



# ENVIRONMENTAL ASSESSMENT

## San Juan West Telecommunications Tower and Power Line Extension

San Juan Chapter,  
Navajo Nation

October 2023



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## **Environmental Assessment**

**October 2023**

### **San Juan West Telecommunications Tower and Power Line Extension**

San Juan Chapter, Navajo Nation; San Juan County, New Mexico

**Prepared for:**

CellularOne Communications  
1500 South White Mountain Road  
Show Low, AZ 85901

**and:**

Bureau of Indian Affairs  
Navajo Regional Office  
301 West Hill Street  
P.O. Box 1060  
Gallup, New Mexico 87301

***Prepared by:***

ETD, Inc.  
2501 N. Fourth Street, Suite 24  
Flagstaff, Arizona 86004

***Contact:***

Eunice Tso  
Principal  
Tel: (928) 266-0044

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**Acronyms:**

BE	Biological Evaluation
BIA	Bureau of Indian Affairs
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CWA	Clean Water Act
EA	Environmental Assessment
ESA	Endangered Species Act
FESL	Federal Endangered Species List
MSWLF	Municipal Solid Waste Landfill
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NESL	Navajo Endangered Species List
NDFW	Navajo Department of Fish and Wildlife
NHPD	Navajo Historic Preservation Department
NTUA	Navajo Tribal Utility Authority
RCRA	Resource Conservation and Recovery Act
ROW	Right-of-Way
TCP	Traditional Cultural Properties
TES	Threatened and Endangered and Sensitive
TSCA	Toxic Substance Control Act
TSDF	Treatment, Storage, and Disposal Facilities
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank

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## 1.0 Introduction

### 1.1 Summary

*CellularOne Communications* of Show Low, Arizona proposes to construct and operate a communications tower in San Juan Chapter of the Navajo Nation, San Juan County, New Mexico. Under the proposed action, *CellularOne Communications* would construct a 180' self-supporting tower within a tract measuring 100' x 100' and the Navajo Tribal Utility Authority (NTUA) will install a 61' power line extension with a 30' right-of-way (ROW).

*CellularOne Communications* and NTUA will apply for ROWs from the Navajo Nation and the Bureau of Indian Affairs (BIA)-Navajo Regional Office, Gallup, New Mexico. BIA will approve or deny the applications; this federal action triggers the National Environmental Policy Act (NEPA) process. The proposed action also requires a license from the Federal Communications Commission.

### 1.2 Purpose and Need

Currently, wireless and internet service is limited or unavailable in parts of the Navajo Nation. This project will improve wireless and internet communication service within San Juan Chapter. Without improvements, public safety, education, health services, and commercial establishments and residents would continue to have limited capacity to meet the public's needs.

### 1.3 Location

San Juan Chapter and Nenanazad Chapter share a land base of 183.1 square mile as shown. The boundary between these chapters is not defined; therefore, they are often referred to as one in the same. The project site is situated southeast of Shiprock, New Mexico, on the south side of the San Juan River. The project site can be accessed off of US Highway 491 using BIA Routes 36 and 280, and a two-track dirt road (**Figure 1**).

Information regarding the site's coordinates, legal description and USGS reference maps is contained below in **Table 1**.

<b>Table 1. Project Location Information</b>			
<b>Latitude and Longitude Coordinates</b>	<b>UTM Coordinates (Nad 83)</b>	<b>Legal Description</b>	<b>USGS 7.5' Map Reference</b>
<u>Self-Support Tower</u> Center: N36° 44' 54.37", W108° 36' 16.52"	<u>Self-Support Tower</u> Center: 4069645 N, 7138852 E	T29N, R17W, Section 11 New Mexico Base and Meridian, McKinley County, New Mexico	<i>The Hogback North</i> , New Mexico
<u>Power Line Pole</u> N36° 44' 53.78" W108° 36' 16.34"	<u>Power Line Pole</u> 4069627 N, 713857 E	T29N, R17W, Section 11 New Mexico Base and Meridian, McKinley County, New Mexico	<i>The Hogback North</i> , New Mexico

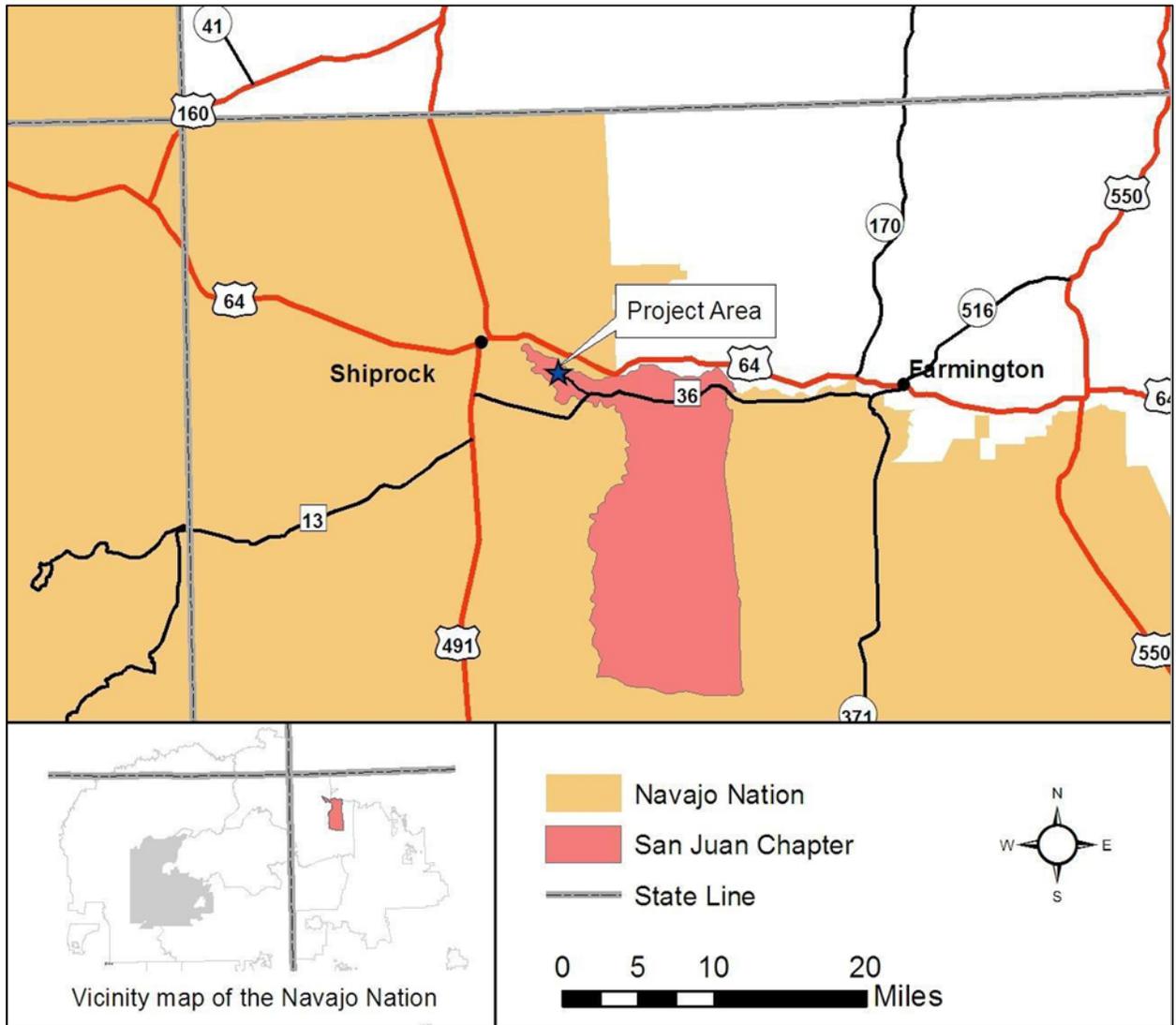


FIGURE 1. GENERAL LOCATION MAP SHOWING PROJECT SITE IN SAN JUAN CHAPTER, NEW MEXICO.

## 2.0 Proposed Action and No-Action Alternative

Below we discuss the proposed action and no action alternative.

### 2.1 Proposed Action

Under the proposed action, CellularOne Communications will construct a 180' self-supporting tower within a tract measuring 100' x 100' and NTUA will install a 61' power line extension with a 30' ROW. The project activities will involve: 1) clearing the vegetation within the tower site, 2) installing the self-supporting tower with concrete pads or pillars, 3) constructing fence around the telecommunications tower, and 4) installing power line poles and power line. No borrow material will be necessary. The project will not need additional staging area. All of the work will be done within the ROW boundaries. The potential affected area will be less than half an acre. Figure 2 presents an aerial photo of the area in the project vicinity.

There are several processes and factors involved in the location of a new site to be added to the network. First, an objective for coverage is determined. A "search ring" is then drafted, typically by outlining a circle of a given radius around the ideal candidate location. The search ring is delivered to the development team, where site acquisitionists work to find the best candidate within the ring. The candidate is compared against the coverage objectives of the search ring. All aspects of the candidate are considered – how well the coverage objectives are met, can the candidate connect to the rest of the network via microwave backhaul, is there access to the site, and how close is commercial power. At that point the candidate is pursued for leasing and eventual cell site construction. The location of this site was determined to be ideal and therefore no alternative sites were further considered for evaluation in this report.



FIGURE 2. AERIAL PHOTO SHOWING THE PROJECT SITE

## 2.2 No-Action Alternative

Under the no action alternative, the proposed telecommunications tower and power line ROWs would not be approved and no impact to the existing natural and human environments would occur. However, the residents would continue to live without sufficient access to telecommunications.

## 3.0 Affected Environment

This Chapter describes the existing conditions in and around the project area and establishes the baseline data upon which the impacts have been evaluated and described in **Chapter 4**.

### 3.1 Land Resources

This section discusses geology, topography, soils, and mineral resources in the area of the proposed project.

#### 3.1.1 Geology

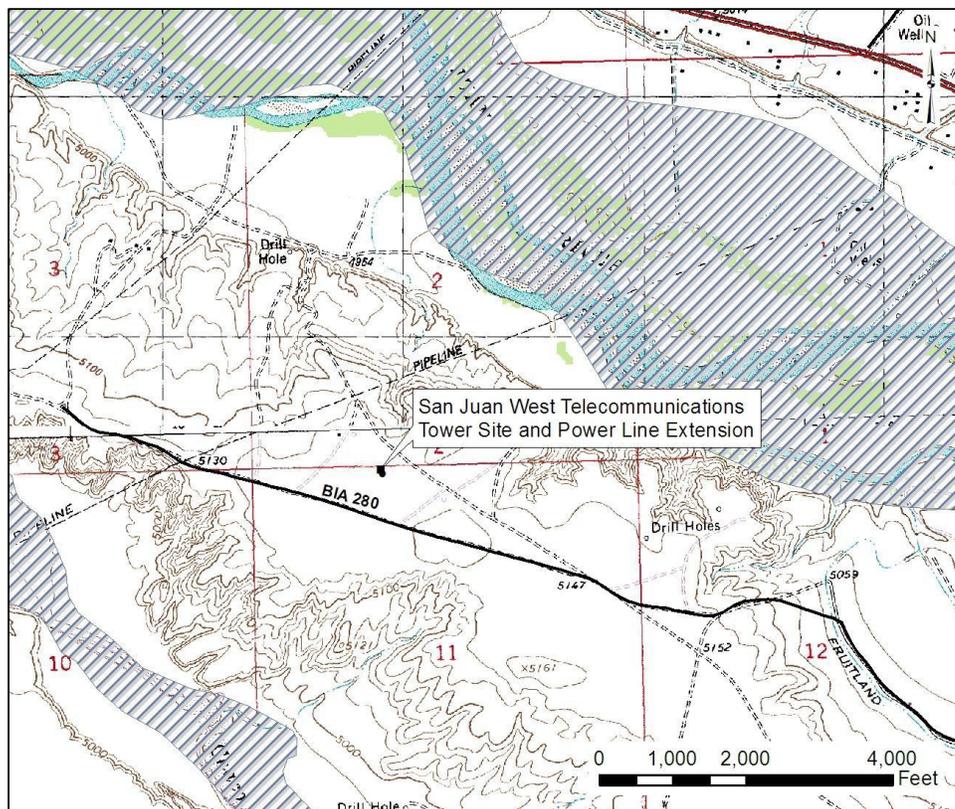
The Colorado Plateau encompasses an area of approximately 140,000 square miles in the Four Corners region of Arizona, Utah, New Mexico, and Colorado. It is drained principally by the Colorado River and tributaries like the San Juan River. It is a land of scenic beauty characterized by sparsely vegetated plateaus, mesas, deep canyons, and barren badlands.

The project site is located at the southeastern portion of the Colorado Plateau and near the center of the San Juan Basin, a large structural depression located on the Plateau. Areas of high elevation nearly encircle the San Juan Basin. The project area is situated west of The Hogbacks, a large uplift situated in northeastern New Mexico. Exposed geologic rock units in the project area are part of the Mancos Shale.

#### 3.1.2 Topography

The project site is located on a flat ridge between the San Juan and Chaco Rivers that join approximately 3,000' west of the project site. The topography of the project site is characterized as flat with a gentle slope to the north as depicted in **Figure 3**.

The project site lies at 5,136 feet elevation. Small drainages extend northward to the San Juan River and southward to the Chaco River. The mid-stream channel of the San Juan River lies at 4,960 feet elevation.



**FIGURE 3. TOPOGRAPHIC MAP SHOWING PROJECT SITE (BASE MAP: USGS 7.5' HOGBACK NORTH, NM).**

### 3.1.3 Soils

Soils at the site are classified as Nageezi loamy fine sand (NRCS, 2001). These soils are located on treads of high stream terraces and fan terraces. Nageezi soil and similar soils make up about 80 percent and contrasting inclusions 20 percent. Contrasting inclusions include the shallow Persayo soil on low knolls, the coarse textured Razito soil on stable linear dunes, and the strongly sodic, moderately fine textured Benally soils on toe slopes.

### 3.1.4 Mineral Resources

The San Juan Basin in northwest New Mexico contains a wealth of energy resources. It is known for its vast reserves of uranium and coal, as well as its numerous oil and gas pools. Although petroleum is largely depleted or under production by now, the extraction of the uranium and coal is far from complete (Stone et. al., 1983). Coal is a mineral resource identified by LSR Innovations (2004) that occurs within San Juan Chapter and is mined nearby in Nenanezad Chapter.

## 3.2 Water Resources

This section discusses the surface water, ground water, and floodplains in and around the project area.

### 3.2.1 Surface Water

The nearest surface water is the San Juan River and the Chaco River when it is flowing. No other surface waters occur closer to the project site.

### 3.2.2 Groundwater

Data from the Navajo Nation Water Management Branch in Ft. Defiance, Arizona, reveals that no water wells occur within a one-mile radius of the project area.

### 3.2.3 Floodplains

Floodplains have been delineated along the San Juan River by Morrison Maierle, Inc. (1977). According to the data, the proposed project is outside the 100-year floodplain boundaries of the San Juan River and the Chaco River. **Figure 3** illustrates the floodplain boundaries.

## 3.3 Atmospheric Resources

This section discusses air resources in terms of air quality/visibility and climate/meteorology conditions in and around the project area.

### 3.3.1 Air Quality/Visibility

The Clean Air Act requires the establishment of National Ambient Air Quality Standards (NAAQS) for ambient levels of criteria pollutants using health and welfare-based criteria. The NAAQS include seven principal pollutants: carbon monoxide (CO); nitrogen dioxide (NO<sub>2</sub>); ozone (O<sub>3</sub>); particulate matter equal to or less than 10 microns in diameter (PM<sub>10</sub>); particulate matter equal or less than 2.5 microns in diameter (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (Pb).

Air quality on the Navajo Nation is generally good and in-attainment for criteria pollutant emission levels under the NAAQS. According to EPA's Interactive Map of Air Quality, on September 14, 2022, the air quality index (AQI) was good for Navajo Nation, except for Grand Canyon National Park, which had a moderate air quality index (AIRNOW, 2022). The data is based on ambient air monitoring stations in Shiprock, New Mexico, and Nazlini, Arizona.

### 3.3.2 Climate

The project region experiences cold, harsh winters, low precipitation scattered more or less throughout the year, and extremes in both daily and seasonal temperatures. The average annual precipitation is about 7.00 inches. The highest average maximum temperature occurs in July and is 94.6° Fahrenheit. The lowest average minimum temperature occurs in January and is 15.7 ° Fahrenheit (Western Regional Climate Center, 2023). Winds are generally from the southwest.

Human activities (primarily the burning of fossil fuels) have fundamentally increased the concentration of greenhouse gases in Earth's atmosphere, warming the planet (NASA, 2021). Both Arizona, New Mexico, and Utah's climate has warmed approximately 2°F in the last century, and this trend is expected to continue. These increases have been linked to recent swings on the Navajo Nation between intense drought and unusually wet periods. Ongoing drought and changes to climate in the region have also impacted livestock health through increased stress of availability of forage. Throughout the southwestern United States, heat waves are becoming more common, snow is melting earlier in spring, and unusual weather events are predicted to become more likely. In the coming decades, changing the climate is likely to decrease the flow of water in the Colorado River, threaten the health of livestock, increase the frequency and intensity of wildfires, and convert some rangelands to desert (USEPA, 2016). Climate change threatens natural resources and public health of tribal communities. Rising temperatures and increasing drought are likely to decrease the availability of certain fish, game, and wild plants on which the Navajo and other tribes have relied for generations. Water may be less available for domestic consumption, especially for those who are not served by either municipal systems or reliable wells. This includes about 30% of the people on the Navajo Nation, who must haul water to meet daily needs. Recurring drought and rising temperatures may also degrade the land itself. In western Navajo Nation, for example, the Great Falls Dune Field has advanced almost a mile in the last 60 years, threatening roads, homes, and grazing areas. Extreme heat may also create health problems for those without electricity, including about 40% of the people on the Navajo reservation (Nania et al., 2014).

## 3.4 Biotic Resources

This section discusses the biological communities, wildlife, vegetation, threatened, endangered and sensitive species, and agriculture identified at the project site and surrounding areas. A summary of the effects of the project on TES species and/or their habitat is included. A Biological Evaluation (BE) was conducted by Rafael Reyna of JE Fuller on July 5<sup>th</sup>, 2023, which is also summarized here.

### 3.4.1 Description of Biological Communities

The proposed project site is dominated by Great Basin Desert Scrub (Brown, 1994). The most northerly of the four North American deserts, the Great Basin Desert, evolved from both cold-temperate and warm-temperate vegetation. Its affinities with cold-temperate progenitors set it apart from the other three deserts, which have almost exclusive ties with warm-temperate and tropical-subtropical archetypes. Major plant dominants having cold-temperate affinities are sage brushes, saltbushes, and winterfat. These distinctly cold-temperate dominants are joined in varying degrees by species having evolutionary ties with warmer climates such as rabbitbrush, blackbrush, hop sage, and horse brush (Brown, 1994).

### 3.4.2 Vegetation and Wildlife

During a field survey, Rafael Reyna, Project Biologist, on June 22, 2023, observed that grasses and forbs are present, but rarely form the dominant source of cover across the landscape; and cactus or yucca

species typically form only a very small component of the community. Vegetation identified at the site includes the following: winterfat (*Krascheninnikovia lanata*), four-wing saltbush (*Atriplex canescens*), Adonis blazingstar (*Mentzelia multiflora*), broom snakeweed (*Gutierrezia sarothrae*), rose heath (*Chaetopappa ericoides*), Viper's bugloss (*Echium vulgare*), Panamint cryptantha (*Johnstonella angustifolia*), snowball sand verbena (*Abronia fragrans*), Stinkwort (*Dittrichia graveolens*), small-flowered milkvetch (*Astragalus nutallianus*), dock (*Rumex* sp.), desert mudwort (*Alyssum desertorum*), Indian ricegrass (*Eriocoma hymenoides*), James' galleta (*Hilaria jamesii*), and Burrograss (*Scleropogon brevifolius*). Two non-native or invasive species were identified at the site: Russian thistle (*Salsola tragus*) and kelch grass (*Schismus barbatus*). Both grass and shrub species found within and near the proposed project site have been significantly impacted by livestock grazing. Due to the highly disturbed nature of the project site, limited wildlife was observed during the field survey. Only a common raven (*Corvus corax*) was observed (JE Fuller, 2023).

### 3.4.3 TES Species

JE Fuller sought information from the Navajo Nation Department of Fish & Wildlife (NNDFW) regarding special-status species that are known or have the potential to occur within or around the project area. A Navajo Nation Endangered Species List (NESL) was provided upon request from NNDFW on June 22, 2023 (NNDFW DR# 23jefhg106 [NNDFW, 2023], included in **Appendix A**). Many species listed by US Fish & Wildlife Service (USFWS) as threatened, endangered, or candidate under the Endangered Species Act (ESA) and birds protected under the Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act (BGEPA) were also included in the NNDFW consultation letters (NNDFW, 2023). Additionally, a list of threatened, endangered, or candidate species was obtained from the USFWS Information, Planning, and Consultation System (IPaC) (USFWS, 2023) and is included in **Appendix B**.

The NNDFW consultation letter indicated that the ferruginous hawk (*Buteo regalis*) and Mesa Verde cactus (*Sclerocactus mesae-verdae*) are known to occur within 3 miles of project site (NNDFW 2023). Special status species listed by NNDFW as potentially occurring in the vicinity of the project site include the following: Mesa Verde cactus, ferruginous hawk, Mancos milkvetch (*Astragalus humillimus*), Naturita milkvetch (*Astragalus naturitensis*), San Juan milkweed (*Asclepias sanjuanensis*), burrowing owl (*Athene cunicularia*), mountain plover (*Charadrius montanus*), southwestern willow flycatcher (*Empidonax traillii extimus*), roundtail chub (*Gila robusta*), bald eagle (*Haliaeetus leucocephalus*), northern leopard frog (*Lithobates pipiens*), Colorado pikeminnow (*Ptychocheilus lucius*), and razorback sucker (*Xyrauchen texanus*) (NNDFW, 2023).

The USFWS IPaC list identified southwestern willow flycatcher, Mancos milkvetch, Mesa Verde cactus, yellow-billed cuckoo (*Coccyzus americanus*), Colorado pikeminnow (*Ptychocheilus lucius*), razorback sucker (*Xyrauchen texanus*), and monarch butterfly (*Danaus plexippus*) as having potential habitat in the project vicinity (USFWS 2023).

Existing literature was reviewed for each species to determine whether specific species and/or their habitat may be affected by the proposed project. JE Fuller's Biologist conducted a habitat evaluation survey on June 22, 2023, to determine the presence/absence of preferred habitat within the project area. Species listed by USFWS and NNDFW were evaluated and are listed in **Table 2**. Rows highlighted in blue indicate species that were retained for detailed analysis. A discussion of the potential effects of the Proposed Action for each species retained for analysis is provided in **Chapter 4**.

**Table 2. TES Species Analyzed per NNDFW and USFWS Consultation (JE Fuller, 2023)**

Species	Status	Habitat Within Project Area	Occurs within 1-3 Miles of Project
Golden Eagle	NESL G3, BGEPA	Golden eagles require tall trees or cliff ledges for nesting purposes and use forest clearings and open grasslands for foraging. This species generally occupies cliff ledges composed of sandstone, limestone, or volcanic rock and prefers to nest on ledges typically higher than 30 meters at elevations between 4,000- and 10,000-foot elevation (AGFD 2022; Mikesic 2008). This species is listed as potentially occurring in the vicinity of the project area (NNDFW 2023) and is <b>retained for analysis</b> .	No, but listed as potentially occurring by NNDFW.
Bald Eagle	NESL G2, BGEPA	Bald eagles typically nest in trees in forested areas where there tend to be mature or old growth stands adjacent to large bodies of water that offer habitat for fish and waterfowl (prey species of this eagle). It rarely uses cliff faces for nesting or roosting. Winter roosts consist of large trees in forests, river bottoms, and canyon rims within a few miles of ponds, lakes, or rivers for foraging (Mikesic 2008). This species is listed as potentially occurring in the vicinity of the project area (NNDFW 2023) and is <b>retained for analysis</b> .	No, but listed as potentially occurring by NNDFW.
Ferruginous hawk	NESL G3	Ferruginous hawks are found in badlands, flat or rolling desert grasslands and desert scrublands. Their distribution extends from North Dakota to northern Texas and west to Nevada. On the Navajo Nation, ferruginous hawks can be found year-round. Nesting habitat includes small buttes, short cliffs (<30 meters in height), or rock pinnacles, and occasionally in the tops of trees (Mikesic 2008). This species is documented as occurring in the vicinity of the project areas (NNDFW 2023) and is <b>retained for analysis</b> .	<b>Yes, listed as occurring within 3 miles of the project area by NNDFW.</b>
Burrowing owl	NESL G4	A suitable nest burrow is a critical requisite for burrowing owls, and the species rarely dig their own burrows (Mikesic 2008d). Burrowing owls favor areas of flat open ground with very short grass or bare soil; and prairie-dog towns or other burrowing fossorial mammal populations that prepare ideal habitat for this owl (AGFD 2022). This species is listed as potentially occurring in the vicinity of the project area (NNDFW 2023) and is <b>retained for analysis</b> .	No, but listed as potentially occurring by NNDFW.
Mountain plover	NESL G4	Mountain plover typically nests in flat to slightly rolling expanses of grassland, semi-desert, or badland, in areas with short, sparse vegetation, extensive bare ground, and locations with ground disturbance (e.g., grazed) (Mikesic 2008). This species is listed as potentially occurring in the vicinity of the project area (NNDFW 2023) and is <b>retained for analysis</b> .	No, but listed as potentially occurring by NNDFW.
Yellow-billed cuckoo	LT	Yellow-billed cuckoo is found mainly in mature cottonwood-willow stands, and to a lesser extent in willows or isolated cottonwoods mixed with tall mesquites. It is also found in streamside cottonwood, willow groves, and larger mesquite bosques for	No, but listed as potentially occurring by USFWS.

		<p>migrating and breeding. Rarely a transient in xeric desert or urban settings (AGFD 2022). Breeding may occur at all elevations on the Navajo Nation but is currently only known to occur along the San Juan River. Potential habitat may also occur along other canyons and streams with appropriate habitat (Mikesic 2008). The closest riparian habitat to the project area is the San Juan River (roughly 0.50 mile to the north) and Chaco River (roughly 0.70 mile to the southwest). There are no suitable riparian or streamside habitats within the project area that represent suitable habitat for the species and all riparian habitats are located farther than 0.25-mile from the tower site. <b>No further analysis of this species is provided.</b></p>	
Southwestern willow flycatcher	NESL G2, LE	<p>Southwestern willow flycatcher is a riparian obligate found in dense vegetation in Arizona, New Mexico, Colorado, California, Nevada, and Utah (Mikesic 2008g). Breeding may occur throughout Navajo Nation and is documented as occurring along the San Juan and Colorado Rivers. Willow flycatchers nest in dense riparian vegetation, near surface water or saturated soil in native stands of willows or in exotic stands of tamarisk and Russian olive (AGFD 2022; Mikesic 2008). Vegetation is usually greater than 3 meters tall and has a dense (thicket) structure with multi-layered closed canopy. The closest riparian habitat to the project area is the San Juan River (roughly 0.50 mile to the north) and Chaco River (roughly 0.70 mile to the southwest). There are no riparian or streamside habitats within the project area that represent suitable habitat for the species (AGFD 2002; Mikesic 2008) and all riparian habitats are located farther than 0.25-mile from the tower site. <b>No further analysis of this species is provided.</b></p>	No, but listed as potentially occurring by NNDFW and USFWS.
Northern leopard frog	NESL G2	<p>Northern leopard frogs are found in permanent water sources in a variety of habitats like grassland, scrub, woodland, and forest. Water sources (ponds, canals, marshes, springs, and streams) with rooted aquatic vegetation for cover from both prey and predators is preferred (AGFD 2021; Mikesic 2008). During the monsoons, when water ponds in low areas, frogs may move between different aquatic sites. This species is well-adapted to cold environments and can be found in a variety of climates (AGFD 2021). The tower site is 0.50 mile away from the closest aquatic habitat along the San Juan River, and, as a result, lack suitable habitat for this species. Therefore, <b>no further analysis of this species is provided.</b></p>	No, but listed as potentially occurring by NNDFW.
Colorado pikeminnow	LE	<p>On the Navajo Nation, Colorado pikeminnow is found throughout the San Juan River from Shiprock to Lake Powell. Adults use backwaters and flooded riparian areas during spring runoff and migrate large distances to spawn in riffle-run areas with cobble/gravel substrates primarily downstream of the Four Corners area. Irrigation canals and ponds connected to San Juan River may be potential habitat. The tower site is 0.50 mile away from the closest aquatic habitat along the San Juan River. There</p>	No, but listed as potentially occurring in the vicinity by NNDFW and USFWS.

		are no perennial streams within 0.25 mile of the project area that represent suitable habitat for the species (Mikesic 2008). <b>No further analysis of this species is provided.</b>	
Roundtail chub	NESL G2	Roundtail chub inhabits most permanent water in cool to warm water mid-elevation streams, typically using pools and eddies, adjacent to rapids and boulders. Spawning occurs over gravel bottoms in runs and pools with > 25 cm water depth. On the Navajo Nation it has been extirpated from the Colorado River but is extant in the San Juan and Mancos Rivers. The tower site is 0.50 mile away from the closest aquatic habitat along the San Juan River. There are no perennial streams within 0.25 mile of the project area that represent suitable habitat for the species (Mikesic 2008). <b>No further analysis is provided.</b>	No, but listed as potentially occurring by NNDFW.
Razorback sucker	LE	Razorback sucker is found in the Colorado River and a few of its warm-water tributaries: Lake Mohave, Upper Green River, and Lower Yampa River. It is rare along the mainstem Colorado River in Marble Canyon and the mouth of the Little Colorado River, the San Juan arm of Lake Powell, and upstream within the San Juan River. The species generally uses mainstream portions of rivers, pre- and post-spawning suckers mostly use low-flow areas, but shallow to deep runs over sandbars and seasonally-flooded shorelines are also important. Final Critical Habitat for the species can be found on the San Juan River, approximately 0.50 mile north of the project area. However, there are no perennial streams within 0.25 mile of the project area that represent suitable habitat for the species (Mikesic 2008). <b>No further analysis is provided.</b>	No, but listed as potentially occurring in the vicinity by USFWS and NNDFW.
Monarch butterfly	C	Breeding areas are virtually all patches of milkweed in North America. Monarchs in Arizona migrate to known overwintering destinations in both Mexico and California; small numbers overwinter in the lower deserts of southwestern Arizona (NatureServe 2023). The monarch is listed as potentially occurring within or near the project area (USFWS 2023). No milkweed species were identified during survey. However, six species of milkweed are documented as occurring within 20 kilometers of the project area; therefore, this species is <b>retained for analysis</b> .	No, but listed as potentially occurring in the vicinity by USFWS.
San Juan milkweed	NESL G4	San Juan milkweed is found mostly in sandy or sandy loam soils in pinyon-juniper woodlands and Great Basin grassland communities. Known populations occur from 5,000 to 6,200 feet amsl east of U.S. HWY 666, south of the San Juan River, and just south of the San Juan County line. Often found in disturbed sites (Roth 2001). This species is listed as potentially occurring in the vicinity of the project area (NNDFW 2023) and is <b>retained for analysis</b> .	No, but listed as potentially occurring by NNDFW.
Naturita milkvetch	NESL G3	Naturita milkvetch is found in sand filled pockets of sandstone slickrock and rimrock pavement along canyons in the pinyon-juniper zone. Known populations occur at 5,000-7,000 feet amsl. Known distribution for the species on the Navajo Nation include, Hogback, San Juan Co., to the Pinetree Canyon area, McKinley Co.,	No, but listed as potentially occurring by NNDFW.

		NM (Roth 2001). This species is listed as potentially occurring in the vicinity of the project area (NNDFW 2023); however, no suitable sandstone slickrock and rimrock pavement along canyons occur within the project area. <b>No further analysis of this species is provided.</b>	
Mancos milkvetch	LE, NESL G2	Mancos milkvetch is found on large, nearly flat areas of exfoliating whitish-tan colored sandstone, in small depressions and sand filled cracks on or near ledges and mesa tops in slickrock communities of Point Lookout and Cliffhouse Sandstone in San Juan County, New Mexico, Palmer Mesa east to the hogback area and south of the San Juan River, to a hogback east of Little Water. Also found on hogback north of Sanostee (Roth 2001). No suitable flat depressions in sandstone on or near ledges occur within the tower site. <b>No further analysis of this species is provided.</b>	No, but listed as potentially occurring by USFWS and NNDFW.
Mesa Verde cactus	LT, NESL G2	Salt-desert scrub communities, typically in the Fruitland and Mancos shale formations, but also in the Menefee Formation overlaying Mancos shale. It is most frequently found on the tops of hills or benches and along slopes (Roth 2001). Known populations occur between 4,900 and 5,500 feet. The project area is within the Mancos shale formation. This species is listed as occurring in the vicinity of the project area (NNDFW 2023) and is <b>retained for analysis.</b>	<b>Yes, listed as occurring within 3 miles of the project area by NNDFW. Listed as potentially occurring by USFWS.</b>
LE (ESA Listed Endangered) LT (ESA Listed Threatened) C (ESA Candidate) NESL G3 (Group 3): "Endangered" — survival/recruitment likely to be in jeopardy in near future NESL G4 (Group 4): Not enough info for listing in Group 2/3 but sufficient reason for concern			

### 3.4.4 Agriculture and Livestock

There are no family farms in the San Juan Chapter (Rodgers, 2004). Livestock grazing of cattle, sheep and horses is a large part of the agricultural activities within the chapter. Based on site visits, no prime or unique farmlands are found on or near the project areas.

## 3.5 Cultural Resources

Cultural resources are tangible remains of past human activity. A cultural resource or cultural property has a definite location of human activity, occupation, or use, normally greater than 50 years of age, and is identifiable through field inventory, historical documentation, or oral evidence. They may include archaeological, historical, or architectural sites, structures, or places with important public and scientific uses, or traditional cultural or religious importance to specified social and/or cultural groups (USDA, 2022). The Navajo Nation Heritage and Historic Preservation Department (NNHHPD) has authority to determine if any historic or cultural artifacts are present within sites. Traditional Cultural Properties (TCPs) on the Navajo Nation include but are not limited to sites that have been blessed, sites where ceremonies occurred, trail shrines, rock art, marked and unmarked graves, places for gathering plants and minerals, prayer offering places, places associated with Navajo, clan, custom, or Holy Being origin stories and ceremonies, places that possess supernatural power, and places associated with individual life cycle

rituals. If a TCP meets the criteria and criteria exceptions (36 CFR 800.2), it may qualify for the National Register of Historic Places (NRHP) and protection by Section 106 of the National Historic Preservation Act.

This section summarizes a cultural resource inventory report prepared by Mathilda Burke, Project Archaeologist (ETD, Inc., 2013).

### 3.5.1 Archaeological Resources

The cultural resources inventory consisted of a records search at the NNHHPD and a field survey on April 2, 2013. The records search revealed that no sites were previously recorded within 300 feet of the project area. A field survey was conducted by Mathilda Burke using a Class III pedestrian inventory method using transects spaced approximately 7.5 meters apart across the project area. A 100' radius was surveyed around the telecommunications tower site along with a 25-foot buffer zone on both sides of the power line extension. No cultural resources were encountered. A report was prepared by the Project Archaeologist and submitted to NNHHPD who later issued a Cultural Resources Compliance Form for the proposed project (**Appendix D**).

### 3.5.2 Traditional Cultural Properties (TCPs), Historic, and Religious Properties

Ethnographic interviews were conducted with two local residents, about the known TCP and other possible TCPs such as burials, sacred sites, and plant/herb gathering areas found on or near the proposed project area. Each stated that there were no known TCP and were unaware of other TCPs on or near the project area.

## 3.6 Socioeconomic Conditions

This section discusses the employment and income, demographics and trends, and lifestyles, cultural values, attitudes, expectations, and community infrastructure existing within the project area.

### 3.6.1 Employment and Income

According to the U.S. Census 2010 website ([www.census.gov](http://www.census.gov)), the median household income in the San Juan Chapter was \$34,392 and the per capita income was \$12,870. The unemployment rate was nearly 8 percent. Approximately 23.4 percent of the Chapter residents lived below the poverty level in spite of the fact number of industries in and surrounding the Chapter. The Chapter hosts a large coal burning electric generating station known as Four Corners Power Plant and is close to Navajo Coal Mine. In the surrounding region there are similar industries such as BHP Mine and San Juan Generating Station. There are also large agricultural industries including Fruitland Irrigation O&M and Navajo Agricultural Products Industry, as well as many government agencies, educational institutions, and health care services. A new Navajo-owned Casino was recently constructed about 10 miles away.

### 3.6.2 Demographic and Trends

The U.S. Census 2010 website ([www.census.gov](http://www.census.gov)) reported the population of the San Juan Chapter to be 1,792, an increase in the population of 97 as recorded in 2000. The median age is currently around 28.2 years of age. There were approximately 525 households within the Chapter with an average of 3.76 persons per household. In comparison, the average household size for the U.S. is about 2.5 persons.

### 3.6.3 Lifestyles, Cultural Values, Attitudes, Expectations

Because many of the residents of the San Juan Chapter practice both Navajo and American lifestyles, they generally support appropriate commercial development within their home community that creates jobs and

provides basic goods and services. They expect the mix of contemporary life and traditional life to continue within their communities, bettering their economic base while preserving their cultural base.

### 3.6.4 Community Infrastructure

Infrastructure systems that serve the San Juan Chapter are described below:

Roads and Accessibility. The project area can be accessed off of US Highway 491 using BIA Routes 36 and 280.

Power. The electrical power infrastructure in the project area is owned and operated by NTUA. *CellularOne Communication* is working with NTUA to gain access to their existing services.

Water. Water utilities in the project area are owned and operated by NTUA. No water utilities are required for the proposed project.

Wastewater. Wastewater utilities in the project area are owned and operated by NTUA. No wastewater utilities are required for the proposed project.

Solid Waste. Solid waste generated in the San Juan Chapter is disposed of at the local transfer station in Shiprock, New Mexico. Waste collected at the transfer station is hauled by Navajo Sanitation, Inc. to a permitted landfill.

## 3.7 Environmental Justice

The proposed project is located in San Juan Chapter where 96.2% of the population is Native American. Environmental justice has been defined as the pursuit of equal justice and equal protection under the law for all environmental statutes and regulations without discrimination based on race, ethnicity, and/or socioeconomic status. No environmental justice issues were identified.

## 3.8 Indian Trust Resources

Coal, oil, water from the San Juan River, and irrigable farmlands are resources identified by the San Juan Chapter that can be considered Indian Trust Resources (Rodgers, 2004).

## 3.9 Environmental Module

Sites regulated under the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Toxic Substance Control Act (TSCA) are discussed here. The information presented below was obtained from the U.S. EPA Envirofacts website ([www.epa.gov/enviro](http://www.epa.gov/enviro)) and field observation.

### 3.9.1 RCRA Subtitle C Sites

Subtitle C program identifies the criteria and establishes various requirements for the three categories of hazardous waste handlers: (1) generators; (2) transporters, and (3) treatment, storage, and disposal facilities (TSDF). The proposed project will not generate, handle, or store hazardous waste on or near the project area as part of the proposed action.

### 3.9.2 RCRA Subtitle D Sites

Subtitle D regulates the disposal of solid waste. A small amount of solid waste including construction waste will be generated during the course of construction. This waste will be hauled back to the *CellularOne Communications'* equipment yard where it will be disposed of in a proper manner.

### 3.9.3 RCRA Subtitle I Sites

Subtitle I regulates active underground storage tanks (USTs) and abandoned and often leaking USTs. Based on the field visit, no RCRA Subtitle I UST sites occur on or near the project area and no USTs will be installed as part of the proposed project.

### 3.9.4 CERCLA Sites

There are no CERCLA sites on or near the proposed project area. A field visit to the site also supported the conclusion that no CERCLA sites occur on or near the proposed project.

### 3.9.5 Toxic Substances Control Act Sites

TSCA sites do not occur on or near the project area. No toxic substances will be used, generated, handled, or stored on or near the project site as part of the construction or operation of the proposed project.

## 3.10 Resources/Land Use Patterns

The following land uses or practices occur in this region: transportation use network, land use plans, agriculture, hunting, fishing, and timber harvesting.

### 3.10.1 Transportation Use Network

BIA Route 36 is the main thoroughfare crossing San Juan Chapter. From this roadway, numerous dirt roads, including unpaved BIA bus routes, provide access to most areas of the chapter. The primary access to the project area will be via BIA Routes 36 and 280.

### 3.10.2 Land Use Plans

The San Juan Chapter has a community land use plan in effect. The proposed action will not affect the current land use pattern or plans.

### 3.10.3 Agriculture

Agricultural practices of the San Juan Chapter are discussed above in **Section 3.4.4**.

### 3.10.4 Outdoor Recreation, Fishing, Hunting

No government or private sponsored outdoor recreation areas occur in the project area.

### 3.10.5 Timber Harvesting

No timber harvesting is presently occurring in the Chapter, or on the Navajo Nation.

## 3.11 Other Values

This section discusses the wilderness areas, sound and noise, public health and safety, and visual setting existing within the project area.

### 3.11.1 Wilderness Areas

The nearest designated wilderness area is the Bisti-De-Na-Zin Wilderness area located 55 miles southeast of the proposed project area. It is managed by the Bureau of Land Management.

### 3.11.2 Sound and Noise

Man-made sound and noise sources near the project site include traffic along BIA Route 36. Natural sound and noise sources in the project area primarily consist of atmospheric phenomena such as wind, thunder, and rain.

### 3.11.3 Public Health and Safety

The San Juan Chapter community is served by the Northern Navajo Medical Center in Shiprock, NM, San Juan Regional Medical Center in Farmington, NM, PMS/Farmington Community Health in Farmington, NM, and Life Course in Kirtland, NM. Fire protection within the San Juan Chapter is provided by a fire station located in Shiprock, NM. Wildfire protection is provided by the BIA. The San Juan Chapter receives police protection through the Shiprock Police District with headquarters in Shiprock, NM.

### 3.11.4 Visual Setting

The proposed project site is located in the scenic region of the Navajo Nation. However, no scenic byways or scenic areas protected by law occur in the project area. The tower will be visible from Navajo Route 36 in some areas and especially to nearby homes in San Juan Chapter.

## 4.0 Environmental Consequences

This section discusses the impacts to the natural and human environment on and near the project site as a result of the proposed action. Mitigation measures that reduce or eliminate impacts are discussed where appropriate.

### 4.1 Land Resources Impacts and Mitigation

The proposed project will be constructed upon the existing topography with no modifications. No impact on the area topography is anticipated as a result of the proposed project.

Soil disturbance will occur in and around the areas where the pad for the tower will be placed, and where the power line pole will be installed. The impact on the soil will be minor and short term. Due to the limited area of ground disturbance, the project is not subject to a National Pollutant Discharge Elimination System-General Construction Permit.

No oil, coal or other mineral resources occur in the project area. Therefore, no impact on the geologic setting or mineral resources is anticipated as a result of the proposed project.

### 4.2 Water Resources Impacts and Mitigation

Disturbed areas on the project site can result in increased soil erosion and subsequent stream sedimentation or contamination, especially during times of heavy precipitation. Due to the distance to surface waters, there will be no impact to surface waters as a result of the project. The proposed project activities will not involve deep excavation, and therefore, ground water resources will not be impacted. The project is not located within a floodplain; therefore, no impacts to or from floodplains are anticipated as a result of the proposed project.

### 4.3 Air Resources Impacts and Mitigation

The construction of the proposed project facilities will cause a slight degradation of the air quality due to increased airborne dust (particulate matter) and exhaust emissions (carbon monoxide) into the atmosphere. However, this impact will be minor and short-term.

### 4.4 Biological Resources Impacts and Mitigation

The potential impacts to biotic community, wildlife, vegetation, threatened and endangered species, and agriculture resources are discussed here.

#### 4.4.1 Biotic Resources

The project activities include clearing a small amount of vegetation at the site. The impacted areas will likely recover soon after the construction. Therefore, the impact on the vegetation will be minimal and short-term.

No farming activities occur on the proposed project site. Livestock grazing occurs in the area surrounding the fenced project tract. The project will have no impact on agricultural resources.

The construction activities will initially create some noise to wildlife in the remote and quiet areas of the tower site. However, these impacts will be minimal and short-term and there will likely be no significant impacts to wildlife following the construction activities.

A Biological Evaluation report by JE Fuller (2023) identifies special-status species and suitable habitat that potentially occurs in project area. Analysis of potential impacts of the Proposed Action on species retained for analysis is provided below in **Table 3**.

<b>Table 3. Potential Impacts on TES Species (JE Fuller, 2023)</b>		
<b>Species</b>	<b>Analysis of Effects</b>	<b>Findings</b>
Golden Eagle	<p>No raptor activity was observed at the time of the habitat evaluation survey. Rolling ridges, scattered cliffs and large rock outcrops occur along Chaco River approximately 0.70 mile to the west. Hogback Mountain, which is approximately 3.7 miles to the east, may provide suitable nesting or foraging habitat for the species. These features were scanned during the habitat evaluation survey for evidence of nesting raptors, but no whitewash or stick nests were observed. No suitable nesting or foraging habitat was identified within the project area due to the distance of the cliff habitats and lack of trees onsite.</p> <p>According to the BGEPA, “Taking” bald or golden eagles, including their parts (including feathers), nests, or eggs is prohibited under the BGEPA and would not occur. “Take” is defined as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb.” “Disturb” is defined as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.” Direct impacts to golden eagles are not anticipated. Potential prey items occur within the vicinity of the tower site, and there could be very minor indirect short-term effects to prey availability during and after cell tower construction; however, prey abundance would likely return to current levels after construction. Given the abundance of relatively undisturbed habitat in the region surrounding the project area, it is unlikely that construction of the tower site would have an adverse effect on golden eagles or their suitable habitats. <b>No “take” as defined by the BGEPA would occur as a result of this project. Therefore, further consultation with USFWS is not necessary.</b></p>	<p>Direct impacts to golden eagles are not anticipated. Very minor indirect impacts may occur temporarily. No “take” as defined by the BGEPA would occur as a result of this project. The project is not likely to adversely affect species or its habitat.</p>
Bald Eagle	<p>The biological field survey identified no evidence (stick nests or droppings) of bald eagle activity. There are no known occurrences or nesting pairs of bald eagles within 3 miles of the project area (NNDFW 2020). As previously noted, wintering eagles are known to occur along the San Juan River, which is 0.50 mile to the northeast. While the San Juan River may provide foraging habitat, there are no tall trees or snags to provide perching, hunting or nesting sites within 0.25 of the project area.</p> <p>See the definitions of taking, take, and disturb according to the BGEPA above. Direct impacts bald eagles are not anticipated. Potential prey items may occur within the vicinity of the tower site, and there could be very minor indirect short-term effects to prey availability during and after cell tower construction; however, prey abundance would likely return to current levels</p>	<p>Direct impacts to bald eagles are not anticipated. Very minor indirect impacts may occur temporarily. No “take” as defined by the BGEPA would occur as a result of this project. The project is not</p>

	<p>after construction. Given the abundance of relatively undisturbed habitat in the region surrounding the project area, it is unlikely that construction of the tower site would have an adverse effect on bald eagles or their suitable habitats. <b>No “take” as defined in the BGEPA would occur as a result of this project. Therefore, further consultation with USFWS is not necessary.</b></p>	<p>likely to adversely affect species or its habitat</p>
<p>Ferruginous hawk</p>	<p>No evidence of ferruginous hawks (stick nests or droppings) was detected during the habitat evaluation survey. Rolling ridges, scattered cliffs and large rock outcrops occur along Chaco River approximately 0.70 mile to the west. Hogback Mountain, which is approximately 3.7 miles to the east, may provide suitable nesting or foraging habitat for the species. These features were scanned during the habitat evaluation survey for evidence of nesting raptors. No suitable nesting or foraging habitat was identified within the project area due to the distance of the cliff habitats and lack of trees.</p> <p>The MBTA prohibits taking, killing, or possessing migratory birds. Direct impacts to ferruginous hawks are not anticipated. Potential prey items occur within the vicinity of the tower site, and there could be very minor, indirect, short-term effects to prey availability during and after cell tower construction; however, prey abundance would likely return to current levels after construction. Given the abundance of relatively undisturbed habitat in the region surrounding the project area, it is unlikely that construction of the tower site would have an adverse effect on ferruginous hawks or their suitable habitats. A pre-construction migratory bird nest search shall be conducted if vegetation is removed during breeding season to ensure that there will be no impacts to migratory birds. <b>No taking, killing, or possessing of ferruginous hawks would occur as a result of this project. Therefore, further consultation with USFWS is not necessary.</b></p>	<p>Direct impacts to ferruginous hawks are not anticipated. Very minor indirect impacts may occur temporarily. No violation of the MBTA would occur as a result of this project. The project is not likely to adversely affect species or its habitat</p>
<p>Burrowing owl</p>	<p>The MBTA prohibits taking, killing, or possessing migratory birds. Direct impacts to burrowing owls are not anticipated. The habitat evaluation survey identified no evidence of burrowing owls or potential burrowing owl burrows in the vicinity of any of the project area (whitewash, feathers, pellets, ornamentation, etc.). While dry, open grasslands and/or desert scrub are found onsite, no prairie dog colonies or requisite burrows were observed within the area surveyed, which included a 200-foot buffer. Additionally, given the abundance of more suitable habitat in the region surrounding the project area the proposed project is not anticipated to directly affect breeding burrowing owls. Very minor indirect impacts may occur temporarily through decreased prey availability during construction. It is possible that individual burrowing owls could pass through the area surrounding the cell tower site while foraging or dispersing from more suitable habitat in the region; however, the construction of the tower is not likely to adversely impact the species because construction would be brief and prey populations would likely return to the area shortly after construction. A pre-construction migratory bird nest search shall be conducted if vegetation is removed during breeding season to ensure that there will be no impacts to migratory birds. <b>No taking, killing, or possessing of burrowing owls would occur as a result of this project. Therefore, further consultation with USFWS is not necessary.</b></p>	<p>Direct impacts to burrowing owls are not anticipated. Very minor indirect impacts may occur temporarily. No violation of the MBTA would occur as a result of this project. The project is not likely to adversely affect species or its habitat</p>

<p>Mountain plover</p>	<p>The MBTA prohibits taking, killing, or possessing migratory birds. Direct impacts to mountain plovers are not anticipated. No mountain plovers were detected during the habitat evaluation survey. Given this species' preference for areas with short or sparse vegetation, or large bare areas that may be disturbed, potentially suitable habitat features were confirmed to exist onsite. Therefore, it is possible that mountain plovers could potentially utilize this project area for either nesting or foraging. However, due to the size and scope of the projects (100-foot by 100-foot cell tower pad) and the extensive availability of suitable habitat for the species throughout the Navajo Nation, the proposed action is not likely to adversely affect the species or its habitat. Very minor indirect impacts may occur temporarily through decreased prey availability during construction. A pre-construction migratory bird nest search shall be conducted if vegetation is removed during breeding season to ensure that there will be no impacts to migratory birds. <b>No taking, killing, or possessing of mountain plovers would occur as a result of this project. Therefore, further consultation with USFWS is not necessary.</b></p>	<p>Direct impacts to mountain plovers are not anticipated. Very minor indirect impacts may occur temporarily. No violation of the MBTA would occur as a result of this project. The project is not likely to adversely affect species or its habitat</p>
<p>Monarch butterfly</p>	<p>There were no monarchs or nectar producing milkweed species observed within or near the project site during the habitat evaluation survey. The species' host plants in the Asclepias genus were not observed during the habitat evaluation survey. However, six species in the Asclepias genus have been documented within 20 kilometers of the project area (SEINet 2023). Several types of flowers/forbs were observed at the project site; but should a monarch prefer feed from any of these species, the vast quantities or similar habitat in the vicinity of the project area would offer extensive feeding opportunities. Therefore, given the lack of milkweed species in the project area and the vast quantity of project-similar habitat in the nearby vicinity, the proposed action would have no effect on the species or its habitat.</p>	<p>No effect to the species or its habitat</p>
<p>San Juan milkweed</p>	<p>This species is listed as occurring within 20 kilometers of the project area by SEINet (2023). It should be noted that the project area represents the Great Basin Desert Scrub biotic community (not pinyon-juniper woodlands and Great Basin grassland communities where the species is commonly found), which is defined by relatively low species diversity and is often occupied by only a few shrub species. No milkweeds or suitable habitat were observed during the habitat evaluation survey conducted on June 22, 2023 (at the end of the survey period of April through June; Roth 2001d) when growing and potentially flowering plants could be observed. While potentially suitable habitat for this species could be impacted, no milkweed plants were observed at the site or within 200 feet of the proposed tower location; therefore, no impacts to this species are anticipated.</p>	<p>No effect to the species or its habitat</p>
<p>Mesa Verde cactus</p>	<p>The biological field survey was conducted after the flowering and fruiting period of April through May. No individual Mesa Verde cactus were encountered. This species is known to occur within 3 miles of the project area and suitable habitat is present onsite (NNDFW 2023; USFWS 2023). The soils of the project area are consistent with Mancos shale formations where Mesa Verde cactus are found, and the species is likely present within the project corridor or surrounding vicinity. The project area was relatively flat compared to the vast extent of rolling hills and benches in the surrounding region and</p>	<p>Direct impacts to Mesa Verde cactus are not anticipated. Very minor impacts to habitat in the project footprint will occur. The</p>

	<p>the location appeared to have periodic disturbance caused livestock grazing and residential land use in the surrounding area. Nonetheless, the proposed project will impact potentially suitable habitat for the species within the project footprint. <b>Mitigation and avoidance measures including an in-season pre-construction survey for the Mesa Verde Cactus, flagging, and a 200-foot buffer will ensure protection of the species. The project is not likely to adversely affect the species or its habitat. Therefore, further consultation with USFWS is not necessary.</b></p>	<p>project is not likely to adversely affect species or its habitat</p>
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The BE documents special-status species with suitable habitat within or near the proposed cell tower. Potentially impacted species analyzed in this BE include golden eagle, bald eagle, ferruginous hawk, burrowing owl, mountain plover, monarch butterfly, San Juan milkweed, and Mesa Verde cactus; however, with implementation of the mitigation/conservation measures described above, adverse effects to these Navajo Nation special-status species and migratory birds would be avoided or minimized. Therefore, JE Fuller recommended that the proposed project be allowed to proceed. However, if any special-status species are detected before or during construction of the cell tower, NNDFW would be notified, and care and management of that species would commence as recommended by NNDFW.

**The NNDFW concurred with the findings of the BE and issued a Biological Resource Compliance Form (BRCF) on August 4, 2023, with the following conditions:**

Avoidance/Mitigation Measures:

1. NNHP recommends that the project sponsor implement best management practices for erosion control and invasive weed prevention and mitigation. NNHP also recommends that temporary disturbance areas shall be reseeded with a native species mix that matched the species in surrounding non-disturbed areas.
2. NNHP recommends that the project sponsor shall follow all conservation measures listed on page 17 of the BE. [(1) The tower site requires an in-season survey for Mesa Verde cactus in April-May prior to construction. (2) When constructing the cell tower, several shrubs may need to be removed. This could impact nesting migratory birds if the vegetation removal is conducted during the migratory bird breeding season. Therefore, a pre-construction migratory bird nest search is recommended if construction is to commence during the breeding season of *March 15 – August 15*. If an active nest is discovered on-site, a 50-meter no-disturbance buffer should be established around the active nest during the migratory bird breeding season (*March 15 – August 15*) from the time of discovery to fledging of chicks or nest failure. If no active nests are discovered during the preconstruction nest search, then construction can continue as planned. (3) Care should be taken to avoid unnecessary disturbance to minimize dust and sediment release during maintenance and access to the site. (4) Invasive species Best Management Practices should be followed to ensure that invasive species are not spread during project implementation. (5) If any sensitive wildlife or plant species described in this document are encountered on-site, they will be reported immediately to NNDFW,

and work would stop until a response with recommended avoidance/mitigation measures is received from NNDFW.

Conditions of Compliance:

1. All construction activities shall avoid the migratory bird breeding season (March 1 – August 31, of any year). A pre-construction survey should be performed if work occurs during this time period to determine if active nests are within the limits of vegetation removal associated with the project.
2. Mesa Verde cactus, in-season pre-construction survey required.
  - a. If habitat exists within the project area and buffer Habitat Analysis Area, then a species-specific survey shall be conducted within the appropriate season. If habitat is not found, then a written report shall be submitted to NNHP for review and written approval, prior to start of work.
  - b. Mesa Verde cactus surveys shall only occur during the plant's flowering/visible time period, April-May, of any year.
  - c. At the completion of the survey and prior to the start of work, a written report shall be submitted to the NNHP for review and written approval.

See **Appendix C** for the full **BRCF**.

## 4.5 Cultural Resources Impacts and Mitigation

No cultural resources including traditional cultural, historic, or religious properties were identified during a cultural resources survey conducted by ETD, Inc. Therefore, no impacts from the proposed project are expected to Cultural Resources. The Navajo Historic Preservation Department concurred with this finding and issued a Cultural Resource Compliance Form (**Appendix D**).

## 4.6 Socioeconomic Conditions Impacts and Mitigation

Potential impacts to employment and income, demographics and trends, and lifestyles, cultural values, and community infrastructure are anticipated to be positive, moderate, and long-term impacts by improving telecommunications for education, health, and public safety purposes within the community.

## 4.7 Environmental Justice

Based on the nature of the project and its purpose, no disproportional adverse human health or environmental effects to minority or low-income populations are anticipated due to the proposed project. The proposed project will only benefit the local community which is mainly comprised of low-income minority citizens.

## 4.8 Indian Trust Resources Impacts and Mitigation

Coal, oil, water from the San Juan River, and irrigable farmlands are natural resources occurring on chapter lands (LSR Innovations, 2004) that can be considered Indian trust resources. However, no mining or farming has occurred in the past or present at the proposed project site.

## 4.9 Environmental Module

No RCRA, CERCLA or TSCA sites occur on or near the proposed project area. Therefore, no RCRA, CERCLA, or TSCA sites will be developed as part of the proposed project. Thus, no impacts to such sites or activities regulated under the RCRA, CERCLA or TSCA are anticipated as result of the proposed project.

## 4.10 Resource/Land Use Patterns

The proposed project does not change land uses and there are no agricultural or recreation sites found near the project; therefore, there will be no impact to these resources.

## 4.11 Other Values

The tower will be visible from Navajo Route 36 in some areas and especially to nearby homes in San Juan Chapter. Therefore, the project may have a moderate, long-term effect on the local visual setting.

## 4.12 Cumulative Impacts

Impacts resulting from project activities are very minor in the form of temporary and localized surface disturbances as well as impacts to the visual setting. Cumulative impacts result from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency or person undertakes these actions. With respect to the visual setting, additional cell towers in the area will increasingly affect the scenic view especially when added to existing towers, oil wells, and electrical transmission lines in this region. There will be a moderate cumulative impact to the visual setting; yet the project will improve wireless and internet communication service within San Juan Chapter to meet the needs of public safety, education, and health services; and commercial and industrial establishments.

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## 5.0 List of Agencies and Organizations Consulted

The information used in this analysis was obtained from reports, government databases, biological and archaeological field surveys, and direct communication either by phone or letters with the following agencies: Navajo Nation EPA, Navajo Fish and Wildlife, U.S. Fish and Wildlife, Navajo Historic Preservation Department, Navajo Tribal Utility Authority, Navajo Department of Water Resources-Branch of Water Management, Indian Health Service, and San Juan Chapter.

## 6.0 Document Preparers' Qualifications and Signature

This document has been prepared by Madelyn Norstrem, Environmental Scientist, ETD, Inc., and Eunice L. Tso, NEPA Specialist, ETD, Inc. M. Norstrem holds a B.S. Degree in Environmental Science, with an Emphasis on Resource Management. Ms. Tso has over 25 years of experience in environmental regulatory compliance in Indian Country and is an expert in the environmental policies and regulations that affect development in Indian country. She holds an M.S. Degree in Environmental Geology from Northern Arizona University.



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Eunice L. Tso, M.S. Geology  
NEPA Specialist

10/5/2023

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Date



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Madelyn Norstrem, B.S. Environmental Science  
Environmental Scientist

10/05/2023

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Date

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## Appendix A: NNDFW Data Request Letter

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PO BOX 1480  
Window Rock, AZ 86515

P 928.871.6472  
F 928.871.7603

[www.nndfw.org](http://www.nndfw.org)

23jefhg106

13-June-2023

Rafael Reyna  
JE Fuller / Hydrology and Geomorphology, Inc.  
3111 N. Caden Court, Suite 120  
Flagstaff, AZ 86004  
928-486-0316  
rafael@jefuller.com

**SUBJECT: San Juan West Cell Tower Site**

Rafael Reyna,

NNHP has performed an analysis of your project in comparison to known biological resources of the Navajo Nation and has included the findings in this letter. The letter is composed of seven parts. The sections as they appear in the letter are:

1. **Known Species** – a list of all species within relative proximity to the project
2. **Potential Species** – a list of potential species based on project proximity to respective suitable habitat
3. **Quadrangles** – an exhaustive list of quads containing the project
4. **Project Summary** – a categorized list of biological resources within relative proximity to the project grouped by individual project site(s) or quads
5. **Conditional Criteria Notes** – additional details concerning various species, habitat, etc.
6. **Personnel Contacts** – a list of employee contacts
7. **Resources** – identifies sources for further information

Known Species lists "species of concern" known to occur within proximity to the project area. Planning for avoidance of these species is expected. If no species are displayed then based upon the records of the Navajo Nation Department of Fish and Wildlife (NNDFW) there are no "species of concern" within proximity to the project. Refer to the Navajo Endangered Species List (NESL) Species Accounts for recommended avoidance measures, biology, and distribution of NESL species on the Navajo Nation ([https://www.nndfw.org/nhsp/sp\\_account.htm](https://www.nndfw.org/nhsp/sp_account.htm)).

Potential Species lists species that are potentially within proximity to the project area and need to be evaluated for presence/absence. If no species are found within the Known or Potential Species lists, the project is not expected to affect any federally listed species, nor significantly impact any tribally listed species or other species of concern. Potential for species has been determined primarily on habitat characteristics and species range information. A thorough habitat analysis, and if necessary, species specific surveys, are required to determine the potential for each species.

Species of concern include protected, candidate, and other rare or otherwise sensitive species, including certain native species and species of economic or cultural significance. For legally protected species, the

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following tribal and federal statuses are indicated: NESL, federal Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and Eagle Protection Act (EPA). No legal protection is afforded species with only ESA candidate, NESL group 4 status, and species listed on the Sensitive Species List. Please be aware of these species during surveys and inform the NNDFW of observations. Reported observations of these species and documenting them in project planning and management is important for conservation and may contribute to ensuring they will not be up listed in the future.

In any and all correspondence with NNDFW or NNHP concerning this project please cite the Data Request Code associated with this document. It can be found in this report on the top right corner of every page. Additionally please cite this code in any biological evaluation documents returned to our office.

**1. Known Species** (NESL=Navajo Endangered Species List, FE=Federally Endangered, FT=Federally Threatened, FC=Federal Candidate)

**Species**

BURE = Buteo regalis / Ferruginous Hawk NESL G3  
 SCMEVE = Sclerocactus mesae-verdae / Mesa Verde Cactus NESL G2 FT

**2. Potential Species**

**Species**

AQCH = Aquila chrysaetos / Golden Eagle NESL G3  
 ASHU = Astragalus humillimus / Mancos Milk-vetch NESL G2 FE  
 ASNA = Astragalus naturitensis / Naturita Milk-vetch NESL G3  
 ASSA = Asclepias sanjuanensis / San Juan Milkweed NESL G4  
 ATCU = Athene cunicularia / Burrowing Owl NESL G4  
 BURE = Buteo regalis / Ferruginous Hawk NESL G3  
 CHMO = Charadrius montanus / Mountain Plover NESL G4  
 EMTREX = Empidonax traillii extimus / Southwestern Willow Flycatcher NESL G2 FE  
 GIRO = Gila robusta / Roundtail Chub NESL G2  
 HALE = Haliaeetus leucocephalus / Bald Eagle NESL G2  
 LIPI = Lithobates pipiens / Northern Leopard Frog NESL G2  
 PTLU = Ptchocheilus lucius / Colorado Pikeminnow NESL G2  
 SCMEVE = Sclerocactus mesae-verdae / Mesa Verde Cactus NESL G2 FT  
 XYTE = Xyrauchen texanus / Razorback Sucker NESL G2 FE

**3. Quadrangles (7.5 Minute)**

**Quadrangles**

The Hogack North (36108-F5) / NM

**4. Project Summary** (EO1 Mile/EO 3 Miles=elements occurring within 1 & 3 miles., MSO=mexican spotted owl PACs, POTS=potential species, RCP=Biological Areas)

SITE	EO1MI	EO3MI	QUAD	MSO	POTS	RCP
------	-------	-------	------	-----	------	-----

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SITE	EO1MI	EO3MI	QUAD	MSO	POTS	RCP
Cell Tower Site	None	BURE, SCMEVE	The Hogack North (36108-F5) / NM	None	AQCH, ASHU, ASNA, ASSA, ATCU, BURE, CHMO, EMTRES, GIRO, HALE, LIPI, PTLU, SCMEVE, XYTE	Area 2
Power Line	None	BURE, SCMEVE	The Hogack North (36108-F5) / NM	None	AQCH, ASHU, ASNA, ASSA, ATCU, BURE, CHMO, EMTRES, GIRO, HALE, LIPI, PTLU, SCMEVE, XYTE	Area 2

**5. Conditional Criteria Notes** *(Recent revisions made please read thoroughly. For certain species, and/or circumstances, please read and comply)*

**A. Biological Resource Land Use Clearance Policies and Procedures (RCP)** - The purpose of the RCP is to assist the Navajo Nation government and chapters ensure compliance with federal and Navajo laws which protect, wildlife resources, including plants, and their habitat resulting in an expedited land use clearance process. After years of research and study, the NNDFW has identified and mapped wildlife habitat and sensitive areas that cover the entire Navajo Nation.

The following is a brief summary of six (6) wildlife areas:

1. **Highly Sensitive Area** – recommended no development with few exceptions.
2. **Moderately Sensitive Area** – moderate restrictions on development to avoid sensitive species/habitats.
3. **Less Sensitive Area** – fewest restrictions on development.
4. **Community Development Area** – areas in and around towns with few or no restrictions on development.
5. **Biological Preserve** – no development unless compatible with the purpose of this area.
6. **Recreation Area** – no development unless compatible with the purpose of this area.

**None** - outside the boundaries of the Navajo Nation

This is not intended to be a full description of the RCP please refer to the our website for additional information at <https://www.nndfw.org/clup.htm>.

**B. Raptors** – If raptors are known to occur within 1 mile of project location: Contact the NNHP zoologist at 871-7070 regarding your evaluation of potential impacts and mitigation.

**Golden and Bald Eagles**- If Golden or Bald Eagle are known to occur within 1 mile of the project, decision makers need to ensure that they are not in violation of the *Golden and Bald Eagle Nest Protection Regulations* found at [https://www.nndfw.org/nnhp/docs\\_reps/gben.pdf](https://www.nndfw.org/nnhp/docs_reps/gben.pdf).

**Ferruginous Hawks** – Refer to *Navajo Nation Department of Fish and Wildlife's Ferruginous Hawk Management Guidelines for Nest Protection* ([https://www.nndfw.org/nnhp/docs\\_reps.htm](https://www.nndfw.org/nnhp/docs_reps.htm)) for relevant information on avoiding impacts to Ferruginous Hawks within 1 mile of project location.

**Mexican Spotted Owl** - Please refer to the *Navajo Nation Mexican Spotted Owl Management Plan* ([https://www.nndfw.org/nnhp/docs\\_reps.htm](https://www.nndfw.org/nnhp/docs_reps.htm)) for relevant information on proper project planning near/within spotted owl protected activity centers and habitat.

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**C. Surveys** – Biological surveys need to be conducted during the appropriate season to ensure they are complete and accurate please refer to NN Species Accounts [https://www.nndfw.org/nnhp/sp\\_account.htm](https://www.nndfw.org/nnhp/sp_account.htm). Surveyors on the Navajo Nation must be permitted by the Director, NNDFW. Contact Jeff Cole at (928) 871-6450 for permitting procedures. Questions pertaining to surveys should be directed to the NNDFW the NNHP Zoologist for animals, and the NNHP Botanist for plants. Questions regarding biological evaluation should be directed to Jeff Cole at 871-6450.

**D. Oil/Gas Lease Sales** – Any settling or evaporation pits that could hold contaminants should be lined and covered. Covering pits, with a net or other material, will deter waterfowl and other migratory bird use. Lining pits will protect ground water quality.

**E. Power line Projects** – These projects need to ensure that they do not violate the regulations set forth in the *Navajo Nation Raptor Electrocution Prevention Regulations* found at [https://www.nndfw.org/nnhp/docs\\_reps/repr.pdf](https://www.nndfw.org/nnhp/docs_reps/repr.pdf).

**F. Guy Wires** – Does the project design include guy wires for structural support? If so, and if bird species may occur in relatively high concentrations in the project area, then guy wires should be equipped with highly visual markers to reduce the potential mortality due to bird-guy wire collisions. Examples of visual markers include aviation balls and bird flight diverters. Birds can be expected to occur in relatively high concentrations along migration routes (e.g., rivers, ridges or other distinctive linear topographic features) or where important habitat for breeding, feeding, roosting, etc. occurs. The U.S. Fish and Wildlife Service recommends marking guy wires with at least one marker per 100 meters of wire.

**G. San Juan River** – On 21 March 1994 (Federal Register, Vol. 59, No. 54), the U.S. Fish and Wildlife Service designated portions of the San Juan River (SJR) as critical habitat for *Ptychocheilus lucius* (Colorado pikeminnow) and *Xyrauchen texanus* (Razorback sucker). Colorado pikeminnow critical habitat includes the SJR and its 100-year floodplain from the State Route 371 Bridge in T29N, R13W, sec. 17 (New Mexico Meridian) to Neskahai Canyon in the San Juan arm of Lake Powell in T41S, R11E, sec. 26 (Salt Lake Meridian) up to the full pool elevation. Razorback sucker critical habitat includes the SJR and its 100-year floodplain from the Hogback Diversion in T29N, R16W, sec. 9 (New Mexico Meridian) to the full pool elevation at the mouth of Neskahai Canyon on the San Juan arm of Lake Powell in T41S, R11E, sec. 26 (Salt Lake Meridian). All actions carried out, funded or authorized by a federal agency which may alter the constituent elements of critical habitat must undergo section 7 consultation under the Endangered Species Act of 1973, as amended. Constituent elements are those physical and biological attributes essential to a species conservation and include, but are not limited to, water, physical habitat, and biological environment as required for each particular life stage of a species.

**H. Little Colorado River** - On 21 March 1994 (Federal Register, Vol. 59, No. 54) the U.S. Fish and Wildlife Service designated Critical Habitat along portions of the Colorado and Little Colorado Rivers (LCR) for *Gila cypha* (humpback chub). Within or adjacent to the Navajo Nation this critical habitat includes the LCR and its 100-year floodplain from river mile 8 in T32N R6E, sec. 12 (Salt and Gila River Meridian) to its confluence with the Colorado River in T32N R5E sec. 1 (S&GRM) and the Colorado River and 100-year floodplain from Nautuloid Canyon (River Mile 34) T36N R5E sec. 35 (S&GRM) to its confluence with the LCR. All actions carried out, funded or authorized by a federal agency which may alter the constituent elements of Critical Habitat must undergo section 7 consultation under the Endangered Species Act of 1973, as amended. Constituent elements are those physical and biological attributes essential to a species conservation and include, but are not limited to, water, physical habitat, and biological environment as required for each particular life stage of a species.

**I. Wetlands** – In Arizona and New Mexico, potential impacts to wetlands should also be evaluated. The U.S. Fish & Wildlife Service's National Wetlands Inventory (NWI) maps should be examined to determine whether areas classified as wetlands are located close enough to the project site(s) to be impacted. In cases where the maps are inconclusive (e.g., due to their small scale), field surveys must be completed.

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For field surveys, wetlands identification and delineation methodology contained in the "Corps of Engineers Wetlands Delineation Manual" (Technical Report Y-87-1) should be used. When wetlands are present, potential impacts must be addressed in an environmental assessment and the Army Corps of Engineers, Phoenix office, must be contacted. NWI maps are available for examination at the Navajo Natural Heritage Program (NNHP) office, or may be purchased through the U.S. Geological Survey (order forms are available through the NNHP). The NNHP has complete coverage of the Navajo Nation, excluding Utah, at 1:100,000 scale; and coverage at 1:24,000 scale in the southwestern portion of the Navajo Nation. In Utah, the U.S. Fish & Wildlife Service's National Wetlands Inventory maps are not yet available for the Utah portion of the Navajo Nation, therefore, field surveys should be completed to determine whether wetlands are located close enough to the project site(s) to be impacted. For field surveys, wetlands identification and delineation methodology contained in the "Corps of Engineers Wetlands Delineation Manual" (Technical Report Y-87-1) should be used. When wetlands are present, potential impacts must be addressed in an environmental assessment and the Army Corps of Engineers, Phoenix office, must be contacted. For more information contact the Navajo Environmental Protection Agency's Water Quality Program.

**J. Life Length of Data Request** – The information in this report was identified by the NNHP and NNDFW's biologists and computerized database, and is based on data available at the time of this response. If project planning takes more than two (02) years from the date of this response, verification of the information provided herein is necessary. It should not be regarded as the final statement on the occurrence of any species, nor should it substitute for on-site surveys. Also, because the NNDFW information is continually updated, any given information response is only wholly appropriate for its respective request.

**K. Ground Water Pumping** - Projects involving the ground water pumping for mining operations, agricultural projects or commercial wells (including municipal wells) will have to provide an analysis on the effects to surface water and address potential impacts on all aquatic and/or wetlands species listed below. NESL Species potentially impacted by ground water pumping: *Carex specuicola* (Navajo Sedge), *Cirsium rydbergii* (Rydberg's Thistle), *Primula specuicola* (Cave Primrose), *Platanthera zothecina* (Alcove Bog Orchid), *Puccinellia parishii* (Parish Alkali Grass), *Zigadenus vaginatus* (Alcove Death Camas), *Perityle specuicola* (Alcove Rock Daisy), *Symphotrichum welshii* (Welsh's American-aster), *Coccyzus americanus* (Yellow-billed Cuckoo), *Empidonax traillii extimus* (Southwestern Willow Flycatcher), *Rana pipiens* (Northern Leopard Frog), *Gila cypha* (Humpback Chub), *Gila robusta* (Roundtail Chub), *Ptychocheilus lucius* (Colorado Pikeminnow), *Xyrauchen texanus* (Razorback Sucker), *Cinclus mexicanus* (American Dipper), *Speyeria nokomis* (Western Seep Fritillary), *Aechmophorus clarkia* (Clark's Grebe), *Ceryle alcyon* (Belted Kingfisher), *Dendroica petechia* (Yellow Warbler), *Porzana carolina* (Sora), *Catostomus discobolus* (Bluehead Sucker), *Cottus bairdi* (Mottled Sculpin), *Oxyloma kanabense* (Kanab Ambersnail)

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## 6. Personnel Contacts

### Wildlife Manager

Leanna Begay  
928.871.6450  
[lbegay@nndfw.org](mailto:lbegay@nndfw.org)

### Zoologist

Brent Powers  
928.871.7070  
[bpowers@nndfw.org](mailto:bpowers@nndfw.org)

### Botanist

Nora Ventrella  
928.523.1526  
[nventrella@nndfw.org](mailto:nventrella@nndfw.org)

### Biological Reviewer

Vacant  
928.871.6450  
[reviews@nndfw.org](mailto:reviews@nndfw.org)

### GIS Supervisor

Dexter D Prall  
928.660.9169  
[prall@nndfw.org](mailto:prall@nndfw.org)

## 7. Resources

### Navajo Endangered Species List:

<https://www.nndfw.org/nnhp/endangered.htm>

### Species Accounts:

[https://www.nndfw.org/nnhp/sp\\_account.htm](https://www.nndfw.org/nnhp/sp_account.htm)

### Biological Investigation Permit Application

[https://www.nndfw.org/nnhp/study\\_permit.htm](https://www.nndfw.org/nnhp/study_permit.htm)

### Navajo Nation Sensitive Species List

<https://www.nndfw.org/nnhp/trackinglist.htm>

### Various Species Management and/or Document and Reports

[https://www.nndfw.org/nnhp/docs\\_reps.htm](https://www.nndfw.org/nnhp/docs_reps.htm)

### Consultant List

[https://www.nndfw.org/bi\\_consult\\_list\\_2022.pdf](https://www.nndfw.org/bi_consult_list_2022.pdf)

Dexter D Prall, GIS Supervisor - Natural Heritage Program  
Navajo Nation Department of Fish and Wildlife

## Appendix B: USFWS IPaC Consultation

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IPaC: Explore Location resources

**IPaC****U.S. Fish & Wildlife Service**

## IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

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

### Location

San Juan County, New Mexico



### Local office

New Mexico Ecological Services Field Office

☎ (505) 346-2525

📠 (505) 346-2542

2105 Osuna Road NE

<https://ipac.ecosphere.fws.gov/location/UKKGXRD77VETLCOZ3QEBCFJGIU/resources>

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6/21/23, 10:39 AM

IPaC: Explore Location resources

ETD Inc.  
Albuquerque, NM 87113-1001

NOT FOR CONSULTATION

# Endangered species

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

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

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

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

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

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

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

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

6/21/23, 10:39 AM

IPaC: Explore Location resources

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

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

## Birds

NAME	STATUS
<p><b>Southwestern Willow Flycatcher</b> <i>Empidonax traillii extimus</i></p> <p>Wherever found</p> <p>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a></p>	<b>Endangered</b>
<p><b>Yellow-billed Cuckoo</b> <i>Coccyzus americanus</i></p> <p>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a></p>	<b>Threatened</b>

## Fishes

NAME	STATUS
<p><b>Colorado Pikeminnow</b> <i>Ptychocheilus lucius</i></p> <p>This species only needs to be considered if the following condition applies:</p> <ul style="list-style-type: none"> <li>Water depletions in the upper Colorado River basin adversely affect this species and its critical habitat. Effects of water depletions must be considered even outside of occupied range.</li> </ul> <p>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.</p> <p><a href="https://ecos.fws.gov/ecp/species/3531">https://ecos.fws.gov/ecp/species/3531</a></p>	<b>Endangered</b>

6/21/23, 10:39 AM

IPaC: Explore Location resources

**Razorback Sucker** *Xyrauchen texanus* **Endangered**

Wherever found

This species only needs to be considered if the following condition applies:

- Water depletions in the upper Colorado River basin adversely affect this species and its critical habitat. Effects of water depletions must be considered even outside of occupied range.

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/530>

## Insects

NAME

STATUS

**Monarch Butterfly** *Danaus plexippus* **Candidate**

Wherever found

No critical habitat has been designated for this species.

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

## Flowering Plants

NAME

STATUS

**Mancos Milk-vetch** *Astragalus humillimus* **Endangered**

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/7483>

**Mesa Verde Cactus** *Sclerocactus mesae-verdae* **Threatened**

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6005>

## Critical habitats

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

There are no critical habitats at this location.

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IPaC: Explore Location resources

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

## Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

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

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

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

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

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

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

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

<https://ipac.ecosphere.fws.gov/location/UKKGGXRD77VETLCOZ3QEBCFJGIU/resources>

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IPaC: Explore Location resources

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

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

## Migratory birds

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

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

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

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

There are no migratory birds of conservation concern expected to occur at this location.

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

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

<https://ipac.ecosphere.fws.gov/location/UKKKGXRD77VETLCOZ3QEBCFJGIU/resources>

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IPaC: Explore Location resources

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

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

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

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

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

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

**How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

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

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

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

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

<https://ipac.ecosphere.fws.gov/location/UKKGXRD77VETLCOZ3QEBCFJGIU/resources>

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IPaC: Explore Location resources

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

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

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

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

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

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

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

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IPaC: Explore Location resources

## Facilities

### National Wildlife Refuge lands

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

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

### Wetlands in the National Wetlands Inventory (NWI)

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

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

#### Wetland information is not available at this time

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

#### Data limitations

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

<https://ipac.ecosphere.fws.gov/location/UKKGXRD77VETLCOZ3QEBCFJGIU/resources>

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IPaC: Explore Location resources

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

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

**Data exclusions**

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

**Data precautions**

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

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## Appendix C: NNDFW Biological Resource Compliance Form

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NNDFW Review No. 23jefhg106

**BIOLOGICAL RESOURCES COMPLIANCE FORM**  
**NAVAJO NATION DEPARTMENT OF FISH & WILDLIFE**  
**P.O. BOX 1480, WINDOW ROCK, ARIZONA 86515-1480**

It is the Department's opinion the project described below, with applicable conditions, is in compliance with Tribal & Federal laws protecting biological resources including the Navajo Endangered Species & Environmental Policy Codes, U.S. Endangered Species, Migratory Bird Treaty, Eagle Protection & National Environmental Policy Acts. This form does not preclude or replace consultation with the U.S. Fish & Wildlife Service if a Federally-listed species is affected.

**PROJECT NAME & NO.:** San Juan West Cell Tower Site

**DESCRIPTION:** CellularOne Communications proposes to construct and operate a telecommunications tower in San Juan Chapter of the Navajo Nation, San Juan County, New Mexico. CellularOne proposes to construct a 180' self-supporting tower within a tract measuring 100' x 100' and NTUA will install a 61' powerline extension with a 30' ROW

**LOCATION:** San Juan West, T29N, R17N, Section 11, San Juan County, NM  
36°44'53.90"N, 108°36'13.22"W

**REPRESENTATIVE:** Rafael Reyna, JE Fuller

**ACTION AGENCY:** NTUA

**B.R. REPORT TITLE/ DATE/PREPARER:** Request for Biological Review & Compliance/ 5 July 2023/ JE Fuller

**SIGNIFICANT BIOLOGICAL RESOURCES FOUND:** Area 2, Medium Wildlife Sensitivity

**POTENTIAL IMPACTS**

**NESL SPECIES POTENTIALLY IMPACTED:**

Golden Eagle (*Aquila chrysaetos*) NESL G3  
Ferruginous Hawk (*Buteo regalis*) NESL G3  
Bald Eagle (*Haliaeetus leucocephalus*) NESL G2  
Mesa Verde Cactus (*Sclerocactus mesae-verdae*) NESL G2 FT

**FEDERALLY-LISTED SPECIES POTENTIALLY IMPACTED:**

Mesa Verde Cactus (*Sclerocactus mesae-verdae*) NESL G2 FT

**OTHER SIGNIFICANT IMPACTS TO BIOLOGICAL RESOURCES:** NA

**AVOIDANCE / MITIGATION MEASURES:**

1. NNHP recommends that the project sponsor shall implement Best Management Practices for erosion control and invasive weed prevention and mitigation. NNHP also recommends that temporary disturbances areas shall be reseeded with a native species mix that matches the

Page 1 of 3

NNDFW -B.R.C.F.: FORM REVISED 04 MAR 2022

species in surrounding non-disturbed areas.

- 2. NNHP recommends that the project sponsor shall follow all conservation measures listed on pg. 17 of the BE.

**CONDITIONS OF COMPLIANCE\*:**

- 1. All construction activities shall avoid the migratory bird breeding season (March 1 - August 31, of any year). A pre-construction survey should be performed if work occurs during this time period to determine if active nests are within the limits of vegetation removal associated with the project.
- 2. Mesa Verde cactus, in-season pre-construction survey required.
  - a) If habitat exists within the project area and buffer Habitat Analysis Area (HAA), then a species-specific survey shall be conducted within the appropriate season. If habitat is not found, then a written report shall be submitted to NNHP for review and written approval, prior to the start of work.
  - b) Mesa Verde cactus surveys shall occur within all potential habitat identified within the project area and buffer Habitat Analysis Area (HAA). The USFWS recommends that transects are spaced no more than 3 m apart for this species.
  - c) Mesa Verde cactus surveys shall only occur during the plants flowering/visible time period, April- May, of any year.
  - d) At the completion of the survey and prior to the start of work, a written report shall be submitted to the NNHP for review and written approval.

FORM PREPARED BY / DATE: T. Kim Yazzie/2 AUG 2023

COPIES TO: (add categories as necessary)

\_\_\_\_\_  \_\_\_\_\_

<p><b>2 NTC § 164 Recommendation:</b></p> <p><input type="checkbox"/> <b>Approval:</b></p> <p><input checked="" type="checkbox"/> <b>Conditional Approval (with memo):</b>  <b>DR# 23jefhg106 - San Juan West Cell Tower Site</b></p> <p><input type="checkbox"/> <b>Pending (with memo):</b></p> <p><input type="checkbox"/> <b>Disapproval (with memo):</b></p> <p><input type="checkbox"/> <b>Categorical Exclusion (with request letter):</b></p> <p><input type="checkbox"/> <b>None (with memo):</b></p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Gloria M. Tom, Director Fish & Wildlife	Navajo Nation Department of
Signature: <i>David Mihene</i>	Date 8/4/2023

<b>*I understand and accept the conditions of compliance, &amp; acknowledge that lack of signature may be grounds for the Department not recommending the above-described project for approval to the Tribal Decision-maker.</b>	
Representative's signature	Date



**DR. BUU NYGREN** *PRESIDENT*  
**RICHELLE MONTOYA** *VICE PRESIDENT*

The Navajo Nation | Yideeskáądi Nitsáhákees

8/2/2023

DR# 23jefhg106

Rafael Reyna  
Project Manager / Environmental Planner  
3111 North Caden Court  
Suite 120 | Flagstaff, AZ 86004  
(928) 486-0316  
[rafael@jefuller.com](mailto:rafael@jefuller.com)  
[www.JEFuller.com](http://www.JEFuller.com)

Dear Rafael,

The Navajo Nation Department of Fish and Wildlife (NNDFW) and the Navajo Natural Heritage Program (NNHP) have reviewed a BE & BRCF request form for **DR# 23jefhg106 - San Juan West Cell Tower Site**. The purpose of this letter is to inform you that the Navajo Nation is granting the proposed project *Conditional Approval*.

Based on the information provided and information in the NNHP database and has determined that additional protective measures are required in order to protect NESL species before, during and after construction activities commence.

The **Conditional Approval Conditions** are as follows for the DR# 23jefhg106 - San Juan West Cell Tower Site:

1. All construction activities shall avoid the migratory bird breeding season (March 1 - August 31, of any year). A pre-construction survey should be performed if work occurs during this time period to determine if active nests are within the limits of vegetation removal associated with the project.
2. Mesa Verde cactus, in-season pre-construction survey required.
  - a) If habitat exists within the project area and buffer Habitat Analysis Area (HAA), then a species-specific survey shall be conducted within the appropriate season. If habitat is not found, then a written report shall be submitted to NNHP for review and written approval, prior to the start of work.
  - b) Mesa Verde cactus surveys shall occur within all potential habitat identified within the project area and buffer Habitat Analysis Area (HAA). The USFWS recommends that transects are spaced no more than 3 m apart for this species.
  - c) Mesa Verde cactus surveys shall only occur during the plants flowering/visible time period, April- May, of any year.

Navajo Nation Department of Fish & Wildlife/ Navajo Natural Heritage Program  
POST OFFICE BOX 1480 – WINDOW ROCK, AZ 86515 – PHONE: (928) 871-6450/7859  
– FAX: (928) 871-7069

- d) At the completion of the survey and prior to the start of work, a written report shall be submitted to the NNHP for review and written approval.

**Recommended Avoidance and Minimization of Conditional Approvals for the DR# 23jefhg106 - San Juan West Cell Tower Site.:**

1. NNHP recommends that the project sponsor shall implement Best Management Practices for erosion control and invasive weed prevention and mitigation. NNHP recommends that temporary disturbances areas shall be reseeded with a native species mix that matches the species in surrounding non-disturbed areas.
2. NNHP recommends that the project sponsor shall follow all conservation measures listed on pg. 17 of the BE.

Survey protocols and habitat descriptions for the species listed above can be found in the species accounts available on NNHP's website at [https://www.nndfw.org/nnhp/sp\\_account.htm](https://www.nndfw.org/nnhp/sp_account.htm).

Surveys must be conducted during the appropriate time of year (for plants, during the fruiting/flowering season) by an experienced biologist who is permitted by the Navajo Nation. See here for a list of permitted consultants ([https://www.nndfw.org/bi\\_consult\\_list\\_2022.pdf](https://www.nndfw.org/bi_consult_list_2022.pdf)). Unless otherwise indicated, plant surveys shall include a buffer of 200 ft. from all temporary and permanent ground-disturbing activities; including temporary equipment staging areas.

Survey reports need to be sent to NNHP prior to construction activities taking place. The survey contractor shall consult with the NNHP botanist and zoologist for positive identification and development of mitigation strategies if NESL plants and or wildlife species are found during surveys.

Please contact me via email at [lbegay@nndfw.org](mailto:lbegay@nndfw.org) with any questions that you have concerning the review of this project.



Leanna Begay, Wildlife Manager  
Navajo Natural Heritage Program  
Department of Fish & Wildlife

CONCURRENCE



Gloria Tom, Director  
Department of Fish & Wildlife

8/4/2023

Date

xc: CONS-100-19

**BIA**

Navajo Nation Department of Fish & Wildlife/ Navajo Natural Heritage Program  
POST OFFICE BOX 1480 – WINDOW ROCK, AZ 86515 – PHONE: (928) 871-6450/7859  
– FAX: (928) 871-7069



## Appendix D: Cultural Resources Compliance Form

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### CULTURAL RESOURCES COMPLIANCE FORM

THE NAVAJO NATION  
HISTORIC PRESERVATION DEPARTMENT  
PO BOX 4950  
WINDOW ROCK, ARIZONA 86515

**ROUTE COPIES TO:**

ETD

NNHPD NO. **HPD-13-304**

OTHER PROJECT NO.: ETD-13-005

PROJECT TITLE: A Cultural Resource Inventory for a Proposed Telecommunications Tower Site and 61 Feet of Power Line Extensions in San Juan Chapter, San Juan County, New Mexico for CellularOne Communications

LEAD AGENCY: BIA/NR

SPONSOR: Renee Chappell Higginbotham, CellularOne Communications, 1500 S. White Mountain Rd, Suite 103, Show Low, AZ 58901

PROJECT DESCRIPTION: The proposed undertaking will involve the construction of a 180-ft tall self-supporting telecommunications tower that will be built within a 50-ft by 50-ft area. A 61-ft powerline will also be installed. The area of effect is 0.23-acre. Ground disturbance will be intensive and extensive with the use of heavy equipment.

LAND STATUS: Navajo Tribal Trust

CHAPTER: San Juan

LOCATION: T.29N, R.17W - Sec.: 11; The Hogback North Quadrangle, San Juan County, New Mexico NMPM

PROJECT ARCHAEOLOGIST: Mathilda Burke

NAVAJO ANTIQUITIES PERMIT NO.: B13167

DATE INSPECTED: 04/02/13

DATE OF REPORT: 04/09/13

TOTAL ACREAGE INSPECTED: 0.7 - ac.

METHOD OF INVESTIGATION: Class III pedestrian inventory with transects spaced 7.5 m apart.

LIST OF CULTURAL RESOURCES FOUND: **None**  
LIST OF ELIGIBLE PROPERTIES: **None**  
LIST OF NON-ELIGIBLE PROPERTIES: **None**  
LIST OF ARCHAEOLOGICAL RESOURCES: **None**

EFFECT/CONDITIONS OF COMPLIANCE: **No historic properties affected.**

In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease, and the Navajo Nation Historic Preservation Department must be notified at (928) 871-7147.

FORM PREPARED BY: Tamara Billie

FINALIZED: April 30, 2013

Notification to  
Proceed Recommended: Yes  No   
Conditions: Yes  No

  
Alan S. Downer, Navajo Nation Historic Preservation Officer Date 5-3-13

Navajo Region Approval: Yes  No

  
BIA-Regional Director Date 8/29/13

Tim 5/22/13