



Phoenix Biological Consulting

Providing proactive biological solutions throughout southern California

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July 30, 2012

Mr. Randall Arnold
RCA Associates, Inc.
15555 Main Street, #D4-235
Hesperia, CA 92345

RE: Results of the Mojave Monkey Flower Habitat Assessment for APN # 0466-181-059, 060, 061, 062

Mr. Arnold:

At your request, Phoenix Biological Consulting visited the project site located at the southwest corner of Wild Road and Smithson Road, Helendale, San Bernardino County, California. The site was visited on July 27, 2012 and a habitat assessment for Mojave monkey flower (*Mimulus mohavensis*), a rare plant species, was conducted. The field effort involved visiting representative vegetation communities within the project site and along the borders to determine if the vegetation communities represent those commonly associated with Mojave Monkeyflower. In addition to the field reconnaissance, a background database search was conducted using the California Natural Diversity Database (CNDDDB) Rarefind 3 along with supplemental Mojave Monkeyflower data from the West Mojave Plan. The results of these database searches are represented on Figure 3.

Results of the field reconnaissance:

The site is a 76 acre rectangular polygon located at the southwest corner of Wild Road and Smithson Road, Section 20, Township 8 North, Range 4 West, Wild Cross USGS Topographic Map. The topography consists of level terrain with an imperceptible aspect. There are no distinct drainages within the property boundary. The habitat on site consists of disturbed non native shrubs with recent (1-2 years) brush clearing (Figure 1-2).

The vegetation communities observed within the project site include possible fallow agriculture fields from previous agriculture practices. The shrubs diversity of the

site was extremely low. The shrubs detected during the site visit included: Russian thistle (*Salsola* sp.). Dominant annuals included: Filaree (*Erodium cicutarium*).

Mojave Monkeyflower Species Description:

The Mojave Monkeyflower is a small annual plant from the figwort family (Scrophulariaceae) that occurs near Barstow, CA. It is typically 2-10 centimeters in height with a reddish-purple radial corolla with maroon veins, fading into a white border. It occurs on gravel slopes and in banks along desert washes and along the Mojave River. It is typically detected during early April through mid May. It is considered rare and the California Native Plant Society lists the species as a List 1B, 2-2-3. List 1B plants are considered rare or endangered in California and elsewhere. It is mandatory that 1B plants are fully considered during the CEQA process.

The “2-2-3” status indicates the plant has the following description:

- 2- “Distributed in a limited number of occurrences, occasionally more if each occurrence is small”
- 2- “Endangered in a portion of its range”
- 3- “Endemic to California”

Results of literature review search:

The CNDDDB records indicate the closest known Monkeyflower occurrence is approximately less than one mile to the southeast. Occurrences # 22, 23 and 24 all occur within 3 miles of the project site, on the other side of the Mojave River (WEMO, 2006). The typical plant associates and soil requirements for these three occurrences are the following: creosote bush scrub with *Larrea tridentata*, *Ambrosia dumosa*, *Eriogonum inflatum*, *Pholisma arenarium*, *Sclerocactus polyancistrus* and *Yucca schidigera*. Rocky, cobbly substrate. There are no known populations in the Helendale area occurring on the west side of the river. The geological characteristics that have favored historic agriculture practices (loose, loamy-sandy, friable soils) in the Helendale area are likely the limiting factor for the lack of occurrences in this area.

Conclusions:

Based on the results of the site visit and literature review search, it has been determined that the site is not suitable Mojave Monkeyflower habitat.

This decision was made using the following criteria:

- Historic agriculture practices have made the site unsuitable for Mojave Monkeyflower.

- Soils types and geologic setting are not conducive for Mojave Monkeyflower to occur on this project site.
- Edge effects from surrounding residential area and nearby alfalfa fields.

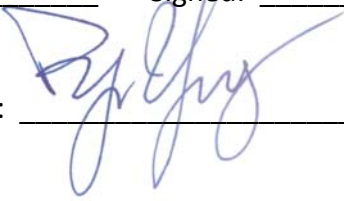
Recommendations:

Due to the conclusions and findings presented above it is the opinion of Phoenix Biological Consulting that the project proponent will not be required to mitigate and/or survey for this species due to the highly disturbed habitat within the project site. The agriculture practices on the project site have altered the native desert habitat beyond that which is suitable to sustain Mojave Monkeyflower. Furthermore, the soil type and geological setting is not likely suitable for this species to occur on the project site.

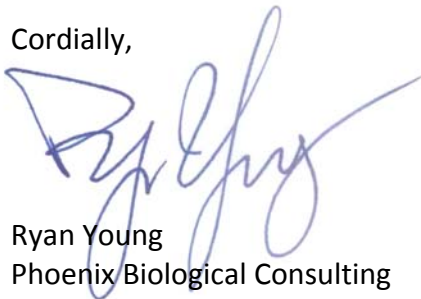
Certification:

I hereby certify that the statements furnished above and in the attached exhibits present the data and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: July 30, 2012 Signed: 
Report Author

Field Work Performed By: 

Cordially,



Ryan Young
Phoenix Biological Consulting
PO Box 720949
Pinon Hills, CA 92372-0949

Figure 1: Habitat Photos



Southeast Corner (Facing Northwest)



Southwest Corner (Facing Northeast)



Northwest Corner (Facing Southeast)



Northeast Corner (Facing Southwest)

Figure 2: Aerial Photo of Project Site



Figure 3: CNDDDB Rarefind 3 Results

