Appendix E.4
Species Accounts
Special-Status Plant Species Accounts

Spanish needle onion (*Allium shevockii*). Spanish needle onion is a CRPR 1B.3 and BLM Sensitive species. This species is a bulb that blooms in April. It occurs in pinyon-juniper woodlands on rocky slopes, metamorphic outcrops, and in upper montane coniferous forest on metamorphic or granitic talus slopes at elevations of approximately 2,800 to 8,200 feet. This species occurs in the southern Sierra Nevada, Tehachapi Mountains, and the margin of the Mojave Desert. It was detected at five locations within the NSR project area during 2010 surveys. A total of approximately 5,000 individuals were observed.

Piute cypress (*Callitropsis nevadensis* = *Cupressus arizonica* ssp. *nevadensis*). Piute cypress is a CRPR 1B.2 and BLM Sensitive species. It is an evergreen tree belonging to the Cupressaceae family. This species occurs in chaparral, cismontane woodland, pinyon-juniper woodland, and closed-cone coniferous forest, at about 2,400 to 6,000 feet. It is found naturally around Lake Isabella and Kernville areas in Kern and adjacent Tulare Counties. There are only eleven known groves of Piute cypress which are scattered over the southernmost portion of the Sierra Nevada in Kern County and extreme southern Tulare County. Suitable habitat is present in the proposed project area, and the nearest known location is two miles west of the project area, in Back Canyon off Back Canyon Road.

Palmer’s mariposa lily (*Calochortus palmeri* var. *palmeri*). Palmer’s mariposa lily is designated as a CRPR 1B.2 and BLM Sensitive species. This variety is a bulbiferous herb that belongs to the lily family (Liliaceae). It blooms from April to July. Palmer’s mariposa lily occurs in lower montane coniferous forest, chaparral, and particularly in meadows and seeps from 3,280 to 6,500 feet. The closest known occurrence for this variety is 0.5 mile west of the proposed project area, near Cache Peak. Palmer’s mariposa lily was not detected during botanical surveys over portions of the proposed project area, but suitable habitat occurs at several locations throughout the site.

Kern County evening-primrose (*Camissonia kernensis* ssp. *kernensis*). Kern County evening-primrose is designated as a CRPR 4.3 species and BLM Plant of Interest. It is an annual herb in the evening primrose family (Onagraceae). It blooms from March to May. This species is typically found in chaparral, joshua tree woodland, and pinyon and juniper woodland on sandy or gravelly substrates at elevations ranging from 2,600 to 7,000 feet. Kern County evening-primrose is endemic to Kern and Santa Barbara counties. The proposed project area supports suitable habitat, and the nearest known location is five miles northwest of the project area in Lower Esperanza Canyon, between Sorrell Peak and Kelso Valley.

White pygmy poppy (*Canbya candida*). White pygmy poppy is designated as a CRPR 4.2 species and BLM Plant of Interest. It is a small annual herb that belongs to the poppy family (Papaveraceae). It blooms from March to June. White pygmy poppy occurs within Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats in gravelly, granitic, or sandy soils at elevations of approximately 1,900 to 4,800 feet. Eight sites with approximately 600 individuals were mapped in the NSR project area in 2010.
Mojave Indian paintbrush (*Castilleja plagiotoma*). Mojave Indian paintbrush is designated as a CRPR 4.3 plant. This species is a perennial hemiparasitic herb that belongs to the figwort family (Scrophulariaceae). It blooms from April to June. Mojave Indian paintbrush typically occurs in Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, and pinyon and juniper woodland communities at elevations of 1,000 to 8,200 feet. One site with five individuals was mapped in the NSR project area in 2010.

Death Valley sandmat (*Chamaesyce vallis-mortae = Euphorbia vallis-mortae*). Death Valley sandmat is designated as a CRPR 4.2 species and BLM Plant of Interest. This species is a perennial herb that belongs to the spurge family (Euphorbiaceae). It blooms from May to October. Death Valley sandmat occurs in arid, sandy soils in shrublands. Its distribution includes the southern Owens Valley, western Mojave Desert, and adjacent foothills at elevations of 700 to 4,800 feet. Nine sites with approximately 25,000 individuals were mapped in the NSR project area in 2010.

Kern Canyon clarkia (*Clarkia xantiana ssp. parviflora*). Kern Canyon clarkia is designated as a CRPR 4.2 species. This species is an annual herb in the evening primrose family (Onagraceae). It blooms from May to June. It is typically found in chaparral, cismontane woodland, Great Basin scrub, and valley and foothill grassland habitats, often on sandy, sometimes rocky slopes. Known occurrences range in elevation from 2,310 to 11,950 feet. Kern Canyon clarkia is endemic to Inyo, Kern, Los Angeles, and Tulare counties. In Kern County, all known occurrences of this subspecies occur in the southern Sierra Nevada. The proposed project area supports suitable habitat, and the nearest known location is five miles north of the project area, near Kelso Valley.

Streambank spring beauty (*Claytonia parviflora ssp. grandiflora*). Streambank spring beauty is designated as a CRPR 4.2 species. This species is an annual that is in the purslane family (Portulacaceae). It blooms from February to May. This subspecies is found within cismontane woodland and chaparral habitats, where it is usually associated with vernally moist shaded areas, springs, streambanks, or is under the canopy of trees or shrubs. It grows at elevations between 500 and 4,500 feet. Streambank spring beauty is endemic to California, where it occurs in the Sierra Nevada foothills, Tehachapi Mountains and other locations throughout the state. It has been reported as far north as Placer County and as far south as San Bernardino County. The nearest known location is five miles southeast of the project area, in Jawbone Canyon.

Mojave tarplant (*Deinandra mohavensis*). Mojave tarplant is State-listed endangered and is a BLM Sensitive plant. This species is an annual herb in the sunflower (Asteraceae) family. It blooms from June to October. Mojave tarplant generally occurs in chaparral, coastal scrub, and riparian scrub communities, in washes or around springs at elevations from 2,100 to 5,250 feet. Mojave tarplant is endemic to California, where it is known from Kern, San Bernardino, Riverside, and San Diego counties. Prior to surveys conducted for this project, the closest known locations of Mojave tarplant to the proposed project area were two miles southeast, near Kelso Valley and Jawbone Canyon. Ten sites with approximately 15,000 individuals were observed in the NSR project area in 2010.

Mt. Pinos larkspur (*Delphinium parryi ssp. purpureum*). Mt. Pinos larkspur is designated as a CRPR 4.3 plant. This species is a perennial herb in the buttercup family (Ranunculaceae). It blooms from May to June. Mt. Pinos larkspur typically occurs within chaparral, Mojavean desert scrub, and pinyon and juniper woodland communities at elevations between 3,000 and 8,000 feet. This species is endemic to
California and has been reported from Kern, Santa Barbara and Ventura counties. Eighty-eight sites with approximately 2,500 individuals were mapped in the NSR project area in 2010.

**Limestone dudleya (Dudleya calcicola).** Limestone dudleya is designated as a CRPR 4.3 plant. This species is a perennial herb in the stonecrop family (Crassulaceae). It blooms from April to August. Limestone dudleya generally occurs on carbonate substrates in chaparral and pinyon and juniper woodland communities. It is endemic to California, and has been found in Inyo, Kern, and Tulare counties. Twenty-seven sites with approximately 1,200 individuals were mapped in the NSR project area in 2010.

**Brandegee’s woolly star (Eriastrum brandegeeae).** Brandegee’s woolly star is designated as a CRPR 1B.2 and BLM Sensitive species. This species is an annual herb in the phlox family (Polemoniaceae). It blooms from April to August. Brandegee’s woolly star generally occurs in volcanic, sandy soils in chaparral and cismontane woodland. This species was considered synonymous with Tracy’s eriastrum (E. tracyi) for a time, and therefore distribution is uncertain in relation to this sister taxon. It is primarily recorded within the North Coast Ranges at elevations from 1,000 to 3,400 feet. Plants identified as Brandegee’s woollystar were found during surveys for the former Hoffman Summit Wind Project, although the proposed project area may be outside of the known geographic range. However, the specimens collected were later determined to be either Brandegee’s woollystar or an undescribed sister species. It is also possible that these specimens were Tracy’s eriastrum which was found to be abundant onsite during 2010 botanical surveys of the NSRP conducted by Garcia and Associates (GANDA).

**Tracy’s eriastrum (Eriastrum tracyi).** Tracy’s eriastrum is State-listed rare and is a BLM Sensitive species. This species is an annual herb in the phlox family (Polemoniaceae). It blooms from June to July and grows in chaparral and cismontane woodland communities, at elevations from 1,000 to 3,200 feet. Thirty-two sites with approximately 25,000 individuals were mapped in the NSR project area in 2010.

**Kern buckwheat (Eriogonum kennedyi var. pinicola).** Kern buckwheat is designated as a CRPR 1B.1 and BLM Sensitive species. This species is a mat-forming perennial buckwheat in the knotweed (Polygonaceae) family. It blooms from May to June. Kern buckwheat grows in Chaparral and Pinyon and Juniper Woodland communities at elevations between 4,400 and 6,400 feet. Kern buckwheat is endemic to Kern County, and has been reported only from Sweet Ridge and Pine Tree Canyon. Prior to surveys conducted for this project, the closest known occurrences to the proposed project area were the locations on Sweet Ridge, less than ¼ mile from the project area. One site with approximately 1,000 individuals was mapped in the NSR project area in 2010.

**Kelso Creek monkeyflower (Mimulus shevockii).** Kelso Creek monkeyflower is designated as a CRPR 1B.2 and BLM Sensitive species. This species is an annual herb in the figwort family (Scrophulariaceae). It blooms from March to May. Kelso Creek monkeyflower generally occurs in Joshua Tree woodland, and pinyon and juniper woodland communities at elevations from 2,600 to 4,400 feet. Kelso Creek monkeyflower is endemic to California, and has been found only in Kern County. The proposed project area supports suitable habitat; and the nearest known location is five miles northwest of the project area off of Kelso Valley Rd.

**Tehachapi monardella (Monardella linoides ssp. oblonga).** Tehachapi monardella is designated as a CRPR 1B.3 and BLM Sensitive plant. This species is a rhizomatous herb that belongs to the mint family (Lamiaceae). It blooms from June to August. Tehachapi monardella occurs in lower and upper montane coniferous forest and pinyon and juniper woodland at elevations from approximately 5,600 to 8,100 feet.
It is associated with decomposed granitic soils but is also found in roadside disturbed areas. Two sites with 31 individuals were mapped in the NSR project area in 2010.

**Fragile pentachaeta (Pentachaeta fragilis).** Fragile pentachaeta is designated as a CRPR 4.3 plant. This species is an annual herb in the Sunflower family (Asteraceae). It blooms from March to June. Fragile pentachaeta occurs on loose sandy or loamy soils in chaparral, foothill grasslands, and lower montane coniferous forest communities at elevations from approximately 100 to 7,000 feet. This species is endemic to California, and has been reported in Kern, Madera, Merced, Monterey, Santa Barbara, San Luis Obispo, Tuolumne, Ventura and Los Angeles counties. Twelve sites with approximately 20,000 individuals were mapped in the NSR project area in 2010.

**Adobe yampah (Perideridia pringlei).** Adobe yampah is designated as a CRPR 4.3 species. This species is a perennial herb in the carrot family (Apiaceae). It blooms from April to July. Adobe yampah occurs in chaparral, cismontane woodland, coastal scrub, and pinyon and juniper woodland communities at elevations ranging from 1,000 to 7,000 feet. Seventy-nine sites with approximately 10,000 individuals were mapped in the NSR project area in 2010.

**Hubby’s phacelia (Phacelia cicutaria var. hubbyi).** Hubby’s phacelia is designated as a CRPR 4.2 species. This species is an annual herb that belongs to the waterleaf family (Hydrophyllaceae). It blooms from April to June. Hubby’s phacelia occurs in chaparral, coastal scrub, and valley and foothill grassland plant community types, most often on gravelly, rocky, and talus slopes. Known occurrences range in elevation from sea level to 3,300 feet. Hubby’s phacelia is endemic to California and has been reported in Los Angeles, Ventura, Santa Barbara, Kern, and Orange counties. The proposed project area supports suitable habitat, and the nearest known location is five miles east of the project area in Jawbone Canyon.

**Charlotte’s phacelia (Phacelia nashiana).** Charlotte’s phacelia is designated as a CRPR 1B.2 and BLM Sensitive species. This species is an annual herb that belongs to the waterleaf family (Hydrophyllaceae). It blooms from March to June. Charlotte’s phacelia occurs in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland at elevations from approximately 1,900 to 7,300 feet. This species is typically associated with sandy to rocky soils. Its distribution includes the Mojave Desert, Tehachapi Mountains, and southern portions of the Sierra Nevada. This species was not detected on site during botanical surveys, but the proposed project area supports suitable habitat. The nearest known location is six miles east of the project area, in Jawbone Canyon.

**Piute Mountains jewel-flower (Streptanthus cordatus var. piutensis).** Piute Mountains jewel-flower is designated as a CRPR 1B.2 and BLM Sensitive species. This species is a perennial herb in the mustard family (Brassicaceae). It blooms from May to July. Piute Mountains jewel-flower occurs in broadleaved upland forest, closed-cone coniferous forest, and pinyon and juniper woodland communities, along roadbanks, cliffs, rocky outcrops, and sometimes on metamorphic red clay soils. Known occurrences range in elevation from 1,000 to 6,500 feet. Piute Mountains jewel-flower is endemic to California, and has only been reported from Kern County. Prior to surveys conducted for this project, the closest occurrence of this variety to the project area was near Cache Peak, less than one mile east. Four sites with a total of 68 individuals were mapped in the NSR project area in 2010.

**Triteleia – undescribed new species (Triteleia species novo).** Plants that appear to be of an undescribed new species of the genus Triteleia were found during the 2010 botanical surveys conducted by GANDA within the project area. Triteleia is a genus of bulb-forming perennial herbs in the Lily family. The plants in question do not correspond to any taxon described in The Jepson Manual (Hickman 1993). Herbarium
specimens of this *Triteleia* have been sent to an expert for evaluation. Photographs of this plant and its habitat are included in Appendix C of the *North Sky River Wind Energy Project Biological Resources Report* (CH2M Hill, 2010).

The conservation status of this *Triteleia* is undetermined, but if it does constitute an undescribed species, it would likely receive an immediate conservation status review by the California Native Plant Society and the California Natural Diversity Database, and it would likely qualify for protection under CEQA. According to the CEQA Guidelines, Section 15380, a plant species qualifies for protection under CEQA, even if it is not State-listed, if: 1) its survival and reproduction in the wild are in immediate jeopardy from one or more causes, or 2) if it exists in such small numbers throughout a significant portion of its range that it may become endangered if its environment worsens, or 3) if it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The undescribed *Triteleia* was found on BLM land, in one location of approximately 0.15 acre, with 75 individuals. The site is on a ridge, within an opening in singleleaf pinyon woodland. The plants were growing within a shallow depression, in gravelly clay soil. Associated species include: desert mariposa lily, Sandberg bluegrass, brome grasses, and the special-status plant, adobe yampah.

### Special-Status Wildlife Species Accounts

#### AMPHIBIANS

**Tehachapi slender salamander (Batrachoseps stebbinsi).** The Tehachapi slender salamander is State-listed as threatened and is a BLM Sensitive species. This species inhabits moist canyons and ravines in oak and mixed woodlands. It is typically found under rocks, logs, bark, and other debris in moist areas, especially in areas with much leaf litter, often near talus slopes. The geographic range of this species appears to consist of two potentially disjunct regions: the Caliente Creek/Caliente Canyon watershed in the southern Piute Mountains (five miles from the western edge of the proposed project), and the northern slopes of the Tehachapi Mountains from Tejon Canyon southwest to Fort Tejon. While this species has not been recorded on site, the proposed project area supports suitable habitat, especially in the western portion.

**Yellow-blotched salamander (Ensatina eschscholtzii croceator).** The yellow-blotched salamander is designated as a CDFG Species of Special Concern and a BLM Sensitive species. This species is typically found in litter and debris of oak woodland, pine-dominated open woodland, and fir-dominated open forest. Its geographic range includes the entire known range of the Tehachapi slender salamander and extends from the southern Sierra Nevada through the Tehachapi Mountains and Transverse Range in Tulare, Kern, and Ventura counties. Yellow-blotched salamanders occur at all known Tehachapi slender salamander localities and both species have been found beneath the same cover object at some sites. While this species has not been recorded on site, the proposed project area supports suitable habitat, especially in the western portion.

#### REPTILES

**Silvery legless lizard (Anniella pulchra pulchra).** The silvery legless lizard is designated as a CDFG Species of Special Concern. This species typically occurs in sparsely vegetated areas of beach dunes, chaparral, woodland, desert scrub, sandy washes, and riparian woodland from sea level to approximately 5,100 feet in elevation. Soil moisture is essential and this species will often seek refuge in areas consisting of adequate leaf litter or other cover features, such as rocks and logs. The primary diet of the silvery
Legless lizard includes larval insects, beetles, termites, and spiders. Much of this species’ habitat has been lost due to agriculture and other human development. The spread of non-native vegetation has also contributed to the decline of suitable habitat for the silvery legless lizard. This species was observed on site during 2010 surveys for the NSRP.

**Desert tortoise (Gopherus agassizii).** The desert tortoise is listed as threatened pursuant to the federal and California ESA. The desert tortoise is widely distributed in the Mojave, Sonoran, and Colorado deserts from below sea level to approximately 7,220 feet, typically in desert scrub, desert wash, and Joshua tree habitats. They are most commonly found in creosote bush communities but can be found in areas of extensive lava formations, alkali flats and most other desert habitats. The desert tortoise is most active during spring and fall. Desert tortoises are herbivorous, feeding on annual forbs and grasses. This species requires friable soil for burrow construction. The practice of taking the animals as pets and the indiscriminate use of off-road vehicles are primary factors that contribute to population declines. Desert tortoises, burrows, carcasses, scat, and other sign were identified along Jawbone Canyon and Gold Canyon Roads during surveys conducted for the NSRP in 2010. Suitable habitat also occurs within the eastern portion of the project area.

Critical habitat for the desert tortoise was designated on 8 February, 1994 (59 FR 5820). This project is not within or near desert tortoise designated critical habitat.

**Coast horned lizard (Phrynosoma blainvillii).** The coast horned lizard is designated as a CDFG Species of Special Concern and a BLM Sensitive species. This species inhabits open areas of sandy soil and sparse vegetation cover in valleys, foothills and semiarid mountains from sea level to roughly 8,000 feet in elevation. Coast horned lizard typically occurs in grassland, coniferous forest, woodland, and chaparral, with open areas and patches of loose soil. It is also found in lowlands along sandy washes. This species is frequently associated with ant colonies, which serve as a primary food source. Breeding generally occurs from late April to early May. Coast horned lizards have been threatened and eliminated from many areas due to habitat destruction from human development and agriculture. Additionally, the spread of non-native ant species, which displace native ant food sources, has contributed to the decline of this species. This species has been observed at several locations throughout the proposed project site.

**BIRDS**

**Cooper’s hawk (Accipiter cooperii).** The Cooper’s hawk is designated as a CDFG Watch List species. This species typically breeds between March and August in the southern Sierra Nevada foothills, New York Mountains, Owens Valley, and other local areas in southern California. Its range includes most of California’s woodland areas. Threats to the Cooper’s hawk are not well documented, but can likely be attributed to loss of habitat. Two individuals were observed during 2010 surveys for the NSRP, and one active Cooper’s hawk nest was observed on site during surveys for the Hoffman Summit Wind Energy Project. The entire proposed project area constitutes suitable foraging habitat for this species.

**Sharp-shinned hawk (Accipiter striatus).** The sharp-shinned hawk is designated as a CDFG Watch List species. This species is a fairly common migrant and winter resident throughout California, except in areas with deep snow. Sharp-shinned hawks prefer riparian areas, but are not restricted to these habitats. Breeding habitats include ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine. This species winters in all habitats, with the exception of alpine open prairie, and bare deserts. In California, no evidence exists of a persistent population decline. This species was recorded on site during surveys for the Hoffman Summit Wind Energy Project.
Golden eagle (*Aquila chrysaetos*). The golden eagle is designated as a CDFG fully protected species and Watch List species, and a USFWS Bird of Conservation Concern. It is also protected under the federal Bald and Golden Eagle Protection Act. This species is an uncommon resident and migrant in California. Golden eagles in California prefer open habitats, such as grasslands, shrublands, and open woodlands, but also use open coniferous forests, alpine meadows, and riparian habitats. Potential breeding habitat occurs throughout the state, with the exception of the interior Central Valley. Urban and agricultural development has been identified as primary threats to this species. Fifteen golden eagle nests were detected within 10 miles of the proposed project, with two nest sites within 4 miles of the proposed project boundary. Of the nests found near the project site, six were active during spring 2011 aerial surveys. This species is a resident within the Tehachapi and Piute Mountains. Over 10 sightings of golden eagles in the project area have occurred during surveys and incidentally since May 2010. This species was also recorded on site in 2006 and 2007 during avian surveys conducted for the Hoffman Summit Wind Energy Project.

Long-eared owl (*Asio otus*). The long-eared owl is designated as CDFG Species of Special Concern. This species is an uncommon year-round resident throughout California, with the exception of the Central Valley and southern deserts where it is an uncommon winter visitor. Habitat requirements for this species include riparian thickets, live oak woodlands, or other dense stands of trees, which are used for roosting and nesting. Breeding typically occurs from valley foothill hardwood woodlands up to ponderosa pine habitats. Long-eared owls usually hunt in open areas, but will also use woodland and forested habitat occasionally. All reasons for the decline of this species are not completely understood; however, it is likely that urban development and agriculture are factors. This species was recorded on site during surveys for the Hoffman Summit Wind Energy Project. Although suitable breeding habitat is limited on site, this species may forage throughout the proposed project area.

Burrowing owl (*Athene cunicularia*). The burrowing owl is designated as a CDFG Species of Special Concern, a BLM Sensitive species, and a USFWS Bird of Conservation Concern. The burrowing owl is a resident species in California that typically occurs in open, dry grassland and desert habitat, such as pinyon and juniper woodland. In California, this species is found in close association with California ground squirrels (*Spermophilus beecheyi*), as owls will often use abandoned ground squirrel and other small mammal burrows as roosting and nesting sites. Major factors attributing to the decline of burrowing owls include the conversion of grassland and other suitable habitats to agriculture and other development, the poisoning of ground squirrels, and collisions with automobiles. Potential habitat exists primarily within the central portion of the project area. Protocol-level surveys conducted for the NSRP in 2010 were negative for owls and their sign. The nearest record for this species is 9.7 miles east of the proposed project site. There is a moderate potential for this species to occur on site.

Ferruginous hawk (*Buteo regalis*). The ferruginous hawk is designated as a USFWS Bird of Conservation Concern and a CDFG Watch List species. The ferruginous hawk is an uncommon winter resident and migrant at lower elevations and open grasslands in the Modoc Plateau, Central Valley, and Coast Ranges. This species, however, is a fairly common winter resident of grasslands and agricultural areas in southwestern California. It frequents open grassland, sagebrush flat, desert scrub, low foothills surrounding valleys, and fringes of pinyon and juniper woodland habitats. Urban development is thought to be a significant contributor to loss of habitat for this species in California. Ferruginous hawk was observed during a 2009 reconnaissance survey over Butterbredt Canyon near the northeast corner of the project area, and is a winter migrant in the proposed project area. This species was also recorded on site...
in 2006 and 2007 during avian surveys conducted for the Hoffman Summit Wind Energy Project. The ferruginous hawk does not breed in the region, but suitable foraging habitat occurs throughout the entire proposed project area.

**Swainson’s hawk (Buteo swainsonii).** The Swainson’s hawk is State-listed threatened and is designated as a USFWS Bird of Conservation Concern. This species is a rare spring migrant and rare to uncommon autumnal migrant in eastern Kern County and surrounding areas in Southern California. Nesting typically occurs in tall trees adjacent to foraging habitat. Population declines are primarily attributed to loss of suitable nesting habitat. This species was observed during 2010 surveys for the NSRP and in 2007 during surveys for the Hoffman Summit Wind Energy Project. No nesting activity was identified in the proposed project study area during surveys, and this species is not known to nest in the region; however, this species frequently migrates through the area. Suitable foraging habitat occurs throughout the entire proposed project area and potential nesting habitat also occurs in tall trees near open grasslands.

**Vaux’s swift (Chaetura vauxi).** Vaux’s swift is designated as a CDFG Species of Special Concern. This species is a fairly common migrant in many areas of southern California and is a sporadically common migrant in eastern Kern County. Breeding is restricted to the Pacific Northwest and northern California. This species may fly over all habitats in the proposed project area and was identified during avian surveys in 2007.

**Northern harrier (Circus cyaneus).** The northern harrier is designated as a CDFG Species of Special Concern. This species is a permanent resident of the northeastern plateau and coastal areas of California and a less common resident of the Central Valley. In eastern Kern County, northern harriers are a fairly common winter visitor, and rare breeder. This species is frequently found in meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands, and wooded areas. Breeding populations have been reduced, particularly in southern coastal areas, due to destruction of wetland habitat, native grasslands, and moist meadows and the burning and plowing of nesting areas during early breeding cycle stages (it is a ground-nesting species). Some agricultural practices are thought to be beneficial to this species, as long as cover and nesting areas are preserved. Although northern harriers do not breed within or near the proposed project area, this species may utilize the entire proposed project area for foraging. It was detected onsite during 2010 NSRP surveys and on adjacent properties during avian surveys in 2002 (unpublished data, as reported in CH2MHill, 2010). This species was also recorded on site in 2006 and 2007 during avian surveys conducted for the Hoffman Summit Wind Energy Project.

**Olive-sided flycatcher (Contopus cooperi).** The olive-sided flycatcher is designated as a CDFG Species of Special Concern and a USFWS Bird of Conservation Concern. This species is a summer resident and migrant in California, where it breeds locally in late-successional conifer forests with open canopies. Nesting sites typically are associated with edges, openings, and natural and human-created clearings in otherwise relatively dense forests, but they also occupy semiopen forests. They forage in unobstructed airspace within openings and over forest canopies with exposed perches. This species was recorded as a migrant on site in 2007 during avian surveys conducted for the Hoffman Summit Wind Energy Project.

**Yellow warbler (Dendroica petechia).** The yellow warbler is designated as a CDFG Species of Special Concern and a USFWS Bird of Conservation Concern. This species is a common spring and autumnal migrant in suitable habitat throughout southern California, including eastern Kern County. Breeding habitat includes riparian woodlands from coastal and desert lowlands up to approximately 8,000 feet. During migration, this species is found in a variety of sparse to dense woodland and forest habitats. This
Southwestern willow flycatcher (Empidonax traillii extimus). The southwestern willow flycatcher is listed as endangered pursuant to the federal and California ESAs. At the species level, the willow flycatcher (Empidonax traillii) is State-listed endangered and is a USFWS Bird of Conservation Concern. The southwestern willow flycatcher formerly occupied riparian habitats throughout the arid southwest United States and northern Mexico, including approximately the southern third of California. Its decline is linked to the widespread loss and degradation of riparian habitats regionally and to the introduction of the brown-headed cowbird (Molothrus ater), which is a brood parasite. This locally rare subspecies of the willow flycatcher is a riparian obligate that prefers well-developed riparian gallery forests with flooded surface water or a damp understory. A neotropical migrant and insectivore, the southwestern willow flycatcher nests in willows, nettles, and lower branches of cottonwoods. Thirty-five observations of southwestern willow flycatchers were recorded during protocol surveys conducted in 2010 for the NSRP. No individuals were detected after mid-June, and no evidence of breeding was observed. This species likely migrates through the proposed project area. The nearest critical habitat unit for southwestern willow flycatchers is located along the South Fork of the Kern River, 23 miles northwest of the proposed project area. Four observations of willow flycatcher (identified only to species, not subspecies) were made during summer fixed-point bird use surveys in 2010.

California horned lark (Eremophila alpestris actia). The California horned lark is designated as a CDFG Watch List species. This common to abundant resident occurs in a variety of open habitats, usually where trees and large shrubs are absent. During winter months, California horned larks will often flock in desert lowlands. Threats to this species include habitat destruction and fragmentation. Suitable habitat for this subspecies occurs primarily throughout the central portion of the proposed project area, and this species was observed during 2010 surveys of the NSRP as well as surveys of the Hoffman Summit Wind Energy Project.

Merlin (Falco columbarius). The merlin is designated as a CDFG Watch List species. This species occurs in most of the western half of California below roughly 4,000 feet. It is a rare winter migrant in the Mojave Desert. The merlin frequents coastlines, open grasslands, savannas, woodlands, lakes and wetlands, edges, and early successional stages ranging from annual grasslands to ponderosa pine and montane hardwood-coniferous forest habitats. Although merlin are not known to breed in the region, suitable foraging habitat occurs throughout the proposed project area. This species was recorded on site in 2007 during avian surveys conducted for the Hoffman Summit Wind Energy Project.

Prairie falcon (Falco mexicanus). The prairie falcon is designated as a USFWS Bird of Conservation Concern and a CDFG Watch List species. This species ranges from the southeastern deserts northwest throughout the Central Valley and along the inner Coast Ranges and Sierra Nevada. It is an uncommon resident in open arid habitats in the interior of southern California, including the Antelope Valley. Prairie falcons primarily occur in perennial grasslands, savannas, rangelands, agricultural fields, and desert scrub areas. Nesting sites are usually located in a scrape on a sheltered ledge of a cliff overlooking a large, open area. Pesticide poisoning has been identified as a primary threat to this species. At least nine observations were recorded during 2010 surveys for the NSRP. Eight nest sites were documented within 10 miles of the proposed project during aerial surveys, and three of these were within or adjacent to the riparian habitats of the South Fork of the Kern River, 23 miles northwest of the proposed project area.
proposed project boundaries. This species was also recorded on site in 2007 during avian surveys conducted for the Hoffman Summit Wind Energy Project.

**American peregrine falcon (Falco peregrinus anatum).** The American peregrine falcon is designated as a USFWS Bird of Conservation Concern and by the CDFG as a fully protected species in California. The species occurs in a variety of habitat worldwide, but requires protected cliffs and ledges for nesting cover. Wintering ranges for this subspecies include the greater Central Valley and portions of southern California, while yearlong ranges occur along the coast north of Santa Barbara and the Sierra Nevada. The American peregrine falcon breeds from early March to late August. The primary decline of peregrine falcon has been attributed to pesticide contamination. This species has been observed migrating through the proposed project area.

**California condor (Gymnogyps californianus).** The California condor is listed as endangered pursuant to the federal and California ESAs and is designated by the CDFG as a fully protected species in California. The California condor is a permanent resident of the mountain ranges surrounding the southern San Joaquin Valley, including the Coast Ranges from Santa Clara County south to Los Angeles County, the Transverse Ranges, Tehachapi Mountains, and southern Sierra Nevada. Nesting habitats range from scrubby chaparral to forested montane regions subject to winter snowfalls and California condors requires caves, cliffs, or large cavity tree trunks for nest sites. Typically, the California condor forages in relatively open grassland regions for carrion of larger mammals, such as cattle, sheep, and deer. In fact, dead cattle have provided the most important food source in recent decades. However, this species has also recently been reported feeding on the smaller carcasses of jackrabbits. Threats to this species have primarily been due to poisoning, shooting, and lead exposure. In the 1980s, all condors were brought into captivity and captive breeding populations were established with the goal of restoring wild populations. Many condors released as part of the California condor recovery program have been fitted with Geographic Positioning System (GPS) or satellite tags that provide biologists with periodic data on the location of tagged birds, and currently about half of the wild population in California wear these tags. The collected data show that many condors forage widely in Southern California, including areas in the vicinity of the proposed project. This species was not detected during avian surveys for the proposed project and for the Pine Tree Wind Project, located adjacent to the southern boundary of the proposed project area (EDAW, 2004). However, most of the proposed project area supports foraging habitat, especially in areas of intensive grazing. Potential roosting habitat is located in rock outcrops and large trees such as gray pines on site. Five records of radio-tracked condors have been located within 10 miles of the proposed project in the last several years, with the nearest one five miles to the east. The project site is located just outside the historic range for the California condor. However, the U.S. Fish and Wildlife Service is concerned that as the reintroduced population grows, it is possible that California condor could expand their foraging activities into adjacent areas with suitable foraging habitat (Kern County, 2009).

Critical habitat for the California condor was designated on 24 September, 1976 (41 CFR 41914). This project is not within or near California condor designated critical habitat.

**Yellow-breasted chat (Icteria virens).** The yellow-breasted chat is designated as a CDFG Species of Special Concern. In California, yellow-breasted chats nest locally in riparian habitats throughout the state, including several widely-scattered desert locations. They are known to breed at the South Fork Kern River Preserve near Weldon, approximately 20 miles north of the proposed project. They are uncommonly observed in California during spring migration, and rarely observed during fall migration.
In southwestern deserts, yellow-breasted chats nest in riparian woodland, forest, and scrub dominated by cottonwoods, willows, arrow weed (Pluchea sericea), salt-cedar (Tamarix spp.), and mulefat. Western populations are generally stable, but some local declines have occurred in California as a result of urbanization, flood control activities, and perhaps cowbird parasitism. This species was recorded on site during surveys for the Hoffman Summit Wind Energy Project.

**Loggerhead shrike (Lanius ludovicianus).** The loggerhead shrike is designated as a USFWS Bird of Conservation Concern and a CDFG Species of Special Concern. This species winters and is also a resident throughout the lowlands and foothills of California. The loggerhead shrike occurs in open foothill and valley woodlands and often forages along edge habitats, with particular preference for shrubs adjacent to grasslands. This species is still fairly common in appropriate habitat in many areas of California and western North America. This includes many areas of the Mojave Desert, including the Antelope Valley. Loggerhead shrikes occur year-round and occupy all habitats in the proposed project area, where they breed, and are probably composed of a mixture of resident and migrant individuals. At least 50 observations of loggerhead shrikes were recorded during 2010 surveys for the NSRP, and this species was also recorded during reconnaissance surveys in 2009. It was recorded on site in 2006 and 2007 during avian surveys conducted for the Hoffman Summit Wind Energy Project.

**Brown-crested flycatcher (Myiarchus tyrannulus).** The brown-crested flycatcher is designated as a CDFG Watch List species. Brown-crested flycatchers primarily occur in riparian groves of cottonwood, mesquite, and willow, which afford suitable nesting sites, but often forage in adjacent desert scrub or plantings of saltcedar. In Kern County, this species has been reported as a migrant visitor. Declines to brown-crested flycatcher populations have been attributed to the destruction of desert riparian habitat and competition with European starlings (Sturnus vulgaris) for nest cavity sites. One pair was identified on site during 2010 surveys of the NSRP.

**Osprey (Pandion haliaetus).** The osprey is designated as a CDFG Watch List species. This species is widespread in the United States and Canada. In California, it breeds primarily in northern California and winters along the coast and some inland areas within southern California. Breeding habitat is located near large bodies of shallow water with adequate supplies of accessible fish. Wintering habitat is also associated with large shallow reservoirs, lakes, rivers, etc. with available fish. This species was recorded on site during surveys for the Hoffman Summit Wind Energy Project. However, no breeding or wintering habitat occurs on site and it likely passes through as a migrant.

**American white pelican (Pelecanus erythrorhynchos).** The American white pelican is designated as a CDFG Species of Special Concern. American white pelican breeds primarily on isolated islands in freshwater lakes and preferred nesting sites include large stands of tall, emergent vegetation adjacent to large lakes. Foraging typically occurs along inland marshes, lakes, or rivers, favoring shallow waters and includes mostly fish; however, insects and other invertebrates, amphibians, and plants are also sometimes consumed. The destruction of wetlands and introduction of pesticides into watersheds have been identified as major factors to the decline of this species. Fourteen observations of this species were recorded during 2010 surveys for the NSRP. No breeding or foraging habitat occurs in the proposed project area. However, this species is known to migrate through the proposed project region.

**Summer tanager (Piranga rubra).** The summer tanager is designated as a CDFG Species of Special Concern. Summer tanagers are rare, but regular migrants and winter visitors throughout much of southern California, except for the mountain areas. It breeds in southern California in riparian woodland or forest.
dominated by cottonwoods (*Populus* spp.) and willows (*Salix* spp.), usually in a climax stage. This species was observed during 2010 surveys of the NSRP.

**White-faced ibis (Plegadis chihi).** The white-faced ibis is designated as a CDFG Watch List species. This species inhabits primarily freshwater wetlands, especially cattail (*Typha* spp.) and bulrush (*Scirpus* spp.) marshes, although it feeds in flooded hay meadows, agricultural fields, and estuarine wetlands. It breeds and winters locally in central and southern California. This species was recorded on site during surveys conducted for the Hoffman Summit Wind Energy Project.

**Vermillion flycatcher (Pyrocephalus rubinus).** The vermilion flycatcher is designated as a CDFG Species of Special Concern. The vermilion flycatcher breeds locally in southeastern California, which is at the northern extent of its breeding range. In native habitats, trees used for nesting range from large cottonwoods, sycamores (*Platanus* spp.), and even oaks (*Quercus* spp.) to more mid-sized trees such as willow and mesquite. It also breeds in parkland or golf courses. This species was recorded on site during surveys for the Hoffman Summit Wind Energy Project.

**Bendire's thrasher (Toxostoma bendirei).** Bendire’s thrasher is designated as a CDFG Species of Special Concern, a BLM Sensitive species, and a USFWS Bird of Conservation Concern. The breeding season distribution of Bendire’s thrasher extends from southeastern California (almost entirely within the Mojave Desert), southern Nevada, southern Utah, and southeastern Colorado, south through Arizona and western New Mexico to Sonora, northern Sinaloa, and extreme northern Chihuahua. In the northern and western Mojave Desert, Bendire’s thrashers are restricted to widely scattered locations supporting either Joshua trees (*Yucca brevifolia*), other species of yuccas, or cholla cactus (*Opuntia* spp.). Large areas of the desert, especially in the western Mojave Desert, support one or more of these plant species but lack thrasher populations. Breeding populations are patchily distributed throughout southern California. The closest one to the proposed project is located just to the north, in the vicinity of southern Kelso Valley and Butterbredt Springs, where an ACEC was established by the BLM for protection of this species. There are no known records of this species in the proposed project area. However, suitable habitat exists.

**Le Conte's thrasher (Toxostoma lecontei).** LeConte’s thrasher is designated as a USFWS Bird of Conservation Concern and a CDFG Watch List species. This species is an uncommon to rare, local resident in southern California deserts from southern Mono County south to the Mexico border, and in western and southern San Joaquin Valley. It primarily occurs in open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats; however, it is also known to use Joshua tree habitat with scattered shrubs of the western San Joaquin Valley and Mojave Desert. Le Conte’s thrasher commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat. This species is highly vulnerable to off-road vehicle activities and human development, among other disturbances. Le Conte’s thrashers were observed on site during 2010 surveys for the NSRP and during surveys for the Hoffman Summit Wind Energy Project. There are numerous CNDBB records of this species near the proposed project area in Butterbredt Canyon. Records describe habitat as Joshua tree woodland along a desert wash from 4,000 to 4,700 foot elevation. This species was also detected on the Pine Tree Wind Development Project site, immediately south of the proposed project (EDAW, 2004).

**Least Bell's vireo (Vireo bellii pusillus).** The least Bell’s vireo is listed as endangered pursuant to the federal and California ESAs. Historically, the least Bell’s vireo was a common to locally abundant species in lowland riparian habitat, ranging from coastal southern California through the Sacramento and San Joaquin Valleys. Populations also occurred in the foothill streams of the Sierra Nevada and Coast Ranges,
and in Owens Valley, Death Valley, and scattered locations in the Mojave Desert. At the time that it was listed under the federal ESA in 1986, it had been extirpated from most of its historic breeding range, and numbered just 300 pairs statewide. The remaining birds were located in eight counties south of Santa Barbara, with the majority in San Diego County. In the years following its listing, the least Bell’s vireo population in California increased exponentially and it is recolonizing its historic breeding range. The least Bell’s vireo arrives in Southern California in mid-March to early April and leaves for its wintering ground in late September. During this period, the species nests in riparian scrub and woodland habitats that provide dense foliage. Individuals occasionally nest in non-native trees or shrubs adjacent to high quality habitat where large populations occur in major riparian corridors. Riparian habitat throughout the historic range of the least Bell’s vireo has been destroyed or fragmented by urban development and water diversion projects, prompting the widespread decline in this species in the past century. The invasion of exotic plants into the riparian habitats of Southern California, most notably giant reed (*Arundo donax*), has heavily degraded much of the remaining suitable habitat for least Bell’s vireo. Other threats to this species include runoff from agricultural fields and roadways, traffic noise, feral pets, recreational use of habitat, and increased foraging habitat for brown-headed cowbird (a nest parasite). Recent conservation and riparian restoration efforts have succeeding in increasing the numbers of least Bell’s vireo in Southern California. Least Bell’s vireos were not detected during protocol surveys conducted in 2010 for the NSRP. However, Bell’s vireos identified only to the species level were recorded on site during surveys for the Hoffman Summit Wind Energy Project, and it is likely that these were migrating least Bell’s vireos. While suitable habitat occurs within the proposed project area, primarily along Cottonwood Creek and at some springs, this species is typically known from much lower elevations. Critical habitat for the least Bell’s vireo does not occur in Kern County.

**Yellow-headed blackbird (*Xanthocephalus xanthocephalus*).** The yellow-headed blackbird is designated as a CDFG Species of Special Concern. It occurs in California primarily as a migrant and summer resident, where it breeds almost exclusively in marshes with tall emergent vegetation, such as tules (*Scirpus* spp.) or cattails (*Typha* spp.), generally in open areas and edges over relatively deep water. Because of the need for deeper water, breeding marshes often are on the edges of water bodies such as lakes, reservoirs, or larger ponds. Yellow-headed blackbirds breed at scattered sites in the Mojave Desert. In eastern Kern County, they breed primarily in an artificial marsh in a California City urban park but also near Cantil. This species was recorded on site during surveys for the Hoffman Summit Wind Energy Project.

**MAMMALS**

**Pallid bat (*Antrozous pallidus*).** Pallid bat is designated as a CDFG Species of Special Concern and a BLM Sensitive species. It is locally common at low elevations in California. It occurs throughout the state, with the exceptions of the high Sierra Nevada from Shasta County to Kern County and the northwest corner from Del Norte and western Siskiyou Counties to northern Mendocino County. The pallid bat is found in a variety of habitats, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests at higher elevations. The species is most common in open, dry habitats with rocky areas for roosting. The primary threat to the pallid bat is the disturbance to roosting sites. This species was identified on site acoustically during surveys for the former Hoffman Summit Wind Energy Project. Potentially suitable foraging and roosting habitat, including abandoned mine shafts, rocky outcrops, and cliff edges, is found throughout much of the proposed project area. Mid-frequency
calls typical of this species were recorded during Anabat surveys for the NSRP at Cottonwood Creek and Mud Springs.

**Townsend’s big-eared bat** (*Corynorhinus townsendii*). Townsend’s big-eared bat is designated as a CDFG Species of Special Concern and a BLM Sensitive species. This species occurs throughout California, but its distribution is not well known. Townsend’s big-eared bat is found in most habitats, with the exception of sub-alpine and alpine areas. This species requires caves, mines, tunnels, buildings, or other structures for roosting. Threats to this species are not well documented; however, it is likely that the disturbance to roosting sites and loss of habitat have contributed to decreasing numbers. Potentially suitable foraging and roosting habitat, including abandoned mine shafts, rocky outcrops, and cliff edges, is found throughout much of the proposed project area. The nearest CNDDB record is approximately two miles northwest of the proposed project area. Guano was detected in Simon Mine; adjacent habitat was characterized as oak woodland. Another mine in the vicinity is known to support this species and abandoned mines in the project area could provide habitat for this species.

**Spotted bat** (*Euderma maculatum*). The spotted bat is designated as a CDFG Species of Special Concern and a BLM Sensitive species. This species is considered to be one of the rarest mammals in North America. Spotted bat is known to occur in a limited number of localities, mostly from the foothills, mountains, and desert regions of southern California. Habitats occupied by spotted bats include arid deserts, grasslands, and mixed conifer forests from below sea level to above 10,000 feet in elevation. This species is most commonly detected at sites with adequate roosting habitat, such as cliffs, near water, and along washes. The nearest CNDDB record is approximately two miles east of the proposed project area at Red Rock Canyon State Park. Habitat was characterized as steep sandstone cliffs along a wash adjacent to desert riparian and Joshua tree woodland. The cliff edges found along Jawbone Canyon and other locations within the proposed project area provide potential habitat for this species. Very low-frequency calls typical of this species were recorded during Anabat surveys at Cottonwood Creek and Mud Springs.

**Western red bat** (*Lasiurus blossevillii*). The western red bat is designated as a CDFG Species of Special Concern. This species is locally common in some areas of California, occurring from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade crest and deserts. The winter range includes low-lying California coastal areas south of San Francisco Bay. Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests, while foraging habitat includes a wide variety of habitats, such as grasslands, shrublands, open woodlands, forests, and croplands. This species was recorded on site during surveys for the Hoffman Summit Wind Energy Project.

**Western small-footed myotis** (*Myotis ciliolabrum*). The western small-footed myotis is designated as a BLM Sensitive species. This species inhabits a wide variety of habitats, primarily in relatively arid wooded and brushy uplands near water. It roosts in caves, buildings, mines, crevices, and occasionally under bridges and under bark. Western small-footed myotis is common in arid uplands. Potential suitable habitat in the project area may include abandoned mine shafts, and rocky outcrops and cliff edges as well as Joshua tree and pinyon-juniper woodlands. Suitable water bodies are limited in the project area but may include cattle stockponds and Cottonwood Creek. High-frequency calls typical of *Myotis* spp. were recorded during Anabat surveys at Cottonwood Creek and Mud Springs.

**Long-eared myotis** (*Myotis evotis*). The long-eared myotis is designated as a BLM Sensitive species. This species is distributed across the western third of the United States and southern Canada, and is highly associated with forest habitat. In California, it is found in a number of habitats from lower-elevation oak...
woodlands to mid-elevation mixed conifer forest and higher elevation coniferous forest. It is generally absent from the Central Valley and desert regions. This species roosts under loose bark, in hollow trees, in rock crevices, in fissures in clay banks, and sometimes in caves, mines and buildings. Potential suitable habitat in the project area may include abandoned mines as well as Joshua tree and pinyon-juniper woodlands. Suitable water bodies are limited in the project area but may include cattle stockponds and Cottonwood Creek. Mid-frequency calls typical of this species were recorded during Anabat surveys at Cottonwood Creek and Mud Springs.

**Fringed myotis (Myotis thysanodes).** The fringed myotis is designated as a BLM Sensitive species. This species is widely distributed across the western third of the United States, is found in most of Mexico, and reaches into southern British Columbia. In California, the species is found through most of the state, but the majority of known localities are on the west side of the Sierra Nevada. Fringed myotis uses open habitats, early successional stages, streams, lakes, and ponds as foraging areas. It roosts in caves, mines, buildings, and crevices. This species was recorded on site during surveys for the Hoffman Summit Wind Energy Project, and high-frequency calls typical of *Myotis* spp. were recorded during Anabat surveys for the NSRP at Cottonwood Creek and Mud Springs.

**Yuma myotis (Myotis yumanensis).** The Yuma myotis is designated as a BLM Sensitive species. This species inhabits a variety of open habitats, including woodlands, in close proximity to water sources. It roosts in buildings, mines, caves, or crevices, abandoned swallow nests, and under bridges. Yuma myotis was recorded on site during surveys for the Hoffman Summit Wind Energy Project. Potential suitable habitat in the project area may include abandoned mine shafts, and rocky outcrops and cliff edges. Suitable water bodies are limited in the project area but may include cattle stockponds and Cottonwood Creek. High-frequency calls typical of *Myotis* spp. were recorded during Anabat surveys for the NSRP at Cottonwood Creek and Mud Springs.

**San Joaquin pocket mouse (Perognathus inornatus inornatus).** The San Joaquin pocket mouse is designated as a BLM Sensitive species. This species inhabits dry, open grasslands or scrub areas on fine-textured soils between 1100 and 2000 ft in the Central and Salinas valleys. San Joaquin pocket mouse was recorded on site during surveys for the Hoffman Summit Wind Energy Project.

**American badger (Taxidea taxus).** American badger is designated as a CDFG Species of Special Concern. This species is an uncommon, permanent resident throughout most of California, with the exception of the northern North Coast area. American badgers are most abundant where friable soils occur in drier, open stages of most shrub, forest, and herbaceous habitats. Indiscriminate trapping and persistent use of poisons are likely the most common causes of decline for this species. Although no individuals were observed during focused surveys of the NSRP site in 2010, sign (forage holes, burrows, tracks, scat, and fresh soil displacement indicating recent digging) was abundant within the site and along access roads. Fifteen burrows were identified that were active or showed signs of recent use. Although not recently surveyed for badger, the JWEP site also contains suitable habitat.

**Desert kit fox (Vulpes macrotis arsipus).** While the desert kit fox is not listed as a special-status species by the State of California or the USFWS, it is protected under Title 14, California Code of Regulations (Title 14, Section 460). Kit foxes are primarily nocturnal, and inhabit open level areas with patchy shrubs. Friable soils are necessary for the construction of dens, which are used throughout the year for cover, thermoregulation, water conservation, and rearing pups. Kit foxes typically produce one litter of
about four pups per year, with most pups born February through April. This species was recorded on site during surveys for the Hoffman Summit Wind Energy Project.

**Mohave ground squirrel** (*Xerospermophilus mohavensis*). Mojave ground squirrel is listed as threatened pursuant to the California ESA. The range for this species is restricted to the Mojave Desert in San Bernardino, Los Angeles, Kern, and Inyo Counties. Mohave ground squirrels typically occur in open desert scrub, alkali desert scrub, and Joshua tree woodland habitats. Primary threats to this species include urban development, off-road vehicle use, and conversion of suitable habitat to agricultural uses. Protocol surveys for this species have not been conducted for the proposed project, but some potential habitat occurs on site in the northern portion of the project area. Suitable habitat occurs along access roads (Jawbone Canyon Road), and several records exist from Jawbone Canyon and Butterbredt Springs (ranging from 1.5 to 7 miles from the eastern border of the proposed project site.) The proposed project area is within the extreme western extent of the species’ range.

The NSRP Biological Technical Report (CH2M Hill, 2010) noted that this species was detected on site (see Table 2 of Appendix A). However, the applicant later stated that this was an erroneous report, and that the sighting referred to in the table was the CNDDB record from Butterbredt Canyon (3 miles northeast of the nearest proposed wind turbine location).