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April 8, 2014

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**Subject: Report Summarizing Results of the RE Cinco Generation Tie-Line Project:
Alternative 2 Preferred Alignment**

Dear Ms. Mitchell:

This letter summarizes the results of the Alternative 2 Preferred Alignment gen-tie line (study area) of the RE Cinco Project (Project) habitat assessment conducted by AECOM Technology Corporation (AECOM). AECOM conducted this habitat assessment on behalf of Recurrent Energy in support of environmental documentation required by the Bureau of Land Management.

Project Description

The Project is located in unincorporated southeastern Kern County, approximately 6.5 miles northwest of the town of California City, approximately 12 miles northeast of the town of Mojave, and approximately 0.8 mile south of the Los Angeles Aqueduct (Figure 1). The Project includes development of a 230-kilovolt generation tie (gen-tie) line extending northeast from the RE Cinco photovoltaic solar electrical generation facility (separate project) to the Los Angeles Department of Water and Power (LADWP) Barren Ridge Switching Station located approximately 2 miles north from the solar site. The gen-tie line includes a 150-foot right-of-way (ROW) corridor; transmission towers and associated spur roads and necessary 450-foot pull site radii would be placed within this ROW corridor. All impacts associated with construction would occur within those areas (Figure 2). Access for the construction and operation of the gen-tie line would be from the existing LADWP maintenance road located west of the proposed alignment. The habitat assessment survey area included the a 2.1-mile-long corridor in addition to a 75-foot buffer of the entire corridor and all areas between the preferred alignment and the existing LADWP maintenance road south of the Pine Tree Canyon Wash (Figure 2).

Survey Area

Topography of the study area is moderately sloping (2% to 15% slopes), with elevation approximately 2,399 to 2,613 feet above mean sea level. A dry wash traverses the study area from the northwest to the southeast. Disturbed areas associated with human off-highway vehicle use, target shooting, and grazing are minimal but present throughout the study area.

Background Information

Desert tortoise (Mojave population) (*Gopherus agassizii*) Status

Desert tortoise (DT) habitat is found in a variety of dry habitats, from flats and slopes dominated by creosote (*Larrea tridentata*) in lower elevations to rocky slopes at higher elevations. DT habitat in higher elevations is typically characterized by blackbrush (*Coleogyne ramosissima*) and juniper (*Juniperus* spp.). The presence of friable soils allows for burrow excavation. Burrows are essential to the natural history of DT to provide cover from predators, nesting places, and refuge from extreme temperatures. Opportunistic use of other types of cover, such as rock cracks and overhangs, can also be utilized. The DT is most active April through May and September through October, primarily feeding on annual herbaceous vegetation, but also perennial grasses and woody vegetation. Nonnative species such as grasses and redstem filaree are also utilized.

The DT ranges from southern California east through southern Nevada and southeastern Utah, south through western Arizona and into northern Mexico. The U.S. Fish and Wildlife Service (USFWS) identifies the listed population as all DT north and west of the Colorado River, which includes all of California. In California, DT is found in the Mojave and Colorado Desert regions, from eastern Inyo County south through eastern Kern County.

Western burrowing owl (*Athene cunicularia hypugaea*) Status

Western burrowing owl (WBO) habitat consists of annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation (Zarn 1974; California Burrowing Owl Consortium [CBOC] 1993). Suitable WBO habitat may also include trees and shrubs if the canopy covers less than 30% of the ground surface. Burrows are the essential component of WBO habitat and both natural and artificial burrows provide protection, shelter, and nests for WBO. WBO typically use burrows made by mammals, such as ground squirrels or badgers, but may also use man-made structures, such as cement culverts, riprap, cement asphalt or wood debris piles, or openings beneath cement or asphalt pavement. WBO may use a site for migratory stopovers, or year-round for breeding and foraging. Suitable habitat is considered occupied if there is an observation of at least one WBO, or WBO sign including molted feathers, cast pellets, prey remains, eggshell fragments, or feces around a burrow. WBO tend to exhibit high site fidelity, reusing the same site year after year.

WBO in California are generally nonmigratory and occur mostly in the Central and Imperial Valleys, primarily in agricultural areas. Small, scattered populations occur in the Mojave Desert.

Mojave Ground Squirrel (*Xerospermophilus mojavensis*) Habitat Status

Mojave ground squirrel (MGS) occur in a variety of desert scrub habitats, including creosote bush scrub, Joshua tree (*Yucca brevifolia*) woodland, and saltbush scrub (*Atriplex* spp.) communities. The MGS is distinguished from the more common sympatric antelope ground squirrel (*Ammospermophilus leucurus*) by the absence of stripes or spots. MGS species is

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active during spring and summer months and spends most of the year (approximately 7 months) aestivating below ground (Leitner 2008). Their diet consists of seeds and vegetative parts of desert plants, such as creosote, winter fat (*Krascheninnikovia lanata*), spiny hop-sage (*Grayia spinosa*), saltbush, golden linanthus (*Linanthus aureus*), Mediterranean grass (*Schismus arabicus*), and box-thorn (*Lycium andersonii*) (Best 1995).

The MGS occurs in the Mojave Desert, in parts of Inyo, Kern, Los Angeles and San Bernardino Counties. Gustafson (1993) describes the species' range limits as Olancha (northwest), Avawatz Mountains (northeast), Palmdale (southwest), and Lucerne Valley (southeast).

Golden Eagle/Raptors Habitat Status

The golden eagle (*Aquila chrysaetos*) nests on cliffs and in canyons and large trees in open habitats. They prey on mammals in open scrub habitat and grasslands. They have wingspans up to 7 feet, and begin breeding in Southern California in January. Nest building and egg laying occur during February and March, and hatching and raising young until fledge occur April through June. This species occurs throughout the United States and is resident in Kern County.

Survey Methodology

A habitat assessment of the study area was conducted by AECOM biologists March 4 and 5, 2014. The habitat assessment intended to assess the existing habitat and vegetation of the survey area. The biologists evaluated the survey area for suitable habitat for sensitive plant and animal species (DT, WBO, MGS and raptors), and sensitive plant communities. AECOM biologists used meandering transects focusing on visual signs for biological resources for all sensitive species. These resources include tracks, burrows, scat, pellets, owl splash, carcasses, rare plants, etc. All data was recorded with a Global Positioning System Garmin 60 CSx.

For the purposes of this report, plant species are considered sensitive if they are (1) listed or proposed for listing by state or federal agencies as threatened or endangered; (2) on List 1B (considered endangered throughout its range) or List 2 (considered endangered in California but more common elsewhere) of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001); or (3) considered rare, endangered, or threatened by the State of California or other local conservation organizations or specialists. Noteworthy plant species are considered those on List 3 (more information about the plant distribution and rarity needed) and List 4 (plants of limited distribution) of the CNPS Inventory. CNPS is a statewide resource conservation organization that has developed an inventory of California's sensitive plant species. The CNPS Listing is sanctioned by the California Department of Fish and Wildlife (previously California Department of Fish and Game [CDFG]) and essentially serves as an early warning list of potential candidate species for threatened or endangered status.

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Survey methods for special status plant species are based on the following resources: *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Species* (USFWS 2000); *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities* (CDFG 2009a); and *CNPS Botanical Survey Guidelines* (CNPS 2001).

Results

Vegetation Communities and Rare Plants

The Project study area is dominated by creosote bush scrub community (Figure 3). Creosote represented the most common shrub within the community. Associated shrubs and subshrubs include white burr sage (*Ambrosia dumosa*), cheesebush (*Ambrosia salsola*), Nevada ephedra (*Ephedra viridis*), Mojave indigo bush (*Psoralea arborescens*), California buckwheat (*Eriogonum fasciculatum* var. *polifolium*), scale broom (*Lepidospartum squamatum*), and spiny senna (*Senna armata*). Common herbaceous vegetation includes California poppy (*Eschscholzia minutiflora*), cryptantha (*Cryptantha* sp.), desert chicory (*Rafinesquia neomexicana*), desert dandelion (*Malacothrix glabrata*), and goldfields (*Lasthenia glabrata*).

Small portions of the survey area, located within the wash, were identified as southern alluvial fan scrub, creosote wash scrub, and desert saltbush scrub. Southern alluvial fan scrub is a wash-specific community with the association of scale broom. Associated shrubs and subshrubs were bladderpod (*Peritoma arborea*), cheesebush, and all-scale saltbush (*Atriplex polycarpa*). Saltbush scrub is dominated by all-scale saltbush, with subshrubs of box-thorn present.

Frequently occurring weed species present in all communities include redstem filaree (*Erodium cicutarium*) and Mediterranean grass. A list of all plant species found during surveys is available in Appendix A.

No special-status plants were detected during surveys. Phenology of sensitive annuals was not conducive to detection or to a determination of presence or absence on-site. A list of the potentially occurring special-status plant species is available in Appendix B.

Wildlife

Very few suitable WBO burrows or other features suitable for WBO occupation were identified in the study area. One WBO was observed during surveys, but no occupied burrow was identified in the vicinity of this occurrence. The owl flew to an unknown location following identification. Further, no whitewash, bone fragments, pellets, feathers, etc. were observed at other burrows suitable for WBO occupation.

Table 1 describes sensitive biological resources detected within the study area. Locations of the sensitive-species occurrences are depicted in Figure 4. All additional wildlife observations are listed in Appendix C

One live DT was found in proximity to a Class 1 (occupied) burrow. The male DT appeared healthy, had a long gular and visible chin gland, and was 250 millimeters in length. No visible shell damage was observed, though some shell wear was visible near the tail. A photo of this DT is shown in Figure 5. In addition, DT scat was observed at two locations in the study area. The scat was Class 3, with a compact feel and no sheen present. One Class 5 disarticulated carcass was found scattered over a 3-meter radius.

Table 1
Waypoints, Latitude/Longitude, and Notes of Potential Burrows and Sign

Type of Sign	Easting	Northing	Notes
Burrow 1	0404124	3899179	Class 1 DT burrow, fresh DT tracks, DT scat
WBO Live	0404152	3899196	Live WBO flushed; not seen again; no associated burrow
Carcass	0403948	3899139	Class 5 disarticulated DT carcass
DT Live	0404116	3899186	Male DT, 250 millimeters, healthy appearance
Burrow 2	0404024	3899208	Class 2 DT burrow with DT scat
DT Scat	0403726	3899214	Class 3 DT scat (3), compact, no sheen
DT Scat	0404048	3899076	Class 3 DT scat (2), compact, no sheen
Burrow 3	0402411	3897169	Class 5 DT burrow

Table 2 describes the dates, pertinent survey information, and any species or sign detected during the habitat assessment. Copies of field data sheets are provided in Appendix D.

Table 2
Dates, Times, Personnel, Weather Conditions, and Observations for Habitat Surveys

Survey #	Date	Time	Personnel	Weather	Observations
1	03/04/2014	0900-1600	Matt Kedziora Shelly Dayman	Start: 55 degrees Fahrenheit (°F), 100% clouds, wind 10 miles per hour (mph) End: 62°F, 80% clouds, wind 5 mph	One live DT and one live WBO, burrows, DT scat, carcass; no sensitive plant species seen
2	03/05/2014	0700-1300	Matt Kedziora Phil Brylski	Start: 48°F, 40% clouds, wind none End: 72°F, 45% clouds, wind none	One burrow; no sensitive plant species seen

Discussion

The Alternative 2 Preferred Alignment gen-tie line study area provides suitable habitat for DT, and DT was observed within the survey area. One occupied DT burrow, additional burrows suitable for DT use, and DT sign (scat and carcasses) were observed. Construction activities in the survey area may result in encounters with DT individuals and loss of suitable DT habitat.

The Alternative 2 Preferred Alignment gen-tie line study area includes suitable foraging habitat for WBO. One WBO was observed foraging, but no burrows with sign or occupied

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burrows were identified. Construction in the study area may result in loss of suitable WBO foraging habitat.

No trapping of MGS was conducted in the study area. Based on the presence of suitable habitat and the historic range and occurrences of the species in the immediate vicinity, MGS are presumed to occupy the survey area. Construction in the survey area will result in loss of suitable MGS habitat.

The Alternative 2 Preferred Alignment gen-tie line study area provides suitable foraging habitat for golden eagles and other raptors. Further, the Tehachapi Mountains, located to the west and north of the survey area, provide suitable nesting habitat. No special-status raptors were observed foraging or flying over or adjacent to the survey area during field surveys. Due to the ample availability of nesting and foraging habitat in the region, construction activities are not expected to directly affect or result in an incremental take of special-status raptors in the survey area. A separate golden eagle memo was prepared by AECOM to document information available on golden eagle presence in the area (AECOM 2013).

Although some perennial shrub species were blooming at the time of survey and evidence of some past flooding in numerous washes was present across the site, no sensitive plant species were found during the survey.

Certification Statement

Qualified AECOM biologists who conducted habitat assessment for the Project certify that the information in this survey report fully and accurately represents the work performed by AECOM biologists. If you have any questions or require additional information, feel free to contact me at (619) 233-1454.

Sincerely,



Jennifer Guigliano
Project Director

Attachments: Figure 1 – Regional Map
Figure 2 – Vicinity Map
Figure 3 – Vegetation Communities
Figure 4 – Biological Resources
Figure 5 – Desert Tortoise Found in Study Area
Appendix A – Observed Plant Species during Habitat Assessment
Appendix B – Potentially Occurring Special-Status Plant Species
Appendix C – Wildlife Species Detected during Habitat Assessment
Appendix D – Field Data Sheets

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Literature Cited

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FIGURES



Source: RE Cinco 2013; Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013

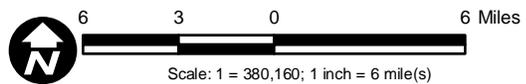
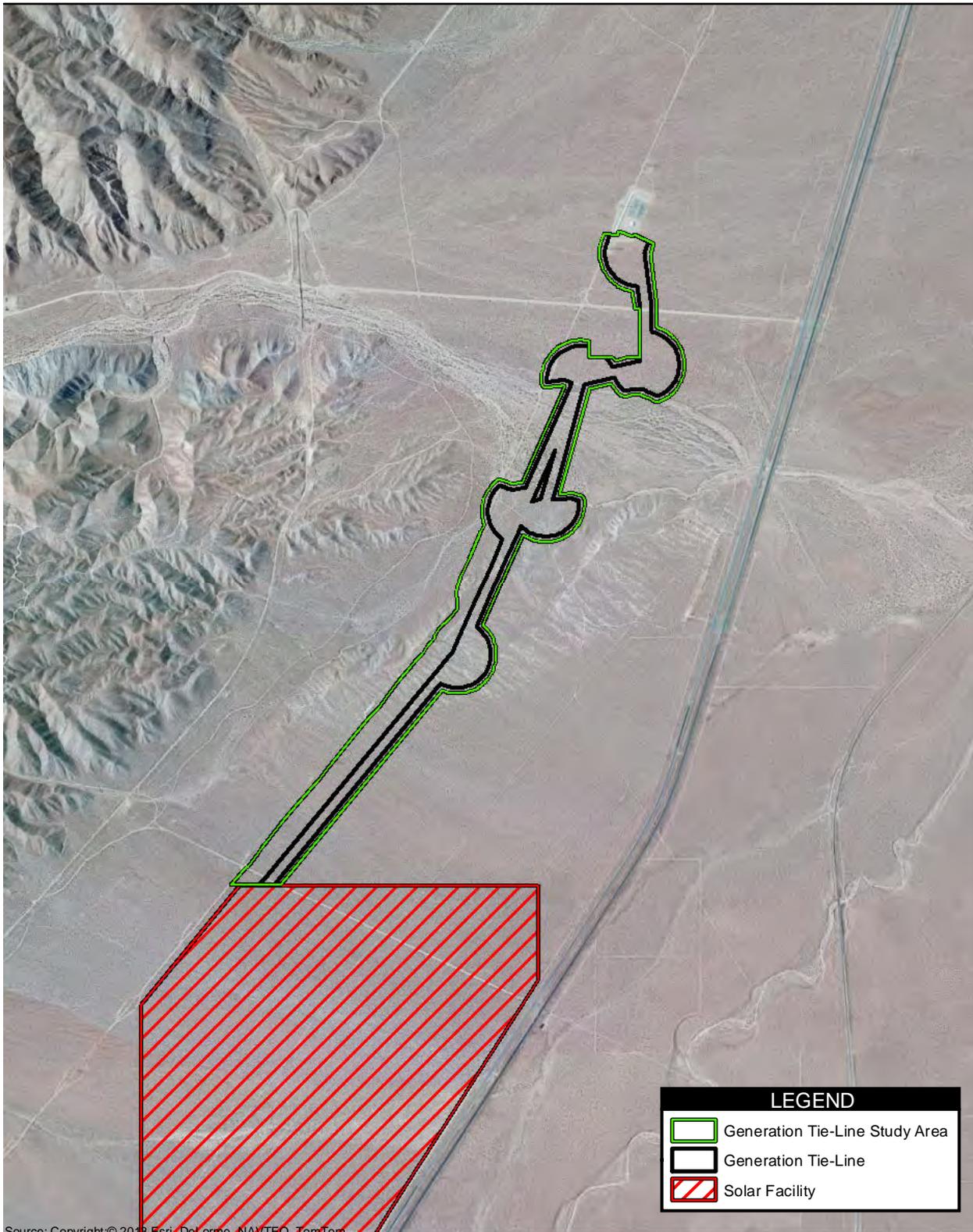


Figure 1
Regional Map

RE Cinco Generation Tie-Line Project - Habitat Assessment

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LEGEND

-  Generation Tie-Line Study Area
-  Generation Tie-Line
-  Solar Facility

Source: Copyright: © 2013 Esri, DeLorme, NAVTEQ, TomTom
 Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community: RE Cinco 2013



Figure 2
Vicinity Map

RE Cinco Generation Tie-Line Project - Habitat Assessment

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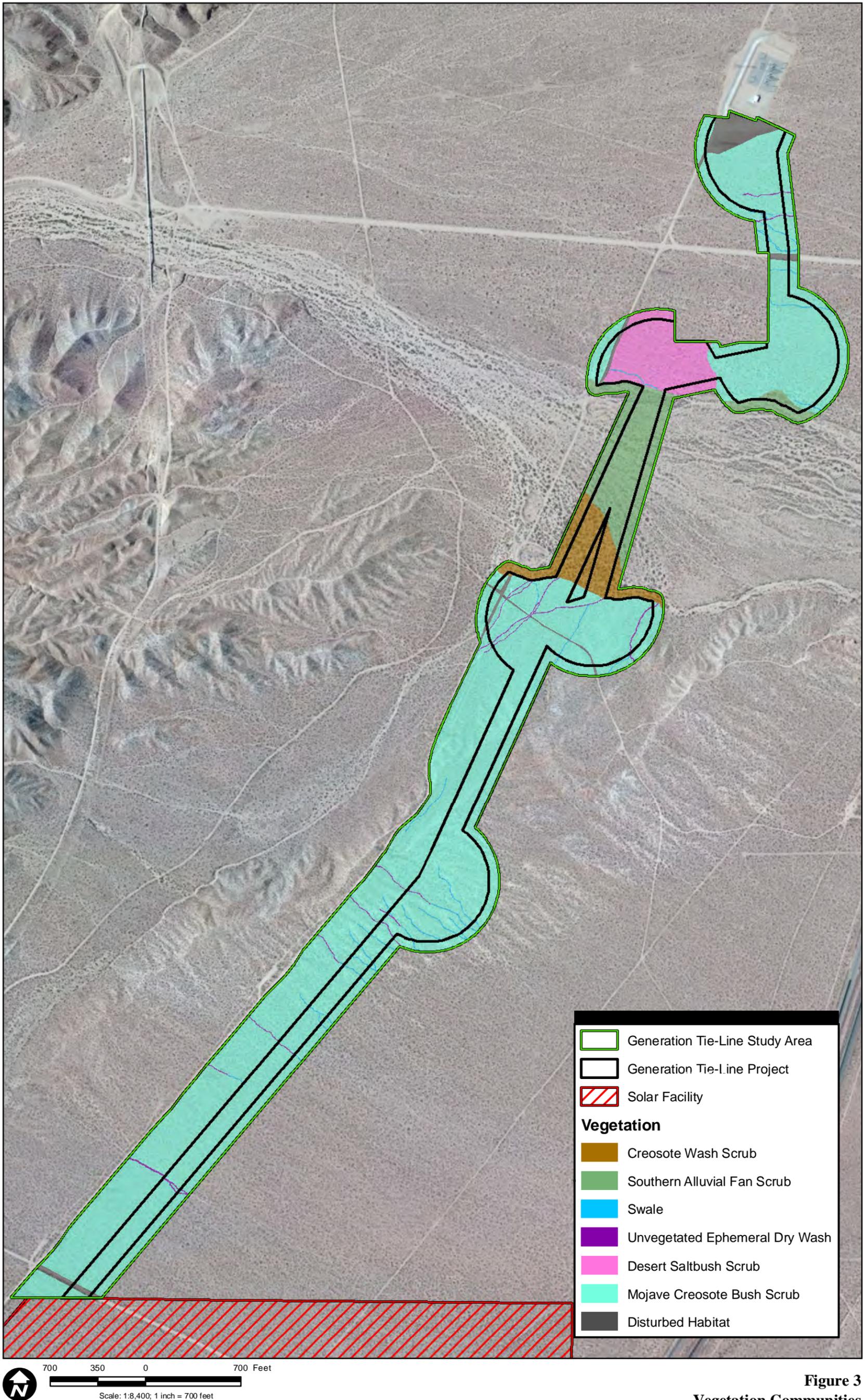


Figure 3
Vegetation Communities

Source: AECOM 2013; RE Cinco 2013; Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

RE Cinco Generation Tie-Line Project - Habitat Assessment

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Figure 4
Biological Resources

Source: AECOM 2013; RE Cinco 2013; Copyright:© 2013 Esri, DeLorme, NAVTEQ, TomTom
 Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

RE Cinco Generation Tie-Line Project - Habitat Assessment

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Date & Time: Tue Mar 4 11:19:35 PST 2014
Position: +035.23118° / -118.05360°
Altitude: 2407ft
Azimuth/Bearing: 114° S66E 2027mils (True)
Elevation Angle: -15.5°
Horizon Angle: -00.8°
Zoom: 2X
WDLMK003



Figure 5
Desert Tortoise Found in Study Area

APPENDIX A

OBSERVED PLANT SPECIES DURING HABITAT ASSESSMENT

Appendix A
Observed Plant Species
During Habitat Assessment

Family	Scientific Name	Common Name
AGAVACEAE	<i>Hesperoyucca whipplei</i>	
	<i>Yucca brevifolia</i>	JOSHUA TREE
ASTERACEAE	<i>Ambrosia acanthicarpa</i>	ANNUAL BUR-SAGE
	<i>Ambrosia dumosa</i>	WHITE BUR-SAGE
	<i>Ambrosia salsola</i>	COMMON BURROBRUSH, CHEESEBUSH
	<i>Ambrosia salsola</i> var. <i>salsola</i>	
	<i>Calycoseris parryi</i>	YELLOW TACK-STEM
	<i>Chaenactis xantiana</i>	FLESHY PINCUSHION
	<i>Encelia farinosa</i>	BRITTLEBUSH
	<i>Ericameria teretifolia</i>	GREEN or ROUND-LEAF RABBITBRUSH
	<i>Eriophyllum ambiguum</i>	
	<i>Eriophyllum wallacei</i>	WALLACE'S WOOLLY DAISY
	<i>Lasthenia gracilis</i>	COMMON GOLDFIELDS
	<i>Lepidospartum squamatum</i>	
	<i>Leptosyne bigelovii</i>	
	<i>Logfia depressa</i>	HIERBA LIMPIA
	<i>Malacothrix coulteri</i>	SNAKE'S-HEAD
	<i>Malacothrix glabrata</i>	DESERT DANDELION
<i>Rafinesquia neomexicana</i>	DESERT CHICORY	
<i>Stephanomeria pauciflora</i>	WIRE-LETTUCE	
BORAGINACEAE	<i>Amsinckia tessellata</i> var. <i>tessellata</i>	DESERT FIDDLENECK
	<i>Cryptantha angustifolia</i>	NARROW-LEAVED CRYPTANTHA
	<i>Cryptantha micrantha</i> var. <i>micrantha</i>	RED-ROOT CRYPTANTHA
	<i>Cryptantha nevadensis</i> var. <i>rigida</i>	RIGID CRYPTANTHA
	<i>Cryptantha pterocarya</i> var. <i>pterocarya</i>	WINGED-NUT CRYPTANTHA
	<i>Eucrypta micrantha</i>	
	<i>Pectocarya heterocarpa</i>	MIXED-NUT PECTOCARYA
	<i>Pectocarya linearis</i> subsp. <i>ferocula</i>	NARROW-TOOTHED PECTOCARYA
	<i>Pectocarya penicillata</i>	NORTHERN PECTOCARYA
	<i>Phacelia crenulata</i> var. <i>crenulata</i>	
	<i>Phacelia distans</i>	
	<i>Phacelia fremontii</i>	
	<i>Pholistoma membranaceum</i>	
<i>Plagiobothrys arizonicus</i>	ARIZONA POPCORNFLOWER	
BRASSICACEAE	<i>Brassica tournefortii</i>	
	<i>Caulanthus lasiophyllus</i>	CALIFORNIA MUSTARD
	<i>Descurainia pinnata</i>	
	<i>Descurainia pinnata</i> subsp. <i>brachycarpa</i>	

Family	Scientific Name	Common Name
	<i>Descurainia pinnata</i> subsp. <i>glabra</i>	
	<i>Lepidium flavum</i>	
	<i>Lepidium fremontii</i>	
	<i>Tropidocarpum gracile</i>	
CACTACEAE	<i>Cylindropuntia echinocarpa</i>	SILVER or GOLDEN CHOLLA
CHENOPODIACEAE	<i>Atriplex polycarpa</i>	ALLSCALE SALTBUSSH
	<i>Krascheninnikovia lanata</i>	WINTER FAT
CLEOMACEAE	<i>Peritoma arborea</i> var. <i>angustata</i>	
EPHEDRACEAE	<i>Ephedra viridis</i>	GREEN EPHEDRA
FABACEAE	<i>Acmispon strigosus</i>	
	<i>Psoralea arborescens</i> var. <i>arborescens</i>	
	<i>Senna armata</i>	SPINY SENNA
GERANIACEAE	<i>Erodium cicutarium</i>	REDSTEM FILAREE
LAMIACEAE	<i>Salvia columbariae</i>	CHIA
	<i>Scutellaria mexicana</i>	BLADDER-SAGE
LOASACEAE	<i>Mentzelia albicaulis</i>	
	<i>Mentzelia obscura</i>	
MALVACEAE	<i>Eremalche exilis</i>	WHITE MALLOW
	<i>Sphaeralcea ambigua</i> var. <i>ambigua</i>	APRICOT MALLOW
MONTIACEAE	<i>Calyptidium monandrum</i>	
NYCTAGINACEAE	<i>Mirabilis laevis</i> var. <i>villosa</i>	
ONAGRACEAE	<i>Camissonia campestris</i> subsp. <i>campestris</i>	
	<i>Chylisma claviformis</i> ssp. <i>claviformis</i>	
PAPAVERACEAE	<i>Eschscholzia californica</i>	CALIFORNIA POPPY
	<i>Eschscholzia minutiflora</i>	
POACEAE	<i>Bromus madritensis</i> ssp. <i>madritensis</i>	FOXTAIL CHESS, MADRID BROME
	<i>Bromus madritensis</i> ssp. <i>rubens</i>	RED BROME
	<i>Bromus tectorum</i>	CHEAT GRASS, DOWNY CHESS
	<i>Schismus barbatus</i>	
POLEMONIACEAE	<i>Gilia brecciarum</i> ssp. <i>brecciarum</i>	
	<i>Gilia stellata</i>	STAR GILIA
	<i>Gilia transmontana</i>	TRANSMONTANE GILIA
POLYGONACEAE	<i>Chorizanthe brevicornu</i> var. <i>brevicornu</i>	BRITTLE SPINEFLOWER
	<i>Chorizanthe watsonii</i>	WATSON'S SPINEFLOWER
	<i>Eriogonum gracillimum</i>	
	<i>Eriogonum fasciculatum</i> var. <i>polifolium</i>	MOJAVE DESERT CALIFORNIA BUCKWHEAT
	<i>Eriogonum pusillum</i>	YELLOW TURBANS (Group 2)
SOLANACEAE	<i>Lycium cooperi</i>	
THEMIDACEAE	<i>Dichelostemma capitatum</i> ssp. <i>capitatum</i>	
ZYGOPHYLLACEAE	<i>Larrea tridentata</i>	

APPENDIX B

POTENTIALLY OCCURRING SPECIAL-STATUS PLANT SPECIES

Appendix B
Potentially Occurring
Special-Status Plant Species

Species	Sensitivity Status	Natural History	Potential Occurrence Status
Spanish needle onion (<i>Allium shevockii</i>)	CNPS List 1B.3	Perennial bulbiferous herb. It occurs in rocky areas in pinyon and juniper woodland and upper montane coniferous forest. Flowers May to June.	Low potential for occurrence due to lack of suitable woodland and forest habitat.
Alkali mariposa lily (<i>Calochortus striatus</i>)	CNPS List 1B.2	Herbaceous perennial geophyte with large pink, radially striped flowers. It occurs in alkali seeps and seasonally moist locations. Flowers April to June.	Low potential for occurrence due to lack of suitable alkali seep habitat.
Kern County evening primrose (<i>Camissonia kernensis</i> ssp. <i>kernensis</i>)	CNPS List 4.3	Annual herb on sandy, gravelly, granitic soils. Found in chaparral, Joshua tree woodland, and pinyon and juniper woodlands. Flowers March to May.	Low potential for occurrence due to lack of suitable woodland or chaparral habitat.
White pygmy-poppy (<i>Canbya candida</i>)	CNPS 4.2	Annual herb on sandy and gravelly soils. Found in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodlands. Flowers March to June.	High potential to occur in desert scrub habitat on-site.
Mohave paintbrush (<i>Castilleja plagiotoma</i>)	CNPS List 4.3	Perennial herb (hemiparasitic) found in great basin scrub (alluvial), Joshua tree woodland, lower montane coniferous forest, and pinyon and juniper woodland. Flowers April – June.	Moderate potential to occur in desert scrub in the alluvial washes on-site.
Death Valley sandmat (<i>Chamaesyce vallis-mortae</i>)	CNPS List 4.2	Perennial herb found in sandy or gravelly soils in Mojavean desert scrub. Flowers May to October.	High potential to occur on-site in desert scrub.
Mojave spineflower (<i>Chorizanthe spinosa</i>)	CNPS List 4.2	Small ephemeral annual on sandy and gravelly soils. Sometimes in alkaline areas, chenopod scrub, Joshua tree woodland, Mojavean desert scrub, playas. Flowers April to June.	Moderate potential to occur in desert scrub habitat on-site.
Kern Canyon clarkia (<i>Clarkia xantiana</i> ssp. <i>parviflora</i>)	CNPS List 4.2	Annual herb often found in sandy, sometimes rocky slopes or roadsides. Prefers chaparral, cismontane woodland, great basin scrub, and valley and foothill grassland. Flowers May to June.	Moderate potential to occur in sandy or rocky soils in desert scrub habitat on-site.

Species	Sensitivity Status	Natural History	Potential Occurrence Status
Streambank spring beauty (<i>Claytonia parviflora</i> ssp. <i>grandiflora</i>)	CNPS List 4.2	Annual herb found in rocky soils in cismontane woodland habitat. Flowers February to May.	Low potential to occur on-site due to lack of cismontane woodland habitat.
Desert springparsley (<i>Cymopterus deserticola</i>)	CNPS List 1B.2	Low growing herbaceous perennial with silvery parsley like leaves and a ball shaped inflorescence. Found in sandy soils in Joshua tree woodland and Mojavean desert scrub. Flowers March to May.	High potential to occur in the desert scrub on-site.
Red Rock tarplant (<i>Deinandra arida</i>)	State Threatened July 1982 CNPS List 1B.2	Annual herb found in clay and volcanic tuff in Mojavean desert scrub. Flowers April to November.	Moderate potential to occur in the rocky desert scrub and wash habitats on-site.
Mohave tarplant (<i>Deinandra mohavensis</i>)	State Endangered Aug 1981 CNPS List 1B.3	Annual in vernal moist and alkali areas in drainages. Flowers July to October.	Moderate to low potential to occur in the washes on-site. No vernal moist spring habitat is present on-site.
Recurved larkspur (<i>Delphinium recurvatum</i>)	CNPS List 1B.2	Slender herbaceous perennial to nearly 3 feet tall with delicate pale blue flowers growing in deeper fine soil with grasses and herbs. Flowers March to June	Low potential to occur on-site due to lack of grasslands.
Limestone dudleya (<i>Dudleya abramsii</i> ssp. <i>calicicola</i>)	CNPS List 4.3	Perennial succulent herb found in carbonate soils in chaparral and pinyon and juniper woodland. Flowers April to June.	Low potential to occur on-site due to lack of chaparral and woodland habitats.
Tracy's eriastrum (<i>Eriastrum tracyi</i>)	State Rare CNPS List 3.2	Annual herb found in chaparral and cismontane woodland. Flowers May to July.	Low potential to occur on-site due to lack of chaparral and woodland habitats.
Mohave woolly sunflower (<i>Eriophyllum mohavense</i>)	CNPS List 1B.2	Small ephemeral annual on sandy and gravelly soil in Mojavean desert scrub, chenopod scrub and playas. Flowers March to May.	Moderate potential to occur on-site in desert scrub habitat.
Kern buckwheat (<i>Eriogonum kennedyi</i> var. <i>pinicola</i>)	CNPS List 1B.1	Perennial herb 2 to 6 inches tall in open places on clay soil. Found in chaparral and pinyon and juniper woodland. Flowers May to June.	Low potential to occur on-site due to lack of chaparral and woodland habitats.
Red Rock Canyon monkeyflower (<i>Erythranthe rhodopetra</i>)	CNPS List 1B.2	Annual herb found in sandy, canyon washes and Mojavean desert scrub. Flowers March to April.	High potential to occur on-site in Pine Tree Canyon wash and moderate potential in smaller washes on-site.
Red Rock poppy (<i>Eschscholzia minutiflora</i> ssp. <i>twisselmannii</i>)	CNPS List 1B.2	Yellow flowered annual about a foot or more tall that occurs on volcanic tuff material. Flowers March to May.	Moderate potential to occur on-site in soils with volcanic tuff.
Pale-yellow layia (<i>Layia heterotricha</i>)	CNPS List 1B.1	Annual herb found in alkaline or clay soils in	Low potential to occur on-site due to the lack of

Species	Sensitivity Status	Natural History	Potential Occurrence Status
		cismontane woodland, pinyon and juniper woodland and grasslands.	woodlands, coastal scrub, and grassland.
Sage-like Loeflingia (<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>)	CNPS List 2B.2	Minute annual with spine tipped leaves on sandy soil and dunes. Jepson Manual does not recognize variety but CNPS does. Flowers April to May.	Moderate potential to occur in sandy soils.
Solitary blazing star (<i>Mentzelia eremophila</i>)	CNPS List 4.2	Annual herb found in Mojavean desert scrub. Flowers March to May.	High potential to occur in desert scrub on-site.
Creamy blazing star (<i>Mentzelia tridentata</i>)	CNPS List 1B.3	Annual with somewhat thick dark green leaves and cream colored flowers on coarse rock gravel. Found in Mojavean desert scrub. Flowers March to May.	High potential to occur in desert scrub on-site.
Tehachapi monardella (<i>Monardella linoides</i> ssp. <i>oblonga</i>)	CNPS List 1B.3	Perennial rhizomatous herb found in lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest. Flowers June to August.	Low potential to occur on-site due to lack of woodland and forest habitat.
Large-flowered nemacladus (<i>Nemacladus secundiflorus</i> var. <i>secundiflorus</i>)	CNPS List 4.3	Annual herb found in gravelly openings in chaparral and valley and foothill grassland. Flowers April to June.	Low potential to occur on-site due to lack of chaparral and grassland habitats.
Bakersfield cactus (<i>Opuntia basilaris</i> var. <i>treleasei</i>)	CNPS List 1B.1	Perennial stem succulent. Found in sandy or gravelly areas of chenopod scrub, cismontane woodland, and valley and foothill grassland.	Moderate potential to occur on-site in desert scrub habitat.
Fragile pentachaeta (<i>Pentachaeta fragilis</i>)	CNPS List 4.3	Annual herb found in foothill woodlands. Flowers March to June.	Low potential to occur on-site due to lack of woodland habitat.
Adobe yampah (<i>Perideridia pringlei</i>)	CNPS List 4.3	Perennial herb found in chaparral and foothill woodland. Flowers April to June.	Low potential to occur on-site due to lack of woodland and chaparral habitat.
Hubby's phacelia (<i>Phacelia hubbyi</i>)	CNPS List 4.2	Annual herb found on gravelly or rocky slopes in chaparral or coastal scrub. Flowers April to June.	Low potential to occur on-site due to lack of coastal scrub and chaparral habitat.
Charlotte's Phacelia (<i>Phacelia nashiana</i>)	CNPS List 1B.2	Low growing annual with somewhat thick leaves and deep blue flowers growing on gravelly and talus slopes. Flowers March to June.	Moderate potential to occur on-site. Known from the general vicinity of the site and its surroundings
Mojave fish-hook cactus (<i>Sclerocactus polyancistrus</i>)	CNPS List 4.2	Perennial stem succulent found in Mojave desert scrub and pinyon and juniper woodland.	Moderate potential to occur on-site in desert scrub.

APPENDIX C

WILDLIFE SPECIES DETECTED DURING HABITAT ASSESSMENT

Appendix C

Wildlife Species Detected During Habitat Assessment

Scientific Names	Common Names
Reptiles and Amphibians	
Order Testudines	
Family Emydidae	
<i>Gopherus agassizii</i>	desert tortoise
Birds	
Order Acciptriformes	
Family Cathartidae	
<i>Cathartes aura</i>	turkey vulture
Order Strigiformes	
Family Strigidae	
<i>Athene cunicularia hypogea</i>	burrowing owl
Order Passeriformes	
Family Corvidae	
<i>Corvus corax</i>	common raven
Family Alaudidae	
<i>Eremophila alpestris actia</i>	California horned lark
Family Emberizidae	
<i>Amphispiza belli</i>	sage sparrow
<i>Zonotrichia leucophrys</i>	white-crowned sparrow
Family Hirundinidae	
<i>Zonotrichia leucophrys</i>	barn swallow
Mammals	
Order Lagomorpha	
Family Leporidae	
<i>Lepus californicus</i>	black-tailed jackrabbit

APPENDIX D
FIELD DATA SHEETS

WILDLIFE SURVEY DATA SHEET

Project: RE Cinco Location: Preferred alt
gentle

Date: 3/4/14

Page 1 of 2

GPS Unit	Surveyor(s)	GPS Unit	Surveyor(s)
GBBMM6	MKE, SOA		

	Time	Temp (°F)	Wind (mph)	Precip.	Cloud Cover (%)
Start	0900	55	10	0	100
End	1600	62	5	0	80

Potential Burrows or Nests:

Burrow or Nest ID (GPS IDENT Code*)	GPS Easting	GPS Northing	Species Present (Circle)	Burrow complex? ¹	Burrow Dimension H x W x D (in.)	Burrow Suitable for (Circle) and Status ¹ (Circle):	Sign Present (Circle) WW=whitewash, Pell=Pellets, Feath=feathers, Claw=claw marks, Trk=tracks, Car=carcass, Oth=other	Description and Comments, **Note Class of any DT sign**
WDBSD001	0404124	3899179	WBO	Y (N) NA	10x18x mk	WBO - A, PA, S, NS	WBO - WW (Pell) Feath Trk Oth	class 1 - fresh DT tracks 2 scat (1 eroded 1 w/ no sheet but compact) - 2 pellets outside but unlikely for WBO w/veg overhead
			AB			AB - A, PA, S, NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, NS	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, S, NS	DT - (Trk) Scat Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			None			N/A	None	
WBLMK001	0404152	3899196	WBO	Y (N) NA	NA	WBO - A, PA, S, NS	WBO - WW Pell Feath Trk Oth	five WBO flushed, no burrow nearby
			AB			AB - A, PA, S, NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, NS	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, S, NS	DT - Trk Scat Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			None			N/A	None	
WDCMK002	0403948	3899139	WBO	Y (N) NA	NA	WBO - A, PA, S, NS	WBO - WW Pell Feath Trk Oth	class 5 disarticulated and scattered.
			AB			AB - A, PA, S, NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, NS	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, S, NS	DT - Trk Scat Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			None			N/A	None	
WOLMK003	0404116	3899186	WBO	Y (N) NA	NA	WBO - A, PA, S, NS	WBO - WW Pell Feath Trk Oth	250 mm, male, long gula visible chin glands appears healthy, no shell damage but some wear large tail.
			AB			AB - A, PA, S, NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, NS	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, S, NS	DT - Trk Scat Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			None			N/A	None	

(No Sun)

Incidental Species Observations/Notes:

Barn Swallow, wOSP, black-tailed jack rabbit, co ra, TVVU

*IDENT Code: the unique 8-digit code that identifies the individual burrow or burrow complex within the project site (e.g., GBBSD001). See last page for nomenclature and codes.

¹Burrow Status: A = Active (occupancy is confirmed by visual detection of species or sign indicates recent use), PA = Potentially Active (species occupancy not confirmed, but sign indicates possible use), Suitable (no evidence of recent use by species, but burrow is suitable), NS = Not Suitable (burrow not suitable for this species), Inact = inactive nest present.

WILDLIFE SURVEY DATA SHEET

Project: RE Cinco Location: preferred Alt gentie Date: 3/2/14

Page 2 of 2

GPS Unit	Surveyor(s)	GPS Unit	Surveyor(s)
GARMING	MKE SDA		

	Time	Temp (°F)	Wind (mph)	Precip.	Cloud Cover (%)
Start	0700	55	10	0	100
End	1600	62	5	0	80

Potential Burrows or Nests:

Burrow or Nest ID (GPS IDENT Code*)	GPS Easting	GPS Northing	Species Present (Circle)	Burrow complex?¹	Burrow Dimension H x W x D (in.)	Burrow Suitable for (Circle) and Status¹ (Circle):	Sign Present (Circle) WW=whitewash, Pell=Pellets, Feath=feathers, Claw=claw marks, Trk=tracks, Car=carcass, Oth=other	Description and Comments, **Note Class of any DT sign**
WDBMK004	0404024	3899208	WBO	Y (N) NA	4x8x unk	WBO - A, PA, (S) NS	WBO - WW Pell Feath Trk Oth	shit ton of scat - filled class 3 scat compact, no sheen class 2 burrow.
			AB			AB - A, PA, S, (NS)	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, (NS)	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, (S) NS	DT - Trk (Scat) Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			(None)			N/A	None	
			Other			Other	Other	
WDSS0002	0403726	3899214	WBO	Y N (NA)		WBO - A, PA, S, NS	WBO - WW Pell Feath Trk Oth	3 pieces compact, no sheen class 3
			AB			AB - A, PA, S, NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, NS	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, S, NS	(DT) - Trk (Scat) Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			None			(N/A)	None	
			Other			Other	Other	
WDSS0003	0404048	3899076	WBO	Y N (NA)		WBO - A, PA, S, NS	WBO - WW Pell Feath Trk Oth	2 pieces compact no sheen class 3
			AB			AB - A, PA, S, NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, NS	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, S, NS	(DT) - Trk (Scat) Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			None			(N/A)	None	
			Other			Other	Other	
			WBO	Y N NA		WBO - A, PA, S, NS	WBO - WW Pell Feath Trk Oth	
			AB			AB - A, PA, S, NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, NS	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, S, NS	DT - Trk Scat Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			None			N/A	None	
			Other			Other	Other	

Incidental Species Observations/Notes:

*IDENT Code: the unique 8-digit code that identifies the individual burrow or burrow complex within the project site (e.g., GBBSD001). See last page for nomenclature and codes.
 ¹Burrow Status: A = Active (occupancy is confirmed by visual detection of species or sign indicates recent use), PA = Potentially Active (species occupancy not confirmed, but sign indicates possible use), S = Suitable (no evidence of recent use by species, but burrow is suitable), NS = Not Suitable (burrow not suitable for this species), Inact = inactive nest present.

WILDLIFE SURVEY DATA SHEET

Project: RE Cinco

Location: PROTECTED ALT
GRITIE

Date: 2/5/14

Page 1 of 1

GPS Unit	Surveyor(s)	GPS Unit	Surveyor(s)
GARMIN 6	MIKE		

	Time	Temp (°F)	Wind (mph)	Precip.	Cloud Cover (%)
Start	0630	48	0	0	40
End	1230	72	0	0	45

Potential Burrows or Nests:

Burrow or Nest ID (GPS IDENT Code*)	GPS Easting	GPS Northing	Species Present (Circle)	Burrow complex?¹	Burrow Dimension H x W x D (in.)	Burrow Suitable for (Circle) and Status¹ (Circle):	Sign Present (Circle) WW=whitewash, Pell=Pellets, Feath=feathers, Claw=claw marks, Trk=tracks, Car=carcass, Oth=other	Description and Comments, **Note Class of any DT sign**
WMAMK005	0402411	3897169	WBO	Y <input checked="" type="radio"/> NA	5x5x unk	WBO - A, PA, <input checked="" type="radio"/> NS	WBO - WW Pell Feath Trk Oth	OLD (white) SCAT ON APRON, BUT MUCH TOO SMALL for den. May have been filled in over time
			AB			AB - A, PA, S, <input checked="" type="radio"/> NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, <input checked="" type="radio"/> NS	DKF - Claw Trk <input checked="" type="radio"/> Scat Carc Oth	
			DT			DT - A, PA, <input checked="" type="radio"/> NS	DT - Trk Scat Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			<input checked="" type="radio"/> None			N/A	<input checked="" type="radio"/> None	
			Other			Other	Other	
			WBO	Y N NA		WBO - A, PA, S, NS	WBO - WW Pell Feath Trk Oth	
			AB			AB - A, PA, S, NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, NS	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, S, NS	DT - Trk Scat Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			None			N/A	None	
			Other			Other	Other	
			WBO	Y N NA		WBO - A, PA, S, NS	WBO - WW Pell Feath Trk Oth	
			AB			AB - A, PA, S, NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, NS	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, S, NS	DT - Trk Scat Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			None			N/A	None	
			Other			Other	Other	
			WBO	Y N NA		WBO - A, PA, S, NS	WBO - WW Pell Feath Trk Oth	
			AB			AB - A, PA, S, NS	AB - Claw Trk, Scat, Carc, Oth	
			DKF			DKF - A, PA, S, NS	DKF - Claw Trk Scat Carc Oth	
			DT			DT - A, PA, S, NS	DT - Trk Scat Car Egg shell, Oth	
			Nest			Nest - A, PA, Inact	Nest - Eggs, Chicks, Oth	
			None			N/A	None	
			Other			Other	Other	

Incidental Species Observations/Notes:

sag S, HOLA, CORA

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