

**Table 1. CNDDDB Occurrence Overlay for the Moonridge Quadrangle**

Species	Federal/ State Status	CNPS Status	Typical Habitat	Occurrence Potential	Bloom Period
<i>Antennaria marginata</i> white-margined everlasting	N / S1.3	2 / 3-1-1	Grows in dry woods of lower montane coniferous forest and upper montane coniferous forest between 2120-3330m.	This species was not encountered on the site. Occurrence potential is moderate.	May - July
<i>Arabis parishii</i> Parish's rock cress	N / S2.1	1B / 2-2-3	Generally found in pebble plains on clay or limestone soil with quartzite cobbles between 5800 and 9500 feet (1770-2900m).	This species was not encountered on the site. Occurrence potential is low.	April - May
<i>Arenaria ursina</i> Big Bear Valley sandwort	T / S2.1	1B / 2-2-3	Grows on mesic, rocky sites in pebble plain, pinyon and juniper woodland habitats. Endemic to the Big Bear area in San Bernardino County between 5,700 to 9,500 feet (1750-2900m).	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is low.	June - July
<i>Astragalus lentiginosus</i> <i>var sierrae</i> Big Bear Valley milk-vetch	N / N	1B / 2-2-3	Grows on sandy and gravelly soils in stony meadows, open pinewoods and mojave desert scrub between 5,900 and 8,600 feet(1800-2600m).	This species was not encountered on the site. Occurrence potential is low.	April - July
<i>Astragalus leucolobus</i> Big Bear Valley woollypod	N / S2.2	1B / 2-2-3	Grows in dry pine woods, on gravelly knolls among sagebrush and on stony lake shores in the pine belt between 5,400 and 8,300 feet (1670-2515m).	This species was not encountered on the site. Occurrence potential is moderate.	May - July
<i>Botrychium crenulatum</i> scalloped moonwort	SC / S2.2	2 / 2-2-1	Grows in moist meadows and near creeks between 4,900 and 8,800 feet (1500-2670m).	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is very low.	N / A
<i>Castilleja cinerea</i> ash-gray indian paintbrush	T / S2.2	1B / 2-2-3	Grows in clay openings and often in meadow edges of pebble plains, upper montane coniferous forest, mojave desert scrub, meadows, pinyon juniper woodland. Endemic to the San Bernardino Mountains between 5,900 and 9,300 (1800-2835m).	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is very low.	May - August
<i>Castilleja lasiorhyncha</i> San Bernardino Mountains owl's-clover	N / S2.2	1B / 2-2-3	Grows on mesic soils in open areas of stream and meadow margins and in vernal wet areas.	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is low.	June - Sept.

Species	Federal/ State Status	CNPS Status	Typical Habitat	Occurrence Potential	Bloom Period
<i>Charina bottae umbratica</i> southern rubber boa	SC / T		Found in the vicinity of streams or in wet meadows. Requires loose, moist soil for burrowing and seeks cover in rotting logs, and hibernates in rock outcroppings.	This species was not encountered on the site. The creek area is not well shaded, is not wet year round and does not provide logs or substantial duff layers for cover. Occurrence potential is low.	N / A
<i>Dudley abramsii</i> ssp. <i>affinis</i> San Bernardino Mountains dudleya	N / S2.2	1B / 2-2-3	Grows on granitic, quartz and rarely limestone outcrops in upper montane coniferous forests, pinyon-juniper woodlands and pebble plains.	This species was not encountered on the site. Occurrence potential is low.	April - June detectable year- round
<i>Eriogonum kennedyi</i> var. <i>austromontanum</i> southern mountain buckwheat	T / S2.2	1B / 2-2-3	Usually found in pebble plain habitats, but also may be found in lower montane coniferous forest. Endemic to San Bernardino County between 5,700 and 7,800 feet (1755-2375m).	This species was not encountered on the site. Occurrence potential is low.	July - August
<i>Gentiana fremontii</i> moss gentian	N / S2.3	2 / 3-1-1	Grows in wet mountain meadows in upper montane coniferous forest between 2400-2700 m. In California, it is known only from San Bernardino County.	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is low.	July - August
<i>Gilia leptantha</i> ssp. <i>leptantha</i> San Bernardino Gilia	N / S2.3	1B / 2-1-3	Grows on sandy or gravelly sites in lower montane coniferous forest between 4,900 and 7,700 feet (1500-2350m) largely in the yellow pine forests of the upper Santa Ana River system of the San Bernardino Mountains.	The site is not in the yellow pine forests of the upper Santa Ana River system. This species was not encountered on the sites. Occurrence potential is low.	June - August
<i>Horkelia wilderae</i> Barton Flats horkelia	N / S1.1	1B / 3-3-3	Grows on rocky, north aspects in openings that hold persistent snowdrifts in lower montane coniferous forest, upper montane coniferous forest and chaparral habitats. Endemic to San Bernardino County between 6,700 and 9,800 feet (2060-3000m).	This species was not encountered on the site. Occurrence potential is low.	May - August
<i>Ivesia argyrocoma</i> silver-haired ivesia	N / S2.2	1B / 2-2-2	Found in pebble plains and meadows in upper montane coniferous forests.	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is low.	June - August

Species	Federal/ State Status	CNPS Status	Typical Habitat	Occurrence Potential	Bloom Period
<i>Lesquerella kingii</i> spp. <i>bernardina</i>  San Bernardino Mountains bladderod	E / S1.1	1B / 3-3-3	Grows on a variety of carbonate soils from dry and sandy to rocky in pinyon and juniper woodland and lower montane coniferous forest. Endemic to San Bernardino County between 6,600 and 8,200 feet (2030-2485m).	This species was not encountered on the site. Occurrence potential is low to moderate.	May - June
<i>Lilium parryi</i>  lemon lily	N / S2.1	1B / 2-2-2	Found in wet, mountainous, generally forested areas such as shady edges of streams and open boggy meadows & seeps between 4,200 and 8,900 feet (1300-2790m).	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is low.	July - August
<i>Linanthus killipii</i>  Baldwin Lake linanthus	N / S2.1	1B / 2-2-3	This species generally occurs on pebble plains with other rare species. It can occur on dry slopes in alkaline meadows, pebble plain, pinyon juniper woodland and upper montane coniferous forest between 5000 and 7000 feet (1700-2400m) from Cactus Flat to Baldwin Lake. It is endemic to San Bernardino County.	This species was not encountered on the site. Occurrence potential is low on the site.	May - July
<i>Malaxis monophyllos</i> ssp. <i>brachypoda</i>  adder's-mouth	N / S1.1	2 / 3-3-1	Grows in hillside bogs and mesic meadows in upper montane coniferous forest between 2200-2700m. In California, known only from Riverside and San Bernardino Counties.	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is low.	July - August
<i>Mimulus exiguus</i>  San Bernardino Mountains monkeyflower	N / S2.2	1B / 2-2-2	Grows on clay soils. in seeps and sandy sometimes disturbed soil in moist drainages of annual streams. Known only from San Bernardino County and Baja between 5,900 and 6,900 feet (1800-2315m).	This species was not encountered on the site. Occurrence potential is moderate.	June - July
<i>Mimulus purpureus</i>  purple monkeyflower	N / S2.2	1B / 2-2-2	Grows on dry clay or gravelly soils under Jeffrey pines, along annual streams or vernal springs & seeps. Known only from San Bernardino County and Baja between 6,200 and 7,600 feet (1900-2300m).	This species was not encountered on the site. Occurrence potential is moderate.	May - July
<i>Oxytheca parishii</i> var <i>cienegensis</i>  cienea seca oxytheca	N / S1.3	1B / 3-1-3	Grows on dry gravelly banks and granitic sand in upper montane coniferous forest between 2,090-2,450m. Endemic to San Bernardino County.	This species was not encountered on the site. Occurrence potential is moderate.	June - Sept.
pebble plains	N / S1.1			This habitat type does not occur on the project site.	N / A

Species	Federal/ State Status	CNPS Status	Typical Habitat	Occurrence Potential	Bloom Period
<i>Perideridia parishii</i> ssp. <i>parishii</i> Parish's yampah	N / S2.2?	2 / 2-2-1	Grows in damp meadows or along streambeds in open pine canopy.	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is low.	April - June
<i>Phlox dolichantha</i> Big Bear Valley phlox	N / S2.2	1B / 2-2-3	Grows on sloping hillsides, in shade under pines and black oak with heavy pine litter and in openings of pebble plains and upper montane coniferous forest. Endemic to San Bernardino County 6,500 and 9,800 feet (2000-2970m).	This species was not encountered on the site. Occurrence potential is low.	June - July
<i>Phrynosoma coronatum blainvillei</i> San Diego horned lizard	N / SC		Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions. Prefers friable, rocky, or shallow sandy soils.	This species was not encountered on the site. Occurrence potential is moderate.	N / A
<i>Poa atropurpurea</i> San Bernardino blue grass	E / S2.2	1B / 2-2-3	Found on loamy alluvial to sandy loam soil in mesic meadows of open pine forests and grassy slopes, 4,400 to 8,052 (1350-2455m).	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is low.	May - June
<i>Populus angustifolia</i> narrow-leaved cottonwood	N / S2S3	2 / 3-2-1	Grows along creeks and rivers in riparian forest between 500-2125m. in California. In California, it is known only from Inyo and San Bernardino Counties; however, it is widespread outside the state.	This species was not encountered on the site. Occurrence potential is low.	N / A
<i>Pyrocoma uniflora</i> var <i>gossypina</i> Bear Valley pyrrocoma	N / S2.2	1B / 2-2-3	Grows in meadows, meadow edges, and along streams in or near pebble plain habitat between 5200 and 7500 feet (1600-2300m). Endemic to San Bernardino County.	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential is low.	July - Sept.
<i>Senecio bernardinus</i> San Bernardino ragwort	N / S2.2	1B / 2-2-3	Grows in mesic meadows and dry rocky slopes of pebble plains and upper montane coniferous forest. Endemic to San Bernardino County between 5900 and 7500 feet (1800-2300m).	This species was not encountered on the site. Occurrence potential on the site is low.	May - July
<i>Sidalcea pedata</i> bird-foot checkerbloom	E / E	1B / 3-3-3	Grows in vernal mesic sites in meadows or pebble plains. Endemic to San Bernardino County between 5,200 and 8,200 feet (1600-2500m).	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential on the site is extremely low.	May - June

Species	Federal/ State Status	CNPS Status	Typical Habitat	Occurrence Potential	Bloom Period
<i>Sphenopholis obtusata</i> prairie wedge grass	N / S2.2	2 / 2-2-1	Grows in open moist sites, along rivers and springs and in alkaline desert seeps between 360-2325m.	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential on the site is low.	April - July
<i>Taraxacum californicum</i> California dandelion	E / S2.1	1B / 3-2-3	Grows in meadows and seeps between 5300 and 9200 feet (1620-2800m.); endemic to San Bernardino County.	This species was not encountered on the site. No suitable habitat occurs on site. Occurrence potential on the site is extremely low.	May - July
<i>Thelypodium stenopetalum</i> Slender-petaled thelypodium	E / E	1B / 3-3-3	Grows in seasonally moist alkaline clay soils associated with seeps and springs in pebble plains. Endemic to San Bernardino County between 6,200 and 7,400 (1900-2245m).	No suitable habitat occurs on the project site as the soils on the site are sandy. This species was not encountered on the site. Occurrence potential on the site is extremely low.	June - July

Coding and Terms	
E = Endangered T = Threatened R = Rare SC = Species of Concern	PE = Proposed Endangered C = Candidate N = None N/A = Not Applicable
Federal Species of Concern: "taxa for which the U.S. Fish and Wildlife Service has information that indicates proposing to list the taxa as endangered or threatened is possibly appropriate, but for which substantial data on the biological vulnerability and threats are not currently known or on file to support the immediate preparation of rules." (Arnold). All of these species have a limited range. In fact, some species are limited to the San Bernardino Mountains area, however, they are locally common.	
State Species of Special Concern: An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code: "It is unlawful to take, possess or destroy any birds in the orders Falconiformes or Strigiformes or to take, possess or destroy the nest or eggs of any such bird."	

## Coding and Terms

### State Plant Rankings:

- S1 - less than 6 element occurrences, or less than 1,000 individuals, or less than 2,000 acres
  - S2 - 6 to 20 element occurrences, or between 1,000 and 3,000 individuals, or between 2,000 and 10,000 acres
  - S3 - 21 to 100 element occurrences, or between 3,000 and 10,000 individuals, or between 10,000 and 50,000 acres
  - S4 - No Threat Rank
  - S5 - No Threat Rank
- 
- .1 - very threatened
  - .2 - threatened
  - .3 - no current threats known

### CNPS Plant Rankings:

- 1A- presumed extinct in California
- 1B - Rare, Threatened or Endangered in California and elsewhere
- 2 - Rare, Threatened or Endangered in California but more common elsewhere
- 3 - Plants for which more information is needed
- 4 - Plants with a limited distribution

### R-E-D Code:

#### R - Rarity

- 1 - Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time
- 2 - Distributed in a limited number of occurrences, occasionally more if each occurrence is small
- 3 - Distributed in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported

#### E - Endangerment

- 1 - Not endangered
- 2 - Endangered in a portion of its range
- 3 - Endangered throughout its range

#### D - Distribution

- 1 - More or less widespread outside California
- 2 - Rare outside California
- 3 - Endemic to California

## Jurisdictional Determination for Waters of the United States

One primary channel with a small bifurcation at the southern end fo the property was investigated in this jurisdictional determination. This channel traverses south to north along the easterly edge of the property. The small secondary channel appears to receive street drainage from Willow Road. The channel is characterized by an eroded channel. This channel is characterized by non-native upland species. Investigation of the water course indicates this water course is isolated. This channel runs into a topographic dead end of Erwin Lake and does not appear to connect with any waters or tributaries to waters.

In a Supreme Court Decision *Solid Waste Association of Northern Cook Counties v. United States Corps of Engineers (SWANCC)* issued on January 9, 2001; the Supreme Court held that the Corps could not extend it jurisdiction to isolated waters or wetlands based solely upon the use of such waters by migratory water fowl. Therefore the water course is isolated, and not subject to Section 404 regulation.

Therefore the channel is a streambed as described in Section 1600 of the Fish and Game Code.

**Table 2. Jurisdictional Areas**

Area	Length of Channel	CDFG Streambed
#1a	420	0.02
#1b	85	0.002
Total acreages		0.022

## CONCLUSIONS

No state or federally listed as endangered, threatened or sensitive species were encountered on the site. No impacts to state or federally listed as endangered, threatened or sensitive species are expected to occur from the proposed project.

Bird nests were not encountered during the surveys. However, the State of California prohibits the take of active bird nests. Thus, any grubbing or brushing to occur on the property should be conducted outside of the State identified breeding season of February 15 through September 1. Alternatively, the site would need to be evaluated by a qualified biologist to determine if birds were nesting in the shrubs or trees to be removed prior to initiation of ground disturbance.

A stream channel as defined by the Section 1600 of the State of California Fish and Game Code under jurisdiction of the CDFG, may be affected by the proposed project. The project

proponent is hereby advised that a Streambed Alteration Agreement will likely be required by the California Department of Fish and Game for impacts to state jurisdictional streambeds.

The project proponent is hereby informed that in the event that a listed species is observed within the construction areas prior to or during grading/construction, that the loss of any listed species is considered an illegal take under both state and federal law. **This report and recommended mitigation measures do not constitute authorization for incidental take of state or federally listed endangered, threatened or sensitive species, state regulated bird nests or state or locally regulated plant species.**

## Site Photographs



## LITERATURE REFERENCED

- Burt, William H. and Richard P. Grossenheider 1980. Peterson Field Guides: A field guide to the Mammal: North America north of Mexico, third edition. Houghton Mifflin Company, New York.
- California Burrowing Owl Consortium, 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines.
- California Natural Diversity Database, updated 2003.
- Coulombe, H.N. 1971. Behavior and population ecology of the burrowing owl, *Speotyto cunicularia*, in the Imperial Valley of California. Condor 73: 162-176.
- Emmel, Thomas C. and John F. Emmel 1973. The Butterflies of Southern California. Science Series 26. Natural History Museum of Los Angeles County.
- Grinnell, J. and A.H. Miller. 1944. The distribution of the birds of California. Pacific Coast Avifauna Number 27. Copper Ornithological Club, Berkeley, California. Reprinted by Artemisia Press, Lee Vining, California: April 1986. 617 pp.
- Hickman, J.D., ed. 1993. The Jepson Manual, Higher Plants of California. UC Press, 1400pp.
- Ingles, Lloyd 1992. Mammals of the Pacific States. Stanford University Press, Stanford, California, pp. 172 and 176.
- Jameson, E.W., Jr. and H.J. Peeters 1988. California mammals. California Natural History guides: 52, University California Press, 402pp.
- Munz, P.A. 1974. Flora of Southern California. University of California Press. Berkeley and Los Angeles, CA.
- National Geographic Society 1999. Field guide to the birds of North America, third edition. National Geographic Society, Washington, D.C.
- Peterson, R.T. 1990. A field guide to western birds, 3<sup>rd</sup> edition. Houghton Mifflin Co., 432pp.
- Remsen, J.V., Jr. 1978. Bird species of special concern in California. California Department of Fish and Game, Sacramento. Wildlife Management Administration Report No. 78-1. 54pp.
- Stebbins, R.C. 1985. A field guide to western reptiles and amphibians, 2<sup>nd</sup> edition. Peterson field guide series, Houghton Mifflin Company, 336pp.

California Fish and Game Code 3503 and 3503.5 state:

**3503:** *It is unlawful to take, possess or needlessly destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation made pursuant thereto.*

**3503.5:** *It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.*

**APPENDIX A**

**SPECIES LIST**

## APPENDIX A SPECIES LIST

### ANIMAL SPECIES LIST

#### INVERTEBRATES

Apidae

*Apis mellifera*

*Bombus*

Bees

Honey bee

Bumble bee

Bombyliidae (3 species)

Bee Flies

Carabidae

*Pristonychus complanatus*

Black ground beetle

Cicadae

G: Platypedia

Cicida

Coccinellidae

*Hippodamia convergens*

Convergent Lady beetle

Vespidae

Yellowjacket

#### Butterflies

Pieridae

*Pieris rapae*

*Euchloe Hyantis andrewsi*

Cabbage Butterfly

Andrew's Marble

Plebejinea

*Plebjus acmon acmon*

Blue subfamily

Acmon's Blue

## VERTEBRATES

### Mammalia

#### Canidae

*Canis lupis familiaris*

#### Sciuridae

*Sciurus griseus*

*Spermophilus beecheyi*

### Reptilia

#### Iguanidae

*Sceloporus occidentalis*

### Aves

#### Certhiidae

*Certhia americana*

#### Columbidae

*Zenaida macroura*

#### Corvidae

*Cyanocitta stelleri*

*Corvus corax*

#### Trochilidae

*Calypte anna*

### Mammals

#### Canines

Dog

#### Squirrels

Western Gray Squirrel

Beechey ground squirrel

### Reptiles

#### Iguana

Western Fence lizard

### Birds

#### Creepers

Brown creeper

Morning Dove

Steller's Jay

common raven

#### Hummingbirds

Anna's Hummingbird

## PLANT SPECIES LIST

### **Gymnosperms**

Cupressaceae  
*Juniperus occidentalis*

Pinaceae  
*Pinus jeffreyi*

### **Angiosperms**

#### Dicotyledonae

Asteraceae  
*Artemisia tridentata*  
*Chrysothamnus nauseosus*  
*Erigeron aphanactis*

Boraginaceae  
*Criptantha sp.*

Brassicaceae  
*Erysimum capitatum*  
*Sisymbrium altissimum*

Convolvulaceae  
*Calystegia fulcrata*

Fabaceae  
*Lotus scoparius*  
*Lupinus andersonii*

Geraniaceae  
*Erodium cicutarium*

Loasaceae  
*Mentzelia sp.*

Malvaceae  
*Sphaeralcea ambigua*

Onagraceae  
*Gayophytum*  
*Oenothera sp.*

### **Naked Seed Plants**

Juniper Family  
California Juniper

Pine Family  
Jeffrey pine

### **Flowering Plants**

#### Dicot-flowering Plants

Great Basin Sage  
Rabbitbrush  
Fleabane

Popcorn Flower

Wallflower  
Tumble Mustard

Pea Family  
Deerweed  
Lupine

Storksbill

Mallow Family  
Globemallow

Primrose Family