UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Farmington District
Farmington Field Office
6251 N College Blvd., Ste. A
Farmington, NM 87402

DECISION RECORD

for the

City of Farmington Electric Utility System's COF-721 Powerline Extension Project

NEPA No. DOI-BLM-NM-FO10-2014-0019-EA

I. Decision

I have decided to select the proposed action for implementation as described in the September 2015 City of Farmington Electric Utility System's COF-721 Powerline Extension Project. Based on my review of the Environmental Assessment (EA) and project record, I have concluded that the proposed action was analyzed in sufficient detail to allow me to make an informed decision. I have selected the proposed action to provide the Farmington Electric Utility System (FEUS) with access to BLM land to construct, operate and abandon the existing NEBU No. 449A natural gas well and utilize temporary use areas and transport electrical power from an existing powerline by Devon Energy Corporation.

II. Conformance and Compliance

The proposed action is in conformance with the 2003 BLM-FFO Resource Management Plan (RMP). Pursuant to 40 CFR 1508.28 and 1502.21, this site-specific EA tiers into and incorporates by reference the information and analysis contained in the BLM-FFO Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS; BLM 2003a). The RMP was approved by the September 29, 2003 Record of Decision (ROD; BLM 2003b), and updated in December 2003.

Development of energy-related ROWs, including powerlines, is one of the primary activities of the BLM-FFO lands program. Such ROWs receive environmental review on a case-by-case basis (BLM 2003b, 2-11).

As required by NEPA, this EA addresses site-specific resources and effects of the proposed action that were not specifically covered within the PRMP/FEIS.

FEUS would comply with applicable Federal, State, and local laws and regulations. Necessary permits and approvals for the proposed project would be obtained prior to project implementation.

Many requirements regulating specific environmental elements are found in the appropriate elements sections of this EA (Chapter 3). Several permits, licenses, consultations, or other requirements are discussed below.

Clean Water Act

The proposed action is in conformance with the Clean Water Act, as amended (CWA; 33 USC 1251 et seq.).

Section 401

Under Section 401 of the CWA, an applicant for a Federal license or permit to conduct an activity that may result in a discharge into a water of the U.S. must provide the Federal agency with a Section 401 certification declaring that the discharge would comply with the CWA. The certification would be granted by the New Mexico Environment Department (NMED). It is not anticipated that any such discharge would result from the proposed project.

Section 402

Under Section 402 of the CWA, the U.S. Environmental Protection Agency (EPA) regulates storm water discharges from industrial and construction activities under the National Pollution Discharge Elimination System program. Permits are required if discharge results in a reportable quantity for which notification is required (pursuant to 40 CFR 117.21, 40 CFR 302.6, or 40 CFR 110.6) or if the discharge contributes to a violation of a water quality standard. It is not anticipated that any such discharge would result from the proposed project.

Section 404

Under Section 404 of the CWA, the EPA regulates the discharge of dredged or fill material into Waters of the U.S., including wetlands. The Section 404 program is administered by the EPA and U.S. Army Corps of Engineers (USACE). Under the CWA, the USACE has jurisdiction over Waters of the U.S. Waters of the U.S. are considered jurisdictional because they have a "significant nexus" to traditional navigable waters. The BLM-FFO and USACE - Durango Regulatory Office have determined that jurisdictional waters (i.e., Waters of the U.S.) within the BLM-FFO planning area may include U.S. Geological Survey (USGS) watercourses (i.e., "blue lines" on USGS 1:24,000 topographic maps) and potentially tributaries to these USGS watercourses.

The proposed powerline extension COF 721 would cross Lewis Park Canyon drainage, an ephemeral, USGS watercourse over which the USACE is assumed to have jurisdiction. No facilities, dredged material, or fill material would be placed within this watercourse. Therefore, a Section 404 permit would not be utilized for the proposed project.

National Historic Preservation Act

Section 106 of the National Historic Preservation Act of 1966 (NHPA; 16 USC 470) requires Federal agencies to take into account the effects of their actions on historic properties, and allow the Advisory Council on Historic Preservation a reasonable opportunity to comment. Compliance with the requirements of the NHPA is met by following the Protocol Agreement between the New Mexico BLM and New Mexico State Historic Preservation Officer, which is authorized by the Programmatic Agreement among the BLM, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (1997).

Clean Air Act

The Clean Air Act of 1972, as amended (CAA; 42 USC 7401 et seq.), establishes national ambient air quality standards (NAAQS) to control air pollution. In New Mexico, the NMED has adopted most of the CAA into the New Mexico Administrative Code (NMAC). The NMED issues construction and operating permits for air quality and enforces air quality regulations and permit conditions.

III. Finding of No Significant Impact

I have reviewed the direct, indirect and cumulative effects of the proposed activities documented in the EA for the COF-721 Powerline Extension Project and utilize temporary use areas. I have also reviewed the project record for this analysis. The effects of the proposed action and alternative is disclosed in the Alternatives and Environmental Consequences sections of the EA. I have determined that constructing the COF 721 would bring electrical power to Devon Energy Corporation's Northeast Blanco Unit No. 449A natural gas wells which share one well pad. The wells on this well pad are currently being powered by a loud generator, which would be replaced by the proposed powerline extension as described in the EA and will not significantly affect the quality of the human environment. Accordingly, I have determined that the preparation of an Environmental Impact Statement is not necessary.

IV. Other Alternatives Considered

The route of the proposed powerline extension and temporary use areas as addressed in page 11 of the EA were chosen based on the location of the NEBU No. 449A well pad, the location of existing powerlines, existing disturbance (such as roads) in the area, vegetation, and topography. FEUS developed the shortest route between the aforementioned well pad and nearest existing powerline while locating poles and anchors as closely as possible to existing disturbance and avoiding areas that were inaccessible due to terrain and/or vegetation. The proposed powerline extension would travel adjacent and parallel to an existing road. No alternative routes were identified that would result in less resource disturbance than the proposed route.

V. Rationale for the Decision

I have determined that the activities described in the proposed action will not adversely affect or cause loss or destruction of scientific, cultural, or historic resources, including those listed in or eligible for listing in the National Register of Historic Places (40 CFR 1508.27(b)(8)).

The proposed activities are not likely to adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (40 CFR 1508.27(b)(9)). Because the proposed project areas are within the Rattlesnake Canyon SDA, no construction would be allowed between December 1 and March 31. Refer to page 22 of the EA.

The proposed activities will not threaten any violation of Federal, State, or local law or requirements imposed for the protection of the environment (40 CFR 1508.27(b)(10)). Sections 1.4 and 1.5 of the EA describe the relationship of the proposed activities to relevant laws, policies, regulations, and plans.

VI. Public Involvement

The BLM-FFO publishes a NEPA log for public inspection. This log contains a list of proposed and approved actions within the BLM-FFO. The log is located on the BLM's New Mexico website (http://www.blm.gov/nm/st/en/prog/planning/nepa_logs.html).

A BLM-FFO Interdisciplinary Team meeting was held July 5, 2012 to discuss the proposed action. At the aforementioned meetings, potential issues of concern were identified by the BLM-FFO.

There was a 30 day public comment period beginning September 15, 2015, to October 15, 2015, because this project is located within the Rattlesnake Canyon SDA. There were no public comments received for the proposed action.

VII. Administrative Review and Appeal

This decision may be appealed to the Interior Board of Land Appeals (IBLA), Office of the Secretary, in accordance with the regulations contained in 43 CFR Part 4. Any appeal must be filed within 30 days of this decision. Any notice of appeal must be filed with Victoria Barr, District Manager, Farmington District Office, 6251 College Boulevard, Suite A, Farmington, NM 87402. The appellant shall serve a copy of the notice of appeal and any statement of reasons, written arguments, or briefs on each adverse party named in the decision, not later than 15 days after filing such document (see 43 CFR 4.413(a)). Failure to serve within the time required will subject the appeal to summary dismissal (see 43 CFR 4.413(b)). If a statement of reasons for the appeal is not included with the notice, it must be filed with the IBLA, Office of Hearings and Appeals, U. S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the District Manager, Farmington District Office.

Notwithstanding the provisions of 43 CFR 4.21(a)(1), filing a notice of appeal under 43 CFR Part 4 does not automatically suspend the effect of the decision. This decision can be implemented immediately and remains in effect pending appeal according to 43 CFR 288.1.10(b). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal.

A petition for a stay is required to show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied;
(2) The likelihood of the appellant's success on the merits;
(3) The likelihood of immediate and irreparable harm if the stay is not granted; and
(4) Whether the public interest favors granting the stay.

In the event a request for stay or an appeal is filed, the person/party requesting the stay or filing the appeal must serve a copy of the appeal on the Office of the Field Solicitor: United States Dept. of the Interior, Office of the Solicitor, Southwest Regional Office, 505 Marquette Avenue NW, Suite 1800, Albuquerque, NM 87102.

Victoria Barr
District Manager
Farmington District Office

10/23/15
Date

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Farmington District
Farmington Field Office
6251 N College Blvd., Ste. A
Farmington, NM 87402

Finding of No Significant Impact
City of Farmington Electric Utility System's
COF-721
Powerline Extension Project
NEPA No. DOI-BLM-NM-FO10-2014-0019-EA

FINDING OF NO SIGNIFICANT IMPACT

I have determined that the proposed action, as described in Environmental Assessment (EA) NM-FO10-2014-0019 will not have any significant impact, individually or cumulatively, on the quality of the human environment. Because there would not be any significant impact, an Environmental Impact Statement is not required.

In making this determination, I considered the following factors:

Context

The Farmington Field Office (FFO) is located in northwestern New Mexico. The field office boundaries include approximately 7,800,000 acres; 1.4 million surface acres and an additional 1 million acres of mineral estate are managed by the BLM. The distribution of BLM-managed lands is fairly well consolidated in the north and becomes increasingly mingled with Tribal lands to the south. BLM-managed lands abut the Navajo Reservation to the west and south, Jicarilla Apache Nation Reservation to the east, and the Ute Mountain Reservation and Southern Ute Indian Reservation to the north. Aztec Ruins National Monument and Chaco Culture National Historical Park, managed by the National Park Service, lie within the field office boundaries. The BLM manages approximately 18% of lands within a 10 mile radius of Chaco Culture National Historical Park.

The FFO encompasses the New Mexico portion of the San Juan Basin. The San Juan Basin and surrounding areas have been occupied by varied cultures since the Paleo Indian period (circa 10,000 BC). The San Juan Basin and Four Comers area have one of the most extensive prehistoric and protohistoric occupations in the United States. The most commonly known archaeological resources are the Anasazi structures at Chaco Culture National Historical Park, Mesa Verde National Park, and other National Park Service sites. Scattered across BLM-managed lands are similar, but smaller structures, which were probably related to these larger sites. Twenty-three Chacoan outliers are known to exist within the FFO. Each contains at least one Chacoan structure and most have associated communities, prehistoric roads, and great kivas along with features such as herraduras and special use areas. The FFO contains an extensive system of finely engineered roads radiating out form Chaco Canyon and extending a considerable distance to outlying sites through the San Juan Basin and beyond. These roads are remarkably straight and carefully constructed. The most notable is the Great North Road, which starts at Chaco Canyon and run north to the Aztec Ruins.

Located within the boundary of the FFO is much of Dinétah, the ancestral homeland to the Navajo. Here the Navajo constructed forked-stick hogans, shades, sweat lodges, and other structures over a several hundred year span. During a short period between 1680 and the mid-1700s, pueblitos were constructed, often associated with other structures. Although not firmly dated, extensive Navajo pictograph and petroglyph sites were painted, etched, pecked, or ground onto the sandstone cliffs of the canyons of

Dinétah. Most are believed to be ceremonial art which is no longer traditionally executed in a permanent form.

Native American Traditional and Sacred Areas are known to exist across the FFO. Many are associated with narrative accounts of origin or other traditional stories. Most of the identified sacred areas are associated with the Navajo culture. These places are still important in Navajo ceremonies and daily activities.

Historic Hispanic or Spanish and Anglo sites within the San Juan Basin primarily date from the late 1800s to the present. Although there are some early Spanish land grants in the southern portion of the FFO, most historic sites located on public lands are either Hispanic or Anglo homesteads with associated structures from the late 1800s and early 1900s. Associated with many clusters of homesteads were a school house and often a church which was visited every few months by a priest.

Cultural resource inventories have been conducted throughout the FFO for project undertakings, management studies, and scientific inquiries. As of April 2014, approximately 760,000 acres of the 7,800,000 acres in the FFO boundaries have been inventoried. Over 46,000 sites have been identified ranging from small artifacts to the 800-room structures in Chaco Canyon. Many of these sites are listed on the National Register of Historic Places and Chaco Culture National Historical Park along with several of the Chacoan sites which have been placed on the World Heritage List. The FFO manages 79 Areas of Critical Environmental Concern (ACECs) for relevant and important cultural values, including five World Heritage Sites.

The San Juan Basin is an important area for mammalian and reptilian fossils. A variety of paleontological resources exist in the FFO including animal fossils, fossil leaves, palynomorphs, petrified wood, and trace fossils occurring in the Triassic, Jurassic, Cretaceous, and Tertiary rocks. Dinosaur and other fossils have made significant contribution to the scientific record have been found and excavated in the FFO. Paleontolgical resources are present in the Bisti De-Na-Zin Wilderness Area, Ah-Shi-Sle-Pa Wilderness Study Area, Fossil Forrest Research Natural Area, and seven fossil areas identified in the 2003 Farmington Resource Management Plan.

The San Juan Basin is one of the largest natural gas fields in the nation and has been under development for more than 60 years. Oil was discovered by accident in the Seven Lakes area of McKinley County in 1911. Natural gas was discovered near Aztec, New Mexico, in 1920-1921 with oil of commercial quantity discovered near the Hogback in 1922 (Barnes 1951). Several small pipelines were built to carry the oil and gas from these discoveries to Aztec and Farmington, respectively. Development began in earnest in the late 1940s and early 1950s as the demand for natural gas increased. The FFO manages 2,765 active oil and gas leases in the San Juan Basin consisting of 2.1 million acres. Leasing began in the mid-1930s and accelerated in the late 1940s. By 1950, over 1 million acres were under lease.

In 1951, El Paso Natural Gas completed the first interstate pipeline out of the San Juan Basin to California. That same year, oil was discovered in the Mancos Shale in Dogie Canyon (Barnes 1951). Since that time, over 30,000 oil and gas wells have been drilled in the San Juan Basin with approximately 16,000 associated rights-of-way. Approximately 23,000 wells are currently producing. Since Stanolind Oil introduced hydraulic fracturing in 1949, nearly every well in the San Juan Basin has been fracture stimulated.

Intensity

1. The activities described in the proposed action would transport electrical power from an existing powerline to the existing NEBU No. 449A natural gas well and do not include any significant beneficial or adverse impacts (40 CFR 1508.27(b)(1)). Per 40 CFR 1500.1(b), the EA concentrated on issues that are truly significant to the action in question, rather than amassing needless detail. Issues have a cause and effect relationship with the proposed action or alternatives; are within the scope of the analysis; have not been decided by law, regulation, or previous decision; and are amendable to scientific analysis rather than conjecture (BLM 2008, page 40). The following issues were identified related to the proposed action and the proposed powerline extension was chosen based on the location of the well pad:

- How would vehicle emissions impact air resources?
- How would proposed facilities (poles and anchors) and cross-country travel within the proposed project area impact upland vegetation?
- How would proposed facilities (poles, anchors, and line) and proposed project activities impact wildlife, including migratory birds?
- How would proposed facilities (poles, anchors, and line) and proposed project activities impact the following BLM Special Status Species (SSS): American peregrine falcon (*Falco peregrinus anatum*), bald eagle (*Haliaeetus leucocephalus*), Bendire's thrasher (*Toxostoma bendirei*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), pinyon jay (*Gymnorhinus cyanocephalus*), prairie falcon (*Falco mexicanus*), and spotted bat (*Euderma maculatum*)?
- How would proposed surface-disturbing construction activities impact cultural resources?
- The proposed project area is within Rattlesnake Canyon Specially Designated Area (SDA), which is managed to protect wildlife. Would proposed facilities (poles, anchors, and line) and proposed project activities comply with the management objectives of the SDA?

The EA includes a description of the expected environmental consequences of the proposed activities for those issues in Chapter 3.

2. The activities included in the proposed action action would transport electrical power from an existing powerline to the existing NEBU No. 449A natural gas well and would not significantly affect public health or safety (40 CFR 1508.27(b)(2)). The following design features have been included in the proposed action to address any impacts to public health and safety:

The hauling of equipment and materials on public roads would comply with Department of Transportation regulations. Any accidents involving persons or property would immediately be reported to the BLM-FFO.

FEUS would adhere to company safety policies and Occupational Safety and Health Administration regulations. The operator would comply with pipeline safety regulations (49 CFR 190 and 192).

3. The proposed activities would not significantly affect any unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas (40 CFR 1508.27(b)(3)). Unique characteristics are generally limited to those that have been identified through the land use planning process or other legislative, regulatory or planning processes (BLM 2008, page 71). The FFO does not contain any prime and unique farmlands, suitable or designated wild and scenic rivers, or designated caves. Table 1 discloses the distance of the proposed activities to identified wetlands. Table 2 discloses the distance of the proposed activities to National Park Service units and Congressionally designated areas. The proposed project areas are found within the Rattle Snake Canyon SDA, which is managed for wildlife (specifically big game). Impacts to historic or cultural resources are described in the Cultural Resources section of the EA and discussed further under item 8.

Table 1. Distance of the Proposed Activities from Identified Wetlands

Identified Wetlands	Distance from Proposed Activities
Bancos	13.19 miles
Blanco	18.06 miles
Bloomfield	22.59 miles
Cutter Canyon	14.63 miles
Carrizo Oxbow	17.00 miles
Desert Hills	27.48 miles

Valdez	19.92 miles

Table 2. Distance of the Proposed Activities from Park Lands and Ecologically Critical Areas

Park Land or Ecologically Critical Area	Distance from Proposed Activities
Ah-Shi-Sle-Pah Wilderness Study Area	51.33 miles
Aztec Ruins National Monument	20.53 miles
Bisti De-Na-Zin Wilderness Area	50.36 miles
Chaco Culture National Historical Park	57.45 miles
Fossil Forest Research Natural Area	66.41 miles

4. The activities described in the proposed action do not involve effects on the human environment that are likely to be highly controversial (40 CFR 1508.27(b)(4)). Controversy in this context means disagreement about the nature of the effects, not expressions of opposition to the proposed action or preference among the alternatives (BLM 2008, page 71). Oil and gas development has occurred in the San Juan Basin for more than 60 years. While there may be controversy over the appropriateness of oil and gas development, there is not a high level of controversy or substantial scientific dispute over the impacts of that activity. The impacts of the proposed activities are described in Chapter 3 of the EA.

5. The activities described in the proposed action do not involve effects that are highly uncertain or involve unique or unknown risks (40 CFR 1508.27(b)(5)). As described under Context, oil and gas development has occurred in the San Juan Basin since the late 1940s and early 1950s. The field office has permitted over 30,000 wells and 16,000 rights-of-way. Hydraulic fracturing has occurred on nearly every well in the San Juan Basin since the 1950s. As such, the FFO has decades of experience and is knowledgeable about the impacts and risks associated with the proposed activities.

6. My decision to implement these activities does not establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration (40 CFR 1508.27(b)(6)). Approval of these activities in no way assures approval of any future activities. The effects of the proposed activities would not be significant, individually or cumulatively, when considered with the effects of other actions (40 CFR 1508.27(b)(7)). Direct, indirect, and cumulative impacts are described in Chapter 3 of the EA.

7. I have determined that the activities described in the proposed action will not adversely affect or cause loss or destruction of scientific, cultural, or historical resources, including those listed in or eligible for listing in the National Register of Historic Places (40 CFR 1508.27(b)(8)). The proposed activities are not located in an ACEC containing relevant and important cultural values. The entire Area of Potential Effect (APE) for the proposed action was archaeologically surveyed by DCA at a BLM Class III (100-percent) level. The archaeological report was prepared and submitted to the BLM in accordance with the Procedures for Performing Cultural Resources Fieldwork on Public Lands in the Area of New Mexico BLM Responsibilities (BLM 2005). During the Class III inventory, no cultural sites were identified within the APE (DCA 2012; BLM Report 2012[II]018F. Refer to page 23 of EA.

8. The proposed activities are not likely to adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (40 CFR 1508.27(b)(9)). Because the proposed project areas are within the Rattlesnake Canyon SDA, no construction would be allowed between December 1 and March 31. Refer to page 22 of the EA.

9. The proposed activities will not threaten any violation of Federal, State, or local law or requirements imposed for the protection of the environment (40 CFR 1508.27(b)(10)). Sections 1.4 and 1.5 of the EA describe the relationship of the proposed activities to relevant laws, policies, regulations, and plans.

REFERENCES

Barnes, Frank C., 1951. History of development and production of oil and gas in the San Juan Basin. In *The south and west sides of the San Juan Basin, New Mexico and Arizona*, Smith, C.T.; Silver, C. ed(s), New Mexico Geological Society, Guidebook, 2nd Field Conference, pp. 155-160.

BLM. 2008. *National Environmental Policy Handbook. H-1790-1.* Bureau of Land Management. National Environmental Policy Act Program.

APPROVED:

Victoria Barr
District Manager
BLM Farmington District Office

10/28/15
Date

United States Department of the Interior
Bureau of Land Management

Environmental Assessment DOI-BLM-NM-F010-2014-0019-EA

City of Farmington Electric Utility System's COF-721 Powerline Extension Project

September 2015

U.S. Department of the Interior
Bureau of Land Management
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BLM

It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

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1. PURPOSE AND NEED FOR ACTION

1.1. Background

The City of Farmington Electric Utility System (FEUS) has submitted a Right-of-Way (ROW) application to the Bureau of Land Management – Farmington Field Office (BLM-FFO; Farmington, New Mexico) for the COF-721 powerline extension project. The proposed project consists of the construction, operation, and final abandonment of one primary electric powerline extension. The proposed action is the issuance of the COF-721 ROW Grant by the BLM-FFO.

The proposed project area is located on BLM-FFO-managed lands and State of New Mexico (State) lands. The proposed ROW Grant would authorize only the portion of the proposed project area that is on BLM-FFO-managed surface. However, as the State portion of the proposed project is a connected action, this Environmental Assessment (EA) will also address this non-Federal portion of the proposed project. The ROW would be 5,314.73 feet in length (4,988.78 feet on BLM-FFO-managed surface and 325.95 feet on State surface). The proposed project area, including ROWs and temporary use areas (TUAs), encompasses 6.23 acres (5.85 acres on BLM-FFO-managed surface and 0.38 acre on State surface).

The proposed powerline extension would bring electrical power to Devon Energy Corporation's (Devon's) Northeast Blanco Unit (NEBU) No. 449A natural gas wells, which share one well pad.

Natural gas, a vital component of the nation's energy supply, accounts for approximately 25 percent of total energy consumed in the U.S. This energy source is used in residential and commercial buildings, in transportation, and by industry (U.S. Energy Information Administration 2012). Common uses for natural gas include space heating, water heating, cooling, cooking, waste treatment and incineration, metals preheating, drying and humidification, glass melting, food processing, fueling industrial boilers, vehicle fueling, and electricity generation. Gases such as butane, ethane, and propane can be extracted from natural gas to be used for products such as fertilizers and pharmaceuticals. Natural gas can also be used to create methanol, which is utilized in the production of formaldehyde, acetic acid, fuel cell sources, and additives for cleaner burning gasoline (Natural Gas Supply Association 2010).

Approximately 84 percent of natural gas consumed in the U.S. is produced in the U.S. Additionally, U.S.-produced natural gas is also exported to other countries (U.S. Department of Energy 2011). Within the U.S., natural gas reserves are concentrated within distinct fields. The BLM-FFO management area is within the San Juan Basin, one of the most prolific gas-producing basins in the country (BLM 2003a, 3-9).

Taxes and royalties from oil, natural gas, and carbon dioxide (CO_2) production contribute approximately 25 percent of New Mexico's general fund, and the oil and gas industry is one of the largest private sector employers in the State (New Mexico Bureau of Geology and Mineral Resources 2012). Additionally, the Federal government receives royalties, or a share of the production income, for extracted Federal minerals. In 2011, Federal natural gas royalties totaled over 2 billion dollars (Office of Natural Resources Revenue 2012).

The proposed project area is located within the San Juan Basin in San Juan County, New Mexico. The proposed project area is located within and above Lewis Park Canyon, just west of the Los Piños arm of Navajo Reservoir (see Figure A.1, Appendix A).

1.2. Purpose and Need for Action

The purpose of the proposed action is to provide FEUS access across BLM-FFO-managed lands to construct, operate, maintain and abandon the proposed COF 721 Powerline Extension. The proposed powerline extension would transport electrical power from an existing powrline to the existing NEBU No. 449A natural gas well.

The need for the proposed action is established by the BLM's responsibility under Federal Land Policy and Management Act of 1976 (FLPMA, 43 USC 1701 et seq). The FLPMA authorizes the BLM to grant,

issue, or renew ROW Grants over public lands for multiple uses. It is the policy of the BLM, as derived from several laws, including FLPMA, to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs.

1.3. Decision to be Made

The BLM-FFO will decide whether or not to issue the COF-721 ROW Grant and, if so, under what terms and conditions. Under the National Environmental Policy Act (NEPA; Public Law 91-90, 42 U.S. Code [USC] 4321 et seq.), the BLM-FFO must determine if there are any significant environmental impacts associated with the proposed action warranting further analysis in an Environmental Impact Statement (EIS). The BLM-FFO Field Manager is the responsible officer who will decide one of the following:

- To approve the ROW Grant with design features as submitted
- To approve the ROW Grant with additional mitigation added
- To analyze the effects of the proposed action in an EIS
- To deny the ROW Grant

1.4. Conformance with Applicable Land Use Plan(s)

The proposed action is in conformance with the 2003 BLM-FFO Resource Management Plan (RMP). Pursuant to 40 CFR 1508.28 and 1502.21, this site-specific EA tiers into and incorporates by reference the information and analysis contained in the BLM-FFO Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS; BLM 2003a). The RMP was approved by the September 29, 2003 Record of Decision (ROD; BLM 2003b), and updated in December 2003.

Development of energy-related ROWs, including powerlines, is one of the primary activities of the BLM-FFO lands program. Such ROWs receive environmental review on a case-by-case basis (BLM 2003b, 2-11).

As required by NEPA, this EA addresses site-specific resources and effects of the proposed action that were not specifically covered within the PRMP/FEIS.

1.5. Relationship to Statutes, Regulations or Other Plans

FEUS would comply with applicable Federal, State, and local laws and regulations. Necessary permits and approvals for the proposed project would be obtained prior to project implementation.

Many requirements regulating specific environmental elements are found in the appropriate elements sections of this EA (Chapter 3). Several permits, licenses, consultations, or other requirements are discussed below.

1.5.1. Clean Water Act

The proposed action is in conformance with the Clean Water Act, as amended (CWA; 33 USC 1251 et seq.).

Section 401

Under Section 401 of the CWA, an applicant for a Federal license or permit to conduct an activity that may result in a discharge into a water of the U.S. must provide the Federal agency with a Section 401 certification declaring that the discharge would comply with the CWA. The certification would be granted by the New Mexico Environment Department (NMED). It is not anticipated that any such discharge would result from the proposed project.

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Under Section 402 of the CWA, the U.S. Environmental Protection Agency (EPA) regulates storm water discharges from industrial and construction activities under the National Pollution Discharge Elimination System program. Permits are required if discharge results in a reportable quantity for which notification is required (pursuant to 40 CFR 117.21, 40 CFR 302.6, or 40 CFR 110.6) or if the discharge contributes to a violation of a water quality standard. It is not anticipated that any such discharge would result from the proposed project.

Section 404

Under Section 404 of the CWA, the EPA regulates the discharge of dredged or fill material into Waters of the U.S., including wetlands. The Section 404 program is administered by the EPA and U.S. Army Corps of Engineers (USACE). Under the CWA, the USACE has jurisdiction over Waters of the U.S. Waters of the U.S. are considered jurisdictional because they have a "significant nexus" to traditional navigable waters. The BLM-FFO and USACE - Durango Regulatory Office have determined that jurisdictional waters (i.e., Waters of the U.S.) within the BLM-FFO planning area may include U.S. Geological Survey (USGS) watercourses (i.e., "blue lines" on USGS 1:24,000 topographic maps) and potentially tributaries to these USGS watercourses.

The proposed powerline extension COF 721 would cross Lewis Park Canyon drainage, an ephemeral, USGS watercourse over which the USACE is assumed to have jurisdiction. No facilities, dredged material, or fill material would be placed within this watercourse. Therefore, a Section 404 permit would not be utilized for the proposed project.

1.5.2. National Historic Preservation Act

Section 106 of the National Historic Preservation Act of 1966 (NHPA; 16 USC 470) requires Federal agencies to take into account the effects of their actions on historic properties, and allow the Advisory Council on Historic Preservation a reasonable opportunity to comment. Compliance with the requirements of the NHPA is met by following the Protocol Agreement between the New Mexico BLM and New Mexico State Historic Preservation Officer, which is authorized by the Programmatic Agreement among the BLM, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (1997).

1.5.3. Clean Air Act

The Clean Air Act of 1972, as amended (CAA; 42 USC 7401 et seq.), establishes national ambient air quality standards (NAAQS) to control air pollution. In New Mexico, the NMED has adopted most of the CAA into the New Mexico Administrative Code (NMAC). The NMED issues construction and operating permits for air quality and enforces air quality regulations and permit conditions.

1.6. Scoping, Public Involvement, and Issues

1.6.1. Scoping and Public Involvement

The BLM-FFO publishes a NEPA log for public inspection. This log contains a list of proposed and approved actions within the BLM-FFO. The log is located on the BLM's New Mexico website (http://www.blm.gov/nm/st/en/prog/planning/nepa_logs.html).

A BLM-FFO Interdisciplinary Team meeting was held July 5, 2012 to discuss the proposed action. At the aforementioned meetings, potential issues of concern were identified by the BLM-FFO.

There was a 30 day public comment period beginning September 15, 2015, to October 15, 2015, because this project is located within the Rattlesnake Canyon SDA. There were no public comments received for the proposed action.

1.6.2. Issues

Issues Analyzed

The following issues were identified as potential issues of concern for the proposed action. These issues will be addressed in this EA.

- How would vehicle emissions impact air resources?
- How would proposed facilities (poles and anchors) and cross-country travel within the proposed project area impact upland vegetation?
- How would proposed facilities (poles, anchors, and line) and proposed project activities impact wildlife, including migratory birds?
- How would proposed facilities (poles, anchors, and line) and proposed project activities impact the following BLM Special Status Species (SSS): American peregrine falcon (*Falco peregrinus anatum*), bald eagle (*Haliaeetus leucocephalus*), Bendire's thrasher (*Toxostoma bendirei*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), pinyon jay (*Gymnorhinus cyanocephalus*), prairie falcon (*Falco mexicanus*), and spotted bat (*Euderma maculatum*)?
- How would proposed surface-disturbing construction activities impact cultural resources?
- The proposed project area is within Rattlesnake Canyon Specially Designated Area (SDA), which is managed to protect wildlife. Would proposed facilities (poles, anchors, and line) and proposed project activities comply with the management objectives of the SDA?

Issues Considered but not Analyzed

The following issues were identified during scoping as issues of concern that would not be impacted by the proposed action or that have been covered by prior environmental review. These issues will not be analyzed in this EA.

U.S. Fish and Wildlife Service (USFWS)-Listed Species

Under Section 7 of the Endangered Species Act of 1973 (ESA; 16 USC 1531-1544), all Federal agencies are required to consult with the USFWS or National Marine Fisheries Service if they are proposing an action that may affect listed species or designated habitat. Consultation with the USFWS was conducted as part of the PRMP/FEIS to address the cumulative effects of RMP implementation (Consultation No. 2-22-01-1-389, Appendix M of the PRMP/FEIS). Based on a review of species currently listed by the USFWS as occurring in San Juan County (USFWS 2014), as well as the location of the proposed project area and habitat within the proposed project area, the potential does not exist for USFWS-listed species to occur within the proposed project area. Additionally, no depletions of waters within waterbodies that provide habitat for USFWS-listed species would occur as a result of the proposed project. Therefore, there is no need for additional Section 7 consultation.

Native American Religious Concerns

For the proposed action, identification efforts for Native American Religious Concerns were limited to a review of existing published and unpublished literature (e.g., Van Valkenburgh 1941, 1974; Brugge 1993; Kelly, et al. 2006), development of the site-specific Class III survey report prepared for the proposed action the San Juan County Museum Association's Division of Conservation Archaeology (DCA 2012; BLM Report No. 2012[II]007F), and a review by the BLM's cultural resources program regarding the presence of Traditional Cultural Properties identified through ongoing BLM tribal consultation efforts. There are currently no known remains that fall within the purview of the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA; 25 USC 3001) or the Archaeological Resources Protection Act (ARPA; 16 USC 470) within the proposed project area.

2. PROPOSED ACTION AND ALTERNATIVE(S)

2.1. Proposed Action

The proposed action is the BLM-FFO issuance of the COF-721 ROW Grant. The ROW Grant would authorize the construction, operation, and abandonment of one powerline extension. The ROW Grant would also authorize the use of one ROW corridor (ROW), two construction TUAs, and two access TUAs.

The proposed powerline extension would begin at an existing powerline and travel to the active NEBU Nos. 449A well pad. The wellson this well pad are currently being powered by a loud generator, which would be replaced by the proposed powerline extension.

Commencement of the proposed project is proposed for 2014.

Construction plats and photographs associated with the proposed project are provided in Appendices B and C, respectively.

2.1.1. Location of Proposed Project area

Maps of the proposed project area are provided in Appendix A. The proposed project area is plotted on the Anastacio Spring and Burnt Mesa, New Mexico, 7.5-minute USGS quadrangles (Figure A.2) and the 2011 San Juan County National Agriculture Imagery Program aerial photograph (Figure A.3).

The proposed project area is approximately 16 miles northeast of the town of Blanco, 0.8 mile east of New Mexico State Highway 511, 5.9 miles north of New Mexico State Highway 173, and 0.6 mile west of the Los Piños arm of Navajo Reservoir.

The western half of the proposed project area is within the gently rolling lowlands of Lewis Park Canyon. At its approximate midpoint, the proposed project area crosses the Lewis Park Canyon drainage, just west of the point where Lewis Park Canyon drops in elevation and becomes Lewis Canyon. The eastern half of the proposed project area is located on a bench overlooking Lewis Canyon to the south. Elevation within the proposed project area ranges from approximately 6,460 to 6,600 feet above mean sea level (AMSL). Terrain is gently rolling to hilly with small, ephemeral washes.

The general region surrounding the proposed project area has been developed by the oil and gas industry. There are well pads, access roads, powerlines, and pipeline corridors in the vicinity. The entirety of the proposed project area overlaps or travels adjacent to an existing access road. A mineral materials pit is located near existing Pole 2, at the western end of the proposed project area. In addition, there are several existing well pads in the immediate vicinity of the proposed project area: the Lewis Park No. 101/San Juan 32-8 No. 35 well pad is located at the western end of the proposed project area, just south of existing Pole No.1 (pole numbers indicated on the plats in Appendix B); the Lewis Park Nos. 100S/001 well pad is located just north of proposed Pole No. 10; and the NEBU No. 449A well pad is located at the eastern end of the proposed project area, just north of proposed Pole No. 15.

The latitude and longitude (Universal Transverse Mercator, North American Datum of 1983) of the proposed powerline extension are as follows.

- Beginning of Line (B.O.L.): 36.8929° North and 107.6325° West
- End of Line (E.O.L.): 36.8916° North and 107.6174° West

The legal location and landowner/land manager associated with the proposed project area are detailed in the below table.

Table 1. Location (New Mexico Principal Meridian)

Township & Range	Section	Quarter-Quarter	Landowner/Land Manager
Township 31 North, Range 8 West	13	Southern quarter of section	BLM-FFO
Township 31 North, Range 7 West	18	Southwestern quarter of southwestern quarter	
	19	Northwestern quarter of northwestern quarter	State

2.1.2. Description of Proposed Project

For a detailed description of design features and construction practices associated with the proposed project, refer to the ROW Grant Application on file at the BLM-FFO. The plats (Appendix B) provide additional details.

Design Features and Best Management Practices

FEUS would adhere to the stipulations attached to the ROW Grant. The following general design features and best management practices (BMPs) would occur.

Protection of Soil and Erosion Prevention

Proposed project activities would cease when soil or road surfaces become saturated to the extent that construction equipment is unable to stay within the proposed project area and/or when activities would cause irreparable harm to roads, soils, or streams. If equipment creates ruts deeper than six inches, the soil would be deemed too wet for construction or maintenance.

Vehicles would not drive within particularly steep or rugged portions of the proposed project area.

No blading, grading, or terrain alteration would occur.

Control of Waste

Liquid and solid wastes would be disposed of at an appropriate waste-disposal site. The proposed project area would be maintained in a sanitary condition. Hazardous substances would be handled and disposed of according to Federal law. Waste resulting from proposed project activities would be removed from the proposed project area and disposed of in an authorized area, such as an approved landfill.

Protection of Paleontological Resources

If a paleontological site is discovered, the BLM would be notified and the site would be avoided by personnel, vehicles, and equipment. Workers would be informed that it is illegal to collect, damage, or disturb some such resources, and that such activities are punishable by criminal and/or administrative penalties.

Protection of Cultural Resources

All cultural resource stipulations would be followed as indicated in the Cultural Resource Records of Review, attached to the stipulations in the ROW Grant. These cultural resource stipulations could include, but would not be limited to, temporary or permanent fencing or other physical barriers, monitoring of earth-disturbing construction, reduction of the proposed project area and/or establishment of specific construction avoidance zones, and employee education.

Employees, contractors, and sub-contractors would be informed by FEUS that cultural sites are to be avoided by personnel, personal vehicles, and company equipment. These individuals would be informed

that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and/or administrative penalties under the provisions of ARPA.

In the event of a cultural discovery during construction, FEUS would immediately stop all construction activities in the immediate vicinity of the discovery and immediately notify the archaeological monitor, if present, or the BLM. The BLM would then evaluate or cause the site to be evaluated. Should a discovery be evaluated as significant (e.g., eligible for the National Register of Historic Places [NRHP] or protected under NAGPRA or ARPA), it would be protected in place until mitigating measures could be developed and implemented according to guidelines set by the BLM.

Protection of Flora and Fauna, including SSS and Livestock

Per Rattlesnake Canyon SDA stipulations, construction of the proposed powerline extension would not occur between December 1 and March 31.

The proposed powerline extension would be constructed in accordance with *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* (Avian Power Line Interaction Committee 2006).

Vehicles would be restricted to the proposed project area (including ROWs and TUAs) and existing areas of surface disturbance, such as access roads and well pads. FEUS would use unvegetated areas of existing disturbance to access facilities wherever possible, rather than driving within vegetated portions of the proposed project area.

No blading, grading, or terrain alteration would occur. FEUS would make every effort to locate power poles and anchors to reduce the need for tree removal.

If an active bird nest is located within or adjacent to an area where vegetation would be disturbed by proposed project activities, the BLM-FFO biologist would be notified and project activities in the area would not be permitted until fledging has occurred. If postponement is not an option, FEUS would contact the USFWS's Migratory Bird Permit Office regarding permitting.

Should any active raptor nests be observed within one-third mile of the proposed project area or should any additional SSS (listed by the USFWS or BLM) be observed within the proposed project area prior to or during proposed project implementation, construction would cease and the BLM-FFO would be immediately contacted. The BLM-FFO would then ensure evaluation of the resource. Should a discovery be evaluated as significant (protected under the ESA, etc.), it would be protected in place until mitigation could be developed and implemented according to guidelines set by the BLM.

During all phases of the proposed project, non-emergency activities would be conducted during daylight hours only.

Wildlife and livestock hazards associated with the proposed project would be fenced, covered, and/or contained in storage tanks, as necessary. Open, unattended holes would be barricaded.

FEUS would notify the USFWS upon discovery of a dead or injured migratory bird, bald or golden eagle, or USFWS-listed species within or adjacent to the proposed project area. If the BLM becomes aware of such mortality or injury, the BLM would inform FEUS. If FEUS fails to notify the USFWS of the mortality or injury, the BLM would notify the USFWS. The BLM and the USFWS would then attempt to determine the cause of mortality and evaluate and identify appropriate mitigation measures to avoid future occurrences.

Any range improvements (such as fences, gates, cattleguards, or waterlines) that could be impacted by the proposed project would be identified and impacts would be mitigated prior to construction. If any fences are damaged during project activities, they would immediately be repaired to their former state or better. Gates located in the vicinity of the proposed project area would be left as is (if the grazing lessee leaves a gate open, FEUS would leave the gate open; if the grazing lessee leaves a gate closed, FEUS would ensure the gate remains closed).

Human Protection

The hauling of equipment and materials on public roads would comply with Department of Transportation regulations. Any accidents involving persons or property would immediately be reported to the BLM-FFO.

FEUS would adhere to company safety policies and Occupational Safety and Health Administration regulations. The operator would comply with pipeline safety regulations (49 CFR 190 and 192).

Prevention and Control of Weeds

It would be FEUS's responsibility to monitor, control, and eradicate all invasive, non-native plant species within the proposed project area throughout the life of the proposed project. FEUS would contact the BLM-FFO regarding acceptable weed-control methods. If FEUS does not hold a current Pesticide Use Permit, a Pesticide Use Permit would be submitted prior to pesticide application. Only pesticides authorized for use on BLM lands would be used. The use of pesticides would comply with Federal and State laws. Pesticides would be used only in accordance with their registered use and limitations. FEUS would contact the BLM-FFO prior to using these chemicals.

Proposed Project Phases

It is anticipated that the proposed powerline extension would be utilized for the life of the existing NEBU No. 449A natural gas well. The life of a natural gas well could be over 50 years.

Construction

One to three days of construction would be required to construct the proposed powerline extension. A maximum of two trucks would be used: one pickup truck and one digger derrick truck.

Most proposed pole and anchor installation sites would be located immediately adjacent to an existing road or well pad. Two proposed pole locations (Pole Nos. 7 and 9) and their associated anchors would be located approximately 50 and 100 feet, respectively, north of the existing access road. These proposed installation sites would be accessed by vehicles traveling cross-country within two proposed access TUAs (totaling 227.41 feet).

Existing Pole No. 2 would be removed. New pole and anchor holes would be dug and poles and anchors would be set by the digger derrick truck. Although FEUS would attempt to place poles and anchors in locations away from trees, it is possible that some trees would require trimming or cutting. If a tree requires removal, it would be delimbed and cut at ground level. Wood would be stacked near an existing access road for gathering by the public. Soil displaced during pole and anchor installation would be redistributed around facility sites.

A wire trailer would be placed at each end of the proposed ROW. Stringing would be accomplished with the pickup truck (travelling cross-country within the proposed ROW, construction TUAs, and access TUAs) and/or by hand. If any trees limbs would interfere with operation of the proposed powerline extension, they would be trimmed.

Per guidelines established in the BLM-FFO *Bare Soil Reclamation Procedures* (2013), because surface disturbance to bare soil would be less than 0.1 acre, manual reseeding would not be required.

Operation

Once construction is completed, FEUS personnel would rarely perform routine or emergency maintenance on the proposed powerline extension throughout its lifetime. The average life expectancy of each power pole is 30 years. Vehicles would access proposed pole and anchor locations via the proposed ROW and areas of existing disturbance, such as roads or well pads.

If any trees limbs would interfere with operation of the proposed powerline extension, they would be trimmed.

Abandonment

When the proposed powerline extension is no longer necessary and is not expected to be utilized in the foreseeable future, it would be abandoned. Abandonment would be carried out under current BLM-FFO regulations. All facilities would be removed. Vehicles would access proposed pole and anchor locations via the proposed ROW and areas of existing disturbance, such as roads or well pads.

Per guidelines established in the BLM-FFO *Bare Soil Reclamation Procedures* (2013), because surface disturbance to bare soil would be less than 0.1 acre, manual reseeding would not be required.

Proposed Facilities

Facilities associated with the proposed project would include 13 new 40- to 45-foot tall power poles, 13 new anchors, and 5,314.73 feet of line. Please see the table below for facilities and the landowner/land manager associated with them.

Table 2. Proposed Facilities

Facility	New Poles		New Anchors		Overhead Line (feet)		Anchor Line (feet)	
Landowner/ Land Manager	BLM-FFO	State	BLM-FFO	State	BLM-FFO	State	BLM-FFO	State
Number/Length	12	1	12	1	4,568.78	290.95	420.00	35.00
Total	13		13		4,859.73		455.00	
					5,314.73			

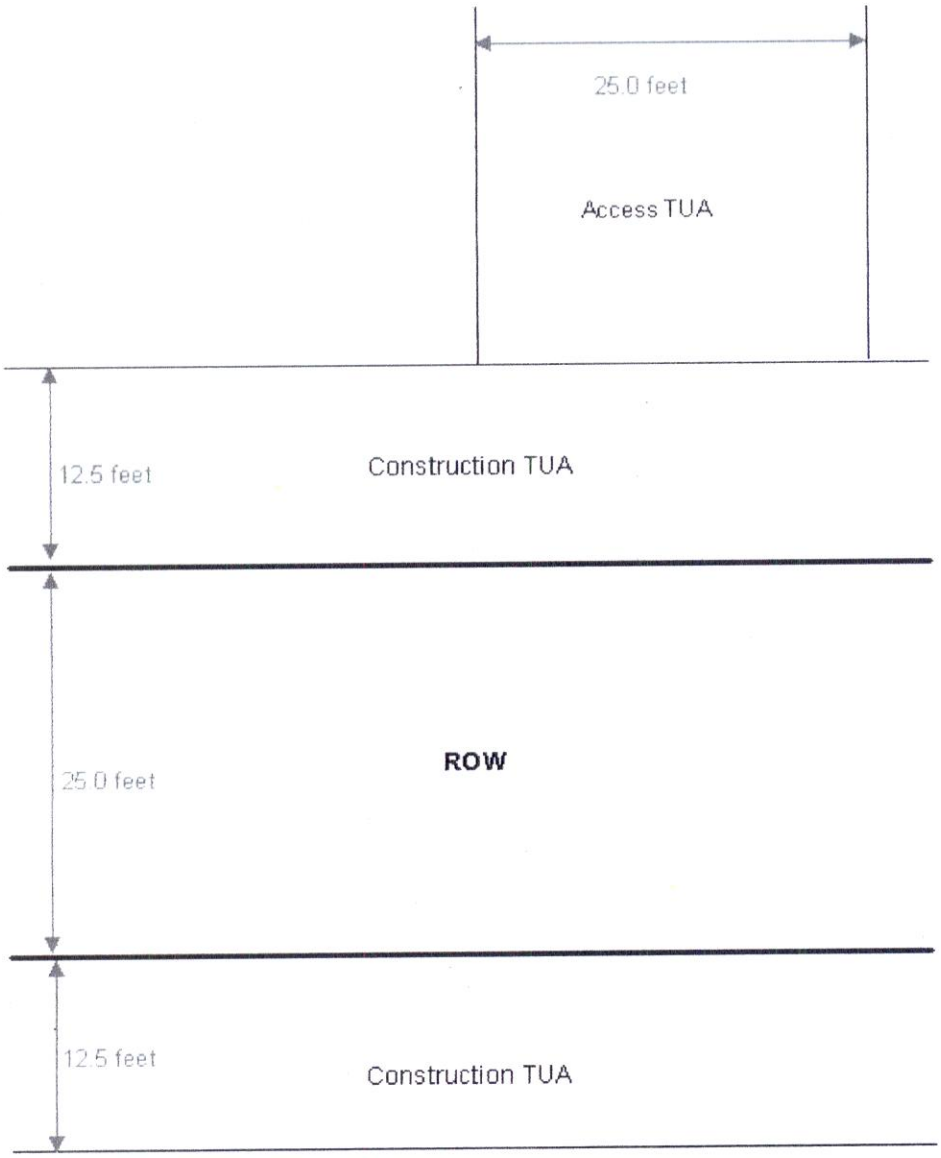
Proposed Surface Disturbance

The installation of poles and anchors discussed in the previous section would result in direct surface disturbance. Each pole and anchor would require a 9-square-foot area of direct surface disturbance; within this 9-square-foot footprint, all vegetation (including trees) would likely be removed. Less than 0.01 acre of direct disturbance would result from the installation of all 26 facilities (13 power poles and 13 anchors).

Within the remainder of the proposed project area (ROW and TUAs), indirect surface disturbance could result from cross-country vehicle travel. Vehicles could potentially travel along the ROW throughout the life of the proposed project. Vehicles could also potentially travel within the construction and access TUAs during the construction phase. Trees within the proposed project area could potentially be trimmed if they interfere with operation of the proposed powerline extension.

All poles, anchors, and line would be placed along the center of the 25-foot-wide ROW. Construction TUAs, which would be used as extra work area during construction, would run the entire length of the ROW, along each side of the ROW; construction TUAs would be 12.5 feet wide. Access TUAs would be used to reach portions of the ROW that would otherwise be inaccessible due to topography, vegetation, or other reasons; access TUAs would be 25 feet wide. The below figure shows the layout of the proposed project area.

Figure 1. Proposed Project area



The proposed project area would encompass 6.23 acres (5.85 acres on BLM-FFO-managed surface and 0.38 acre on State surface). Please refer to the below table for the acreage and landowner/land manager associated with the proposed project area.

Table 3. Proposed Project Area

Area	ROWs		Construction TUAs		Access TUAs	
Landowner/ Land Manager	BLM-FFO	State	BLM-FFO	State	BLM-FFO	State
Acres	2.86	0.19	2.86	0.19	0.13	-
Total	6.23					

2.2. No Action

Under the No Action Alternative, the COF-721 ROW Grant would not be issued. The proposed powerline extension would not be constructed. The NEBU Nos. 449A natural gas well would continue to be powered by a generator. Current land and resource uses would continue to occur in the proposed project area.

2.3. Alternatives Considered but Eliminated from Detailed Study

The route of the proposed powerline extension was chosen based on the location of the NEBU No. 449A well pad, the location of existing powerlines, existing disturbance (such as roads) in the area, vegetation, and topography. FEUS developed the shortest route between the aforementioned well pad and nearest existing powerline while locating poles and anchors as closely as possible to existing disturbance and avoiding areas that were inaccessible due to terrain and/or vegetation. The proposed powerline extension would travel adjacent and parallel to an existing road. No alternative routes were identified that would result in less resource disturbance than the proposed route.

3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Under the No Action alternative, current land and resource issues within the proposed project area would continue; there would be no new impacts from powerline extension development. The No Action alternative will serve as the baseline for comparing the environmental impacts of the analyzed alternatives, and will not be further evaluated in this EA (BLM 2008b).

3.1. Air Resources

3.1.1. Affected Environment

The proposed project area is located in San Juan County, New Mexico. Additional general information on air quality in the area is contained in Chapter 3 of the Farmington PRMP/FEIS. In addition, new information about greenhouse gases (GHGs) and their effects on national and global climate conditions has emerged since this document was prepared. Ongoing scientific research has identified the potential impacts of GHG emissions such as CO_2, methane, nitrous oxide, water vapor; and several trace gases on global climate. Through complex interactions on a global scale, GHG emissions may cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the earth back into space. Although GHG levels have varied for millennia (along with corresponding variations in climatic conditions), industrialization and burning of fossil carbon sources have caused GHG concentrations to increase measurably, and may contribute to overall climatic changes, typically referred to as global warming.

Much of the information referenced in this section is incorporated from the Air Resources Technical Report for BLM Oil and Gas Development in New Mexico, Kansas, Oklahoma, and Texas (herein referred to as Air Resources Technical Report; BLM 2014). This document summarizes the technical information related to air resources and climate change associated with oil and gas development and the methodology and assumptions used for analysis.

The EPA has the primary responsibility for regulating air quality, including six nationally regulated ambient air pollutants (criteria pollutants). These criteria pollutants include carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM10 and PM2.5), sulfur dioxide (SO_2), and lead (Pb). EPA has established NAAQS for criteria air pollutants. The NAAQS are protective of human health and the environment. EPA has approved New Mexico's State Implementation Plan and the state enforces state and federal air quality regulations on all public and private lands within the state, except for tribal lands and within Bernalillo County. Air quality is determined by atmospheric pollutants and chemistry, dispersion meteorology and terrain, and also includes applications of noise, smoke management, and visibility. Climate is the composite of generally prevailing weather conditions of a particular region throughout the year, averaged over a series of years. EPA has proposed or completed actions recently to implement CAA requirements for GHG emissions. Climate has the potential to influence renewable and non-renewable resource management.

The Air Resources Technical Report describes the types of data used for description of the existing conditions of criteria pollutants, how the criteria pollutants are related to the activities involved in oil and gas development, and provides a table of current National and state standards. EPA's Green Book web page (EPA 2013) reports that all counties in the Farmington Field Office area are in attainment of all NAAQS as defined by the CAA. The area is also in attainment of all state air quality standards (New Mexico Ambient Air Quality Standards; NMAAQS). The current status of criteria pollutant levels in the BLM-FFO are described below. Total emissions of criteria pollutants from each source sector were calculated by adding together the emissions from the four counties that are located in BLM-FFO: San Juan, McKinley, Rio Arriba, and Sandoval.

"Design Concentrations" are the concentrations of air pollution at a specific monitoring site that can be compared to the NAAQS. The 2012 design concentrations of criteria pollutants are listed below in Table 4

(EPA 2014). There is no monitoring for CO and Pb in San Juan County, but because the county is relatively rural, it is likely that these pollutants are not elevated. PM10 design concentrations are not available for San Juan County.

Table 4. Criteria Pollutant Monitored Values in San Juan County (EPA 2014)

Pollutant	2012 Design Concentration	Averaging Time	NAAQS	NMAAQS
O_3	0.071 ppm	8-hour	0.075 ppm[1]	
NO_2	13 ppb	Annual	53 ppb[2]	50 ppb
NO_2	38 ppb	1-hour	100 ppb[3]	
$PM_{2.5}$	4.7 μg/m^3	Annual	12 μg/m^3[3,4]	60 μg/m^3[3,6]
$PM_{2.5}$	14 μg/m^3	24 hour	35 μg/m^3[3,3]	150 μg/m^3[3,6]
SO_2	19 ppb	1-hour	75 ppb[5]	

[1] Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
[2] Not to be exceeded during the year
[3] 98th percentile, averaged over 3 years
[4] Annual mean, averaged over 3 years
[5] 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
[6] The NMAAQS is for Total Suspended Particulate (TSP)

In 2005, the EPA estimates that there was less than 0.01 ton per square mile of Pb emitted in BLM-FFO counties, which is less than 2 tons total (EPA 2012). Pb emissions are not an issue in this area, and will not be discussed further.

Air quality in a given region can be measured by its Air Quality Index (AQI) value. The AQI is reported according to a 500-point scale for each of the major criteria air pollutants, with the worst denominator determining the ranking. For example, if an area has a CO value of 132 on a given day and all other pollutants are below 50, the AQI for that day would be 132. The AQI scale breaks down into six categories: good (AQI<50), moderate (50-100), unhealthy for sensitive groups (100-150), unhealthy (>150), very unhealthy and hazardous. The AQI is a national index, the air quality rating and the associated level of health concern is the same everywhere in the country. The AQI is an important indicator for populations sensitive to air quality changes.

Mean AQI values for San Juan County were generally in the good range (AQI<50) in 2013 with 80% of the days in that range. The median AQI in 2013 was 42, which indicates "good" air quality. The maximum AQI in 2013 was 156, which is "unhealthy".

Although the AQI in the region has reached the level considered unhealthy for sensitive groups on several days almost every year in the last decade, there are no patterns or trends to the occurrences (Table 5). On 8 days in the past decade, air quality has reached the level of "unhealthy" and on two days, air quality reached the level of "very unhealthy". In 2009 and 2012, there were no days that were "unhealthy for sensitive groups" or worse in air quality. In 2005 and 2013, there was one day that was "unhealthy" during each year. In 2010, there were five "unhealthy" days and two "very unhealthy days".

Table 5. Number of Days classified as "unhealthy for sensitive groups" (AQI 101-150) or worse (EPA 2013a)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days	3	6	9	18	1	0	12	9	0	1

Hazardous Air Pollutants

The Air Resources Technical Report discusses the relevance of hazardous air pollutants (HAPs) to oil and gas development and the particular HAPs that are regulated in relation to these activities (BLM 2014). The EPA conducts a periodic National Air Toxics Assessment (NATA) that quantifies HAP emissions by county in the U.S. The purpose of the NATA is to identify areas where HAP emissions result in high health risks and further emissions reduction strategies are necessary. A review of the results of the 2005 NATA shows that cancer, neurological and respiratory risks in San Juan County are generally

lower than statewide and national levels as well as those for Bernalillo County where urban sources are concentrated in the Albuquerque area (EPA 2012).

Climate

The planning area is located in a semiarid climate regime typified by dry windy conditions and limited rainfall. Summer maximum temperatures are generally in the 80s or 90s (degrees Fahrenheit) and winter minimum temperatures are generally in the teens to 20s. Temperatures occasionally reach above 100° F in June and July and have dipped below zero in December and January. Precipitation is divided between summer thunderstorms associated with the Southwest Monsoon and winter snowfall as Pacific weather systems drop south into New Mexico.

Table 6. 1981-2010 Climate Normals

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Precip (inches)	0.68	0.63	0.62	0.63	0.48	0.51	1.37	1.36	1.15	0.81	0.71	0.67
Min. Temp. (°F)	13.4	19.1	23.8	30.4	38.9	47.7	55.6	53.9	45.0	32.3	21.3	14.2
Avg. Temp. (°F)	28.5	34.1	40.9	48.5	57.8	67.0	72.7	70.4	62.6	50.2	37.9	29.1
Max. Temp. (°F)	43.6	49.1	58.0	66.7	76.7	86.3	89.8	86.9	80.3	68.1	54.5	44.0

The Air Resources Technical Report summarizes information about GHG emissions from oil and gas development and their effects on national and global climate conditions. While it is difficult to determine the spatial and temporal variability and change of climatic conditions; what is known is that increasing concentrations of GHGs are likely to accelerate the rate of climate change.

3.1.2. Direct and Indirect Impacts

Air quality would temporary be directly impacted with pollution from exhaust emissions and dust. Air pollution from the motorized equipment and dust dissemination would discontinue at the completion of the project. Other factors that currently affect air quality in the area include dust from livestock herding activities, dust from recreational use, dust from use of roads for vehicular traffic, and emissions from oil and gas production activities. Impacts to air quality attributable to this project would be temporary and minor.

Cumulative Impacts

The BLM-FFO manages Federal hydrocarbon resources in San Juan, Sandoval, Rio Arriba, and McKinley Counties. There are approximately 21,150 wells in the San Juan Basin. About 14,843 of the wells in these counties are Federal wells. Analysis of cumulative impacts for reasonable development scenarios and RFDS of oil and gas wells on public lands in the BLM-FFO was presented in the 2003 RMP. This included modeling of impacts on air quality. A more detailed discussion of Cumulative Effects can be found in the Air Resources Technical Report (BLM 2014).

The primary activities that contribute to levels of air pollutant and GHG emissions in the Four Corners area are electricity generation stations, fossil fuel industries, and vehicle travel. The Air Quality Technical Report includes a description of the varied sources of national and regional emissions that are incorporated here to represent the past, present, and reasonably foreseeable impacts to air resources (BLM 2014). It includes a summary of emissions on the national and regional scale by industry source. Sources that are considered to have notable contributions to air quality impacts and GHG emissions include electrical generating units, fossil fuel production (nationally and regionally), and transportation.

The proposed project could result in a very small direct and indirect increase in several criteria pollutants, HAPs, and GHGs as a result the short term construction activity. The very small increase in emissions from short term construction activity would not be expected to result in exceeding the NAAQS for any criteria pollutants in the analysis area.

The very small increase in GHG emissions that could result from implementing the proposed alternative would not produce climate change impacts that differ from the No Action Alternative. This is because climate change is a global process that is impacted by the sum total of GHGs in the Earth's atmosphere. The incremental contribution to global GHGs from the action alternatives cannot be translated into effects on climate change globally or in the area of this site-specific action. It is currently not feasible to predict with certainty the net impacts from the action alternatives on global or regional climate.

The Air Resources Technical Report (BLM 2014) discusses the relationship of past, present, and future predicted emissions to climate change and the limitations in predicting local and regional impacts related to emissions. It is currently not feasible to know with certainty the net impacts from particular emissions associated with activities on public lands.

3.2. Upland Vegetation

3.2.1. Affected Environment

The proposed project area is located within the Arizona/New Mexico Plateau ecological region. This ecological region occurs primarily in Arizona, Colorado, and New Mexico; a small portion of the region is located within Nevada. This region encompasses approximately 45,870,500 acres (185,632 square kilometers), and the elevation ranges from 2,165 to 11,949 feet (660 to 3,642 meters) AMSL. The ecological region's landscapes include low mountains, hills, mesas, foothills, irregular plains, alkaline basins, wetlands, and some sand dunes. The Arizona/New Mexico Plateau ecological region is a large transitional area located between the semiarid grasslands to the east; the drier shrublands and woodlands to the north; and the lower, hotter, less-vegetated areas to the west and south. Vegetation communities within this region include shrublands of big sagebrush (*Artemisia tridentata*), rabbitbrush (*Ericameria* spp.), winterfat (*Krascheninnikovia lanata*), shadscale saltbush (*Atriplex confertifolia*), and greasewood (*Sarcobatus vermiculatus*); and grasslands of blue grama (*Bouteloua gracilis*), western wheatgrass (*Pascopyrum smithii*), green needlegrass (*Nassella viridula*), and needle-and-thread grass (*Hesperostipa comata*). Higher elevations within the Arizona/New Mexico Plateau ecological region may support piñon pine (*Pinus edulis*) and juniper (*Juniperus* spp.) woodlands. This ecological region includes the urban areas of Santa Fe and Albuquerque, New Mexico. Important land uses within the region include irrigated farming, recreation, rangeland, wildlife habitat, and some natural gas production (Griffith, et al. 2006).

The western half of the proposed project area, which is within Lewis Park Canyon, is within a large patch of sagebrush shrubland with scattered piñon pine and juniper trees. The sagebrush shrubland patch is surrounded by piñon-juniper woodlands. Dominant species within this portion of the proposed project area include big sagebrush, rabbitbrush, broom snakeweed (*Gutierezia sarothrae),* Russian thistle (*Salsola tragus*), western wheatgrass, Indian ricegrass (*Achnatherum hymenoides*), blue grama, and cheatgrass (*Bromus tectorum*). As the proposed project area travels eastward, the density of trees increases until the vegetation community becomes piñon-juniper woodland. Frequently occurring species recorded within this portion of the proposed project area include piñon pine, juniper, Mormon tea (*Ephedra viridis*), narrowleaf yucca (*Yucca angustissima*), banana yucca (*Yucca baccata),* and plains pricklypear (*Opuntia polyacantha).* Ground cover (including litter) within the proposed project area is 30 to 80 percent.

The proposed project area runs parallel to an existing access road, and there are existing wells pads at the B.O.L. and E.O.L. Therefore, some portions of the proposed project area are unvegetated and some portions include previously disturbed vegetation.

3.2.2. *Impacts from the Proposed Action*

Direct and Indirect Impacts

During construction, vegetation would be directly removed from within 26 pole- and anchor-installation sites, each of which would measure 9 square feet. FEUS would attempt to locate poles and anchors away from trees. However, if trees are located within the installation sites, they would be removed. Total direct vegetation removal would be less than 0.01 acre.

During construction and maintenance activities, if trees within the proposed project area would interfere with powerline operation, they would be trimmed.

Vegetation could be briefly crushed as vehicles travel cross-country within the ROW and TUAs. Although the ROW and TUAs encompass 6.23 acres, most of the proposed poles and anchors are located immediately adjacent to existing roads or well pads; therefore, FEUS would not need to drive cross-country to access most facilities. Because construction, operation, and abandonment activities are anticipated to be brief and infrequent in nature, vegetation impacts are expected to be minor.

Because disturbance to bare soil would be less than 0.1 acre, manual reseeding would not be required by FEUS. Disturbed areas around power poles and anchors would be expected to reseed naturally (BLM 2013).

Cumulative Impacts

The spatial analysis area includes the proposed project area and immediately adjacent lands.

Existing disturbances within the spatial analysis area include the following:

- Access road (adjacent to the entire length of the proposed project area; crossed several times)
- Well pads (at proposed B.O.L., proposed E.O.L., and north of proposed Pole No. 10)
- Active wildlife and livestock grazing; the spatial analysis area is within the Pump Mesa AMP grazing allotment (No. 5055; permitted for grazing from November 15 through June 10 by 300 head of cattle)

Aside from the proposed project, no reasonably foreseeable disturbances are anticipated within the spatial analysis area.

Indirectly, fugitive dust or deposition associated with roads and well pads in the immediate area could currently impact the vegetation within the spatial analysis area, and could continue to do so throughout the life of the proposed project. The proposed project would contribute slightly to vegetation disturbance within the spatial analysis area.

3.3. Wildlife

3.3.1. *Affected Environment*

General Wildlife

The proposed project area is found within Rattlesnake Canyon SDA, which is managed for wildlife (specifically big game). This SDA is discussed in Section 3.6 (SDAs).

The vegetation community found within the proposed project area provides habitat for a variety of vertebrate and invertebrate species. The objectives of the BLM wildlife management program are to "ensure optimum populations and a natural abundance and diversity of fish and wildlife values by restoring, maintaining, and enhancing habitat conditions for consumptive and non-consumptive uses" (BLM 2003b, 2-24).

A 3.1-acre prairie dog colony is recorded approximately 750 feet west-northwest of the proposed B.O.L. (BLM 2012b). No sign of prairie dogs or prairie dog burrows was observed within the proposed project area.

Mule deer (*Odocoileus hemionus*) and rabbit (Family Leporidae) scat were recorded within the proposed project area during the site survey. Woodrat (*Neotoma* sp.) middens were also observed.

A noisy generator is currently powering the NEBU No. 449A natural gas well. It is possible that the generator deters some wildlife.

Migratory Birds

EO 13186, dated January 17, 2001, calls for increased efforts to more fully implement the Migratory Bird Treaty Act of 1918. In keeping with this mandate, the BLM-FFO has issued an interim policy to minimize unintentional take, as defined by the EO, and to better optimize migratory bird efforts related to BLM-FFO activities. In keeping with this policy, a list of priority birds of conservation concern which occur in ecological regions similar to the proposed project area was compiled through a review of existing bird conservation plans, including the following:

- USFWS Birds of Conservation Concern
- New Mexico Partners in Flight (NMPIF) New Mexico Bird Conservation Plan
- Comprehensive Wildlife Conservation Strategy for New Mexico
- Gray Vireo Recovery Plan
- The North American Waterbird Conservation Plan
- Recovery plans and conservation plans/strategies prepared for Federally listed candidate species

The selected species have a known distribution in the BLM-FFO area and may be affected by various types of perturbations. The species that could potentially occur within the proposed project area, and a brief assessment of their habitats, are identified in the below table.

Table 7. Migratory Birds with Potential to Occur in Proposed Project area

Species Name	Habitat Associations
Bendire's thrasher (*Toxostoma bendirei*)	On the Colorado Plateau, inhabits open sagebrush with scattered junipers; sparse or degraded understory, lower elevations. Avoids riparian areas and arroyos with dense shrub cover
Black-throated sparrow (*Amphispiza bilineata*)	Xeric habitats dominated by open shrubs with areas of bare ground.
Brewer's sparrow (*Spizella breweri*)	Closely associated with sagebrush, preferring dense stands broken up with grassy areas.
Gray vireo (*Vireo vicinior*)	In northern NM, stands of piñon pine and Utah juniper 5,800 – 7,200 feet AMSL open with a shrub component and mostly bare ground; antelope bitterbrush, mountain mahogany, Utah serviceberry and big sagebrush often present. Broad, flat or gently sloped canyons, in areas with rock outcroppings, or near ridge-tops.
Loggerhead shrike (*Lanius ludovicianus*)	Open country interspersed with improved pastures, grasslands, and hayfields. Nests in sagebrush areas, desert scrub, and woodland edges.
Mountain bluebird (*Sialia currucoides*)	Open piñon-juniper woodlands, mountain meadows, and sagebrush shrublands; requires larger trees and snags for cavity nesting.
Mourning dove (*Zenaida macroura*)	Open country, scattered trees, and woodland edges. Feeds on ground in grasslands and agricultural fields. Roost in woodlands in the winter. Nests in trees or on ground.
Sage sparrow (*Amphispiza belli*)	Large and contiguous areas of tall and dense sagebrush. Negatively associated with seral mosaics and patchy shrublands and abundance of greasewood.
Sage thrasher (*Oreoscoptes montanus*)	Shrub-steppe dominated by big sagebrush.
Scaled quail	Brushy arroyos, cactus flats, sagebrush or mesquite plains, desert grasslands,

Species Name	Habitat Associations
(*Callipepla squamata*)	Plains grasslands, and agricultural areas. Good breeding habitat has a diverse grass composition, with varied forbs and scattered shrubs.
Vesper sparrow (*Pooecetes gramineus*)	Dry montane meadows, grasslands, prairie, and sagebrush steppe with grass component; nests on ground at base of grass clumps.

3.3.2. Impacts from the Proposed Action

Direct and Indirect Impacts

As discussed in Section 3.2.2 (Upland Vegetation – Direct and Indirect Impacts), direct vegetation removal associated with the proposed project would be less than 0.01 acre, and the proposed powerline extension would parallel an existing access road. Therefore, direct habitat disturbance is anticipated to be minimal. No new habitat fragmentation would occur.

If proposed project activities (installing poles or anchors or driving cross-country) occur during bird nesting season and bird nests are not identified and avoided, it is possible that bird nests and eggs could be harmed by the proposed project. It is possible that small mammals and reptiles or burrows of such species could be crushed as vehicles drive cross-country within the proposed project area.

Birds, including raptors, could potentially utilize the proposed powerline extension for perching. Hunting from these perches could have a positive impact on these birds and a negative impact on their prey.

Proposed project activities would be brief and infrequent. It is not anticipated that human and vehicle presence would increase much in the area as a result of the proposed powerline extension; little maintenance is anticipated, and is not expected to exceed that required for the generators that are currently present.

Once the proposed powerline extension is in operation, the noisy generator that is currently powering the NEBU Nos. 440A natural gas well would no longer be required. The reduction in noise in the area surrounding the proposed project area could possibly encourage some wildlife to use the area.

It is difficult to predict the effects of the proposed project on migratory birds. The proposed project could result in the increased usage of the immediate area by some migratory bird species, while decreasing usage by other species. Studies have shown mixed impacts of oil and gas development on nesting migratory birds. According to a study by Ortega and Francis (2007), the presence of oil and gas compressors affected bird species differently; however, there was no difference in overall nest density on plots with and without compressors. A study by Holmes and King (2006) found that the sage sparrow had lower nest survival in an area with ongoing gas development; however, the Brewer's sparrow had higher nest survival rates in a developed gas field when compared with populations in an undeveloped control area.

Cumulative Impacts

The spatial analysis area for wildlife includes the proposed project area and an approximately 2-mile radius around the proposed project area. Within the spatial analysis area, there is existing disturbance, and the region has been fragmented. Existing disturbance within the spatial analysis area includes the following:

- 142 active oil and/or natural gas wells and associated well pads
- 3 inactive oil and/or natural gas wells and associated well pads (some reclaimed)
- Approximately 4 mile of New Mexico State Highway 511
- Approximately 3 miles of County Roads
- Approximately 20 miles of other roads (such as oil and gas access roads)

- Numerous powerline corridors
- Numerous natural gas pipeline corridors
- Active wildlife and livestock grazing; the spatial analysis area is within Middle Mesa AMP grazing allotment (No. 5056; permitted for year-round grazing by 268 head of cattle) and Pump Mesa AMP grazing allotment (No. 5055; permitted for grazing from November 15 through June 10 by 300 head of cattle)

It is possible that additional oil and/or natural gas wells could be drilled within the spatial analysis area in the reasonably foreseeable future; however, there are no known plans for such activities.

Habitat disturbance and fragmentation in the spatial analysis area is primarily the result of oil and gas development (including well pads, access roads, and powerline and pipeline corridors). The direct and indirect habitat disturbance, fragmentation, and human activities associated with these disturbances could deter wildlife from utilizing portions of the spatial analysis area. The proposed action would contribute slightly to direct and indirect habitat disturbance in the spatial analysis area, but would also decrease long-term noise within portions of the spatial analysis area.

3.4. Special Status Species

3.4.1. Affected Environment

The BLM manages certain species which are not Federally listed as threatened or endangered in order to prevent or reduce the need to list them as threatened or endangered in the future. BLM SSS include BLM Sensitive Species and BLM-FFO Special Management Species (SMS).

New Mexico BLM State Directors have developed a list of BLM Sensitive Species for the State of New Mexico (BLM 2011a, BLM 2011b, BLM 2011c, BLM 2012a). In accordance with BLM Manual 6840, the BLM-FFO has prepared a list of BLM-FFO SMS to focus species management efforts toward maintaining habitats under a multiple-use mandate (BLM 2008a, BLM 2008c). BLM-FFO SMS include some BLM Sensitive Species and other species for which the BLM-FFO has determined special management is appropriate (BLM 2008c). The authority for this policy and guidance is established by the ESA; Title II of the Sikes Act, as amended (16 USC 670a-670o, 74 Stat. 1052); FLPMA; and Department of Interior Manual 235.1.1A.

Based on known range and habitat, several BLM Special Status Species have the potential to occur within the proposed project area. These species, their habitat descriptions, and their potential to occur within the proposed project area are provided in the below table.

Table 8. BLM Special Status Species with Potential to Occur within Proposed Project Area

Species	Status	Documented Occurrence Within BLM-FFO Region	Habitat	Potential to Occur in Proposed Project Area
American peregrine falcon (*Falco peregrinus anatum*)	SMS	Summer/ breeding range (Sibley 2000). Known to nest in BLM-FFO (BLM 2003a, 3-46).	Rugged, semi-open to wooded areas in montane regions. Areas with rocky cliffs, outcrops, and canyons that are at least 30 feet high and often near water. In New Mexico, typically nests on cliff ledges (NMPIF 2007, Wheeler 2003).	The proposed project area is located in a rugged, semi-open to wooded area approximately 0.6 mile west of the Los Piños arm of Navajo Reservoir. Peregrine falcons could potentially use the proposed project area for foraging, and could potentially use the high cliffs above the Los Piños arm of Navajo Reservoir for nesting. The nearest known peregrine falcon nest is 1.4 miles north of the proposed project area; this nest is located along cliffs on the western side of the Los Piños River. There are also three recorded peregrine falcon nests located within Simon Canyon, approximately 2.0 miles southwest of the proposed project area.
Bald eagle (*Haliaeetus leucocephalus*)	SMS	Winter range (Sibley 2000). Known to migrate through and winter in BLM-FFO (BLM 2003a, 3-43).	Wintering areas are commonly associated with open water; may also use habitat with little or no open water if other food resources (such as carrion) are readily available. Winter roost sites may be up to 20 miles from food resources (NatureServe 2012).	The proposed project area is located 0.6 mile west of the Los Piños arm of Navajo Reservoir. Known bald eagle roost sites (Pine No. 2, Pine No. 3, and Negro Canyon Unit Areas of Critical Environmental Concern [ACECs], which are managed for bald eagle protection) are located along this arm of the reservoir. The nearest of these is Pine No. 2 ACEC, which is 0.7 mile east-northeast of the proposed project area. Bald eagles could potentially roost or forage within the proposed project area, although the habitat within the proposed project area is not preferred.

Species	Status	Documented Occurrence Within BLM-FFO Region	Habitat	Potential to Occur in Proposed Project Area
Bendire's thrasher (*Toxostoma bendirei*)	Sensitive	Summer range (Sibley 2000). Known to occur within BLM-FFO (BLM 2011a).	Sparse desert shrublands, degraded grasslands, and open woodlands with scattered shrubs. On the Colorado Plateau, open sagebrush shrublands with scattered junipers. Avoids riparian areas and arroyos with dense shrub cover (NMPIF 2007).	Sagebrush shrublands and open woodlands are found within the proposed project area. The Bendire's thrasher could potentially utilize the proposed project area for foraging and nesting.
Ferruginous hawk (*Buteo regalis*)	SMS	Year-round range (NMPIF 2007). Known to nest in BLM-FFO (BLM 2003a, 3-46).	Open areas with broad expanses of prairie grassland or shrub-steppe vegetation, areas with low to moderate agricultural coverage, transitional edges between grasslands and piñon-juniper woodlands, sagebrush shrublands, and desert scrub (NMPIF 2007, NatureServe 2012). Nests in elevated locations on the ground (if in grasslands), in isolated tree stands, on rock outcrops/spires, or on utility poles (NMPIF 2007).	Sagebrush shrublands and open piñon-juniper woodlands are found within the proposed project area. The proposed project area could potentially be utilized for foraging by ferruginous hawks. However, no appropriate nesting sites are available in the vicinity. The nearest known ferruginous hawk nest is more than 28 miles southwest of the proposed project area.
Golden eagle (*Aquila chrysaetos*)	SMS	Year-round range (Sibley 2000). Known to nest in BLM-FFO (BLM 2003a, 3-41).	Open to semi-open country with elevated perches, including grasslands, prairies, open woodlands, shrublands, and barren areas. Prefers hilly or montane regions. Nests on rock ledges on cliffs or in large trees (NatureServe 2012, NMPIF 2007, Wheeler 2003).	The proposed project area is within open to semi-open country that golden eagles could use for foraging. The cliffs above the Los Piños arm of Navajo Reservoir (0.6 mile to the east) could potentially be used for nesting. The nearest known golden eagle nest is more than 4 miles west of the proposed project area.
Pinyon jay (*Gymnorhinus cyanocephalus*)	Sensitive	Year-round range (Sibley 2000). Known to occur within BLM-FFO (BLM 2011a).	Piñon-juniper woodlands. Occasionally areas dominated by ponderosa pine, sagebrush, or chaparral (NMPIF 2007).	Piñon-juniper woodlands are found within and around the proposed project area. The proposed project area could be used by pinyon jays for foraging and nesting.

Species	Status	Documented Occurrence Within BLM-FFO Region	Habitat	Potential to Occur in Proposed Project Area
Prairie falcon (*Falco mexicanus*)	SMS	Year-round range (NMPIF 2007). Known to nest in BLM-FFO (BLM 2003a, 3-41).	Arid, very open areas with short grass or scrub vegetation. Nests on cliffs at least 20 feet high. Breeding cliffs may be within semi-open to dense woodlands several miles from open foraging habitat (Wheeler 2003).	The shrubland and woodland vegetation communities within the proposed project area are too dense for this species to forage within. However, the high cliffs above the Los Piños arm of Navajo Reservoir (0.6 mile to the east of the proposed project area) could potentially be used by prairie falcons for nesting. The nearest known prairie falcon nest is 14 miles west-southwest of the proposed project area.
Spotted bat (*Euderma maculatum*)	Sensitive	Known to occur within BLM-FFO (BLM 2011b).	Ponderosa pine forests, piñon-juniper woodlands adjacent to sandstone cliffs, open semi-desert shrublands. Often over streams or water holes in ponderosa or mixed conifer forests. Roost in cracks and crevices of canyons and cliffs (BLM 2011b).	Pinon-juniper woodlands are found within and around the proposed project area. There are sandstone cliffs present in the region, although not within the proposed project area. The proposed project area could provide potential foraging habitat for spotted bats.

3.4.2. Impacts from the Proposed Action

Direct and Indirect Impacts

General impacts to SSS wildlife would be similar to those discussed in the Wildlife section (Section 3.3.2: Wildlife – Impacts from the Proposed Action – Direct and Indirect Impacts).

Bendire's Thrasher and Pinyon Jay

Impacts to Bendire's thrashers and pinyon jays would be similar to those described for migratory birds (Section 3.3.2 [Wildlife– Impacts from the Proposed Action – Direct and Indirect Impacts]).

Bald Eagle

Because the proposed project area is within Rattlesnake Canyon SDA, no construction would be allowed between December 1 and March 31. Therefore, it is not anticipated that noise associated with the construction phase of the proposed project would disturb wintering bald eagles within the nearby bald eagle ACECs.

American Peregrine Falcon, Golden Eagle, and Prairie Falcon

The proposed powerline extension would be located more than 0.5 mile from a cliff that could potentially be used by these species for nesting. Therefore, the proposed powerline extension and proposed project activities are not anticipated to interfere with the nesting of these raptors.

Ferruginous Hawk

Because there are no potential ferruginous hawk nesting sites in the area, the proposed project would not impact nesting by this species.

Spotted Bat

Because proposed project activities would take place during the daytime, and no potential roosting sites would be physically disturbed by the proposed project, it is not anticipated that spotted bats would be directly impacted by the proposed project.

Cumulative Impacts

The spatial analysis area for SSS includes the proposed project area and an approximately 2-mile radius around the proposed project area. Within the spatial analysis area, there is existing disturbance; reasonably foreseeable future disturbance is possible, although no future projects are currently known. Existing disturbance is described in detail in Section 3.3.2 (Wildlife – Impacts from the Proposed Action – Cumulative Impacts). Habitat disturbance in the area is primarily the result of oil and gas development (including well pads, access roads, and pipeline corridors).

Cumulative impacts to SSS would be similar to those described for wildlife (Section 3.3.2 [Wildlife - Impacts from the Proposed Action – Cumulative Impacts]).

3.5. Cultural Resources

3.5.1. Affected Environment

The proposed project area is located within the archaeologically rich San Juan Basin of northwestern New Mexico. In general, the history of the San Juan Basin can be divided into five major periods: PaleoIndian (circa [ca.] 10000 B.C. to 5500 B.C.); Archaic (ca. 5500 B.C. to A.D. 400); Basketmaker II-III and Pueblo I-IV (aka Anasazi; A.D. 1-1540); and historic (A.D. 1540 to present), which includes Native American as well as later Hispanic and Euro-American settlers. Detailed descriptions of these various periods are provided in the BLM-FFO PRMP/FEIS (BLM 2003a, 3-65 – 3-84) and will not be reiterated here. Additional information can also be found in an associated documented, the Cultural Resources Technical Report (Science Applications International Corporation 2002).

Cultural sites vary considerably, and can include but are not limited to simple artifact scatters, domiciles of various types with a myriad of associated features, rock art and inscriptions, ceremonial/religious features, and roads and trails.

The entire Area of Potential Effect (APE) for the proposed action was archaeologically surveyed by DCA at a BLM Class III (100-percent) level. The archaeological report was prepared and submitted to the BLM in accordance with the Procedures for Performing Cultural Resources Fieldwork on Public Lands in the Area of New Mexico BLM Responsibilities (BLM 2005). During the Class III inventory, no cultural sites were identified within the APE (DCA 2012; BLM Report 2012[II]007F).

3.5.2. Impacts from the Proposed Action

Direct and Indirect Impacts

There are no cultural sites within the APE. The proposed action would not be expected to physically threaten any TCPs, prevent access to sacred sites, prevent the possession of sacred objects, or interfere with or otherwise hinder the performance of traditional ceremonies/rituals. The proposed action would have no direct or indirect impacts on cultural sites.

Cumulative Impacts

There would be no negative cumulative impact on cultural resources, as no cultural sites are present. A positive cumulative effect is the additional scientific information yielded by the archaeological survey associated with the proposed action.

3.6. SDAs

3.6.1. Affected Environment

The proposed project area is within the 110,160-acre Rattlesnake Canyon SDA. This SDA is managed to support increases in potential wildlife (BLM 2003b, C-171). Historically, Rattlesnake Canyon SDA supported many more mule deer than it supports currently. There is currently a small, resident population of deer and elk (*Cervus elaphus*; Hansen 2009). The primary objective for the SDA is to increase resident deer numbers. The SDA, if properly managed, also has the potential to provide wildlife for a variety of other wildlife species, including Merriam's wild turkey (*Meleagris gallopavo merriami*), mountain lion (*Puma concolor*), black bear (*Ursus americanus*), and many bird species (BLM 2003b, C-171 and Hansen 2009).

3.6.2. Impacts from the Proposed Action

Direct and Indirect Impacts

Per Rattlesnake Canyon SDA stipulations, no construction would be allowed between December 1 and March 31; therefore, proposed construction activities would not affect wintering wildlife.

Impacts to big game are discussed in Section 3.3.2 (Wildlife - Direct and Indirect Impacts).

The proposed project would be consistent with the management objectives established for Rattlesnake Canyon SDA.

Cumulative Impacts

The spatial analysis area is Rattlesnake Canyon SDA. Within the spatial analysis area, there is existing disturbance, and the region has been fragmented. Existing disturbance within the SDA includes the following:

- 1,456 active oil and/or natural gas wells and associated well pads
- 172 inactive oil and/or natural gas wells and associated well pads (some reclaimed)
- Approximately 18 miles of highways (including New Mexico State Highway 511, Colorado State Highway 173, and U.S. Highway 550)
- Numerous County Roads and other roads (such as oil and gas access roads)
- Numerous powerline corridors
- Numerous natural gas pipeline corridors
- Active wildlife and livestock grazing; the SDA is located within several BLM-FFO grazing allotments

It is possible that additional oil and/or natural gas wells could be drilled within the SDA in the reasonably foreseeable future; however, there are no known plans for such activities.

Habitat disturbance and fragmentation in the spatial analysis area is primarily the result of oil and gas development (including well pads, access roads, and powerline and pipeline corridors). The direct and

indirect habitat disturbance, fragmentation, and human activities associated with these disturbances could deter big game from utilizing portions of the SDA. The proposed project would contribute negligibly to direct and indirect habitat disturbance in the area, and would reduce long-term noise in the area.

4. SUPPORTING INFORMATION

4.1. Tribes, Individuals, Organizations, or Agencies Consulted

The following tribes, individuals, organizations, and/or agencies were consulted during the development of this EA:

- Dale Smith, FEUS
- Erik Simpson, DCA

4.2. List of Preparers

This EA was prepared by NCI in conformance with the standards of and under the direction of the BLM-FFO. The following individuals assisted in the preparation of this EA:

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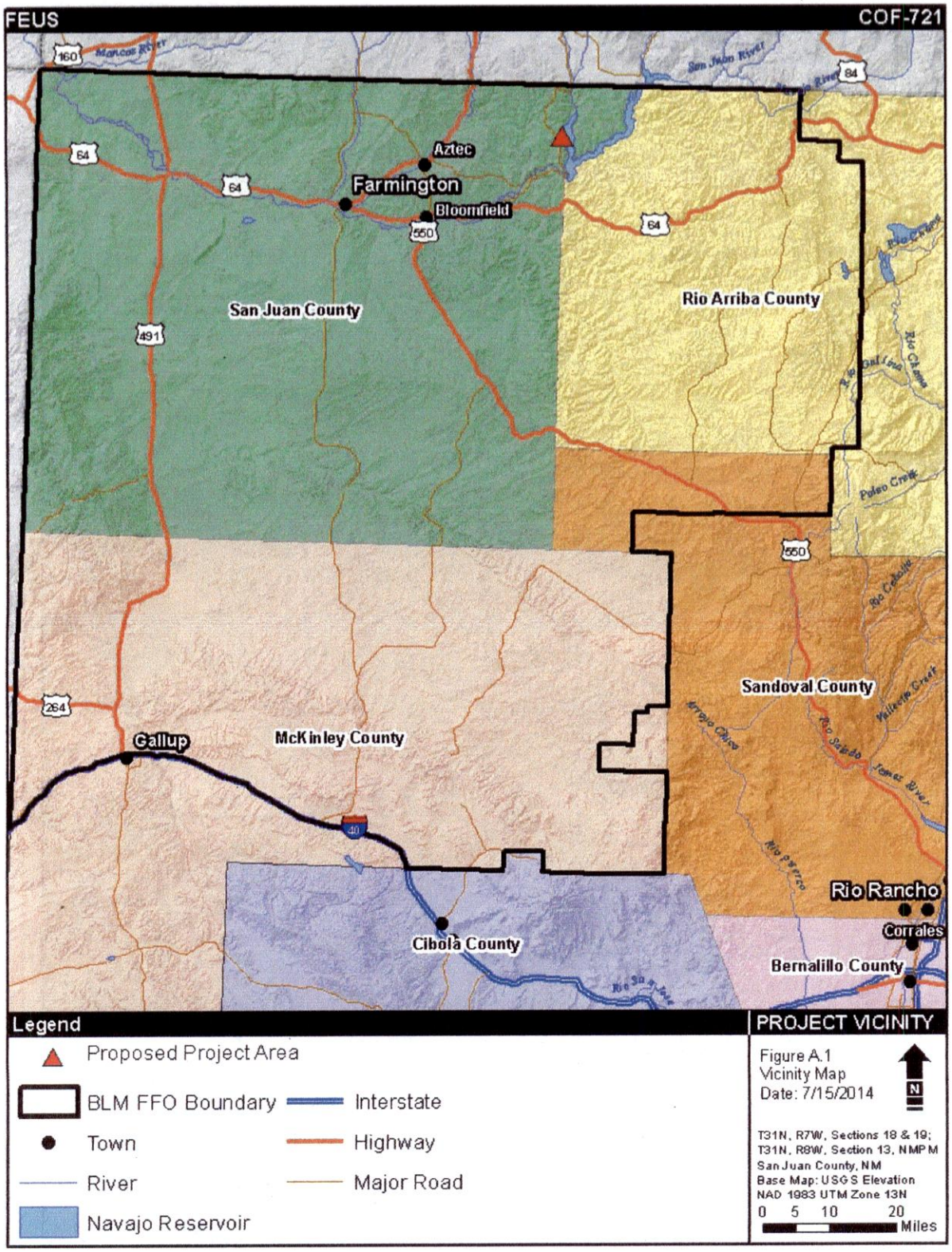
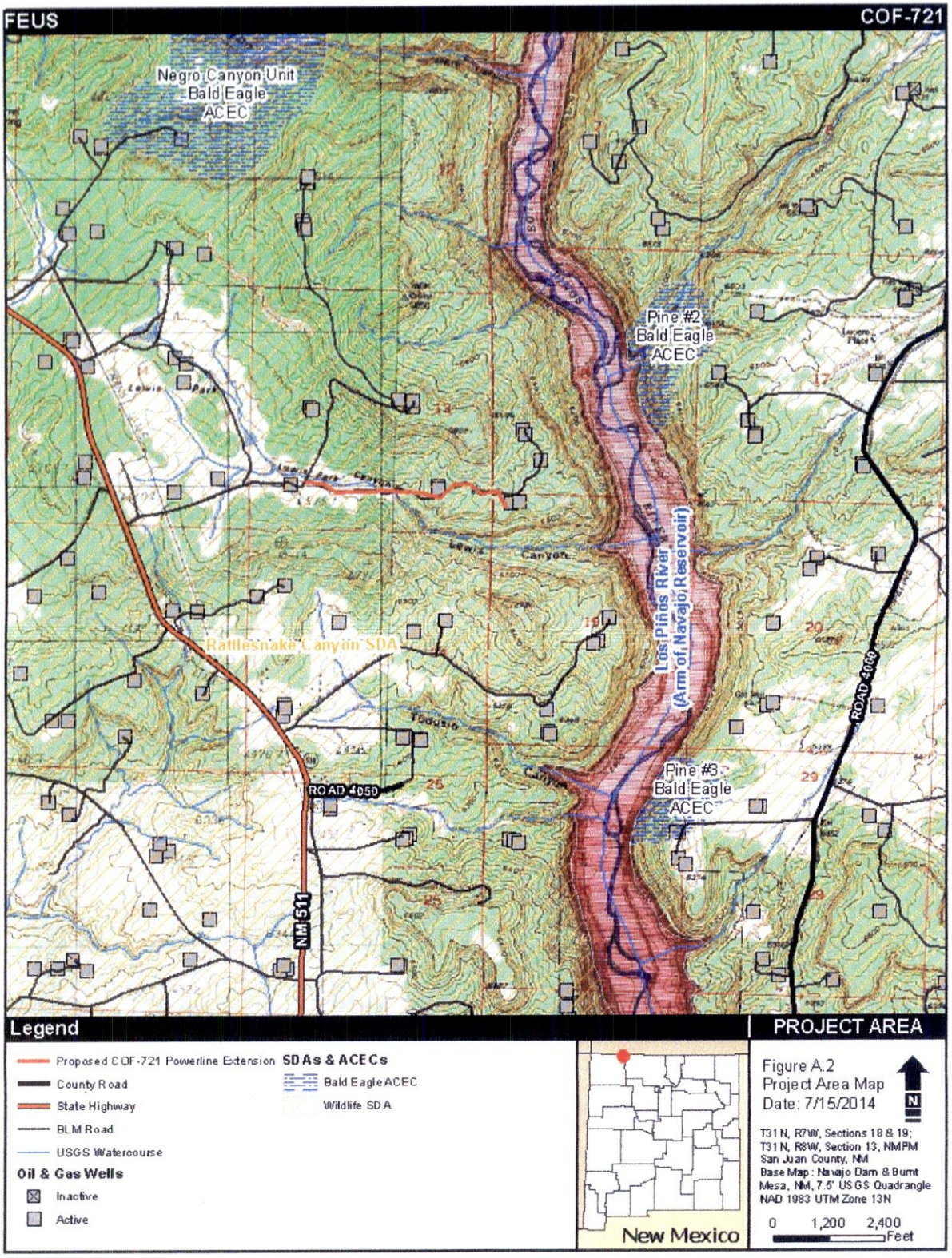
APPENDIX A. MAPS

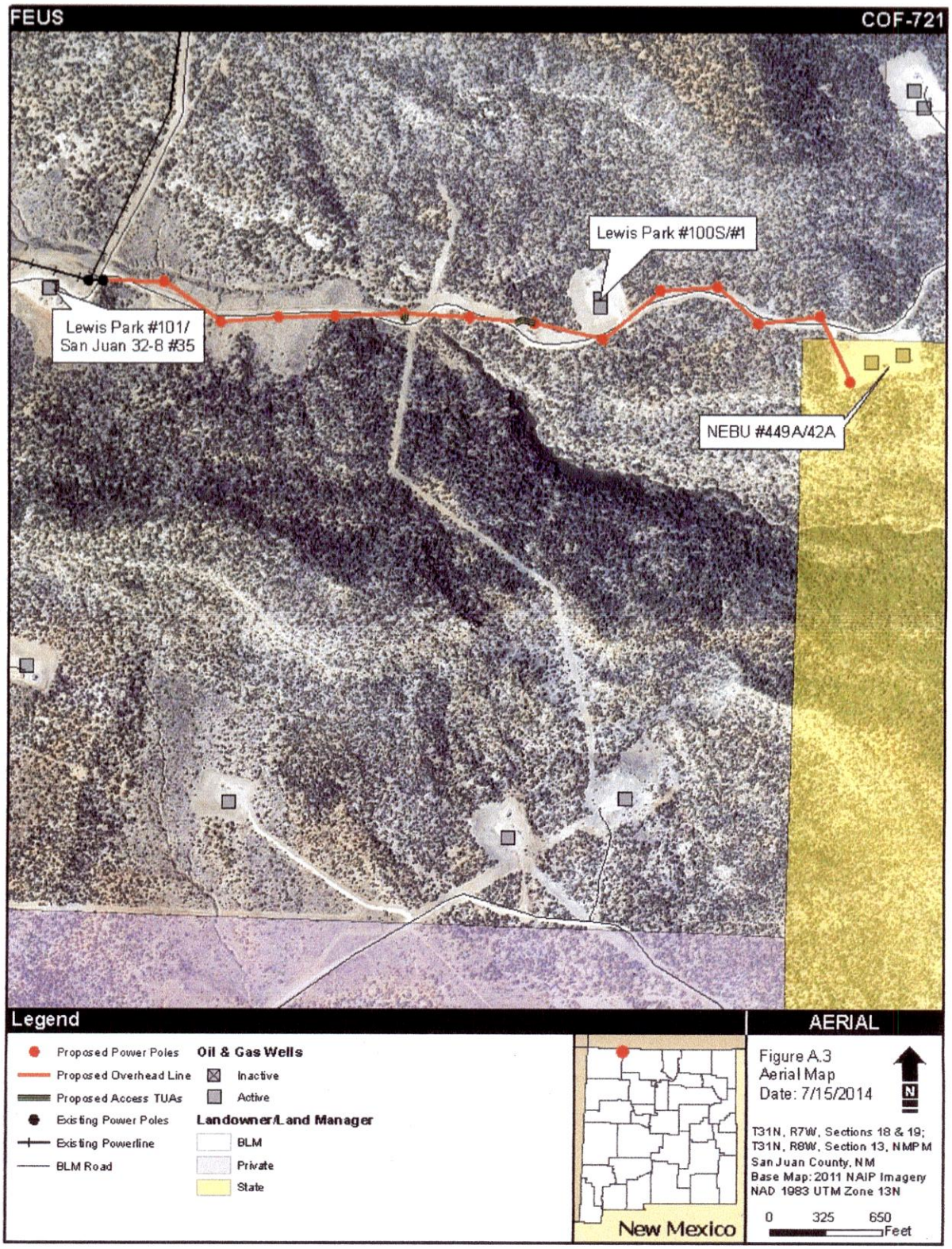
A.1. Vicinity Map



A.2. Project Area Map



A.3. Aerial Map



APPENDIX B. PLAT

	UP	DOWN
O.H. LINE	4859'	
URD. LINE		
ALUM POLES		
WOOD POLES	7-40',6-45'	1-35'
ST. LT.		
D.D. LT.		
TRANS	3-15	
TRANS2		
FEEDER 2401		
PURCHASED ST. LT. POLES		
PRELIMINARY PLAT		

B.L.M. EASEMENT REQUIRED--

STATE R.O.W. EASEMENT REQUIRED--

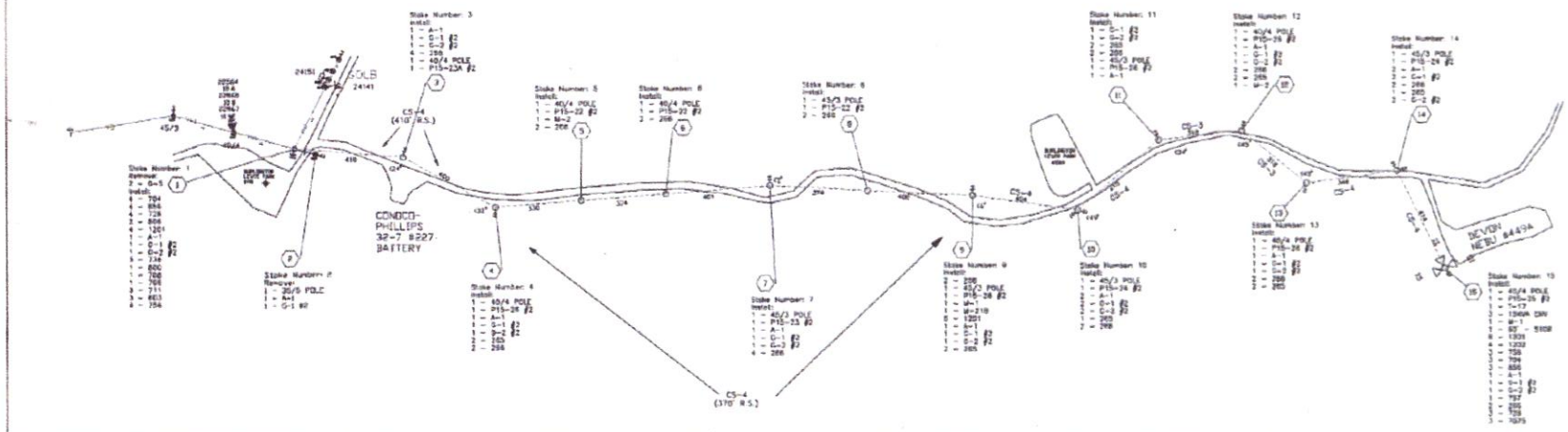
LOAD CALCULATION / RISER DIAGRAM REQUIRED--

MAP #	T31 R8 SW/4 SEC 13
SCH. DIST.	2 OUT
W.O. #	042
W.F. #	WFD534330/002
DRAWN BY:	DALE S.
PHONE #	599-8326
DATE	10/19/10
WIRE SIZE	#2 ACSR
SAG	SEE DRAWING
ZONE	2 HOUR
GPS	
SURVEY COF	

NOTE: THIS ESTIMATE IS CONTINGENT UOPN AVAILABLE CAPACITY ON CIRCUIT 2401--

COF-721
COF-721S

INST (3)-#2 ACSR Primary
INST #2 ACSR Neutral



COMPLETED

MAPPED

METER	3P CL200 D
DEMAND LOAD	45 HP
SECONDARY VOLTAGE	120/240
SERVICE WIRE SIZE	
# OF CONDUCTORS PER PHASE	
PHASE	3
MAIN DISCONNECT SIZE	
WATER USERS	
T.V.	
TELE	
ST. LT. APPROVAL	

DESCRIPTION: THREE ø PRIMARY EXTENSION (45 HP 120/240v)

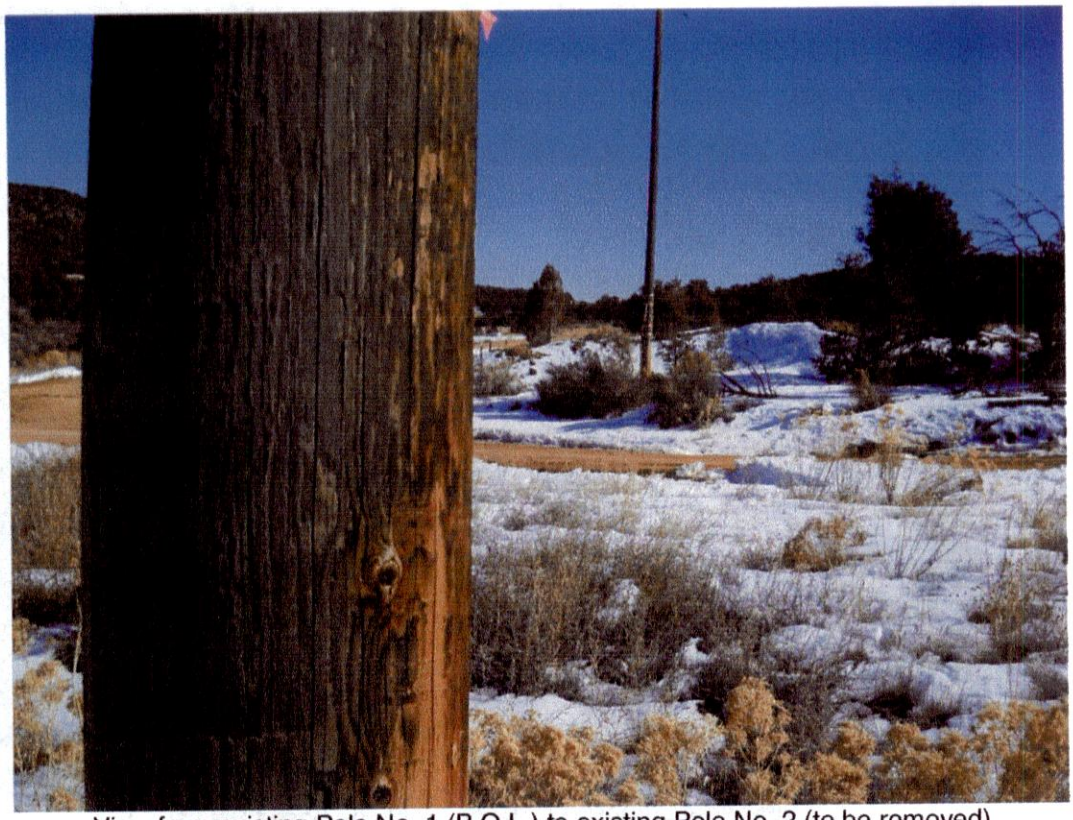
PURPOSE: TO SERVE NEBU #449A FOR DEVON ENERGY

LOCATION: NORTH OF NAVAJO DAM (EAST OF #2078 HWY 511)

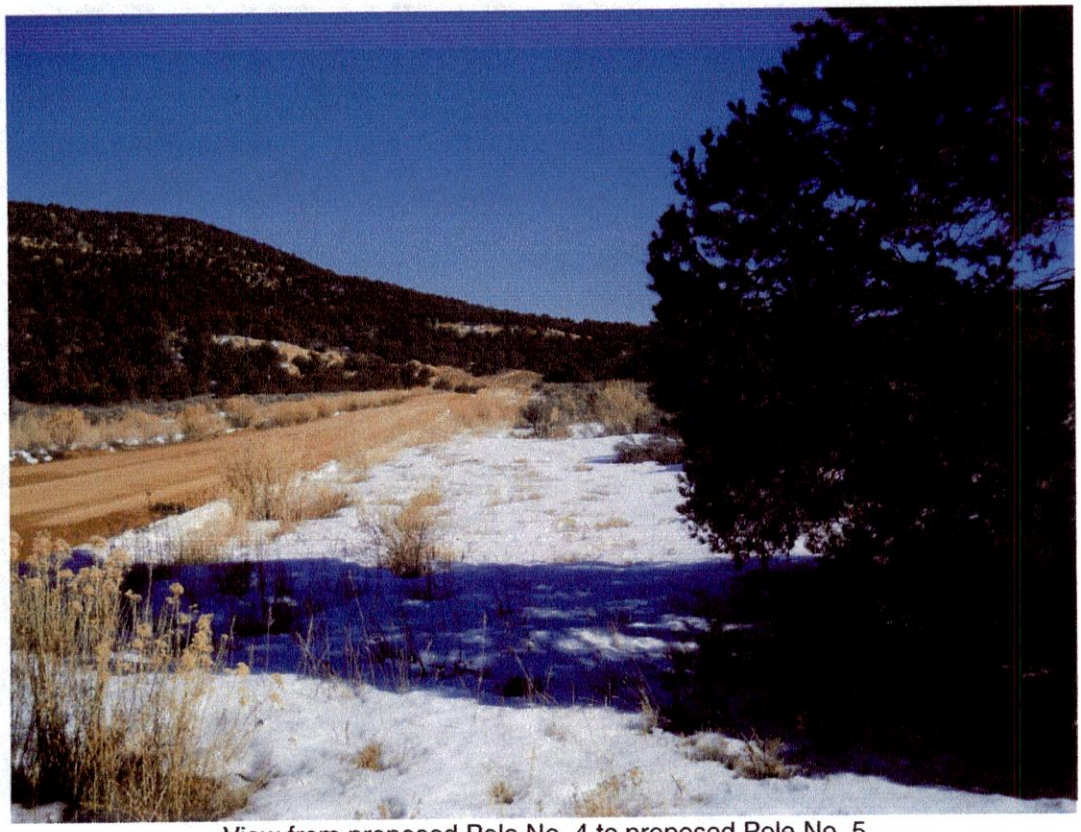
FORMAN	
START	
COMPL	
FIELD CHANGES	☐YES ☐NO
DATE(S):	
TAIL GATE BRIEFING:	☐YES ☐NO
CREW MEMBERS:	INITIAL

NOTE: USE BACK FOR ADDITIONAL COMMENTS/CREW MEMBERS

APPENDIX C. PHOTOGRAPHS



View from existing Pole No. 1 (B.O.L.) to existing Pole No. 2 (to be removed)



View from proposed Pole No. 4 to proposed Pole No. 5

View from proposed Pole No. 10 to proposed Pole No. 11

Proposed eastern access TUA, viewed from existing access road