutant Discharge Elimination System (NPDES) construction stormwater permit to prevent stormwater runoff from washing harmful pollutants into local surface waters such as streams, rivers, lakes or coastal waters. The NPDES Construction General Permit for storm water discharges may include a Storm Water Pollution Prevention Plan (SWPPP), which will be prepared by the contractor prior to construction activities. Contractor construction notes will indicate “site restoration seeding or planting of any disturbed areas shall follow the NPDES standards, and topsoil used shall be reseeded with native vegetation.”

Mitigation of dust accumulation in the area where vehicles are used for access to system components may be achieved by gravel or asphalt surfacing of access road(s) as applicable.

Upon completion of construction, the return of area to pre-existing contours (as appropriate) and planting of native perennial plants to prevent erosion will be implemented.

Formally Classified Lands

No indirect effects to identified lands are anticipated, as construction of the new Tribal Administration Building and associated components will not be in areas of any formally classified land.

Long term or cumulative effects to formally classified lands may include an increase in awareness and education to the community and visitors with regards to the history of the area. Understanding the significance and history of Tribal-owned lands help celebrate and preserve their unique past and current ways of living.

Mitigation efforts include abiding by local community guidelines or ordinances that help protect and preserve the culture, traditions, and practices of the Pojoaque Pueblo.

3.2 Floodplains

On November 26, 2024, the United States Department of Homeland Security Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were reviewed for the APE and surrounding area. The results indicated the APE and adjacent properties are in Zone X, an area of minimal flood hazard. A copy of the map is included in Appendix C.

Evidence of floodplain areas was not observed during a site reconnaissance on September 4, 2024. Site observation and topographic maps were also reviewed, and no additional evidence of areas subject to flooding was observed.

3.2.1 Affected Environment

The proposed project is located in an area of minimal flood hazard (Zone X), nor was there evidence that flooding has occurred during the site reconnaissance. However, there may be risk of localized flooding within the APE, such as depressions or along drainages.

The adjacent Rio Tesuque Arroyo and Pojoaque Creek are within an area subject to the 1% chance annual flood event, also known as a 1-in-100-year flood event (Zone A) (FEMA, 2024).

3.2.2 Environmental Consequences

The proposed project is not located in any floodplain, thus there are no anticipated long-term or cumulative consequences as a result of this completed project. In addition, the proposed project should not have any direct or indirect effects on the nearby floodplains.

Direct effects that may increase the potential for localized flooding include loss of soil from construction activities during heavy rain events. This loss of soil, or erosion, can alter the wash morphology, and can also deposit soil downstream in areas that previously did not receive sediment loads, which can ultimately cause runoff to back up. Localized flooding may also occur if grading and contouring during construction is done without proper planning. Stockpiles of soil can create a dam and increase the potential for flooding.

Long-term effects to flooding may occur if the final site grading, contouring, or curbing (if applicable) is not designed properly and results in depression areas or runoff patterns that cause pooling of water.

3.2.3 Mitigation

Per the Clean Water Act, a stormwater pollution prevention plan (SWPPP) will be developed for the construction phase of the project. The SWPPP will implement best management practices (BMPs) that will reduce impacts to surface water and stormwater runoff, including erosion prevention, bank stabilization practices, and control of flow rates during rain events. These BMPs will be particularly important during heavy rain events, which can be present during the summer monsoonal season and cloud bursts. The SWPPP will be developed and implemented by the construction contractor.

To address low lying areas or depressions, the SWPPP will state that grading and contouring for construction will limit the formation of these areas so that new flooding areas are not created.

Upon completion of construction, return of disturbed areas to pre-existing contours and reseeding and slope stabilization will be implemented. Vegetation and slope stabilization limits soil erosion and promotes overland flow over channeling, which also limits potential flooding.

3.3 Wetlands

The US Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) database, Google Earth imagery, and a biological survey were used to determine the presence of wetlands and other water features within the APE and adjoining properties. There are no recorded wetlands, historical wetlands, or riparian areas on or near the project area. The nearest water source that may act as a riparian habitat is the earthen Rincon Ditch (riverine), located 0.1 miles northwest and cross gradient to the project area (FWS, 2024).

The biological site visit, conducted by SMA on September 4, 2024 included determining the presence of high-water marks, hydrophytes, and other evidence of wetland areas. No evidence of wetlands was observed.

The NWI map showing the designated wetlands is included in Appendix C.

3.3.1 Affected Environment

Construction of the proposed project is unlikely to directly impact identified wetlands, as construction will take place outside of wetland areas mapped by the FWS.

3.3.2 Environmental Consequences

There are no anticipated direct effects to potential wetlands from project construction, since construction will take place outside of current known and historical wetland areas. Nor should there be any cumulative effects to nearby wetlands or riparian areas from construction or from the completed project.

Short-term impacts to the riverines (e.g. Rincon Ditch) should be indirect and may include a temporary increase in sediment load during construction grading and contouring. Short-term environmental effects may also include stormwater runoff that encounters construction

equipment and has the potential to pick up pollutants such as fuel, lubricants, and construction debris, which is then transported to the wetlands.

Cumulative or long-term effects to the riverines are not anticipated from the completed project. Post-construction drainage patterns will aim to reflect pre-construction patterns and volume.

3.3.3 Mitigation

No construction is planned within wetlands or other jurisdictional waters or riparian zones, however, a SWPPP with BMPs will be implemented during construction and post-construction until permit conditions are met. BMPs will be in place to prevent soil erosion that might impact areas of temporary flooding. BMPs will include erosion control devices, minimizing soil disturbance activities during rain events, routing stormwater runoff away from construction equipment, and proper maintenance of construction equipment.

3.4 Cultural Resources and Historic Properties

3.4.1 Affected Environment

The National Historic Preservation Act (NHPA) defines Federal agencies' responsibilities for the protection of sites listed or eligible for listing in the National Register of Historic Places. It also establishes the requirement for consultation with the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO) if there is a potential for adverse effects on listed or eligible sites.

Due to the long and complex history of the region, many historical, cultural and archaeological sites exist within the Pueblo of Pojoaque. Findings include religious and ceremonial sites, historic buildings, archaeological structures, historic trails and pathways, and artifacts. To the north of the APE are the Pojoaque Church, Crossroads Church, and the Pojoaque Cemetery.

Consultation with the New Mexico Department Tribal Historic Preservation Office (THPO) was made with regards to cultural and archeological sites within and near the project area. A copy of the comments from Mr. Bruce Bernstein, former THPO Officer, and Mr. Fermin Lopez, current THPO Officer, are included in Appendix D.

Per Mr. Bernstein and Mr. Lopez, there are a number of cultural and archaeological sites adjacent to and near the project area. Of particular concern with potential for impacts is archaeological site LA128692, located adjacently west of the project and on a hilltop. The proposed new Tribal Administration Building may affect cultural and religious activities, and views from the project area may impede the privacy of these activities.

The New Mexico State Historic Preservation Officer stated that the proposed project would have no adverse effect on any cultural properties or on properties eligible for nomination to the National Register or the New Mexico Register of Cultural Properties.

The project area also falls within an area not likely to contain vertebrate fossils or scientifically significant invertebrate fossils, such as altered formations or Holocene sediments. Areas just outside of the project area, specifically to the south, have a higher occurrence of significant fossil deposits. Vertebrate fossils, scientifically significant invertebrate fossils, or plant fossils are known to occur and have been documented but may vary in occurrence and predictability (Bureau of Reclamation, 2017).

The United States Department of Agriculture National Park Service National Register of Historic Places indicated one listing within the Pojoaque Pueblo, the *Jean Bouquet Historic/Archaeological District*. This finding is included in the National Register for its architecture and engineering that dates back to as early as the 1750s (National Register of Historic Places, 2024). The location of the site has been restricted for its protection.

3.4.2 Environmental Consequences

There are no direct effects to cultural resources or historic properties anticipated for the project area.

However, there may be indirect short-term and long-term effects to adjacent and nearby cultural resources as a result of the proposed project. Indirect effects may be encountered during the construction phase as well as upon completion of the project and during occupancy of the new building.

Cumulative effects to cultural resources or historic properties may include an increase in foot and vehicular traffic to adjacent and nearby cultural sites. This increase in traffic may promote greater awareness of these sites and their significance.

If any buried cultural resources are encountered, work will cease immediately, and notification will be made to the THPO.

3.4.3 Mitigation

The THPO has noted several mitigation measures for the construction activities and final building plans so that there are no direct or indirect effects on nearby cultural sites, particularly site LA128692. Mitigation may include putting up temporary fencing along the perimeter of the construction area to limit visibility of construction activities, and routing construction traffic to enter and exit the site from the east side of the property. The final building may need to keep windows and any other visual opportunities away from the west side of the building to protect the privacy of the cultural site. Specifically, THPO requires the following mitigation measures:

- Development of a comprehensive long-term erosion control plan for the surrounding slopes and ridgetops.
- Design a retaining wall for the west side of the project area to protect LA128692.
- No new soil is introduced to the construction site so that the integrity of the archaeological sites within the surrounding area wall remains intact, including the backfill of the retaining wall.

3.5 Biological Resources

Biological resources were reviewed, and a biological survey was performed to evaluate potential species that may be present or affected by the proposed project. SMA reviewed T&E species, migratory birds, rare plants, noxious weeds, and wetlands to evaluate the potential environmental impacts and effect determinations of the proposed project and mitigation measures to reduce or eliminate any adverse effects on T&E species within the project area. The biological field survey was performed on September 4, 2024.

A copy of the Biological Survey Report is included in Appendix E.

Endangered Species / Critical Habitats

The Federal Endangered Species Act (ESA) requires that no actions be taken which are “likely to threaten the existence of any federally listed endangered or threatened species or result in the destruction or adverse modification of critical habitat.” The USFWS is the federal agency with direct responsibility for implementing the ESA, listing species as threatened or endangered, and protecting such listed species. The USFWS maintains an online Information for Planning and Consultation (IPaC) web site that allows proponents to download information necessary to evaluate potential impacts of their projects. The USFWS recommended conservation measures detail how a user may avoid, minimize, and mitigate adverse effects that may result from potential activities. Consultation via the USFWS IPaC occurred on November 15, 2024.

3.5.1 Affected Environment

According to USFWS IPaC, there are a total of five threatened, endangered, or candidate species that may be present in the proposed project area. These species are noted in the following table:

Species	Status
Mammals	
New Mexico Meadow Jumping Mouse <i>Zapus hudsonius luteus</i>	Endangered
Birds	
Mexican Spotted Owl <i>Strix occidentalis lucida</i>	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i>	Threatened
Fishes	
Rio Grande Cutthroat Trout <i>Oncorhynchus clarkii virginalis</i>	Candidate
Insects	
Monarch Butterfly <i>Danaus plexippus</i>	Candidate

Species of Concern

Although they are not protected by the Endangered Species Act, federal species of concern and New Mexico species of concern were taken into consideration during the site visit. Effect determinations for species of concern are typically not analyzed. A recent list of species of concern for Santa Fe County was obtained from USFWS and the New Mexico Department of Game and Fish (NMDGF). No species of concern from that list were observed in the areas to be affected during the time of the site visit.

Critical Habitats

No critical habitats were identified within the APE or land immediately adjacent to the APE.

Migratory Birds

Fourteen migratory birds are listed in the IPaC corresponding to the project area, including those of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in the project location. The probability of presence summaries can be used to determine when these birds are most likely to be present and breeding in the specific project area. There is suitable habitat for nests and roosts in the project area, therefore, there is still a possibility that other migratory birds could nest and roost within the project areas during their identified breeding seasons within the vicinity of the project area.

- Bald Eagle (*Haliaeetus leucocephalus*) Breeds December 1 to August 31
- Broad-tailed Hummingbird (*Selasphorus platycercus*) Breeds May 25 to August 21
- California Gull (*Larus californicus*) Breeds March 1 to July 31
- Cassin's Finch (*Haemorhous cassinii*) Breeds May 15 to July 15
- Clark's Grebe (*Aechmophorus clarkii*) Breeds June 1 to August 31
- Golden Eagle (*Aquila chrysaetos*) Breeds December 1 to August 31
- Lesser Yellowlegs (*Tringa flavipes*) Breeds elsewhere may migrate through APE
- Lewis's Woodpecker (*Melanerpes lewis*) Breeds April 20 to September 30
- Olive-sided Flycatcher (*Contopus cooperi*) Breeds May 1 to August 31
- Pectoral Sandpiper (*Calidris melanotos*) Breeds elsewhere may migrate through APE
- Pinyon Jay (*Gymnorhinus cyanocephalus*) Breeds February 15 to July 15
- Virginia's Warbler (*Leiothlypis virginiae*) Breeds May 1 to August 31
- Western Grebe (*Aechmophorus occidnetalis*) Breeds June 1 to August 31

Biological Site Survey Results

The following animals or evidence of animals were observed within the APE during September 4, 2024 site biological survey (common name, *scientific name*):

- Common Raven, *Corvus corax*
- Rock Pigeon, *Columba livia*
- House Finch, *Haemorhous mexicanus*
- Dark-eyed Junco, *Junco hyemalis*
- Killdeer (call), *Charadrius vociferus*

- Western Bluebird, *Sialia mexicana*
- Small Mammal Burrows, *Unknown sp.*

The following vegetation was observed within the APE during the September 4, 2024 site biological survey (common name, *scientific name*):

- Tree Cholla, *Cylindropuntia imbricata*
- Broom Snakeweed, *Gutierrezia sarothrae*
- Big sagebrush, *Artemisia tridentata*
- Flaxflowered Gilia, *ipomopsis longiflora*
- Saltbush species, *Atriplex Sp.*
- Ash species, *Fraxinus Sp.*
- Indian Paintbrush, *Castilleja Sp.*
- Prickly Pear, *Opuntia chlorotica*
- Gumweed, *Grindelia Sp.*
- Narrowleaf Yucca, *Yucca glauca*
- Grasses, *Unknown bunchgrass sp.*

3.5.2 Environmental Consequences

The proposed project has a low potential to impact biological species, both directly and indirectly. Native vegetation is present within the APE and will be removed during construction, which represents a loss of habitat for some wildlife species, however the area has been previously disturbed so native habitat loss will be minimum. Construction activities will physically disturb the ground and temporarily eliminate places of potential inhabitation. Direct temporary effects due to noise during construction are expected. Noise may cause temporary disturbances to nesting birds but are likely to be less significant than disturbances from normal vehicular traffic.

Migratory birds, if present, may be affected during the construction period. Migratory birds may use the APE to rest or gather food, particularly if native vegetation and food sources are present.

Disturbance of soil during construction has potential to lead to the introduction of invasive species and noxious weeds along the APE. Noxious weed infestations negatively impact biological diversity, increase erosion, alter hydrologic function, and reduce wildlife habitat.

Long-term and permanent negative effects on wildlife and vegetation will be minimal because of this construction. The administration building is proposed in a previously disturbed area. An increase in human activity will not be impactful because human activity is already high in the area. There is a possibility that migratory birds may be discouraged from inhabiting and breeding within the APE or using the APE as a migration route.

Using the USFWS Effect Determination criteria, effects determination on T&E species within the APE are detailed in the Biological Survey Report and summarized below.

	Species	Effects Determination
Endangered	New Mexico Meadow Jumping Mouse (<i>Zapus hudsonius luteus</i>)	No Effect
Threatened	Mexican Spotted Owl (<i>Strix occidentalis lucida</i>)	No Effect
	Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	No Effect
Candidate	Rio Grande Cutthroat Trout (<i>Oncorhynchus clarkii virginalis</i>)	No Effect
	Monarch Butterfly (<i>Danaus plexippus</i>)	May affect, not likely to adversely affect

3.5.3 Mitigation

The following measures shall be implemented to the fullest extent possible to avoid, minimize, and mitigate adverse effects that may result from potential activities:

- Any individuals of listed species in danger of being harmed and found within the designated project area will result in the enlistment of a qualified specialist (individual or agency personnel with permits to handle the species) to relocate the animal to a safe nearby location in accordance with accepted species handling protocols. Work will be avoided in any area where a listed individual is found until that individual leaves or is removed by a qualified specialist.
- Project construction will be scheduled to allow for project completion in the most time-effective manner to limit the time of disturbance to listed species.
- Minimization of habitat disturbance will be achieved by restricting vegetation removal to the footprint of the activity. Grading or top-soil removal should be limited to areas where this activity is absolutely necessary for construction or staging activities.
- In order to minimize site disturbance and avoid attracting predators, waste materials, wrappers, and debris will be removed promptly from the site during construction. Any waste that must remain more than 12 hours should be properly stored until disposal.
- To minimize the potential for hazardous or regulated material release where handling of hazardous and regulated materials occurs, collection and storage of all fuels, waste oils, and solvents will be in clearly labeled tanks and drums within a secondary containment system that consists of an impervious floor and bermed sidewalls capable of containing the volume of the largest container stored therein.
- Ground and vegetation-disturbing activities should be conducted outside of the bird breeding season to minimize potential impacts to migratory bird species that may utilize the survey area or surrounding area. The breeding season for each species listed varies greatly but includes December-August for Bald eagles and Golden Eagles, February-July for the Pinion Jay, March-July for the California Gull, April-September for Lewis's Woodpecker, May- August for Broad-tailed Hummingbird, Cassin's Finch, Olive-sided Flycatcher, and Virginia's Warbler, and June-August for Clark's Grebe, therefore

disturbance activities should be planned for mid to late fall and early winter. If activities planned must occur during the breeding season of one or more species, preconstruction nesting surveys should be conducted by qualified personnel.

- Open trenches and ditches associated with construction of maintenance of underground or other features can trap small mammals, amphibians, and reptiles, and can cause injury to large mammals. High levels of mortality to these wildlife species are possible within trenches. Periods of highest activity for many of these species include nighttime, summer months and wet weather. For open trenches, even for temporary periods, best management practices should be implemented.
- Minimize impacts to wildlife by limiting the use of vehicles within the project area, use of erosion controls such as silt screens or hay bales during project construction, replacement of any lost native plants with the same or similar species, and storage of all fuels, lubricants and hydraulic fluids to inhibit spills or release of contaminants to soils.
- Vegetation removal for the proposed project (where applicable) will be minimized. Damaged areas may be reseeded if evidence indicates irreparable damage to plants and grasses where soil has been disturbed. The USFWS recommends that areas disturbed during construction be reseeded with native vegetation to minimize erosion. Areas of disturbed soil should be seeded with certified weed-free native species found in the project area to reduce soil erosion and improve wildlife habitat.
- To minimize the potential introduction of State-listed noxious weeds into the area, construction equipment to be used for the project should be thoroughly washed prior to arrival at the site.
- Migratory birds: If trees must be removed for proposed project construction, the ideal time for removal is outside of nesting seasons. Removal of trees during nesting season should include observance for nesting locations and preservation of trees that do contain nests.
- If construction occurs during nesting season, a preconstruction biological survey should be conducted two to three weeks prior to project construction. Should nesting of a bird species protected under the Migratory Bird Treaty Act be identified within the project area, construction will be limited to a time of the year outside the migratory bird nesting season. Alternatively, the nesting area will be avoided until nesting is complete.

3.6 Water Resources

Sole Source Aquifers

The US EPA defines a Sole Source Aquifer (SSA) as an aquifer that is the "sole or principal source" of drinking water for a given service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for that area and for which there are no reasonably available alternative sources should the aquifer become contaminated. According to EPA's interactive map on SSAs, reviewed on December 4, 2024, the APE is located within the Española Basin Aquifer System SSA.

The Española Basin is part of the Rio Grande rift, which is a general north-south alignment of large geologic basins extending from southern Colorado to Mexico. It is bound to the east by the Sangre de Cristo Mountains, and to the west by the Jemez Mountains and the extinct Valles Caldera. The sediments that fill the Española Basin comprise an aquifer system that currently contains the primary source of water for most residents of the basin. These resources are limited and under stress due to continuing urban development and drought conditions (Española Basin Technical Advisory Group, 2020). Because of this, the project area is located within an area of “high aquifer sensitivity” (U.S. EPA, 2024).

Groundwater

Depth to groundwater in the project area is estimated at approximately 40 feet below ground surface. The New Mexico Office of the State Engineer (OSE) was reviewed for depth to groundwater determination within or near the APE. The nearest active well, RG-01601-POD2, is located approximately 525 feet north and upgradient of the APE and measured depth to groundwater of 80 feet below ground surface (bgs). The second nearest well, RG-16006, is located approximately 780 feet west-southwest and downgradient of the APE and measured a depth to groundwater of 32 feet bgs. Other active wells in the area vary from 20 feet bgs to 60 feet bgs. This range in depth to groundwater may be partly due to the elevation relief, but also demonstrates variability in depth to groundwater for the Pojoaque region. The earliest data from the wells were recorded in the 1960s and the most recent recording was from 2015. Given climate variability and drought patterns, it is likely that the current depth to groundwater may be greater than historically recorded. The wells and depth to groundwater are shown in the OSE POD Location Map in Appendix C.

Surface Water

The northeastern portion of the project area is located within the Rio Tesuque – Pojoaque Creek hydrologic basin, and the southwestern portion of the project area is located within the Rio Tesuque hydrologic basin. Both hydrologic basins are part of the Upper Rio Grande watershed (U.S. EPA, 2020). The Rio Tesuque flows northwesterly through Santa Fe County and Pojoaque, the Pojoaque Creek flows southwesterly through Pueblo of Pojoaque, and the two join on the west side of the Pojoaque Valley. Streamflow can be intermittent, though flow is more consistent during spring and early summer runoff from the mountains to the east. Channel morphology is mostly discontinuous channel reaches primarily comprised of sand. Small arroyos that feed the Rio Tesuque and Pojoaque Creek have higher compositions of silts and clays. Riparian vegetation is comprised of cottonwoods, Siberian elm, willows, piñon pine, Russian olive, rabbitbrush, junipers, and three-leaf sumac (Bureau of Reclamation, 2017).

The Clean Water Act (CWA) requires that all states identify surface waters within their respective boundaries that do not meet or are not expected to meet established federal water quality standards. Additionally, Section §303(d) of the Act requires states to prioritize their listed waters for the development of Total Maximum Daily Loads (TMDLs) for contaminants. There are no reported surface waters on or near the project area that report for TMDLs. There are also no impaired waters on or near the project area (U.S. EPA, 2020).

Under the CWA Section 303(d)(1), the NMED Surface Water Quality Bureau (SWQB) reports

waters within New Mexico that do not support their designated uses, as established in the state *Water Quality Standards*. A TMDL of pollutant is allotted for each designated water. New Mexico's list of TMDLs indicates impairment of the Little Tesuque Creek, headwaters of the Rio Tesuque, for chronic aluminum. Little Tesuque Creek falls outside and upstream of the project area. By the time flows from Little Tesuque Creek reach Rio Tesuque, the chronic aluminum impairment is no longer applicable, likely as a result of dilution from other ephemeral streams entering the Rio Tesuque. However, the Little Tesuque Creek from Rio Tesuque to headwaters was listed on the 2004-2006 Clean Water Act Integrated 303(d) list for aluminum (Surface Water Quality Bureau, 2005).

3.6.1 Affected Environment

Sole Source Aquifers and Groundwater

Depth to groundwater in the project area is approximately 40 feet below ground surface. Because depth to groundwater is considered relatively shallow, there is potential for activities related to the project, particularly during construction activities, to affect the local groundwater and aquifer. There is also a likelihood of hydraulic connectivity between the surface waters in the area and the groundwater. Therefore, impacts on local surface waters may also indirectly affect groundwater.

Additionally, the APE resides within the Española Basin Aquifer System SSA.

Surface Water

The proposed project may affect nearby Rio Tesuque, as it is located downgradient of the subject property, though surface runoff would first pass through the Cities of Gold Casino property and Highway 285. A large storm with significant runoff may allow sediments, fines, or pollutants to reach Rio Tesuque, but most runoff from the project area will infiltrate the soils prior to reaching the waterway.

Pojoaque Creek is nearby, though it is upgradient and separated by roadways and the Rincon Ditch. Surface runoff from the project area will not likely flow towards Pojoaque Creek.

3.6.2 Environmental Consequences

Sole Source Aquifers and Groundwater

Environmental impacts include an increase in pollutant loading to the local aquifer and groundwater table. Pollutant loading may include an increase in sediment and suspended solids, which indirectly harbors more microorganisms. Other pollutants added to the groundwater may include petroleum hydrocarbons as a result of releases from unmaintained construction equipment

Local groundwater recharge from the new building property area is anticipated to have minimal effect on the aquifer.

Surface Water

During construction activities, the potential for surface water quality degradation exists from silt, sand, or clay caused by temporary stockpiling of soil and ground disturbance. The potential for impact to surface water exists during construction in the event of a release of petroleum products resulting in malfunction of heavy equipment used.

Final construction may include impervious surfaces, such as concrete and asphalt. This can lead to both an increase in runoff from the project area (due to less infiltration), as well as potential for increased petroleum hydrocarbons and metals that are typically found in vehicle parking areas.

3.6.3 Mitigation

Sole Source Aquifers and Groundwater

A SWPPP will be prepared by the construction contractor. Mitigation efforts will include BMPs to reduce erosion where soil has been disturbed and maintenance of construction equipment. Other BMPs may include site restoration and erosion control during and after construction. Contract construction notes will indicate “site restoration, seeding, or planting of any disturbed areas shall follow NPDES standards, and topsoil used shall be free of weeds.” Stabilization of soil and revegetation, upon completion of construction, will be implemented in order to minimize pollutants in stormwater runoff.

There is no plan to discharge water from the site during construction activities or after completion of the new building. Use of water during construction activities may include washing of equipment or spaying soils to increase soil-moisture content for compaction requirements. Washing of equipment will be outlined in the SWPPP and will be done in designated areas that control and prevent runoff from the construction site.

In the event of a release to soil or groundwater during construction activities, compliance with discharge notification requirements contained in 20.6.2.1203 NMAC will ensure the protection of groundwater quality in the vicinity of the project.

Surface Water

A NPDES storm water pollution prevention plan (SWPPP) will be prepared by the construction contractor and implemented to prevent stormwater runoff from washing harmful pollutants into nearby surface waters and the local aquifer. Mitigation efforts will include BMPs to reduce erosion where soils have been disturbed, protection of stormwater outfalls, proper containment of chemicals stored on site, and good housekeeping practices. Other BMPs may include site restoration and erosion control during and after construction.

In the event of a contaminant release to soils or groundwater during construction activities, compliance with discharge notification requirements contained in 20.6.2.1203 NMAC will ensure the protection of groundwater quality in the vicinity of the project.

Contract construction notes will indicate “site restoration, seeding, or planting of any disturbed areas shall follow NPDES standards, and topsoil used shall be free of weeds.” Stabilization of soils and revegetation, upon completion of construction, will be implemented in order to minimize pollutants in stormwater runoff.

3.7 Coastal Resources

The Coastal Zone Management Act (CZMA) under FEMA, defines a coastal zone as including coastal waters extending to the outer limit of state submerged land title and ownership, adjacent shorelines and land extending inward to the extent necessary to control shorelines. A coastal zone includes islands, beaches, transitional and intertidal areas, and salt marshes.

New Mexico is not a state with any coastal areas, thus the proposed project is not within a coastal area, as it is not on a boundary of any ocean or arm thereof, nor is it on a boundary of any of the Great Lakes.

3.7.1 Affected Environment

No coastal areas are impacted by the project.

3.7.2 Environmental Consequences

There are no environmental consequences to any coastal area from the proposed project.

3.7.3 Mitigation

No coastal zone mitigation measures are required for the proposed project.

3.8 Socio-Economic/Environmental Justice Issues

Environmental justice is the principle that all people, regardless of socioeconomic status, race or ethnicity, deserve to live in a clean, healthy environment. The U.S. EPA has this goal for all communities and persons across the nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

Environmental justice is a concept that emerged in the U.S. in the early 1980s, and refers to the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Using the EPA’s Environmental Justice screening and mapping tool, the project area and surrounding community of Pojoaque were above average (>50 percentile) compared to the National Percentile for various factors, including ozone exposure, nitrogen dioxide exposure lead paint exposure, superfund proximity, and drinking water non-compliance. A higher percentile EJ screen index indicates that an area has a higher environmental burden for that category compared to the State or National average. A copy of the EJ Screen Community Report and the EJ Screen ACS (socioeconomic) Summary Report is included in Appendix F.

In addition, the New Mexico Environmental Justice Collaborative Action Plan is state-specific action plan with six focus areas, including: environmental challenges in colonias, communities affected by mining and nuclear energy, and environmental concerns specific to rural and agricultural communities (Region 6 EPA, 2016). The Plan was imposed for 2014-2016, though more recent plans have not been made available.

According to the 2020 U.S. census data, the APE is located within the Pojoaque Census Designated Place (CDP). Per the 2020 Census, Pojoaque has a population of 2,292 people and an area of 4.37 square miles. The median age is 36.8 with 49% of the population male and 51% female. Approximately 66% of the population is Hispanic, followed by 18% American Indian and 14% White. The number of housing units was estimated at 933, which averages 2.5 people per household. The employment rate is 5%, the median household income (MHI) is \$37,105, and there is a poverty rate of 16.1%.

3.8.1 Affected Environment

The proposed project should have no disproportionate negative effects on the community. In contrast, new Tribal Administration Building should improve quality of life in the community and for businesses located within the community.

The proposed project will affect the immediate area and adjacent areas due to proximity of the new building. The new Tribal Administration Building will likely affect the greater Pojoaque Pueblo due to the added resources to the community.

3.8.2 Environmental Consequences

Impacts from the construction of the new building would result in the short-term disturbance of the local community. Disturbances would include increased noise, dust, and construction traffic, which may discourage nearby residences from their normal outdoor activities.

Upon completion of the new building, the economic impact would be of increased value. There would likely be an increase in jobs and income to the community, as well as an increase in resources available to the community.

Short-term impacts include construction dust, noise, and traffic, which may cause indirect impacts to the minority and low-income community. Long-term impacts should offer employment opportunities and resources for the local community.

3.8.3 Mitigation

General BMPs will be implemented to reduce noise, dust, and traffic during the construction phase. Construction activities will not occur at night, and if overhead lighting is used, it should be aimed inside the construction zone and not directly at neighboring properties.

Short-term impacts from construction will be mitigated by the use of BMPs to control noise, dust, lighting, and traffic disturbances that may affect the welfare of the community.

No socio-economic or Environmental Justice mitigation efforts are anticipated for the proposed project. However, should concerns be brought up during community meetings, those items will be considered and addressed to the best extent possible.

3.9 Air Quality

Air quality for the proposed project falls under the jurisdiction of USEPA's Clean Air Act 40 CFR Part 49. The Clean Air Act and Amendments of 1990 define a "nonattainment area" as a locality where air pollution levels persistently exceed National Ambient Air Quality Standards or that contributes to ambient air quality in a nearby area that fails to meet standards. Nonattainment areas are given a classification based on the severity of the violation and the type of air quality standard they exceed.

The project area is outside of any New Mexico non-attainment areas. The nearest major facilities reporting to NMED and EPA are located in Los Alamos, approximately 15 miles west of the project area. The nearest minor facilities are located in Española, approximately 8 miles north of the project area (AQB, 2020). The nearest Title V facility, which is a facility that requires a national operating permit, is also located in Los Alamos (U.S. EPA, 2020). Regional winds generally flow from west to east, therefore, air pollutants from upwind facilities have the potential to travel and settle in the Pojoaque Valley.

3.9.1 Affected Environment

Construction activities have the potential to create temporary increases in emissions due to combustion-related construction equipment. Fugitive dust associated with soil disturbing activities, vehicular use, and earth moving activities may also impact local air quality.

Construction activities have the potential to create temporary increases in emissions due to combustion-related construction equipment. Dust, which is considered particulate matter, is associated with vehicular use and earth moving activities and may impact local air quality. Air quality control and permitting for Indian Country is regulated by 40 CFR 49 under Region 8 EPA. Construction activities will likely be less than the threshold for a major New Source Review (NSR), but potentially equal to or greater than a minor NSR, in which case, an air permit is required. Refer to 40 CFR 49 Part 153, Table 1 for minor NSR emission thresholds. Air permitting requirements are detailed in 40 CFR 49 Parts 154 and 155.

3.9.2 Environmental Consequences

Impacts from construction include an increase in fugitive dust/particulate matter from surface disturbing activities, as well as an increase in combustion of fuel from construction vehicles. Fugitive dust will be greatest during soil disturbing activities (e.g. excavating and grading), and fuel combustion will vary over the course of construction activities and construction phase. Air quality will likely be affected on the project site as well as immediately adjacent and downwind receptors.

Direct and indirect air quality impacts resulting from dust or combustion emissions during construction will not likely result in non-attainment of air quality standards, and the project is not anticipated to contribute negatively to air quality on a long-term basis.

3.9.3 Mitigation

Dust control measures will be taken to minimize the release of particulates that may affect air quality due to soil disturbing activities. These measures may include application of water or dust suppressant, cover exposed stockpiles, limit vehicle speed, limit soil disturbing activities on windy days, revegetation of disturbed areas as soon as possible. Per completion of construction activities, the property will be landscaped with vegetation and other soil cover measures (e.g. xeroscaped).

Air pollutants from fuel combustion will be mitigated by proper maintenance of construction equipment and related vehicles, limit idling of equipment, and use the proper grade of fuel for each piece of equipment.

Construction crews are to use best management practices to limit dust generation and combustion emissions. The following control measures are recommended:

- If required, the construction contractor shall complete and comply with an air permit.
- All unpaved roads and other disturbed surface areas on site should be watered as necessary to prevent off-property transport of visible fugitive particulate emissions.
- Vehicle speed on all unpaved roads and disturbed areas should not exceed a maximum of 30 mph.
- No earthwork activities should be performed when the wind speed exceeds 30 miles per hour.
- All disturbed surface areas should be revegetated as soon as possible, and ideally during the seed mix's preferred application season, and according to the information submitted by the applicant with the permit application.
- Gravel entryways should be utilized to prevent mud and dirt carryout onto paved surfaces. Any mud and dirt carried out onto paved surfaces should be cleaned up daily.
- Foundation soil should be compacted on a daily basis to within 90% of maximum compaction.
- Silt fencing should be installed prior to overlot grading along all property borders that are adjacent to developed areas.
- Surface area disturbed should be minimized as described in the information submitted by the applicant with the permit application.

The project area should be revegetated or xeroscaped where possible to avoid long-term problems with erosion or fugitive dust. BMPs and revegetation practices to limit erosion and fugitive dust should be specified in the SWPPP.

3.10 Visual Impacts

3.10.1 Affected Environment

The presence of the new building will be visible by all the adjacent properties as well as some nearby non-adjacent properties. The building may block views that currently exist.

Overhead utility lines and below grade conveyance line appurtenances, such as manholes, may be visible within the project area and adjacent properties.

The APE is located in an area that has had previous disturbance and development, including a soccer field and pavilion and spectator stands. Currently, the buildings are gone, though a ~60-foot by 100-foot concrete pad (basketball court) remains.

Visual impacts as a result of the proposed project will result in visibility of a new building in an area that is currently devoid of structures, as well as temporary visual impacts from the construction phases. Visibility of construction activities and the permanent Tribal Administration Building is likely limited to the APE and area adjacent to the APE. The APE is located near areas of mixed residential, business, and undisturbed land, so there is potential for some residents and business occupants will be able to see the construction activities and Tribal Amin Building.

3.10.2 Environmental Consequences

Direct visual impacts during construction of the proposed project are inevitable and will reduce traffic speeds for transportation safety. Reduction in visibility from the building and overhead power lines may affect the aesthetic value of the immediate area.

Windy days may cause more fugitive dust from the construction area, which may limit visibility.

Long-term and cumulative impacts may be an increase in light pollution if overhead lights, such as in the parking lot, remain on at night.

Direct environmental consequences of the proposed project is a permanent increase in visible structures in an area that is currently undeveloped. There will also be temporary increases in visibility of construction equipment.

3.10.3 Mitigation

Earth-disturbing activities will be limited during windy days so that less dust and debris become airborne.

Mitigation efforts will also include blending the outside architecture and colors of the new building with the natural surroundings and with respect to traditional practices of the Pueblo and other historical features. Other structures such as power poles, manhole covers, parking lots, and sidewalks will be maintained and not degrade to unsightly conditions. Light posts, if

installed, should be pointed in a downward direction that does not contribute to light pollution at night.

The following measures would be implemented to mitigate visual impacts:

- Above ground facilities requiring painting should be designed to blend with the surrounding environment.
- Disturbance would be contoured to match the original topography, where matching is defined as reproducing the original topography and eliminating form, line, and color contrast caused by the disturbance as much as possible.
- Cut and fill (if applicable) would be re-contoured.
- Where possible, disturbed areas would be reseeded with native grasses.
- Edges of disturbances would be scalloped and feathered.

3.11 Human Health and Safety

Public health and safety are of highest priority during construction, post-construction activities, and operation of the new Tribal Administration Building.

3.11.1 Affected Environment

The affected area includes the construction zone, adjacent properties, and the nearby community.

The APE will be occupied by contractors and construction equipment during the construction phase of the project. Due to heavy equipment operation and associated activities, there is risk to human health and safety. Such examples include dangers from heavy equipment operation, noise (see Section 3.13), formation of dust (see section 3.9), trenching, tripping hazards from equipment on the ground, and pinch points from equipment and vehicles. The construction personnel and those directly involved with the project are subject to health and safety concerns. Indirectly, community members can be affected by the construction activities if safety standards or practices are not followed.

Negative impacts on long-term health and safety are not currently anticipated.

3.11.2 Environmental Consequences

Direct environmental consequences include an increase in fugitive dust, noise, and traffic during the construction phase. Long-term environmental consequences may include a change in the surface runoff pattern due to grading and curbing, which if not planned properly, can potentially cause an increase in flood risk.

Health and safety plans that are followed closely will directly reduce the potential for pollutants entering the environment. Controlling and reducing noise, dust, and tripping hazards will minimize impacts to the environment and community population. Safety measures and BMPs in place should protect the health and safety of humans directly involved with construction, as well as the long-term occupants within the APE.

3.11.3 Mitigation

Short-term impacts from construction will be mitigated by the use of BMPs to control noise, dust, and traffic disturbances that may affect the welfare of the community. Additionally, the construction zone should be fenced, signed, or controlled in a way to keep the general public out. Personnel that arrive on site should be made aware of the dangers, such as noted during a Job Safety Analysis or a site-specific Health and Safety Plan.

Construction and post-construction should account for surface water runoff so that there is no increase in flood risk or pooling of waters, such as in an open excavation or trench, which may affect the safety of the local community.

The following measures would be implemented to mitigate health and safety issues:

- Development and follow-through of a site-specific health and safety plan. Incorporate noise, dust, tripping hazards, pinch points, etc. BMPs into health and safety plan.
- Daily safety briefings and changes in job safety analysis when conditions change.
- Signage for entering construction area. Limit site personnel to those directly involved with the project.
- Engage community members and leaders during planning phase (community meetings) on their safety concerns.
- Stop work when conditions change such that there are concerns for health or safety.
- Design of building, roads, and parking should comply with local, Tribal, and federal building or design codes.

3.12 Aesthetics

3.12.1 Affected Environment

The presence of the new building will be visible by all the adjacent properties as well as some nearby non-adjacent properties. The building may block views that currently exist. Additionally, views from the Pojoaque Church, Crossroads Church, and the Pojoaque Cemetery may be affected by the new Tribal Administration Building.

Overhead utility lines and below grade conveyance line appurtenances, such as manholes, may be visible within the project area and adjacent properties.

Activities associated with construction that may affect aesthetics include the increased visuals of project personnel, construction equipment, and staging areas. There is also potential for increased dust during construction which may affect the aesthetics of the area.

The proposed Tribal Administration Building will permanently affect the visual aesthetics of the APE and adjoining properties. The open, vacant landscape that currently exists will turn into a business/commercial area. Increased human activity and traffic also results in increased lighting in an area that is currently void of artificial light.

3.12.2 Environmental Consequences

Direct visual impacts during construction of the proposed project are inevitable and will reduce traffic speeds for transportation safety. Reduction in visibility from the building and overhead power lines may affect the aesthetic value of the immediate area.

Windy days may cause more fugitive dust from the construction area, which may limit visibility.

Long-term and cumulative impacts may be an increase in light pollution if overhead lights, such as in the parking lot, remain on at night.

Environmental impacts related to aesthetics of the proposed project include increased equipment on site, staging areas, formation of dust, and increased human presence, all of which will occur during the construction phase.

Environmental impacts related to the building, parking area, and roads are permanent. The natural landscape of the APE will be changed from vacant to developed.

3.12.3 Mitigation

Earth-disturbing activities will be limited during windy days so that less dust and debris become airborne.

Mitigation efforts will also include blending the outside architecture and colors of the new building with the natural surroundings and with respect to traditional practices of the Pueblo and other historical features. Other structures such as power poles, manhole covers, parking lots, and sidewalks will be maintained and not degrade to unsightly conditions. Light posts, if installed, should be pointed in a downward direction that does not contribute to light pollution at night.

The following measures would be implemented to mitigate impacts to aesthetics:

- Implement BMPs which address housekeeping of construction area and staging areas, and dust control.
- The new Tribal Administration Building should contour and blend in with the natural landscape as much as possible. Revegetation and landscaping will aid and improve the aesthetics.

3.13 Miscellaneous – Noise, Transportation

3.13.1 Affected Environment

Miscellaneous items which may affect the environment include noise and transportation. Noise will increase during the construction phase, as will the increase in vehicular traffic and construction equipment operation within the APE.

There will be a permanent increase in noise and traffic in the APE, as well as the roads to access the APE, when the building is complete, and occupants start working there.

There will be a permanent increase in noise and vehicular traffic, though it will likely not greatly affect residents outside the APE, as traffic is not required to pass through residential areas to access the building.

3.13.2 Environmental Consequences

Increased noise levels are likely during construction activities. Construction workers are expected to wear hearing protection during high noise level duties. The adjacent properties and nearby community may experience a higher level of noise during the typical construction hours and work week. These noise levels are not anticipated to exceed any threshold levels.

No long-term or cumulative effects to noise are anticipated upon completion of the new building, aside from a slight increase in traffic noise.

An increase in noise and traffic may result in wildlife disturbance. Birds, animals, insects, lizards, etc. present within the APE may leave and seek shelter, food, or habitat elsewhere.

Environmental impacts from noise and traffic will be temporary during construction. Once construction is complete, long-term impacts from increased area traffic and noise will result from the increase in human activity in the APE.

3.13.3 Mitigation

Construction hours will be held during daytime hours (typically 8 am – 5 pm) and weekdays (Monday – Friday). The planned construction activities near residences will take into account nearby residences and businesses and will try to keep noise to a minimum and plan noise-inducing practices at times appropriate for the affected community. The project coordinators will also work with the Pueblo and nearby residences so that cultural and traditional practices are not affected, such as religious or cultural ceremonies.

The following measures would be implemented to mitigate the increase in noise and traffic:

- Implement a traffic control plan during construction, as needed.
- Limit construction to normal working hours so noise is limited during times when community members are more likely to be awake.
- Engage and communicate with residents and local businesses on noises they will likely encounter during construction if they are near or within the APE.
- Implement noise control measures and comply with any County or Towaoc noise ordinances.
- Implement traffic control devices such as speed limit signs to control traffic speed.

3.14 Corridor Analysis

3.13.1 Affected Environment

Existing corridors near or in the APE include Camino del Rincon and Lightning Loop. Camino del Rincon is a two-way paved road that travels east-west along the northern portion of the APE, and Lightning Loop is a gravel road that borders the northeast portion of the APE.

Stakeholders include the current businesses and residents off those portions of the roads.

3.13.2 Environmental Consequences

Environmental consequences to the project corridor are summarized in this report and will be limited to the defined APE. Local, state, Tribal, and federal regulations/standards/procedures, such as permitting, development of a SWPPP, adherence to local ordinances, etc., will be followed to ensure the environmental consequences are minimized and controlled.

3.13.3 Mitigation

Stakeholders will be allowed to provide comments during the planning stage and will be directed by the tribal and community leaders.

4.0 CUMULATIVE EFFECTS

Cumulative effects of the proposed project will come from the construction phases and the final residential development. Some effects will be temporary while others will be long-term.

The cumulative effects of the proposed project are summarized in the following table.

Impacted Resource	Cumulative Effects (Direct or Indirect)
Land use, important farmland, formally classified lands	Land use will change from open space to business/commercial. No cumulative impacts to farmland, rangeland or forestland will result from completion of the proposed project. Important farmland and formally classified lands will not have any cumulative effects as those designated lands are not present in the APE.
Floodplains	The proposed project is not located near any floodplains, thus there are no anticipated long-term or cumulative consequences as a result of this completed project.
Wetlands	The proposed project is not located near any wetlands, thus there are no anticipated long-term or cumulative consequences as a result of this completed project.

Cultural resources and historic properties	There may be unforeseen cumulative effects to nearby cultural resources or historic properties, particularly since several historical and cultural sites are located very close to the project area.
Biological resources	No cumulative effects to wildlife are expected upon completion and operation of the proposed project. Since critical habitat is outside of the project area, no direct, indirect, or cumulative environmental consequences to federally listed species are anticipated.
Water quality	Cumulative effects for surface water may include a change in stormwater runoff patterns from the project area, which may directly affect surface water quality and indirectly affect groundwater quality.
Coastal resources	The APE is not within or adjacent to coastal resources. Therefore, cumulative effects on coastal resources are not anticipated.
Socio-economic, environmental justice issues	<p>Cumulative effects include an increase in employment and available resources for the local community.</p> <p>The new and expanded Tribal Administration Building should be able to offer more employment opportunities and resources available to the predominantly minority community. Services offered through the new Tribal Administration Building should aid in the education, preservation, and celebration of the Pueblo Pojoaque people and nearby archaeologically significant sites.</p>
Air quality	Cumulative effects on air quality may result from a slight increase in traffic (vehicle emissions) due to the additional employment and services offered by the new Tribal Administration Building.
Visual impacts	Long-term and cumulative effects on visibility will result from the presence of the new building, including any overhead powerlines, power poles, lighting, and ground features such as power boxes and manhole covers. These new structures will affect sky visibility of nearby residences and businesses.
Human health and safety	There are no anticipated cumulative effects to health and safety as a result of the completed project.
Aesthetics	Long-term and cumulative effects on visibility will result from the presence of the new building, including any overhead powerlines, power poles, lighting, and ground features such as power boxes and manhole covers. These new structures will affect sky visibility of nearby residences and businesses.

Miscellaneous – noise, traffic	<p>An increase in noise is anticipated due to the increase in human activity in the APE, including noise from vehicle traffic.</p> <p>A small increase in traffic to the area is likely to occur due to the new building. Traffic patterns and signs should control traffic flow and provide safety to both commuters and nearby pedestrians and residents.</p>
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5.0 SUMMARY OF RECOMMENDED MITIGATION MEASURES

Environmental resources can be affected in many ways during implementation of the proposed action. The effect, or impact, is defined as any change or alteration in the pre-existing condition of the environment produced by the proposed action, either directly or indirectly. The following table summarizes the proposed mitigation measures to avoid or minimize environmental consequences of the proposed action.

Impacted Resource	Proposed Mitigation Measure
Land use, important farmland, formally classified lands	No Effect: No farmland, forestland, or rangeland.
Floodplains	No Effect: Project area is located outside of flood zones
Wetlands	No Effect: Construction and APE are outside of wetland areas.
Cultural resources and historic properties	<ul style="list-style-type: none"> • Coordination between the Project Manager, THPO, and the Pueblo of Pojoaque to mitigate construction activities and final building plans so that there are no direct or indirect effects on nearby cultural sites, particularly site LA128692. • As applicable, install fencing along the perimeter of the construction area, route construction traffic to enter and exit the site from the east side of the property. • Protect the privacy of nearby cultural sites by not installing any windows in the building to face directly towards cultural areas. • Development of a comprehensive long-term erosion control plan for the surrounding slopes and ridgetops. • Design a retaining wall for the west side of the project area to protect LA128692. • No new soil is introduced to the construction site so that the integrity of the archaeological sites within the surrounding area wall remain intact, including the backfill of the retaining wall.

	<ul style="list-style-type: none"> • Cease work if cultural resources encountered, notify Tribal Historic Preservation Officer.
Biological resources	<p>Vegetation:</p> <ul style="list-style-type: none"> • Minimize vegetation removal during construction. • Implement erosion control BMPs. • Wash construction vehicles/equipment prior to entering site to prevent spread of noxious or invasive weeds. • Reseed with native vegetation after construction. <p>Wildlife:</p> <ul style="list-style-type: none"> • Minimize erosion inhibitors that may trap wildlife, such as netting and silt screens. • Avoid disturbance to nesting areas, such as for migratory birds. • Minimize trench/excavation sizes. • Provide trench escape ramps. • Store and maintain construction machinery and chemicals properly. • Open trenches and ditches associated with construction of maintenance of underground or other features can trap small mammals, amphibians, and reptiles, and can cause injury to large mammals. High levels of mortality to these wildlife species are possible within trenches. Periods of highest activity for many of these species include nighttime, summer months and wet weather. For open trenches, even for temporary periods best management practices should be implemented. <p>Threatened and Endangered Species:</p> <ul style="list-style-type: none"> • If threatened or endangered species are found onsite, enlist a qualified specialist to relocate species off-site. • Minimize ground disturbing activities and limit construction to times that do not impact nearby nesting, migration, etc. • Practice construction BMPs, such as proper material and chemical storage, to limit potential releases and impacts to threatened or endangered species.
Water Quality	<p>Surface Water:</p> <ul style="list-style-type: none"> • SWPPP implemented, including BMPs such as erosion control, stormwater runoff outlet maintenance, equipment maintenance. • Reseeding and site restoration after construction. <p>Groundwater:</p> <ul style="list-style-type: none"> • No planned discharge to groundwater. • SWPPP and construction BMPs implemented in the event surface discharge reaches groundwater.
Coastal Resources	No Effect: Project Outside of Coastal Area

<p>Socio-economic, Environmental Justice</p>	<p>Socio-economic:</p> <ul style="list-style-type: none"> • Implementation of construction BMPs to reduce noise, dust, and traffic. • Limit construction activities to daytime hours. • Limit overhead lighting to not be aimed outside the construction zone and not at neighboring properties. • Engage with community on construction phases and impacts, as well as final building plans and resources available to community. <p>Environmental Justice:</p> <ul style="list-style-type: none"> • Implementation of construction BMPs to reduce noise, dust, and traffic. • Engage with community on construction phases and impacts, as well as final building plans and resources available to community.
<p>Air Quality</p>	<ul style="list-style-type: none"> • Dust control measures during construction, including covering exposed soil stockpiles, and limiting ground disturbance activities on windy days. • Limit idling of vehicles, perform maintenance on construction vehicles and motorized equipment. • Landscape site after construction completed. • If required, the construction company will complete and comply with an air quality permit. • All unpaved roads and other disturbed surface areas on site should be watered as necessary to prevent off-property transport of visible fugitive particulate emissions. • Vehicle speed on all unpaved roads and disturbed areas should not exceed a maximum of 30 mph. • No earthwork activities should be performed when the wind speed exceeds 30 miles per hour. • All disturbed surface areas should be revegetated as soon as possible, and ideally during the seed mix's preferred application season, and according to the information submitted by the applicant with the permit application. • Gravel entryways should be utilized to prevent mud and dirt carryout onto paved surfaces. Any mud and dirt carried out onto paved surfaces should be cleaned up daily. • Foundation soil should be compacted on a daily basis to within 90% of maximum compaction. • Silt fencing should be installed prior to overlot grading along all property borders that are adjacent to developed areas. • Surface area disturbed should be minimized as described in the information submitted by the applicant with the permit application.

Visual impacts	<ul style="list-style-type: none"> • Blend the outside architecture and colors of the new building with the natural surroundings and with respect to traditional practices of the Pueblo and other historical features. • Maintain structures such as power poles, manhole covers, parking lots, and sidewalks to not degrade to unsightly conditions. • Limit overhead lighting and comply with local ordinances/regulations to reduce light pollution. • Above ground structures should be designed to blend with the surrounding environment. • Disturbance would be contoured to match the original topography, where matching is defined as reproducing the original topography and eliminating form, line, and color contrast caused by the disturbance as much as possible. • Cut and fill (if applicable) would be re-contoured. • Disturbed areas would be reseeded with native grasses. • Edges of disturbances would be scalloped and feathered.
Human health and safety	<ul style="list-style-type: none"> • Implementation of construction BMPs to reduce noise, dust, and traffic. • Use fencing or other controls to limit accessibility of construction area to construction personnel only. • Develop site specific Health and Safety Plans and/or Job Safety Analyses. • Development and follow-through of a site-specific health and safety plan. Incorporate noise, dust, tripping hazards, pinch points, and other safety BMPs into health and safety plan. • Daily safety briefings and changes in job safety analysis when conditions change. • Signage for entering the construction area. Limit site personnel to those directly involved with the project. • Engage community members and leaders during planning phase (community meetings) on their safety concerns. • Stop work when conditions change such that there are concerns for health or safety. • Install road signs limiting traffic speed to safe levels.
Aesthetics	<ul style="list-style-type: none"> • Blend the outside architecture and colors of the new building with the natural surroundings and with respect to traditional practices of the Pueblo and other historical features. • Maintain structures such as power poles, manhole covers, parking lots, and sidewalks so as to not degrade to unsightly conditions. • Limit overhead lighting and comply with local ordinances/regulations to reduce light pollution. • Implement BMPs which address housekeeping of

	<p>construction area and staging areas.</p> <ul style="list-style-type: none"> • The APE should be restored to original or better conditions to match the area environment where applicable. Examples include surface contouring, proper drainage, and revegetation.
Miscellaneous – Noise, Traffic Control	<p>Noise:</p> <ul style="list-style-type: none"> • Limit construction hours to 8-5, M-F. • Keep noise to a minimum and notify the community of events that may be loud enough to impact the local community. • The project coordinators will also work with the Pueblo and nearby residences so that cultural and traditional practices are not affected, such as religious or cultural ceremonies. <p>Traffic Control:</p> <ul style="list-style-type: none"> • Obtain applicable permits from County, State, or other if construction activities involve nearby roads and right-of-ways. • Implement traffic control and safety measures (signage) until construction activities cease, in accordance with New Mexico traffic safety standards. • Reduce speed limits in construction zones. • Operate during normal working hours. • Comply (if applicable) with local noise ordinances. • As applicable, implement a traffic control plan. • Install road signage to control residential traffic flow.

6.0 CORRESPONDENCE

Tribal Historical Preservation Officer (THPO) consultation is included in Appendix D.

7.0 EXHIBITS/MAPS

Appendix A Figures and Maps

Vicinity Map
Site Map (APE)

Appendix B Land Use Information

NRCS Custom Soil Resource Report with Soil Map

Appendix C Flood Zone/Wetlands/Ground Water/Surface Waters

FEMA National Flood Hazard Layer FIRMette Map
New Mexico OSE POD Locations Map
USFWS National Wetlands Inventory Map

Appendix D Historic Properties and Cultural Resources

National Park Service National Register of Historic Places Map
Tribal Correspondences
Archaeological Sites Map

Appendix E Biological Resources

SMA Biological Survey Report

Appendix F US Census Information

EPA EJScreen Community Report
EPA EJScreen ACS Summary Report (Socioeconomic Report)

Appendix G Air Quality

EPA Non-Attainment Map

Appendix H Agency Correspondence

8.0 LIST OF PREPARERS

This ER was prepared by Souder, Miller & Associates on behalf of the Pueblo of Pojoaque. Correspondence with federal agencies and background information research was performed by Erin Berry, Tech III for SMA, and Stephanie Hinds, P.E. Project Engineer for SMA. Project Engineering and supervision of the ER was performed by Niki Harings, Ph.D., Senior Biologist for SMA.

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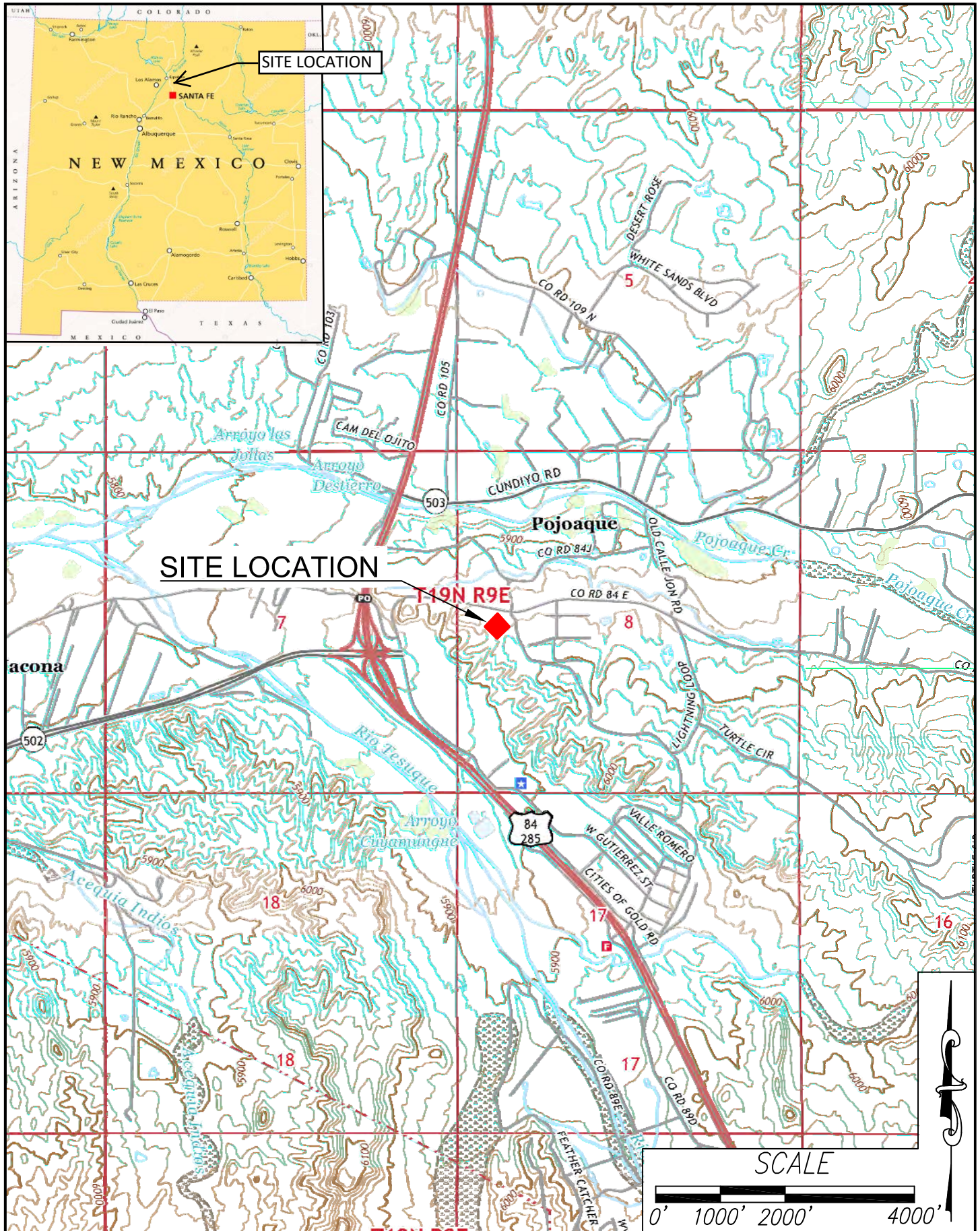
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APPENDIX A

FIGURES AND MAPS



SOUDER, MILLER & ASSOCIATES  401 West Broadway Avenue Farmington, NM 87401-5907 Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 326-0045 Serving the Southwest & Rocky Mountains www.soudermiller.com		PUEBLO OF POJOAQUE SANTA FE, NEW MEXICO VICINITY MAP POJOAQUE TRIBAL ADMIN BLDG EA SECTION 8, T19N, R9E SANTA FE COUNTY		Designed SAH Date: May 2020 Scale: Horiz: 1"=2000' Vert: NA Project No: 1228881	Drawn DJB Checked RSA
				FIGURE 1	




**AREA OF
POTENTIAL
EFFECT (APE)**

SCALE

0' 150' 300' 600'



 <p>SOUDER, MILLER & ASSOCIATES 401 West Broadway Avenue Farmington, NM 87401-5907 Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 326-0045 Serving the Southwest & Rocky Mountains www.soudermiller.com</p>			PUEBLO OF POJOAQUE		SANTA FE, NEW MEXICO		Designed SAH	Drawn DJB	Checked RSA
<p>SITE MAP POJOAQUE TRIBAL ADMIN BLDG EA SECTION 8, T19N, R9E</p> <p>SANTA FE COUNTY</p>							Date: May 2020		
							Scale: Horiz: 1"=300' Vert: NA		
							Project No: 1228881		
							FIGURE 2		

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APPENDIX B

LAND USE INFORMATION



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Santa Fe County Area, New Mexico**

**Pueblo of Pojoaque Admin
Building**



August 15, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit


 Clay Spot


 Closed Depression

 Gravel Pit

 Gravelly Spot


 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Fe County Area, New Mexico
Survey Area Data: Version 15, Sep 7, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 15, 2021—Dec 11, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	Pits	3.4	72.6%
131	Jaconita-Xenmack complex, 25 to 60 percent slopes	0.0	0.0%
132	Depolvo-Sueleros complex, 2 to 15 percent slopes	1.3	27.3%
Totals for Area of Interest		4.7	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Santa Fe County Area, New Mexico

106—Pits

Map Unit Setting

National map unit symbol: dn59
Elevation: 5,400 to 7,700 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 50 to 52 degrees F
Frost-free period: 150 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Pits: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pits

Setting

Landform: Eroded fan remnants
Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Alluvium derived from granite, gneiss, and schist

Typical profile

C1 - 0 to 4 inches: very gravelly coarse sandy loam
C2 - 4 to 16 inches: very gravelly coarse sandy loam
C3 - 16 to 22 inches: extremely gravelly coarse sand
C4 - 22 to 29 inches: very gravelly sandy loam
C5 - 29 to 46 inches: very gravelly sandy loam
C6 - 46 to 63 inches: very gravelly sandy clay loam
C7 - 63 to 84 inches: very gravelly coarse sandy loam

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Riovista

Percent of map unit: 8 percent
Hydric soil rating: No

Devargas

Percent of map unit: 4 percent
Hydric soil rating: No

Delvalle

Percent of map unit: 3 percent
Hydric soil rating: No

Paraje

Percent of map unit: 3 percent
Hydric soil rating: No

Agua fria

Percent of map unit: 2 percent

Hydric soil rating: No

131—Jaconita-Xenmack complex, 25 to 60 percent slopes

Map Unit Setting

National map unit symbol: drbh

Elevation: 5,400 to 6,600 feet

Mean annual precipitation: 9 to 12 inches

Mean annual air temperature: 50 to 52 degrees F

Frost-free period: 150 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Jaconita and similar soils: 45 percent

Xenmack and similar soils: 40 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Jaconita

Setting

Landform: Strath terraces

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Colluvium and slope alluvium derived from granite, gneiss, schist, and micaceous sandstone

Typical profile

ABk - 0 to 2 inches: very gravelly coarse sandy loam

Bk1 - 2 to 5 inches: very gravelly coarse sandy loam

Bk2 - 5 to 10 inches: very gravelly loamy coarse sand

BCK1 - 10 to 22 inches: very gravelly coarse sand

BCK2 - 22 to 42 inches: extremely gravelly coarse sand

C1 - 42 to 65 inches: extremely gravelly coarse sand

2C2 - 65 to 77 inches: very fine sandy loam

2C3 - 77 to 99 inches: loam

2C4 - 99 to 108 inches: loamy fine sand

2C5 - 108 to 120 inches: loam

Properties and qualities

Slope: 25 to 60 percent

Depth to restrictive feature: 59 to 79 inches to strongly contrasting textural stratification

Drainage class: Somewhat excessively drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Custom Soil Resource Report

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 1.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R035XG114NM - Gravelly
Hydric soil rating: No

Description of Xenmack

Setting

Landform: Strath terraces
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Colluvium derived from granite, gneiss, and schist over residuum derived from sandstone and siltstone

Typical profile

ABk - 0 to 2 inches: extremely gravelly sandy loam
Bk1 - 2 to 7 inches: very gravelly sandy loam
Bk2 - 7 to 16 inches: gravelly loam
Bk3 - 16 to 24 inches: gravelly loam
2BCk1 - 24 to 29 inches: paragravelly clay loam
2BCk2 - 29 to 37 inches: very paragravelly loam
2Cr - 37 to 47 inches: cemented bedrock

Properties and qualities

Slope: 25 to 60 percent
Depth to restrictive feature: 20 to 39 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R035XG114NM - Gravelly
Hydric soil rating: No

Minor Components

Zozobra

Percent of map unit: 5 percent
Hydric soil rating: No

Depolvo

Percent of map unit: 5 percent
Hydric soil rating: No

Quarteles

Percent of map unit: 5 percent
Hydric soil rating: No

132—Depolvo-Sueleros complex, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: drbj
Elevation: 5,500 to 6,500 feet
Mean annual precipitation: 9 to 12 inches
Mean annual air temperature: 50 to 52 degrees F
Frost-free period: 150 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Depolvo and similar soils: 45 percent
Sueleros and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Depolvo

Setting

Landform: Strath terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess derived from micaceous sandstone and siltstone

Typical profile

A - 0 to 3 inches: very fine sandy loam
Btk1 - 3 to 9 inches: loam
Btk2 - 9 to 21 inches: loam
Btk3 - 21 to 38 inches: loam
Bk1 - 38 to 48 inches: loam
Bk2 - 48 to 58 inches: loam
Btkb - 58 to 79 inches: fine sandy loam
Bkb1 - 79 to 93 inches: sandy loam
Bkb2 - 93 to 103 inches: fine sandy loam

Custom Soil Resource Report

Bkb3 - 103 to 109 inches: gravelly sandy loam

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 25 percent

Maximum salinity: Slightly saline to moderately saline (4.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 8.0

Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6c

Hydrologic Soil Group: B

Ecological site: R035XA113NM - Sandy

Hydric soil rating: No

Description of Sueleros

Setting

Landform: Strath terraces

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loess derived from micaceous sandstone and siltstone over alluvium derived from granite, gneiss, and schist

Typical profile

A - 0 to 3 inches: very fine sandy loam

Btkn1 - 3 to 6 inches: loam

Btkn2 - 6 to 14 inches: loam

Btkn3 - 14 to 26 inches: loam

Bkn - 26 to 37 inches: very gravelly sandy loam

2Bk1 - 37 to 44 inches: very gravelly coarse sand

2Bk2 - 44 to 54 inches: very gravelly coarse sand

3BCK1 - 54 to 70 inches: loam

3BCK2 - 70 to 92 inches: very fine sandy loam

3C - 92 to 120 inches: very fine sandy loam

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: 2 to 6 inches to natric

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Custom Soil Resource Report

Maximum salinity: Strongly saline (16.0 to 25.0 mmhos/cm)

Sodium adsorption ratio, maximum: 60.0

Available water supply, 0 to 60 inches: Very low (about 0.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6c

Hydrologic Soil Group: A

Ecological site: R035XA113NM - Sandy

Hydric soil rating: No

Minor Components

Jaconita

Percent of map unit: 7 percent

Hydric soil rating: No

Xenmack

Percent of map unit: 5 percent

Hydric soil rating: No

Ojito

Percent of map unit: 3 percent

Hydric soil rating: No

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- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

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APPENDIX C

FLOOD ZONE / WETLANDS / GROUND WATER /
SURFACE WATERS

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map was New Mexico State Plane, Central Zone (FIPS 3002). The **horizontal datum** was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA/NGS12
National Geodetic Survey, SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at <http://www.ngs.noaa.gov/>.

Base map information shown on this FIRM was provided in digital format by City of Santa Fe, 2009 and 2010; and Santa Fe County, 2006. Additional information was taken directly from the previous Countywide FIRM dated June 17, 2008. Other information was photogrammetrically compiled at a scale of 1:12,000 from U.S. Department of Agriculture aerial photography dated 2009.

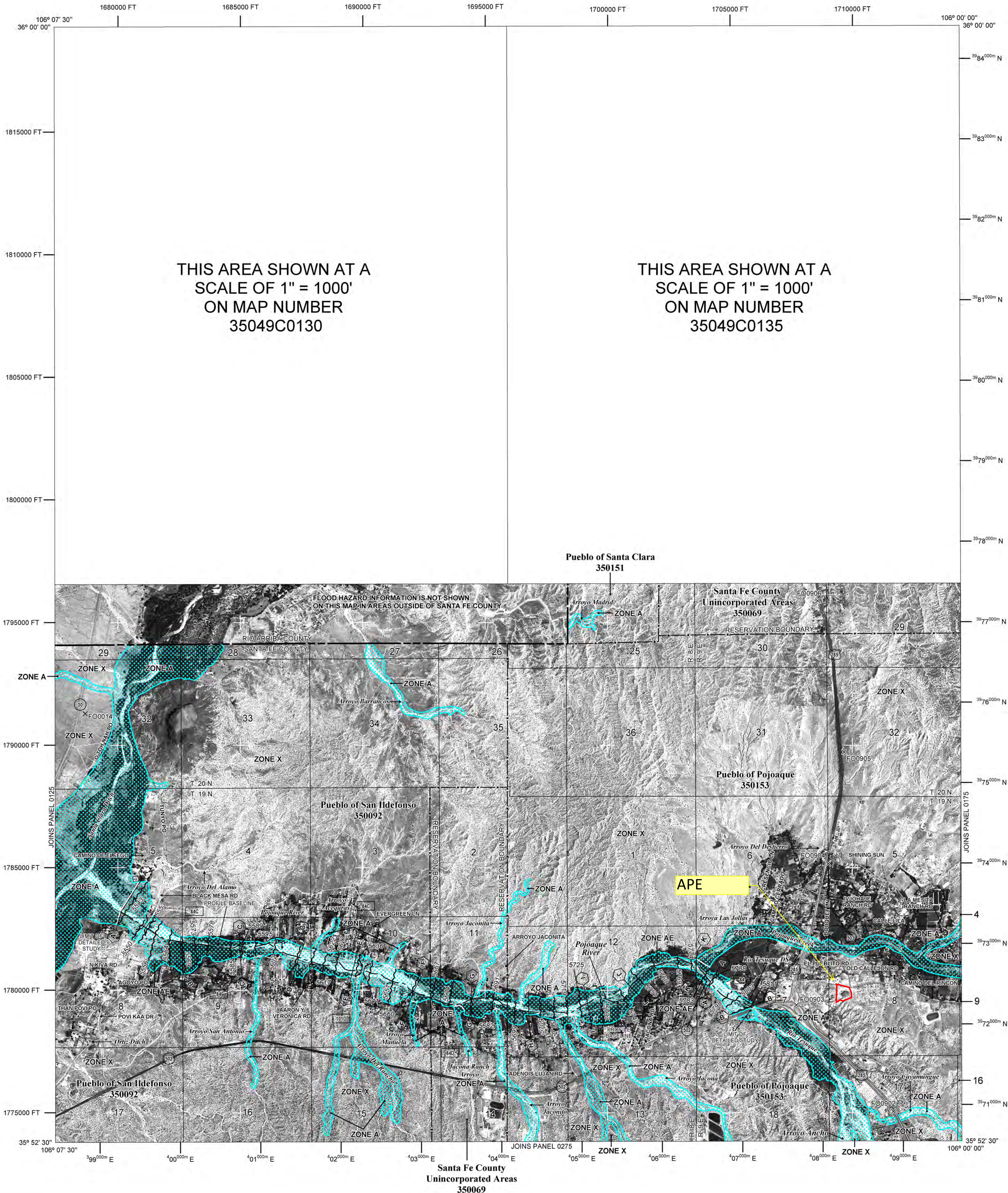
Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (FMIX) at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/nfip>.



LEGEND

- SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**
- The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
- FLOODWAY AREAS IN ZONE AE**
- The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- OTHER FLOOD AREAS**
- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS**
- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**
- OTHERWISE PROTECTED AREAS (OPAs)**
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D Boundary
- CBRS and OPA Boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet* (EL 987)
- Base Flood Elevation value where uniform within zone; elevation in feet*
- *Referenced to the North American Vertical Datum of 1988
- Cross section line
- Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 1000-meter Universal Transverse Mercator grid values, zone 13
- 5000-foot grid ticks: New Mexico State Plane coordinate system, Central zone (FIPSZONE 3002), Transverse Mercator
- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index.

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP PANEL
JUNE 17, 2008

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
DECEMBER 4, 2012 - to update corporate limits, to add Special Flood Hazard Areas, to add Base Flood Elevations, to add or update roads and road names, to incorporate previously issued LOMRs.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'

1000 0 2000 4000 FEET

600 0 600 1200 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0150E

FIRM

FLOOD INSURANCE RATE MAP

SANTA FE COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 150 OF 1100

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
POJOAQUE, PUEBLO OF	350153	0150	E
SAN ILDEFONSO, PUEBLO OF	350092	0150	E
SANTA CLARA, PUEBLO OF	350151	0150	E
SANTA FE COUNTY (UNINCORPORATED AREAS)	350069	0150	E

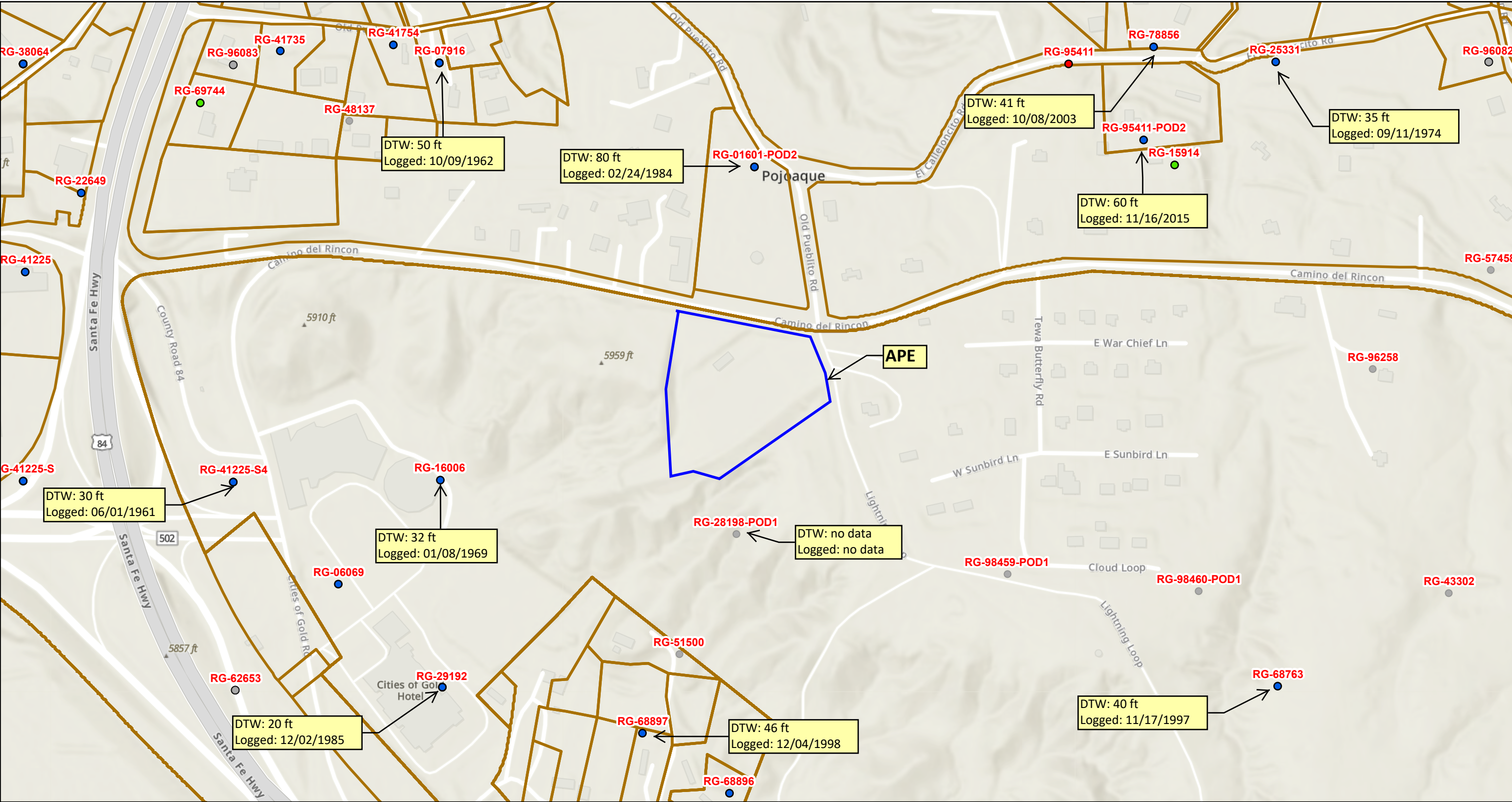
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 35049C0150E

MAP REVISED DECEMBER 4, 2012

Federal Emergency Management Agency

OSE POD Location Map



12/11/2024, 10:14:48 AM

GIS WATERS PODs

● Plugged

● Active

●

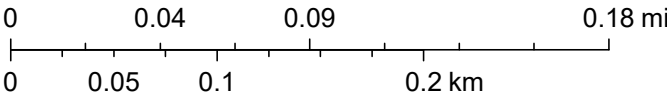
● Pending

■

Santa Fe County Parcels

DTW: Depth to groundwater (feet)

1:4,514



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, ©



U.S. Fish and Wildlife Service

National Wetlands Inventory

Pueblo of Pojoaque



U.S. Fish and Wildlife Service, National Standards and Support Team,
wetlands_team@fws.gov

August 15, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

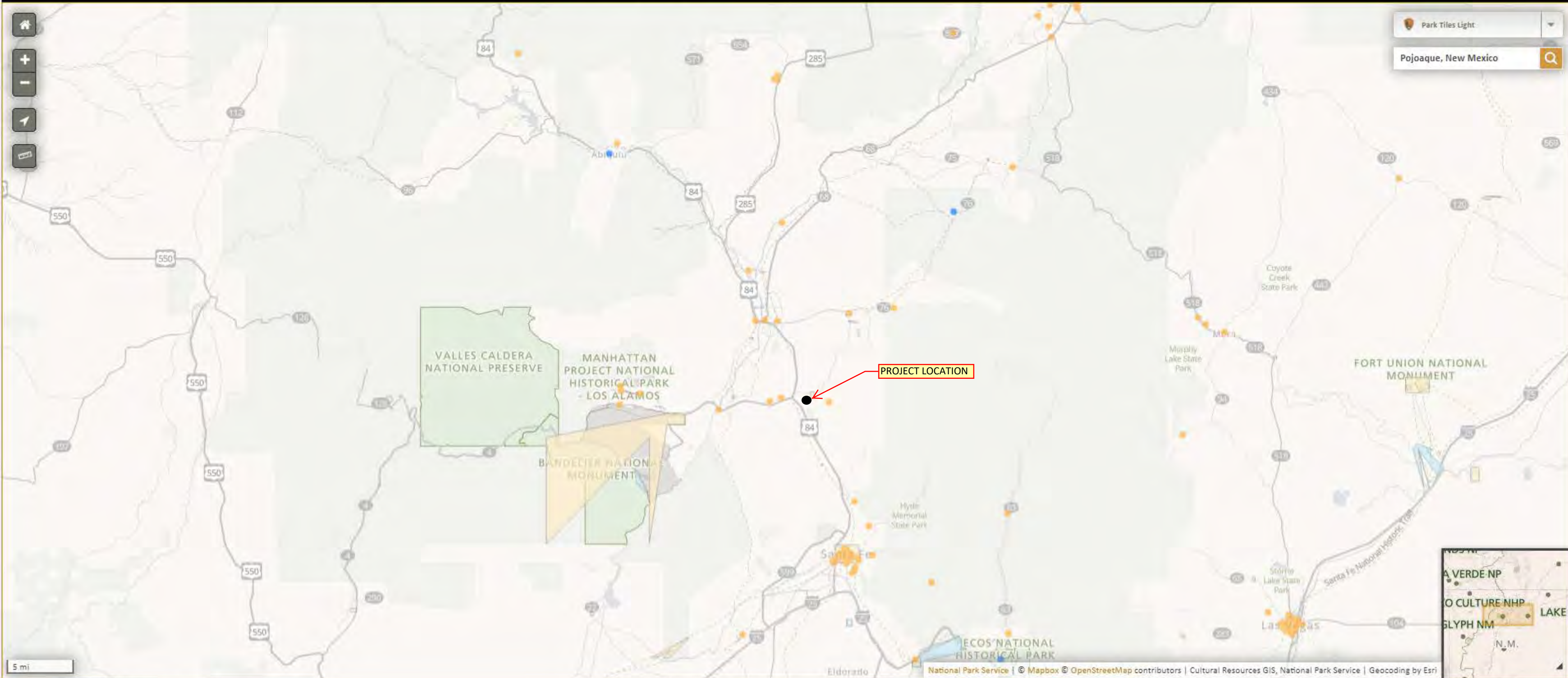
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

APPENDIX D

HISTORIC PROPERTIES AND CULTURAL RESOURCES

National Register of Historic Places

Public, non-restricted data depicting National Register spatial data processed by the Cultural Resources GIS facility. Last minor update, September 2020.



From: [Lopez, Fermin](#)
To: [Stephanie Hinds](#); [Ladd, Christy](#)
Cc: [Niki Harings](#); [George Mihalik](#); [Maestas, Fredrica](#); [Rebecca James](#); [Kaitlin Kerl](#)
Subject: RE: [EXTERNAL]RE: Tribal Admin Building - cultural/archeological review
Date: Tuesday, November 12, 2024 1:23:10 PM
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Awesome. Thank you Stephanie.

Thank You!

Fermin Lopez
Tribal Historic Preservation Officer
Pueblo of Pojoaque Historic Preservation Office
39 Camino del Rincon STE #3
Santa Fe, NM 87506
505-231-0237 Cell
flopez@pojoaque.org



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From: Stephanie Hinds <stephanie.hinds@soudermiller.com>
Sent: Tuesday, November 12, 2024 11:22 AM
To: Lopez, Fermin <FLopez@pojoaque.org>; Ladd, Christy <cladd@pojoaque.org>
Cc: Niki Harings <niki.harings@soudermiller.com>; George Mihalik <george.mihalik@soudermiller.com>; Maestas, Fredrica <FNMaestas@pojoaque.org>; Rebecca James <RebeccaJ@dekkerdesign.org>; Kaitlin Kerl <KaitlinK@dekkerdesign.org>
Subject: RE: [EXTERNAL]RE: Tribal Admin Building - cultural/archeological review

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Thank you, Fermin. We will include your comment additions to the EA report.

Thanks,



www.soudermiller.com

Stephanie Hinds, P.E.
Senior Engineer

Direct/Mobile: 505.793.7079
Office: 505.302.1127

112 W. Montezuma Ave, Suite 3
Cortez, CO 81321

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From: Lopez, Fermin <FLopez@pojoaque.org>

Sent: Tuesday, November 12, 2024 11:07 AM

To: Ladd, Christy <cladd@pojoaque.org>; Stephanie Hinds <stephanie.hinds@soudermiller.com>

Cc: Niki Harings <niki.harings@soudermiller.com>; George Mihalik

<george.mihalik@soudermiller.com>; Maestas, Fredrica <FNMaestas@pojoaque.org>; Rebecca

James <RebeccaJ@dekkerdesign.org>; Kaitlin Kerl <KaitlinK@dekkerdesign.org>

Subject: [EXTERNAL]RE: Tribal Admin Building - cultural/archeological review

Thank you Christy. Rebecca and team please let me know how I can be of assistance.

Thank You!

Fermin Lopez

Tribal Historic Preservation Officer

Pueblo of Pojoaque Historic Preservation Office

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From: Ladd, Christy <cladd@pojoaque.org>
Sent: Tuesday, November 12, 2024 11:05 AM
To: Lopez, Fermin <FLopez@pojoaque.org>; Stephanie Hinds <stephanie.hinds@soudermiller.com>
Cc: Niki Harings <niki.harings@soudermiller.com>; George Mihalik <george.mihalik@soudermiller.com>; Maestas, Fredrica <FNMaestas@pojoaque.org>; Rebecca James <RebeccaJ@dekkerdesign.org>; Kaitlin Kerl <KaitlinK@dekkerdesign.org>
Subject: RE: Tribal Admin Building - cultural/archeological review
Importance: High

Thanks Fermin; since we are only in the Preliminary design phase, this will more than likely be a part of the final design phase (which is not currently funded)

My question for Rebecca and Kaitlin is concerning the meeting scheduled for this Thursday. It is my understanding that Leadership has been overwhelmed with meetings for this project and recommended that Dekker move the project into preliminary design. Can you please be more specific on what this week's meeting is for with Leadership? Maybe the rest of the Team can help answer the questions without another meeting.

Thank you

From: Lopez, Fermin <FLopez@pojoaque.org>
Sent: Tuesday, November 12, 2024 11:00 AM
To: Stephanie Hinds <stephanie.hinds@soudermiller.com>
Cc: Niki Harings <niki.harings@soudermiller.com>; George Mihalik <george.mihalik@soudermiller.com>; Ladd, Christy <cladd@pojoaque.org>; Maestas, Fredrica <FNMaestas@pojoaque.org>; Rebecca James <RebeccaJ@dekkerdesign.org>; Kaitlin Kerl <KaitlinK@dekkerdesign.org>
Subject: RE: Tribal Admin Building - cultural/archeological review

Good morning Stephanie.

I have reviewed the documents you sent (attached) and the information is still accurate. There are 3 things I must add which are, 1. I have asked that a comprehensive long term erosion plan for the surrounding slopes and ridgetops be included in the design and build and 2. also a retaining wall for the west side of the project area to protect LA128692 which is an active site that rests on the hilltop to the west and butts up to the project area. 3. No new soil is introduced to the construction site which will protect the integrity of the archaeological sites within the surrounding area especially where the retaining wall is built (backfill of the retaining wall) on the west side of the property.

Thank You!

Fermin Lopez
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From: Stephanie Hinds <stephanie.hinds@soudermiller.com>
Sent: Tuesday, November 12, 2024 10:33 AM
To: Lopez, Fermin <FLopez@pojoaque.org>
Cc: Niki Harings <niki.harings@soudermiller.com>; George Mihalik <george.mihalik@soudermiller.com>
Subject: FW: Tribal Admin Building - cultural/archeological review

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Hi Fermin,

Bruce Bernstein gave me your name and said you are the THPO contact. We are working on the Environmental Assessment of the Pojoaque Tribal Admin Building and need to verify the cultural and historical review of the site area. Below is my email to Bruce for reference. Can you review his feedback from 2020 and provide any updates to his review? I just spoke with Bruce on the phone and he said you are welcome to contact him with any questions.

Thank you!



Stephanie Hinds, P.E.
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From: Stephanie Hinds

Sent: Tuesday, November 5, 2024 10:48 AM

To: Bernstein, Bruce <bbernstein@pojoaque.org>

Cc: George Mihalik <george.mihalik@soudermiller.com>; Niki Harings <niki.harings@soudermiller.com>

Subject: Tribal Admin Building - cultural/archeological review

Hello Dr. Bernstein,

Hope you are doing well. Please let me know if the message below should be addressed to someone else.

We are providing an updated Environmental Assessment for the proposed Tribal Administration Building in Pueblo of Pojoaque. If you recall, we did a cultural and archeological review in 2020 of the area intended for the building and area of disturbance. I've attached your comments from that review. **Can you provide any updates, if there are any, to the proposed project area with respect to known or potential sites?** If you have any concerns or requests not already addressed in your previous review, particularly under item 2, please let me know.

Thank you very much!



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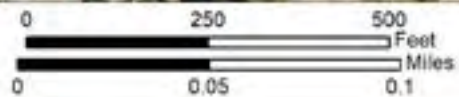
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Proposed Tribal Administration Building

Archaeological Sites



APPENDIX E

BIOLOGICAL RESOURCES



December 13, 2024

#1228881

Christina Cartier
Chief Finance Officer
Pueblo of Pojoaque
2 Petroglyph Circle
Santa Fe, New Mexico 87506
(505) 455-4564

RE: Biological Report for Pojoaque Tribal Administration Building, Pojoaque, New Mexico, Santa Fe County.

Dear Miss Cartier:

SUMMARY

This Biological Report (BR) for the proposed Pueblo of Pojoaque Tribal Administration Building was prepared for the Pueblo of Pojoaque to assess possible Threatened and Endangered (T&E) species within Santa Fe County, New Mexico. This evaluation includes the project location, project description (status and plan), study methods, and findings.

In summary, the Endangered Species Act of 1973 requires the evaluation of potential impacts on federally listed species and their critical habitat for projects involving federal land or funding. On behalf of the Project Proponents, Souder, Miller and Associates (SMA) developed this report by conducting a desktop survey with GIS data and available information within the County of the project area and performed a field reconnaissance to document observed flora and fauna. SMA reviewed T&E species, migratory birds, rare plants, noxious weeds, and wetlands to evaluate the potential environmental impacts and effect determinations of the proposed project and mitigation measures to reduce or eliminate any adverse effects on T&E species within the project area.

Based on the desktop studies, various T&E species were noted as potentially present in the proposed project area. Fourteen migratory birds were listed in the IPaC as potentially present within the project area. No fisheries habitats are known to occur within the project area. There are no wetlands in or near the extent of the project area. SMA opines that the proposed project will not have a negative net impact on the presence of T&E species or their critical habitat if the recommended mitigation measures outlined in this BR are implemented.

PROJECT LOCATION

The project area is located in Santa Fe County within the Pueblo of Pojoaque approximately 14 miles north of Santa Fe New Mexico as shown on the location map (Figure 1). The elevation averages 5,950 ft. The physical address of the proposed building is 39 Camino Del Rincon, Santa Fe, NM 87506. The area is bordered to the north by Camino del Rincon and Lightning Loop to the east. To the immediate south and west the land is undeveloped. The site is approximately 4.6 acres. The site boundary is shown in Figure 2.

PROJECT DESCRIPTION

The Proposed Project is the development of the Pueblo of Pojoaque Tribal Administration Building to improve accommodations for the Tribal Officials' Office and to support the growth and expansion of the Pueblo of Pojoaque and to best provide effective management of all services to the community.

STUDY METHODS

The Endangered Species Act of 1973 (ESA) requires an evaluation of potential impacts on federally listed species and their critical habitat. On behalf of the Project Proponents, SMA conducted this biological desktop review for T&E species in Santa Fe County to evaluate the potential environmental impacts of the proposed project and mitigation measures to reduce or eliminate any adverse effects. As part of the evaluation, SMA also evaluated the presence and potential presence of critical habitat, migratory birds, rare plants, noxious weeds, and wetlands/need for permitting.

DESKTOP STUDIES

The desktop studies conducted by SMA included searching the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database and the New Mexico Department of Game and Fish (NMDGF) Biota Information System of New Mexico (BISON-M) database to identify T&E flora and fauna that may be present in the vicinity of proposed project area. Additionally, SMA accessed the National Wetland Inventory (NWI) database to identify the presence of wetlands.

USFWS IPaC

The USFWS IPaC system is used to generate project-specific lists of T&E species and migratory birds that may occur within the proposed project area. A formal electronic request for a T&E species, critical habitat and migratory bird listing was made with USFWS via the automated IPaC system for the extent of the proposed project area on August 15, 2024 and updated on December 13, 2024 (Attachment 1).

- One mammal: New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*)
- Two birds: Mexican Spotted Owl (*Strix occidentalis lucida*); Yellow-billed Cuckoo (*Coccyzus americanus*)
- One fish: Rio Grande Cutthroat Trout (*Oncorhynchus clarkii virginalis*)
- One insect: Monarch Butterfly (*Danaus plexippus*) Candidate
- Fourteen Migratory Birds: Bald Eagle (*Haliaeetus leucocephalus*); Broad-tailed Hummingbird (*Selasphorus platycercus*); California Gull (*Larus Californicus*); Cassin's Finch (*Haemorhous cassinii*); Clark's Grebe (*Aechmophorus clarkii*); Evening Grosbeak (*Coccothraustes vespertinus*); Golden Eagle (*Aquila chrysaetos*); Lesser Yellowlegs (*Tringa flavipes*); Lewis's Woodpecker (*Melanerpes lewis*); Olive-sided Flycatcher (*Contopus cooperi*); Pectoral Sandpiper (*Calidris melanotos*); Pinyon Jay (*Gymnorhinus cyanocephalus*); Virginia's Warbler (*Leiothlypis virginiae*); Western Grebe (*Aechmophorus occidentalis*)
- No Critical Habitat for T&E species within the project area under USFWS jurisdiction
- No designated wetlands are present within the project area

NMDGF BISON-M

SMA accessed the NMDGF automated BISON-M system on August 15, 2024 and updated on December 13, 2024, for Santa Fe County (Attachment 2); this system is used to generate county-specific lists of animal and plant species, including state-listed T&E species, that may occur within the proposed project area. The automated list from the BISON-M system listed a total of 783 plant and animal species in Santa Fe County: including 16 listed T&E species.

- Three Mammals: Spotted Bat (*Euderma maculatum*); Pacific Marten (*Martes caurina*); Meadow Jumping Mouse (*Zapus luteus luteus*)
- Twelve birds: White-tailed Ptarmigan (*Lagopus leucura*) Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*); Broad-billed Hummingbird (*Cynanthus latirostris*); Violet-crowned Hummingbird (*Leucolia violiceps*); Least Tern (*Sternula antillarum*); Bald Eagle (*Haliaeetus leucocephalus*); Mexican Spotted Owl (*Strix occidentalis lucida*); Boreal Owl (*Aegolius funereus*); Peregrine Falcon (*Falco peregrinus*); Southwestern Willow Flycatcher (*Empidonax traillii extimus*); Gray Vireo (*Vireo vicinior*); Baird's Sparrow (*Centronyx bairdii*)
- One mollusk: Lilljeborg's Peaclam (*Pisidium lilljeborgi*)

Wetlands

SMA used the NWI database and Google Earth imagery to evaluate the presence of wetlands on the subject and adjoining properties. The NWI database was consulted on August 15, 2024 (Attachment 3). No evidence of wetlands was identified within the project area. Google Earth imagery also revealed no evidence of potential wetlands. During the site visit two areas were identified that would carry runoff during rain events.

Noxious Weeds and Rare Plants

- Noxious weeds – The NM Department of Agriculture's Noxious Weed List identifies potential weeds within the project area; none were observed during the site visit (Attachment 4).
- Rare Plants - The New Mexico Rare Plant List, maintained by the New Mexico Rare Plant Technical Council (NMRPTC) identifies potential rare plants within the proposed project area. The database was consulted on October 17, 2024 and there are 3 New Mexico Rare Plants listed specific to Santa Fe County. None were observed during the site visit (Attachment 5).

FIELD RECONNAISSANCE

The field reconnaissance of the site was conducted on September 4, 2024. SMA personnel traveled to the site and documented vegetation and evidence of wildlife. Photographs were taken within the project area and boundaries. Site reconnaissance notes and photographs were collected for positive identification to adequately describe the flora and fauna. Erin Berry, SMA Technician III, conducted the site visit and annotated photographs (Attachment 6).

SMA did not observe any nests during the site reconnaissance. SMA did observe several burrows, of different sizes belonging to rodent and insect species. SMA did not observe any, or any evidence of, T&E species in the project area. There is no evidence of suitable habitat of any listed T&E species within the project area. There is a possibility that migratory birds could nest and roost within the project area during their identified breeding seasons within the vicinity of the project area. There was no evidence of any high-water marks indicative of jurisdictional wetlands observed in the project area. Common desert flora and fauna were observed as described below (Tables 1 and 2).

Table 1. Vegetation observed within the survey area during the site visit include:

Scientific Name	Common Name
<i>Cylindropuntia imbricata</i>	Tree Cholla
<i>Gutierrezia sarothrae</i>	Broom Snakeweed
<i>Artemisia tridentata</i>	Big sagebrush
<i>ipomopsis longiflora</i>	Flaxflowered Gilia
<i>Atriplex Sp.</i>	Saltbush species
<i>Fraxinus Sp.</i>	Ash species
<i>Castilleja Sp.</i>	Indian Paintbrush
<i>Opuntia chlorotica</i>	Prickly Pear
<i>Grindelia Sp.</i>	Gumweed
<i>Yucca glauca</i>	Narrowleaf Yucca
<i>Unknown bunchgrass sp.</i>	Grasses

Table 2. Animals or evidence of animals observed within the survey area during the site visit include:

Scientific Name	Common Name
<i>Corvus corax</i>	Common Raven
<i>Columba livia</i>	Rock Pigeon
<i>Haemorhous mexicanus</i>	House Finch
<i>Junco hyemalis</i>	Dark-eyed Junco
<i>Charadrius vociferus</i>	Killdeer (call)
<i>Sialia mexicana</i>	Western Bluebird
<i>Unknown sp.</i>	Small Mammal Burrows

DETERMINATIONS

The following determinations were made for the proposed project areas based solely on field observations of potential habitat and interpretation of aerial imagery. The determinations do not imply the need for any agency consultation until a specific project is proposed. The determinations address the federally listed endangered, threatened or candidate species, and species of concern that may occur in Santa Fe County according to lists obtained from USFWS and BISON-M (Attachments 1 and 2). Candidate species and species of concern are not protected under the ESA, as amended. However, the status of these species is monitored by USFWS. These determinations have been made based on a desktop review of the proposed project area, based on available information for the species. Additionally, rare plants, noxious weeds, and migratory birds were taken into consideration.

USFWS Effects Determinations and Rationale:

- a. **No effect:** This effect determination is used when it is concluded that the proposed action will have no effect on the species in question. Either no individuals were observed in the project area or no 'suitable habitat' exists within the project area. No consultation with management agencies is required when the effect determination is "no effect".

- b. May affect, not likely to adversely affect: This effect determination is used when the proposed action is beneficial, insignificant, or discountable to the species in question. This effect determination requires informal Section 7 consultation with the USFWS and concurrence with the determination for federally listed species. This determination may also require informal consultation with NMDGF for state-listed species.
- c. May affect, likely to adversely affect: This effect determination is used when the proposed action will cause unavoidable adverse effects to the species in question, either directly or indirectly. In the event the overall effect is beneficial to the listed species, but is also likely cause adverse effects, the appropriate effect determination for the proposed action is “likely to adversely affect” the listed species. This effect determination requires formal Section 7 consultation with the USFWS and NMDGF.

Endangered Species

- a. New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*)
 - i. Habitat: The New Mexico meadow jumping mouse (jumping mouse) is endemic to New Mexico, Arizona, and a small area of southern Colorado. It nests in dry soils, but uses moist, streamside, dense riparian/wetland vegetation up to an elevation of about 8,000 feet. The jumping mouse appears to only utilize two riparian community types: persistent emergent herbaceous wetlands and scrub-shrub wetlands. It especially uses microhabitats of patches or stringers of tall dense sedges on moist soil along the edge of permanent water.
 - ii. Determinations: Based on the available information, and that the jumping mouse is a habitat specialist, there is no suitable habitat within the project area. Final critical habitat has been designated for the New Mexico Meadow Jumping Mouse, and the project area does not overlap the critical habitat. The effect determination for the New Mexico Meadow Jumping Mouse is “no effect.”

Threatened Species

- a. Mexican Spotted Owl (*Strix occidentalis lucida*)
 - i. Habitat: Mexican spotted owls can be found in a wide range of habitats, including mixed coniferous forests, pine-oak forests, and riparian forests. They often prefer old-growth or mature forests, which offer dense canopy cover. In addition to forests, Mexican Spotted Owls are frequently found in steep, rocky canyon areas with sparse vegetation. These canyons provide shelter and suitable nesting sites.
 - ii. Determinations: Based on the available information, the preferred habitat of the Mexican Spotted Owl is not likely present within project area. There is designated final critical habitat for the Mexican Spotted Owl. The project

location does not overlap this designated critical habitat. The effect determination for the Mexican Spotted Owl is “no effect.”

b. Yellow-billed Cuckoo (*Coccyzus americanus*)

- i. Habitat: The Yellow-billed Cuckoo is an obligate riparian nester. They mostly breed in streamside forests, especially areas dominated by white alder (*Alnus rhombifolia*), sycamore (*Plantanus* sp.), bigleaf maple (*Acer macrophyllum*), willow (*Salix* sp.) and cottonwood stands (*Populus* sp.). Other habitat characteristics include moist thickets, overgrown pastures, and orchards. This species ranges from California to Minnesota and southern New Brunswick and southward. The cuckoo winters in South America. The western populations are separated from the eastern populations by the Rocky Mountains in Montana, Wyoming, and the northern and central parts of Colorado, and by the eastern crest of the Rio Grande watershed in southern Colorado, New Mexico, and western Texas. They are regular migrants and breeders throughout Arizona and New Mexico where suitable riparian habitat is available, such as along the Rio Grande, Pecos River, Gila River, Mogollon Creek, San Francisco River Valley, Tularosa River, Ute Creek, Canadian River and on the Gray Ranch in Hidalgo County. They feed on caterpillars, grasshoppers, beetles, ants, wasps, frogs, lizards, small fruit, and various other insects.
- ii. Determinations: Based on available data, the preferred habitat of the Yellow-billed Cuckoo is not present within the proposed project area. The effect determination for the Yellow-billed Cuckoo is “no effect.”

Candidate Species

a. Rio Grande Cutthroat Trout (*Oncorhynchus clarkii virginalis*)

- i. Habitat: The Rio Grande cutthroat trout is a subspecies of cutthroat trout, endemic to the Rio Grande, Pecos, and possibly the Canadian River Basins in New Mexico and Colorado. Rio Grande Cutthroat trout occupy high elevation streams and lakes of the Rio Grande, Canadian, and Pecos River drainages in Colorado and New Mexico, giving it the southern-most distribution of any form of Cutthroat Trout.
- ii. Determinations: Based on available data, the preferred habitat of the Rio Grande Cutthroat Trout is not present within the proposed project area. The effect determination for the Rio Grande Cutthroat Trout is “no effect.”

b. Monarch Butterfly (*Danaus plexippus*):

- i. Habitat: The Monarch Butterfly can occur in areas with suitable habitat for milkweed, where they lay their eggs. Milkweed is the sole food source (nectar) for Monarch caterpillars. They have been observed in desert grassland and

scrub, Great Plains mixed-grass prairie, and Rocky Mountain Subalpine-High Mountain Meadow.

Monarchs have both spring and fall migrations, traveling across the North American continent to and from wintering sites. In eastern North America, monarchs travel north in the spring, from Mexico to Canada, over two to three successive generations, breeding along the way. Western monarchs continue to occupy and breed in warmer climates throughout the summer. The final generation returns to wintering sites in Mexico and coastal California. Unlike previous generations, which complete their life cycle in four weeks, these “super generation” monarchs live for six to eight months and may travel thousands of miles to return to wintering grounds. These monarchs then begin the multi-generational migration the following spring.

- ii. Determinations: Based on observations and on available data, the preferred habitat (milkweed) of the Monarch butterfly may occur within the project area. The effect determination for the Monarch butterfly is “may effect, not likely to adversely effect.

Species of Concern

Although they are not protected by the Endangered Species Act, federal species of concern and New Mexico species of concern were also taken into consideration during the desktop review, however; effect determinations for species of concern are not analyzed. Recent lists of species of concern for Santa Fe County were obtained from USFWS and NMDGF.

FINDINGS

The USFWS automated IPaC system and NMDGF BISON-M system identified several potential T&E species: Spotted Bat (*Euderma maculatum*); Pacific Marten (*Martes caurina*); New Mexico Meadow Jumping Mouse (*Zapus luteus luteus*); White-tailed Ptarmigan (*Lagopus leucura*) Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*); Broad-billed Hummingbird (*Cyanthus latirostris*); Violet-crowned Hummingbird (*Leucolia violiceps*); Least Tern (*Sternula antillarum*); Bald Eagle (*Haliaeetus leucocephalus*); Mexican Spotted Owl (*Strix occidentalis lucida*); Boreal Owl (*Aegolius funereus*); Peregrine Falcon (*Falco peregrinus*); Southwestern Willow Flycatcher (*Empidonax traillii extimus*); Gray Vireo (*Vireo vicinior*); Baird's Sparrow (*Centronyx bairdii*); Lilljeborg's Peaclam (*Pisidium lilljeborgi*). While it is possible that some of these species may have suitable habitat within the proposed sites, SMA did not identify any suitable habitat during the site reconnaissance. The proposed site has been previously disturbed and has undergone a wide range of past uses. The IPaC system did not identify any critical habitats or fish hatcheries. Fourteen migratory birds: Bald Eagle (*Haliaeetus leucocephalus*); Broad-tailed Hummingbird (*Selsphorus platycercus*); California Gull (*Larus Californicus*); Cassin's Finch (*Haemorhous cassinii*); Clark's Grebe (*Aechmophorus clarkii*); Evening Grosbeak (*Coccothraustes vespertinus*); Golden Eagle (*Aquila chrysaetos*); Lesser Yellowlegs (*Tringa flavipes*); Lewis's Woodpecker (*Melanerpes lewis*); Olive-sided Flycatcher (*Contopus cooperi*); Pectoral Sandpiper (*Calidris melanotos*); Pinyon Jay (*Gymnorhinus cyanocephalus*); Virginia's Warbler (*Leiothlypis virginiae*); Western Grebe (*Aechmophorus occidentalis*) are potentially present within the area according to the IPaC's Probability of Presence Summary. Based on the foregoing information, SMA opines that an informal Section 7 consultation with the USFWS is not

necessary. Regarding wetlands, it appears that there are no wetlands within the project area. There are areas that carry runoff during rain events.

RECOMMENDATIONS

Regarding the outcomes of this BR, SMA recommends that the Pueblo of Pojoaque and their chosen contractors undertake certain protective measures during construction:

- Any ground and vegetation-disturbing activities be conducted outside of the bird breeding season to minimize potential impacts to listed bird species. The breeding season for each species listed varies greatly but includes December-August for Bald eagles and Golden Eagles, February-July for the Pinyon Jay, March-July for the California Gull, April-September for Lewis's Woodpecker, May- August for Broad-tailed Hummingbird, Cassin's Finch, Olive-sided Flycatcher, and Virginia's Warbler, and June-August for Clark's Grebe, therefore disturbance activities should be planned for mid to late fall and early winter. If activities planned must occur during the breeding season of one or more species, preconstruction nesting surveys should be conducted by qualified personnel. The additional migratory birds that are listed do not have suitable nesting habitat within the project area.

• • •

SMA appreciates the opportunity to provide professional consulting services to you. If you have any questions or comments concerning this evaluation, please feel free to call me at (505) 325-7535 or contact me via e-mail.

Sincerely,

MILLER ENGINEERS, INC. D/B/A
SOUDER, MILLER & ASSOCIATES



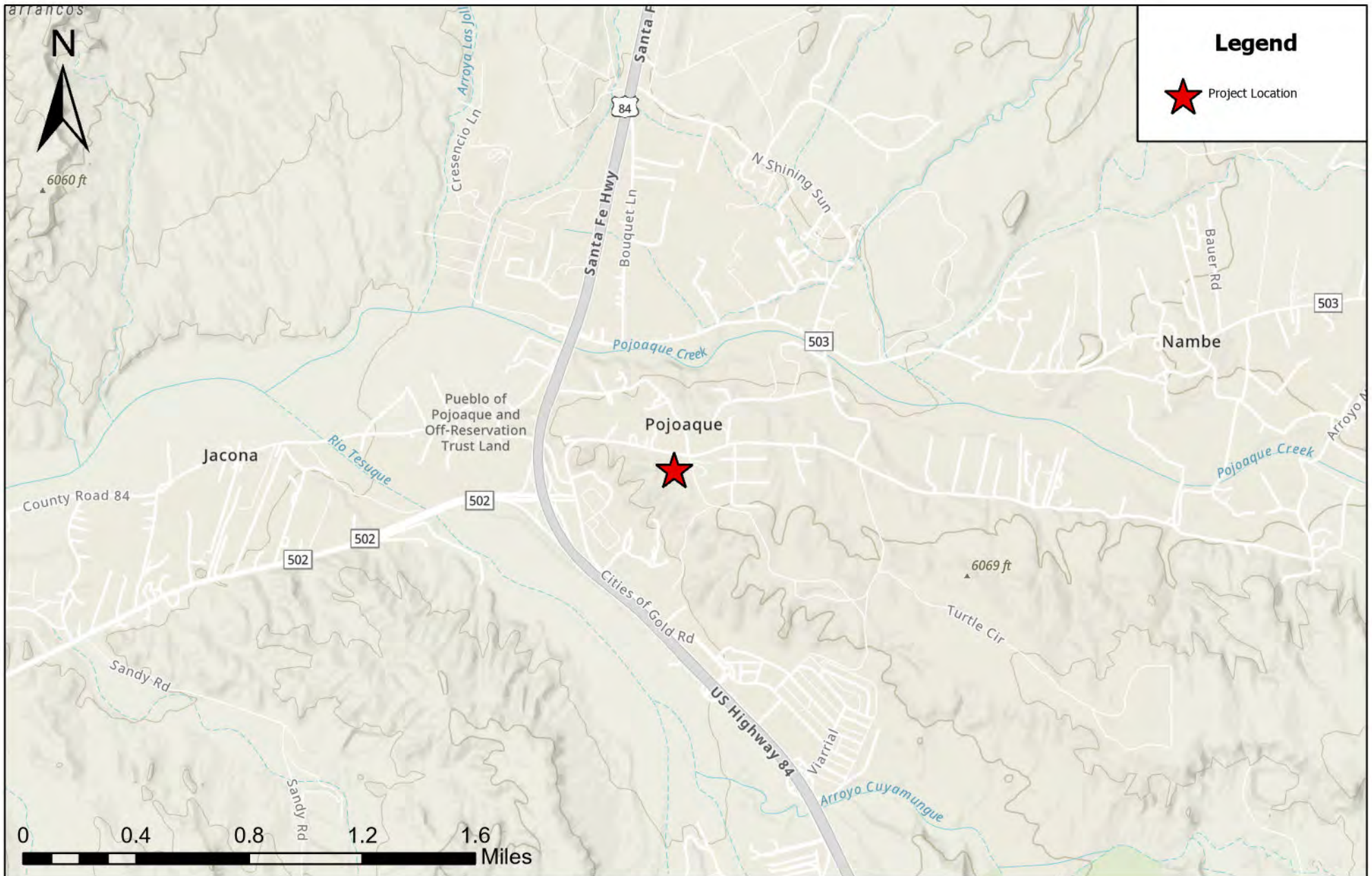
Erin Berry
Environmental Technician III
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Niki Harings, Ph.D.
Senior Scientist
niki.harings@soudermiller.com


- Figures: 1 Project Area Location Map
 2 Project Extent

- Attachments: 1 *United States Fish and Wildlife Service, IPaC Output*
 2 *New Mexico Fish and Game, BISON-M Output*
 3 *National Wetland Inventory*
 4 *Noxious Weeds List*
 5 *Rare Plants List*
 6 *NRCS Web Soil Survey*
 7 *Site Visit notes and photolog*



PROJECT LOCATION
PUEBLO OF POJOAQUE ADMINISTRATION BUILDING
SANTA FE COUNTY, NEW MEXICO


Figure 1

<p>Date Saved: 11/22/2024</p> <p>Revisions</p> <p>By: _____ Date: _____ Descr: _____</p> <p>By: _____ Date: _____ Descr: _____</p> <p>© Souder, Miller & Associates, 2024, All Rights Reserved</p>	<p>Drawn Erin Berry</p> <p>Date 11/22/2024</p> <p>Checked _____</p> <p>Approved _____</p>	<p align="center">  </p> <p align="right"> 401 West Broadway Farmington, New Mexico 87401 (505) 325-7535 www.soudermiller.com Serving the Southwest & Rocky Mountains </p>
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Legend

— Project Extent

<p>PROJECT EXTENT PUEBLO OF POJOAQUE ADMINISTRATION BUILDING SANTA FE COUNTY, NEW MEXICO</p>			<p>Figure 2</p>	
<p>Date Saved: 11/22/2024</p>	<p>Revisions</p> <p>By: _____ Date: _____ Descr: _____</p> <p>By: _____ Date: _____ Descr: _____</p>	<p>Drawn Date Checked Approved</p>	<p>Erin Berry 11/22/2024 _____ _____</p>	<p> Souder, Miller & Associates Engineering • Environmental Geomatics</p>
<p>© Souder, Miller & Associates, 2024, All Rights Reserved</p>		<p>401 West Broadway Farmington, New Mexico 87401 (505) 325-7535 www.soudermiller.com Serving the Southwest & Rocky Mountains</p>		

ATTACHMENT 1
United States Fish and Wildlife Service, IPaC Output



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:

12/13/2024 17:19:09 UTC

Project Code: 2024-0130923

Project Name: Pueblo of Pojoaque Admin Building

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: 2024-0130923

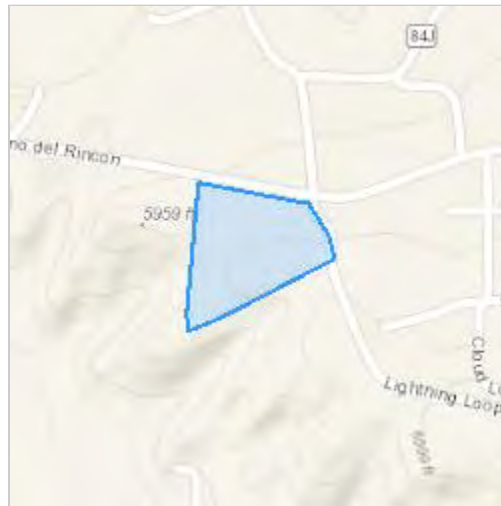
Project Name: Pueblo of Pojoaque Admin Building

Project Type: Tribal Construction

Project Description: Construction of a new tribal administration building.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.8915794,-106.01604534143863,14z>



Counties: Santa Fe County, New Mexico

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 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 Fisheries¹, 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.

-
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
New Mexico Meadow Jumping Mouse <i>Zapus hudsonius luteus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7965	Endangered

BIRDS

NAME	STATUS
Mexican Spotted Owl <i>Strix occidentalis lucida</i> 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 <i>Coccyzus americanus</i> 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 <i>Danaus plexippus</i> There is proposed critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

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: Erin Berry
Address: 401 W. Broadway
City: Farmington
State: NM
Zip: 87401
Email: erin.berry@soudermiller.com
Phone: 5057935784

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Pueblo of Pojoaque, New Mexico THPO

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially 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.

Project information

NAME

Pueblo of Pojoaque Admin Building

LOCATION

Santa Fe County, New Mexico



DESCRIPTION

Some(Construction of a new tribal administration building.)

Local office

New Mexico Ecological Services Field Office

☎ (505) 346-2525

📅 (505) 346-2542

2105 Osuna Road Ne
Albuquerque, NM 87113-1001

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. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species¹ 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 Fisheries²).

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 <i>Zapus hudsonius luteus</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7965	Endangered

Birds

NAME	STATUS
Mexican Spotted Owl <i>Strix occidentalis lucida</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8196	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Insects

NAME	STATUS
<p>Monarch Butterfly <i>Danaus plexippus</i></p> <p>Wherever found</p> <p>There is proposed critical habitat for this species.</p> <p>https://ecos.fws.gov/ecp/species/9743</p>	Proposed Threatened

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.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

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

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

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 "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "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.

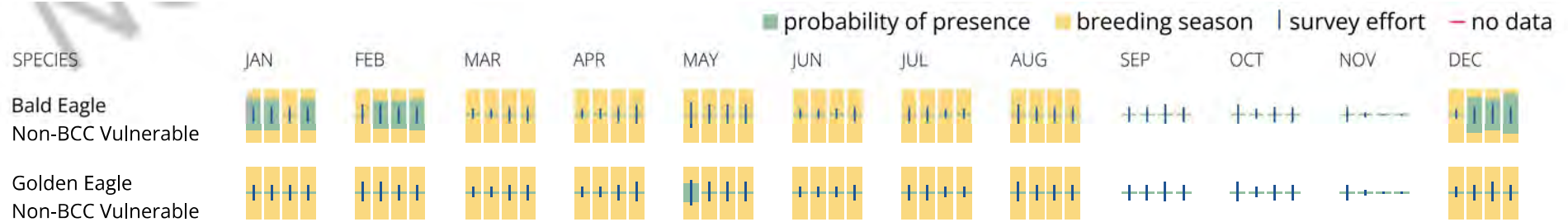
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence 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). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs of bald and golden eagles 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 [Rapid Avian Information Locator \(RAIL\) Tool](#).

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. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

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:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

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, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Broad-tailed Hummingbird <i>Selasphorus platycercus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 25 to Aug 21
California Gull <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
Cassin's Finch <i>Haemorhous cassinii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Evening Grosbeak <i>Coccothraustes vespertinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10

Golden Eagle *Aquila chrysaetos*

Breeds Dec 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Lesser Yellowlegs *Tringa flavipes*

Breeds elsewhere

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

<https://ecos.fws.gov/ecp/species/9679>

Lewis's Woodpecker *Melanerpes lewis*

Breeds Apr 20 to Sep 30

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

<https://ecos.fws.gov/ecp/species/9408>

Olive-sided Flycatcher *Contopus cooperi*

Breeds May 20 to Aug 31

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

<https://ecos.fws.gov/ecp/species/3914>

Pectoral Sandpiper *Calidris melanotos*

Breeds elsewhere

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

Pinyon Jay *Gymnorhinus cyanocephalus*

Breeds Feb 15 to Jul 15

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

<https://ecos.fws.gov/ecp/species/9420>

Virginia's Warbler *Leiothlypis 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>

Western Grebe *aechmophorus occidentalis*

Breeds Jun 1 to Aug 31

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

<https://ecos.fws.gov/ecp/species/6743>

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 "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "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 (l)

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.

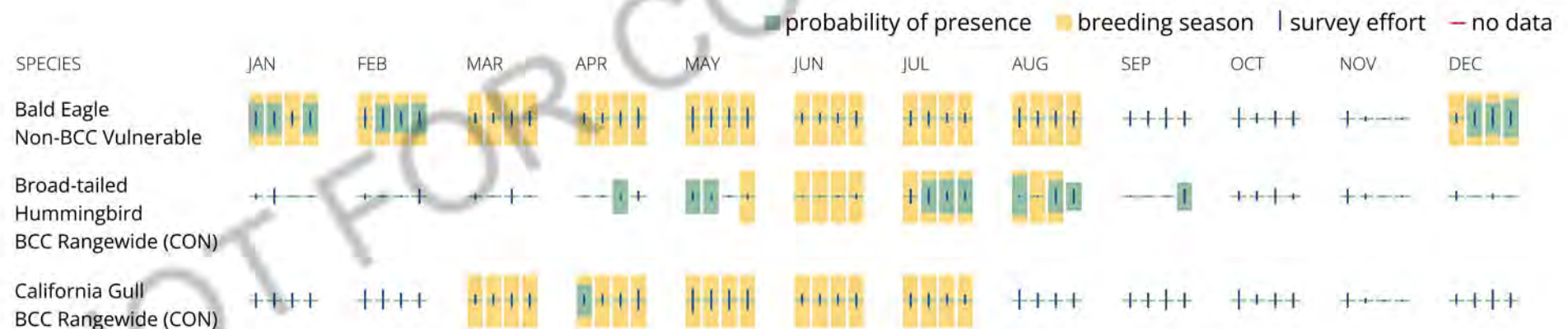
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

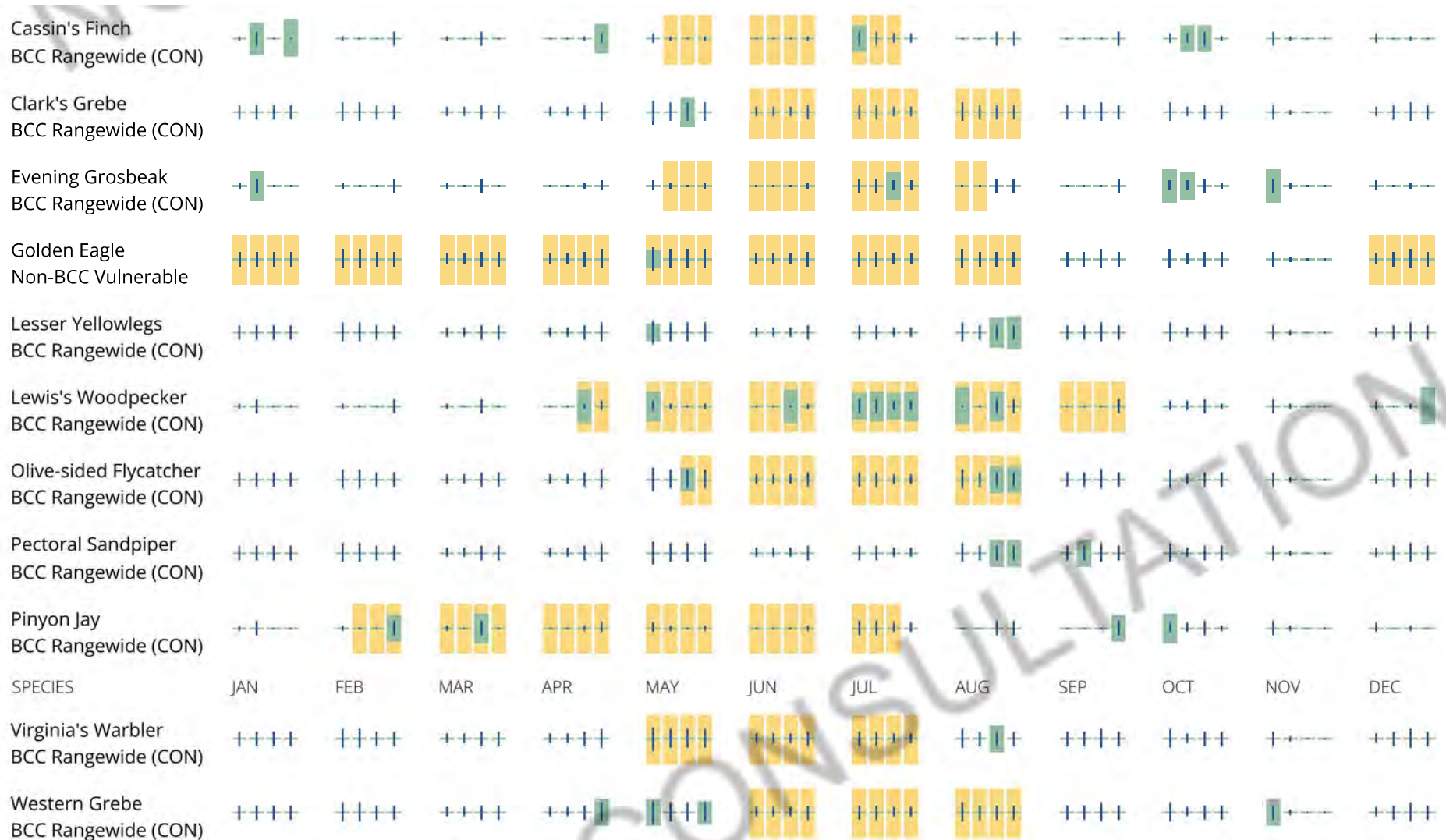
No Data (—)

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 list of migratory birds that potentially occur 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 [Rapid Avian Information Locator \(RAIL\) 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 or migrating in my 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 query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. 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 (NWI)

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](#).

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

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.

ATTACHMENT 2
New Mexico Fish and Game, BISON-M Output

Species of Greatest Conservation Need and Federal or State Threatened/Endangered Santa Fe

<u>Taxonomic Group</u>	<u># Species</u>	<u>Taxonomic Group</u>	<u># Species</u>
Birds	12	Mammals	3
Molluscs	1		

TOTAL SPECIES: 16

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Spotted Bat	Euderma maculatum	T			Y	View
Pacific Marten	Martes caurina	T			Y	View
New Mexico Jumping Mouse	Zapus hudsonius luteus	E	E	Y	Y	View
White-tailed Ptarmigan	Lagopus leucura	E			Y	View
Yellow-billed Cuckoo (western pop)	Coccyzus americanus occidentalis		T	Y	Y	View
Broad-billed Hummingbird	Cynanthus latirostris	T			Y	View
Violet-crowned Hummingbird	Leucolia violiceps	T			Y	View
Least Tern	Sternula antillarum	E			Y	View
Bald Eagle	Haliaeetus leucocephalus	T			Y	View
Mexican Spotted Owl	Strix occidentalis lucida		T	Y	Y	View
Boreal Owl	Aegolius funereus	T			Y	View
Peregrine Falcon	Falco peregrinus	T			Y	View
Southwestern Willow Flycatcher	Empidonax traillii extimus	E	E	Y	Y	View
Gray Vireo	Vireo vicinior	T			Y	View
Baird's Sparrow	Centronyx bairdii	T			Y	View
Lilljeborg's Peaclam	Pisidium lilljeborgi	T			Y	No Photo

ATTACHMENT 3
National Wetland Inventory



U.S. Fish and Wildlife Service

National Wetlands Inventory


Pueblo of Pojoaque



U.S. Fish and Wildlife Service, National Standards and Support Team,
wetlands_team@fws.gov

August 15, 2024

Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

ATTACHMENT 4
Noxious Weeds List

New Mexico Noxious Weed List

Update April 2009

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.

<u>Common Name</u>	<u>Scientific Name</u>
Alfombrilla	<i>Drymaria arenariodes</i>
Black henbane	<i>Hyoscyamus niger</i>
Camelthorn	<i>Alhagi psuedalhagi</i>
Canada thistle	<i>Cirsium arvense</i>
Dalmation toadflax	<i>Linaria dalmatica</i>
Diffuse knapweed	<i>Centaurea diffusa</i>
Dyer's woad	<i>Isatis tinctoria</i>
Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Giant salvinia	<i>Salvinia molesta</i>
Hoary cress	<i>Cardaria spp.</i>
Hydrilla	<i>Hydrilla verticillata</i>
Leafy spurge	<i>Euphorbia esula</i>
Oxeye daisy	<i>Leucanthemum vulgare</i>
Parrotfeather	<i>Myriophyllum aquaticum</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Purple starthistle	<i>Centaurea calcitrapa</i>
Ravenna grass	<i>Saccharum ravennae</i>
Scotch thistle	<i>Onopordum acanthium</i>
Spotted knapweed	<i>Centaurea biebersteinii</i>
Yellow starthistle	<i>Centaurea solstitialis</i>
Yellow toadflax	<i>Linaria vulgaris</i>

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.

<u>Common Name</u>	<u>Scientific Name</u>
African rue	<i>Peganum harmala</i>
Chicory	<i>Cichorium intybus</i>
Halogeton	<i>Halogeton glomeratus</i>
Malta starthistle	<i>Centaurea melitensis</i>
Musk thistle	<i>Carduus nutans</i>
Perennial pepperweed	<i>Lepidium latifolium</i>

Russian knapweed	<i>Acroptilon repens</i>
Poison hemlock	<i>Conium maculatum</i>
Teasel	<i>Dipsacus fullonum</i>
Tree of heaven	<i>Ailanthus altissima</i>

Class C Species

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

<u>Common Name</u>	<u>Scientific Name</u>
Bull thistle	<i>Cirsium vulgare</i>
Cheatgrass	<i>Bromus tectorum</i>
Jointed goatgrass	<i>Aegilops cylindrica</i>
Russian olive	<i>Elaeagnus angustifolia</i>
Saltcedar	<i>Tamarix spp.</i>
Siberian elm	<i>Ulmus pumila</i>

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.

<u>Common Name</u>	<u>Scientific Name</u>
Crimson fountaingrass	<i>Pennisetum setaceum</i>
Giant cane	<i>Arundo donax</i>
Meadow knapweed	<i>Centaurea pratensis</i>
Pampas grass	<i>Cortaderia sellonana</i>
Quackgrass	<i>Elytrigia repens</i>
Sahara mustard	<i>Brassica tournefortii</i>
Spiny cocklebur	<i>Xanthium spinosum</i>
Wall rocket	<i>Diploaxis tenuifolia</i>

ATTACHMENT 5
Rare Plants List

Rare Plant List

Search Parameters:
This search is not limited by plant name
Counties: SANTA FE
Has a State of New Mexico status

Results found: 4

Export CSV	Modify Search								
Scientific Name	NMRPTC	FWS	State of NM	USFS	BLM	Navajo Nation	State Rank	Global Rank	Counties
Cylindropuntia viridiflora	R		E		SEN		S1	G1Q	SANTA FE
Cypripedium parviflorum var. pubescens	D		E	SEN			S2?	G5T5	CATRON,COLFAX,GRANT,LOS ALAMOS,MORA,SAN JUAN,SAN MIGUEL,SANTA FE
Lilium philadelphicum var. andinum			E				S3	G5T4T5	COLFAX,LOS ALAMOS,OTERO,SAN MIGUEL,SANDOVAL,SANTA FE
Spiranthes magnicamporum	D		E				S2	G3G4	BERNALILLO,GUADALUPE,RIO ARRIBA,SANTA FE



NEW MEXICO
RARE PLANTS

Contact Us

ATTACHMENT 6
NRCS Web Soil Survey



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Santa Fe County Area, New Mexico**

Pojoaque



November 14, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit


 Clay Spot

 Closed Depression

 Gravel Pit


 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Fe County Area, New Mexico
Survey Area Data: Version 16, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 15, 2021—Dec 11, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	Pits	3.9	74.6%
131	Jaconita-Xenmack complex, 25 to 60 percent slopes	0.1	1.6%
132	Depolvo-Sueleros complex, 2 to 15 percent slopes	1.2	23.8%
Totals for Area of Interest		5.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Santa Fe County Area, New Mexico

106—Pits

Map Unit Setting

National map unit symbol: dn59
Elevation: 5,400 to 7,700 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 50 to 52 degrees F
Frost-free period: 150 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Pits: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pits

Setting

Landform: Eroded fan remnants
Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Alluvium derived from granite, gneiss, and schist

Typical profile

C1 - 0 to 4 inches: very gravelly coarse sandy loam
C2 - 4 to 16 inches: very gravelly coarse sandy loam
C3 - 16 to 22 inches: extremely gravelly coarse sand
C4 - 22 to 29 inches: very gravelly sandy loam
C5 - 29 to 46 inches: very gravelly sandy loam
C6 - 46 to 63 inches: very gravelly sandy clay loam
C7 - 63 to 84 inches: very gravelly coarse sandy loam

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Riovista

Percent of map unit: 8 percent
Hydric soil rating: No

Devargas

Percent of map unit: 4 percent
Hydric soil rating: No

Delvalle

Percent of map unit: 3 percent
Hydric soil rating: No

Paraje

Percent of map unit: 3 percent
Hydric soil rating: No

Agua fria

Percent of map unit: 2 percent

Hydric soil rating: No

131—Jaconita-Xenmack complex, 25 to 60 percent slopes

Map Unit Setting

National map unit symbol: drbh

Elevation: 5,400 to 6,600 feet

Mean annual precipitation: 9 to 12 inches

Mean annual air temperature: 50 to 52 degrees F

Frost-free period: 150 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Jaconita and similar soils: 45 percent

Xenmack and similar soils: 40 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Jaconita

Setting

Landform: Strath terraces

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Colluvium and slope alluvium derived from granite, gneiss, schist, and micaceous sandstone

Typical profile

ABk - 0 to 2 inches: very gravelly coarse sandy loam

Bk1 - 2 to 5 inches: very gravelly coarse sandy loam

Bk2 - 5 to 10 inches: very gravelly loamy coarse sand

BCK1 - 10 to 22 inches: very gravelly coarse sand

BCK2 - 22 to 42 inches: extremely gravelly coarse sand

C1 - 42 to 65 inches: extremely gravelly coarse sand

2C2 - 65 to 77 inches: very fine sandy loam

2C3 - 77 to 99 inches: loam

2C4 - 99 to 108 inches: loamy fine sand

2C5 - 108 to 120 inches: loam

Properties and qualities

Slope: 25 to 60 percent

Depth to restrictive feature: 59 to 79 inches to strongly contrasting textural stratification

Drainage class: Somewhat excessively drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

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Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 1.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R035XG114NM - Gravelly
Hydric soil rating: No

Description of Xenmack

Setting

Landform: Strath terraces
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Colluvium derived from granite, gneiss, and schist over residuum derived from sandstone and siltstone

Typical profile

ABk - 0 to 2 inches: extremely gravelly sandy loam
Bk1 - 2 to 7 inches: very gravelly sandy loam
Bk2 - 7 to 16 inches: gravelly loam
Bk3 - 16 to 24 inches: gravelly loam
2BCk1 - 24 to 29 inches: paragravelly clay loam
2BCk2 - 29 to 37 inches: very paragravelly loam
2Cr - 37 to 47 inches: cemented bedrock

Properties and qualities

Slope: 25 to 60 percent
Depth to restrictive feature: 20 to 39 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R035XG114NM - Gravelly
Hydric soil rating: No

Minor Components

Zozobra

Percent of map unit: 5 percent

Hydric soil rating: No

Depolvo

Percent of map unit: 5 percent

Hydric soil rating: No

Quarteles

Percent of map unit: 5 percent

Hydric soil rating: No

132—Depolvo-Sueleros complex, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: drbj

Elevation: 5,500 to 6,500 feet

Mean annual precipitation: 9 to 12 inches

Mean annual air temperature: 50 to 52 degrees F

Frost-free period: 150 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Depolvo and similar soils: 45 percent

Sueleros and similar soils: 40 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Depolvo

Setting

Landform: Strath terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loess derived from micaceous sandstone and siltstone

Typical profile

A - 0 to 3 inches: very fine sandy loam

Btk1 - 3 to 9 inches: loam

Btk2 - 9 to 21 inches: loam

Btk3 - 21 to 38 inches: loam

Bk1 - 38 to 48 inches: loam

Bk2 - 48 to 58 inches: loam

Btkb - 58 to 79 inches: fine sandy loam

Bkb1 - 79 to 93 inches: sandy loam

Bkb2 - 93 to 103 inches: fine sandy loam

Custom Soil Resource Report

Bkb3 - 103 to 109 inches: gravelly sandy loam

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 25 percent

Maximum salinity: Slightly saline to moderately saline (4.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 8.0

Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6c

Hydrologic Soil Group: B

Ecological site: R035XA113NM - Sandy

Hydric soil rating: No

Description of Sueleros

Setting

Landform: Strath terraces

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loess derived from micaceous sandstone and siltstone over alluvium derived from granite, gneiss, and schist

Typical profile

A - 0 to 3 inches: very fine sandy loam

Btkn1 - 3 to 6 inches: loam

Btkn2 - 6 to 14 inches: loam

Btkn3 - 14 to 26 inches: loam

Bkn - 26 to 37 inches: very gravelly sandy loam

2Bk1 - 37 to 44 inches: very gravelly coarse sand

2Bk2 - 44 to 54 inches: very gravelly coarse sand

3BCK1 - 54 to 70 inches: loam

3BCK2 - 70 to 92 inches: very fine sandy loam

3C - 92 to 120 inches: very fine sandy loam

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: 2 to 6 inches to natric

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

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Maximum salinity: Strongly saline (16.0 to 25.0 mmhos/cm)

Sodium adsorption ratio, maximum: 60.0

Available water supply, 0 to 60 inches: Very low (about 0.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6c

Hydrologic Soil Group: A

Ecological site: R035XA113NM - Sandy

Hydric soil rating: No

Minor Components

Jaconita

Percent of map unit: 7 percent

Hydric soil rating: No

Xenmack

Percent of map unit: 5 percent

Hydric soil rating: No

Ojito

Percent of map unit: 3 percent

Hydric soil rating: No

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ATTACHMENT 7
Field notes and Photographs

Location

35.892051, -106.015747 EW. 5951

Pojoaque, New Mexico off Camino del Rincon

Site, mostly previously disturbed and includes a
old sports field that is no longer maintained,
some playground equipment, fencing and portable
building evidence

Ecoregion: North Central New Mexico Valleys and
Mesas

Plants

Tree Cholla
Broom snakeweed
Grass sp - bunchgrass
Cota
Flaxflowered Gilia
New Mexico prickly pear
Salt bush
big sagebrush
Ash tree
Paint brushy
gumweed
Yucca

Animals

Raven
Rock Pigeon
House Finch
Dark Eye Junco
Wilson's Phalarope
Western Bluebird
Some small
mammal burrows



Photo 1: Site overview. Site consists of a gravel lot, sport field and playground.



Photo 2: Species of saltbush and ash tree.

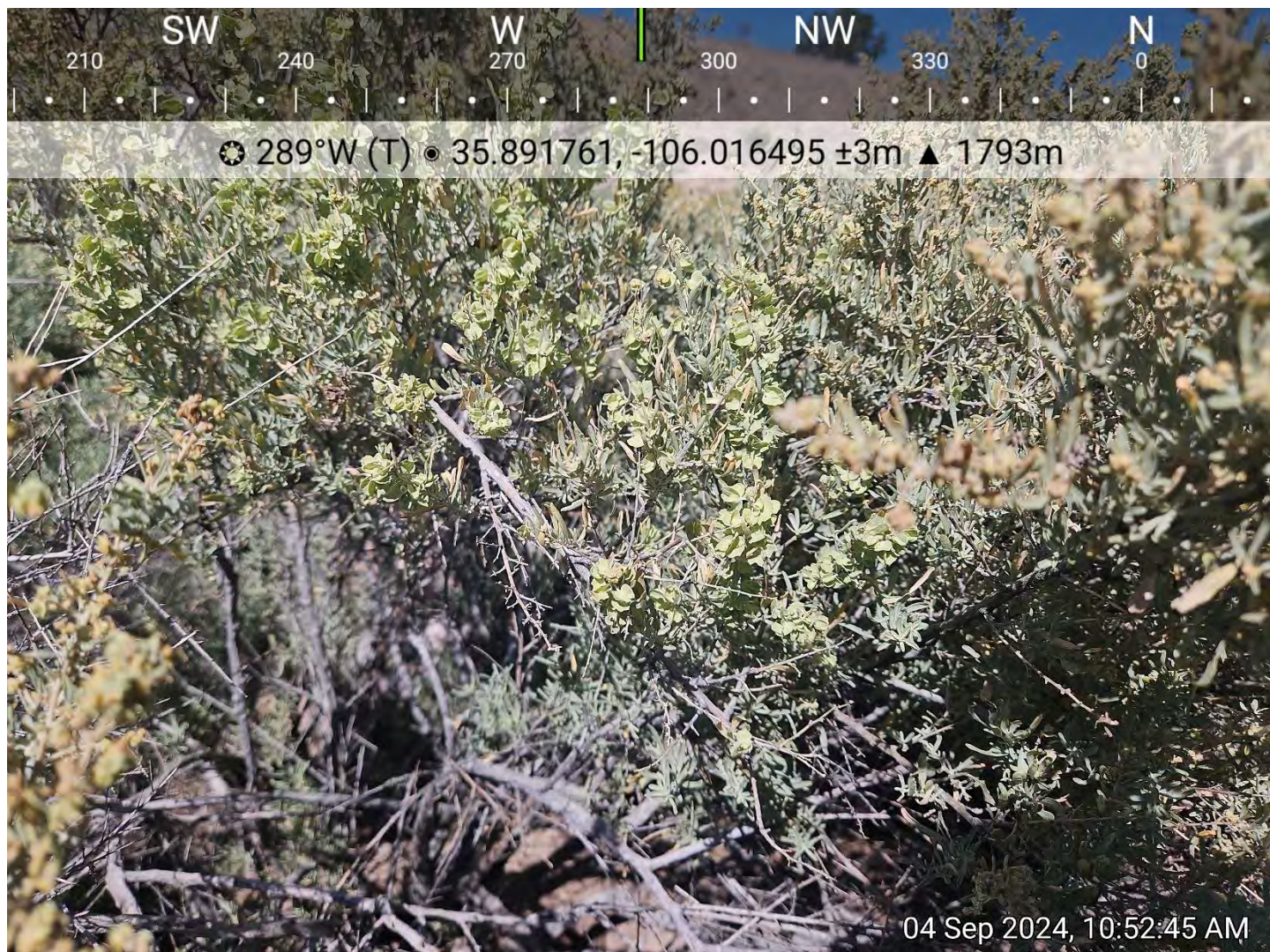


Photo 3: Species of salt bush was abundant in the project area.



Photo 4: Broom snakeweed was abundant within the project area.



Photo 5: Species of bunchgrass was abundant in the project area.



Photo 6: Area overview of eastern side of the project area. This area would carry runoff during rain events. Vegetation includes several species of grasses, saltbush and sagebrush.

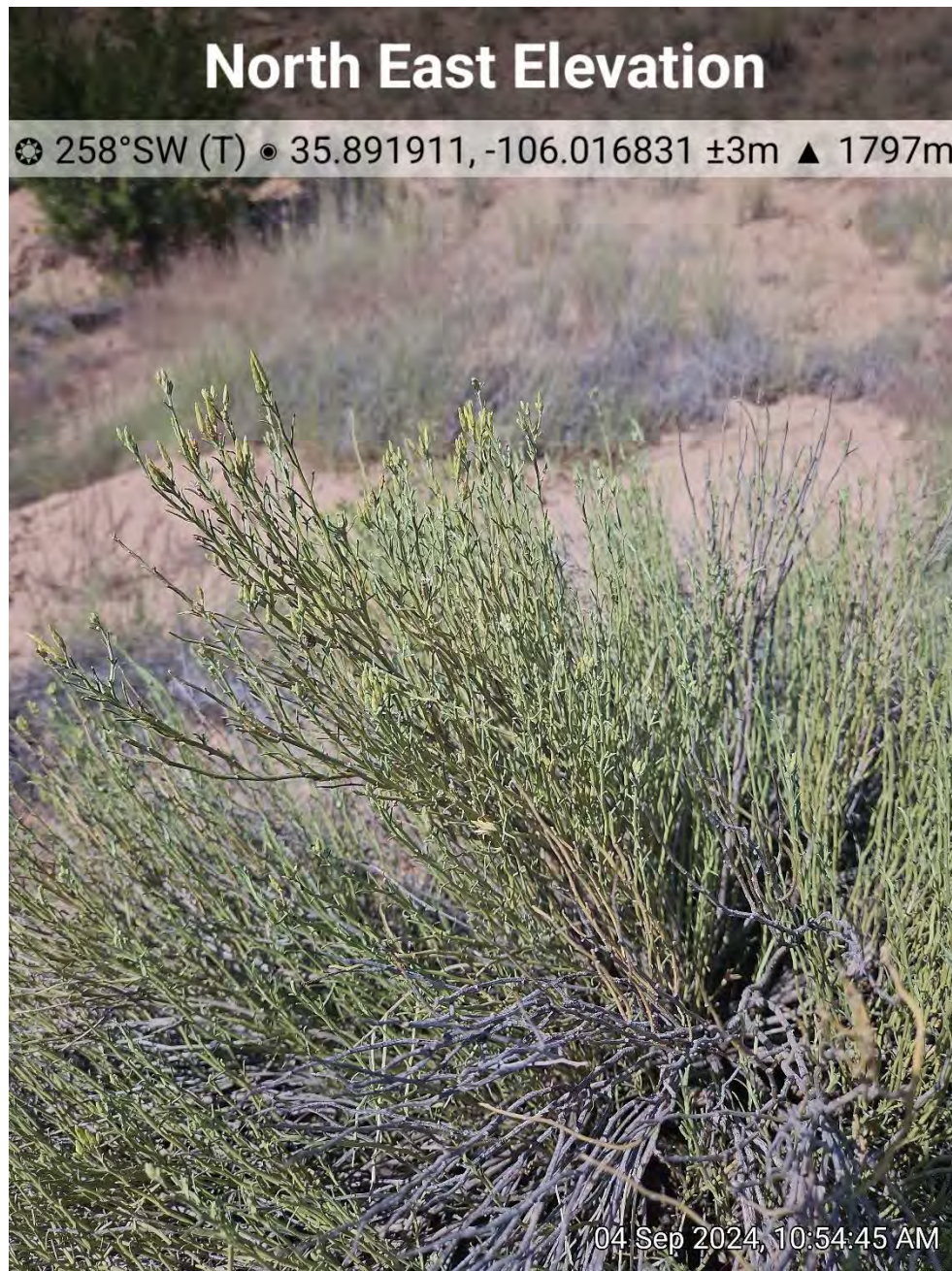


Photo 7: Snakeweed species (not flowering).



Photo 8: Species of gumweed, was relatively common in the project area.

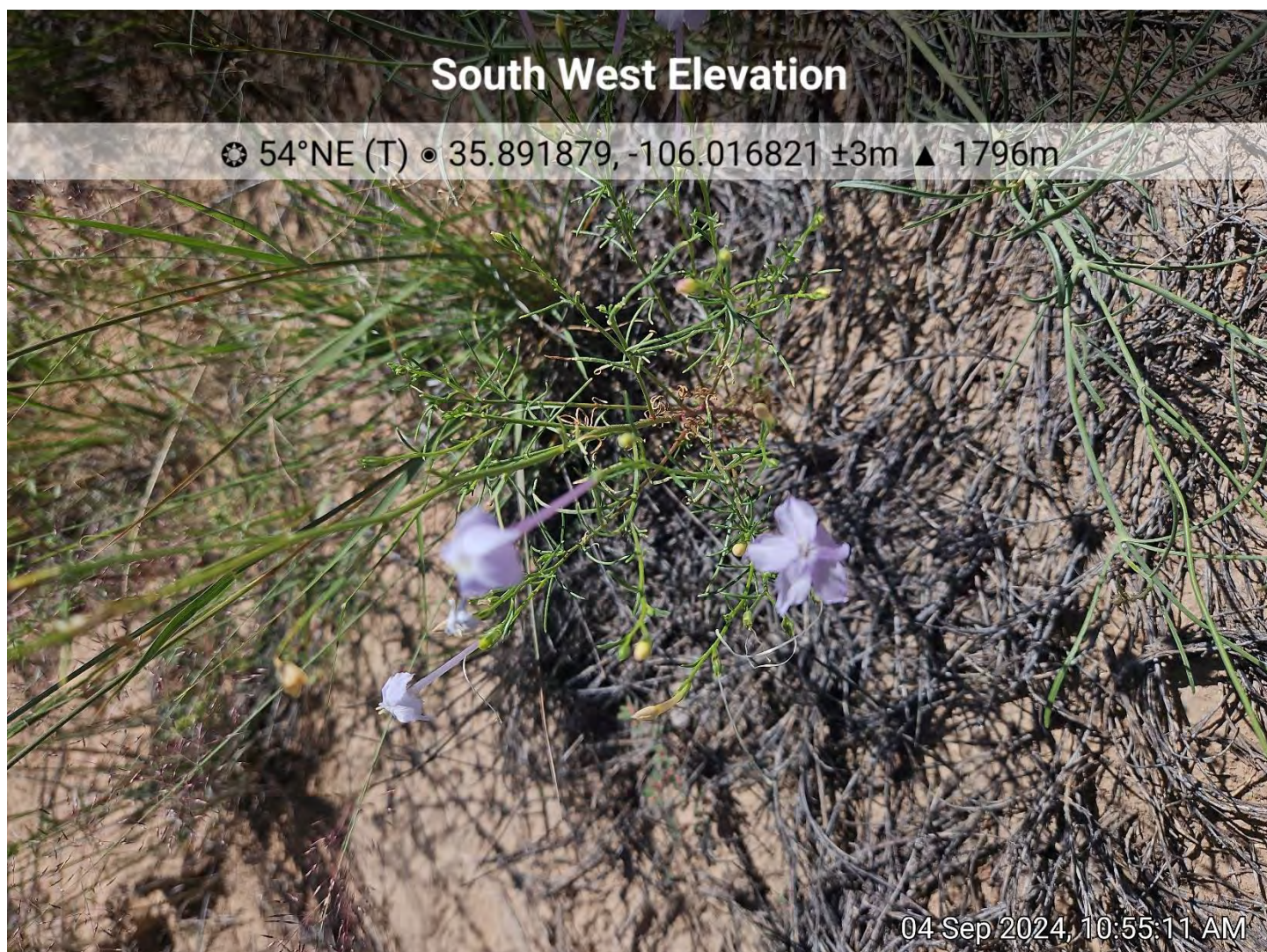


Photo 9: Flaxflowered gilia blooming in the project area.



Photo 10: New Mexico prickly pear on some of the slopes along the east and west sides of the project area.

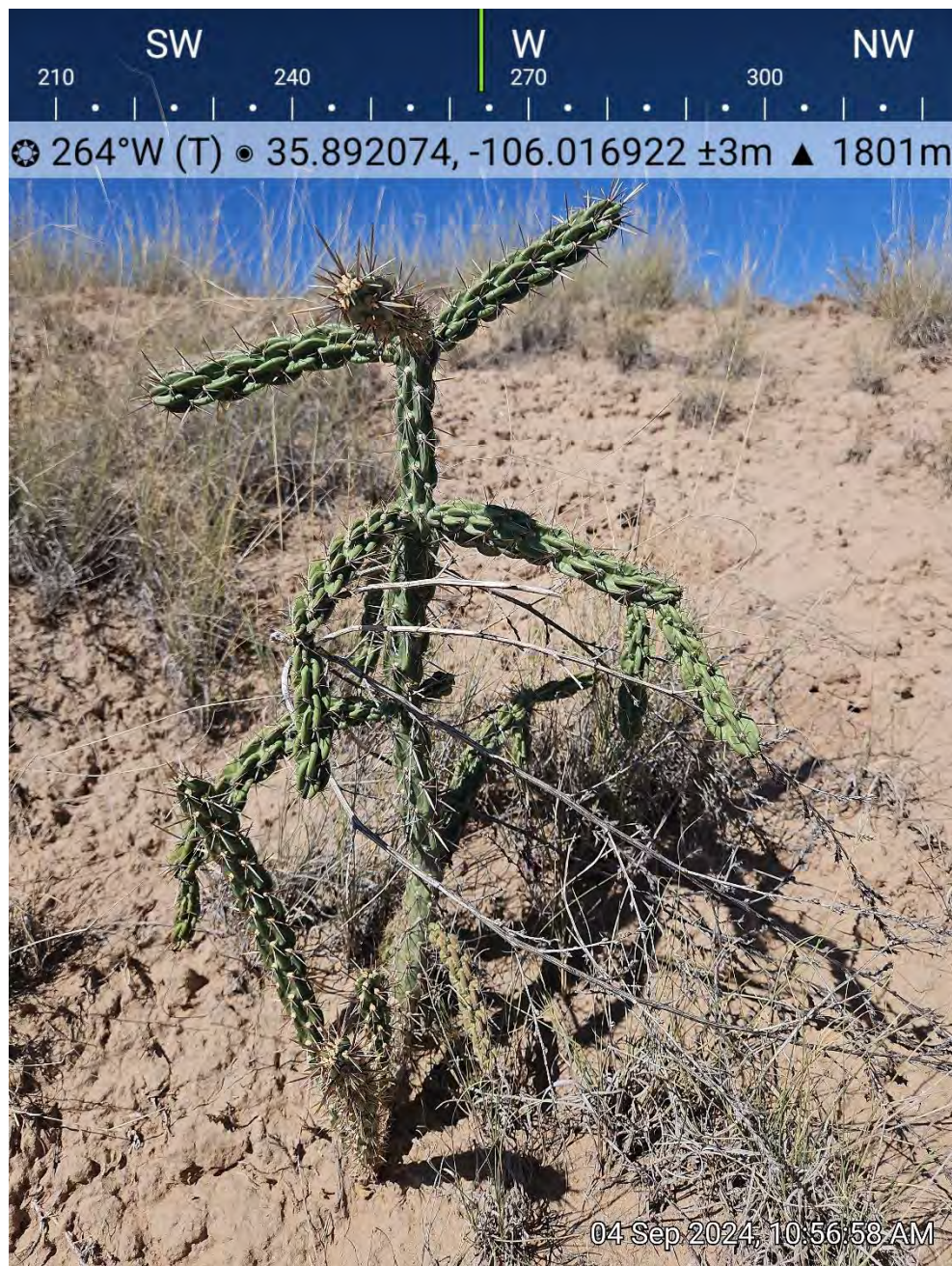


Photo 11: Tree Cholla, two specimens were observed in the project area.



Photo 12: Project area overview looking to the east.



Photo 13: Overview from one of the higher points in the project area. Can see the two drainages that carry runoff during rain events that combine in the southwestern edge of the project area.



Photo 14: Big sagebrush was abundant on the non-previously disturbed edges of the project area



Photo 15: Species of ash tree in the drainage area with juniper trees in the background.



Photo 16: Indian paintbrush on the western hillside of the project area.



Photo 17: Drainage that carries runoff during rain events on the western side of the project area.

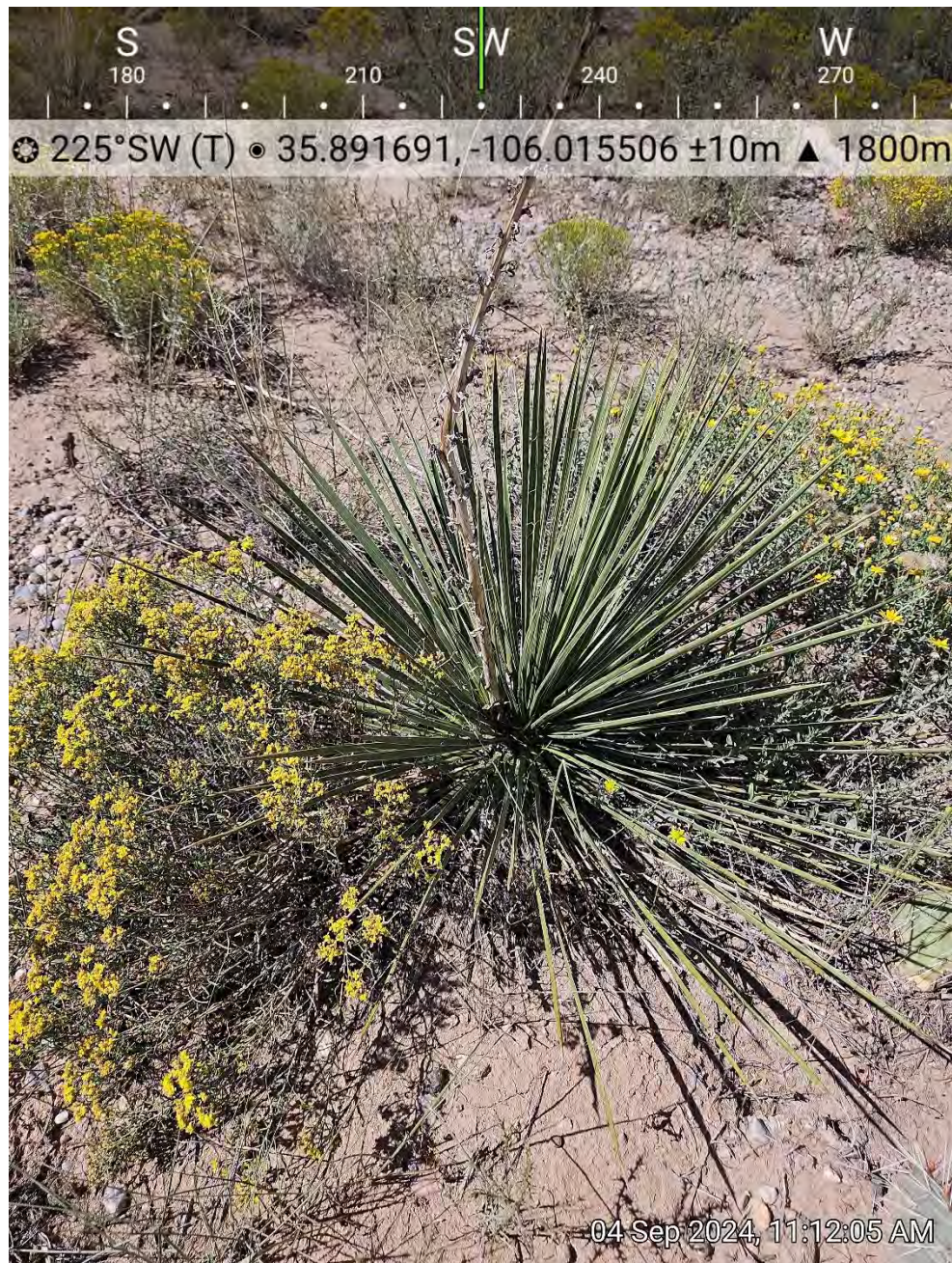


Photo 18: Narrowleaf Yucca, there were a couple specimens observed within the project area.

APPENDIX F

US CENSUS INFORMATION



EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

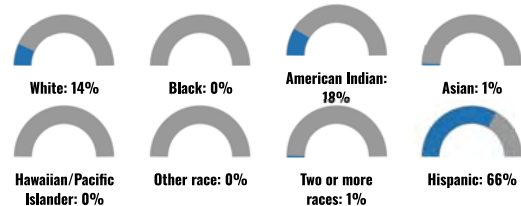
Pojoaque, NM

City: Pojoaque
Population: 2,292
Area in square miles: 4.37

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2018-2022. Life expectancy data comes from the Centers for Disease Control.

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	59%
Spanish	36%
Other and Unspecified	5%
Total Non-English	41%

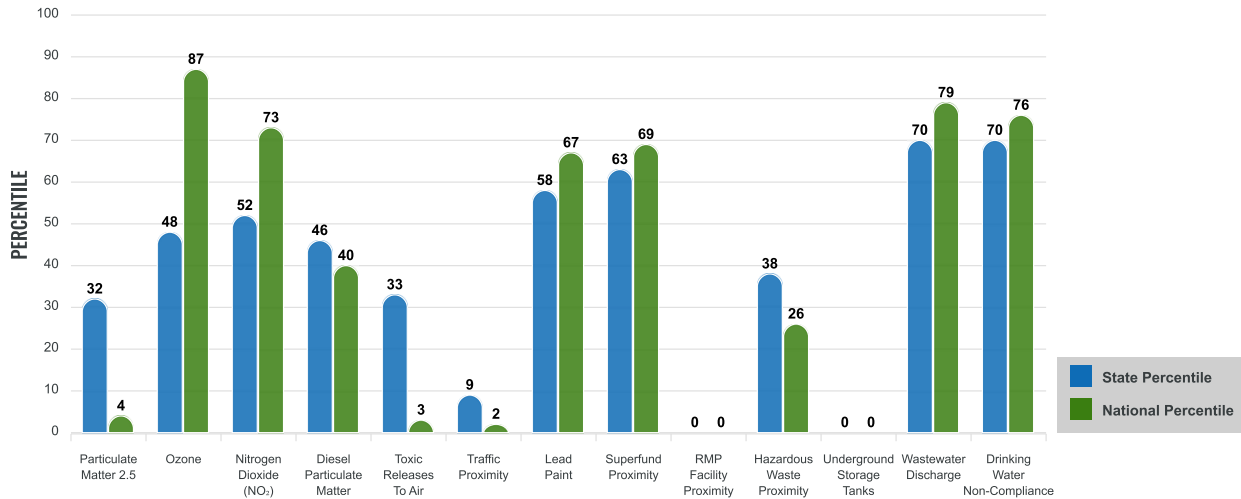
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

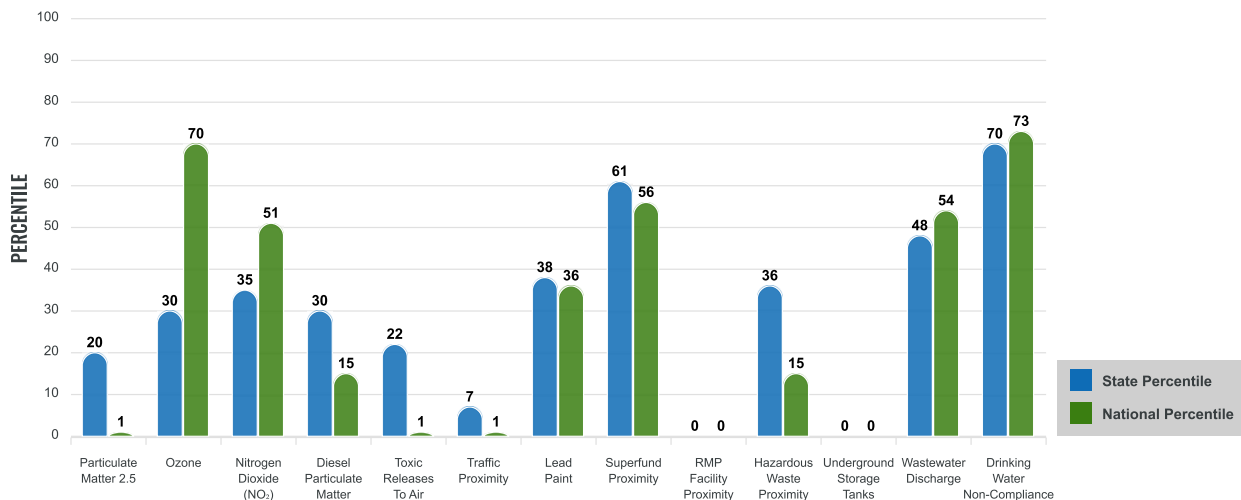
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low income, percent persons with disabilities, percent less than high school education, percent limited English speaking, and percent low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



Report for City: Pojoaque

Report produced December 11, 2024 using EJScreen Version 2.3

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
ENVIRONMENTAL BURDEN INDICATORS					
Particulate Matter 2.5 (µg/m ³)	5.1	6.11	21	8.45	1
Ozone (ppb)	64.1	65.3	35	61.8	67
Nitrogen Dioxide (NO ₂) (ppbv)	7.2	8.1	36	7.8	46
Diesel Particulate Matter (µg/m ³)	0.0675	0.187	34	0.191	15
Toxic Releases to Air (toxicity-weighted concentration)	0.006	29	22	4,600	1
Traffic Proximity (daily traffic count/distance to road)	530	730,000	8	1,700,000	1
Lead Paint (% Pre-1960 Housing)	0.14	0.19	58	0.3	41
Superfund Proximity (site count/km distance)	0.045	0.34	61	0.39	56
RMP Facility Proximity (facility count/km distance)	0	0.2	0	0.57	0
Hazardous Waste Proximity (facility count/km distance)	0.04	1.2	36	3.5	15
Underground Storage Tanks (count/km ²)	0	2.8	0	3.6	0
Wastewater Discharge (toxicity-weighted concentration/m distance)	62	990000	53	700000	51
Drinking Water Non-Compliance (points)	4.8	5.6	85	2.2	90
SOCIOECONOMIC INDICATORS					
Demographic Index USA	2.25	N/A	N/A	1.34	83
Supplemental Demographic Index USA	1.49	N/A	N/A	1.64	47
Demographic Index State	2.62	2.16	66	N/A	N/A
Supplemental Demographic Index State	1.21	1.62	29	N/A	N/A
People of Color	86%	62%	79	40%	86
Low Income	38%	39%	48	30%	67
Unemployment Rate	5%	6%	55	6%	60
Limited English Speaking Households	4%	6%	59	5%	71
Less Than High School Education	11%	14%	53	11%	63
Under Age 5	5%	5%	60	5%	54
Over Age 64	15%	20%	39	18%	44

*Diesel particulate matter index is from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	7
Air Pollution	1
Brownfields	0
Toxic Release Inventory	0

Other community features within defined area:

Schools	2
Hospitals	0
Places of Worship	2

Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	Yes
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for City: Pojoaque

Report produced December 11, 2024 using EJScreen Version 2.3

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	15%	19%	11	20%	12
Heart Disease	5.2	5.9	31	5.8	39
Asthma	10.1	11.2	14	10.3	46
Cancer	5.4	6.1	33	6.4	29
Persons with Disabilities	14.2%	17.1%	38	13.7%	59

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	12%	9%	74	12%	71
Wildfire Risk	86%	58%	51	14%	90

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	25%	20%	68	13%	86
Lack of Health Insurance	13%	10%	77	9%	80
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access Burden	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for City: Pojoaque

Report produced December 11, 2024 using EJScreen Version 2.3

Location: City: Pojoaque
Ring (buffer): 0-mile radius
Description:

Summary of ACS Estimates		2018 - 2022	
Population		2,292	
Population Density (per sq. mile)		525	
People of Color Population		1,968	
% People of Color Population		86%	
Households		933	
Housing Units		1,048	
Housing Units Built Before 1950		98	
Per Capita Income		37,105	
Land Area (sq. miles) (Source: SF1)		4.37	
% Land Area		100%	
Water Area (sq. miles) (Source: SF1)		0.00	
% Water Area		0%	
	2018 - 2022 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	2,292	100%	157
Population Reporting One Race	1,961	86%	291
White	900	39%	110
Black	8	0%	5
American Indian	512	22%	85
Asian	18	1%	14
Pacific Islander	0	0%	13
Some Other Race	523	23%	64
Population Reporting Two or More Races	331	14%	51
Total Hispanic Population	1,502	66%	112
Total Non-Hispanic Population	790		
White Alone	324	14%	35
Black Alone	6	0%	4
American Indian Alone	418	18%	81
Non-Hispanic Asian Alone	14	1%	14
Pacific Islander Alone	0	0%	13
Other Race Alone	0	0%	16
Two or More Races Alone	27	1%	12
Population by Sex			
Male	1,130	49%	78
Female	1,162	51%	98
Population by Age			
Age 0-4	118	5%	26
Age 0-17	465	20%	44
Age 18+	1,827	80%	92
Age 65+	334	15%	45

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2018 - 2022

Location: City: Pojoaque
Ring (buffer): 0-mile radius
Description:

	2018 - 2022 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	1,501	100%	84
Less than 9th Grade	89	6%	26
9th - 12th Grade, No Diploma	80	5%	27
High School Graduate	482	32%	50
Some College, No Degree	358	24%	32
Associate Degree	106	7%	29
Bachelor's Degree or more	385	26%	52
Population Age 5+ Years by Ability to Speak English			
Total	2,173	100%	141
Speak only English	1,217	56%	79
Non-English at Home ¹⁺²⁺³⁺⁴	957	44%	101
¹ Speak English "very well"	755	35%	71
² Speak English "well"	129	6%	57
³ Speak English "not well"	40	2%	42
⁴ Speak English "not at all"	33	2%	45
³⁺⁴ Speak English "less than well"	73	3%	61
²⁺³⁺⁴ Speak English "less than very well"	201	9%	83
Limited English Speaking Households*			
Total	33	100%	23
Speak Spanish	27	81%	10
Speak Other Indo-European Languages	1	4%	13
Speak Asian-Pacific Island Languages	0	0%	13
Speak Other Languages	5	15%	13
Households by Household Income			
Household Income Base	933	100%	61
< \$15,000	71	8%	13
\$15,000 - \$25,000	71	8%	19
\$25,000 - \$50,000	229	24%	30
\$50,000 - \$75,000	216	23%	40
\$75,000 +	347	37%	50
Occupied Housing Units by Tenure			
Total	933	100%	61
Owner Occupied	635	68%	51
Renter Occupied	298	32%	31
Employed Population Age 16+ Years			
Total	1,867	100%	122
In Labor Force	1,266	68%	112
Civilian Unemployed in Labor Force	66	5%	24
Not In Labor Force	601	32%	54

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: City: Pojoaque
Ring (buffer): 0-mile radius
Description:

	2018 - 2022 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	1,907	100%	233
English	1,117	59%	160
Spanish	685	36%	130
French, Haitian, or Cajun	2	0%	3
German or other West Germanic	3	0%	6
Russian, Polish, or Other Slavic	2	0%	7
Other Indo-European	4	0%	5
Korean	0	0%	13
Chinese (including Mandarin, Cantonese)	2	0%	4
Vietnamese	0	0%	13
Tagalog (including Filipino)	0	0%	13
Other Asian and Pacific Island	0	0%	13
Arabic	0	0%	13
Other and Unspecified	92	5%	51
Total Non-English	790	41%	283

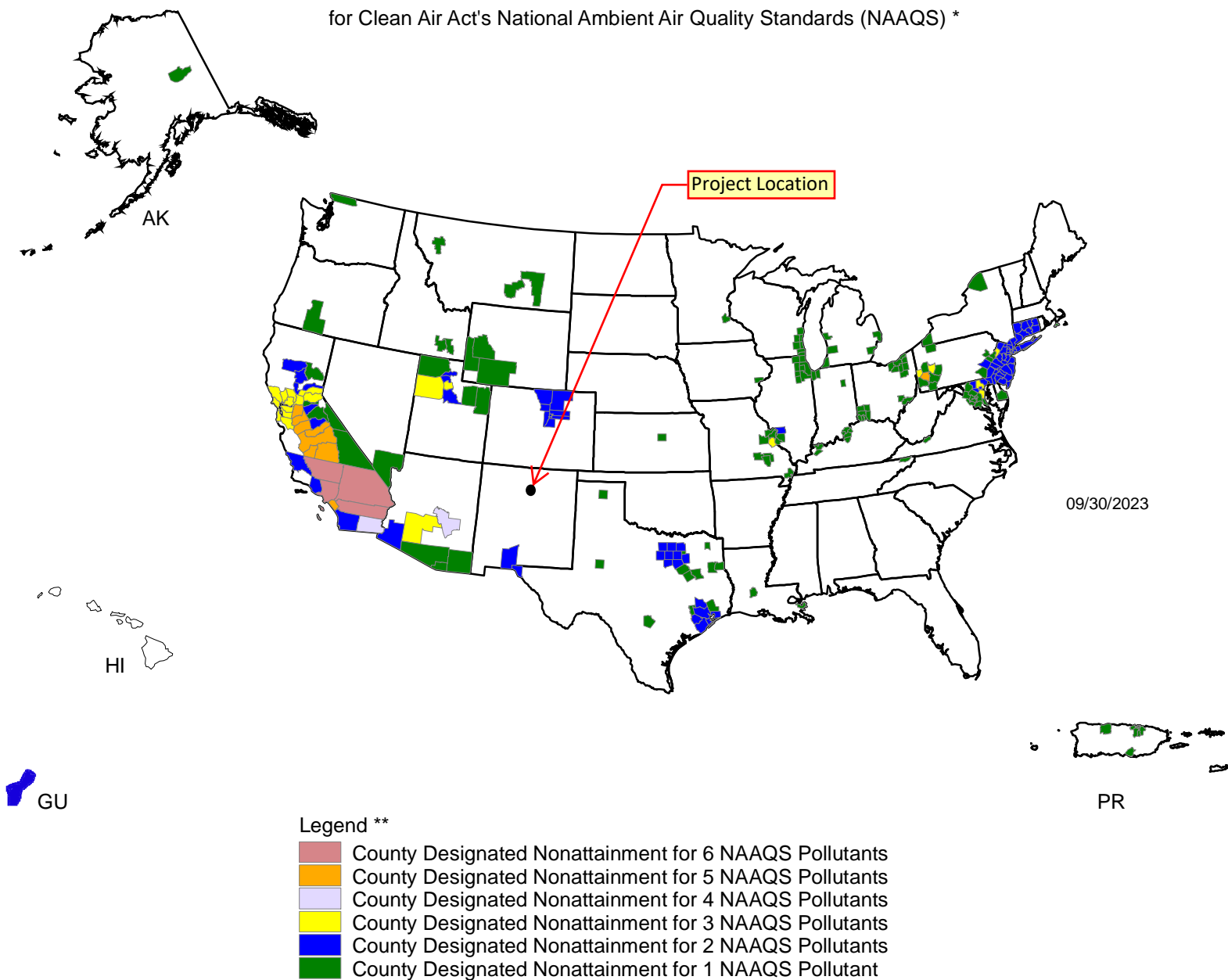
Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2018 - 2022.
*Population by Language Spoken at Home is available at the census tract summary level and up.

APPENDIX G

AIR QUALITY

Counties Designated "Nonattainment"

for Clean Air Act's National Ambient Air Quality Standards (NAAQS) *



* The National Ambient Air Quality Standards (NAAQS) are health standards for Carbon Monoxide, Lead (1978 and 2008), Nitrogen Dioxide, 8-hour Ozone (2008), Particulate Matter (PM-10 and PM-2.5 (1997, 2006 and 2012), and Sulfur Dioxide.(1971 and 2010)

** Included in the counts are counties designated for NAAQS and revised NAAQS pollutants. Revoked 1-hour (1979) and 8-hour Ozone (1997) are excluded. Partial counties, those with part of the county designated nonattainment and part attainment, are shown as full counties on the map.

APPENDIX H
AGENCY CORRESPONDENCE