Biological Resource Letter Report Over APNs 392-070-10 and 392-070-07 on Lakeside Avenue County of San Diego, CA

[Project Number PDS2020-TPM-21279]

Prepared For:

The County of San Diego
Department of Planning and Development Services
5510 Overland Avenue
San Diego, CA 92123

Prepared For:

Mr. James Hurrell
12392 Lakeside Avenue
Lakeside, CA 92040

Prepared By:

Gretchen Cummings

Gretchen Cummings

Cummings Environmental, Inc.
1721 Main Street, Suite 104
Ramona, CA 92065
(760)440-0349

Revised 11 January 2022
Revised 17 September 2021
Revised 10 December 2020
28 May 2020
Cummings Environmental Job Number 1823.21C

Biological Resource Letter Report Over APNs 392-070-10 and 392-070-07 on Lakeside Avenue County of San Diego, California

[Project Number PDS2020-TPM-21279]

Prepared For:

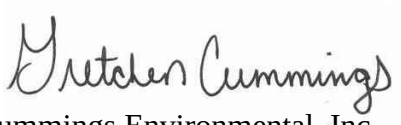
The County of San Diego
Department of Planning and Development Services
5510 Overland Avenue
San Diego, CA 92123

Project Proponent:

Mr. James Hurrell
12392 Lakeside Avenue
Lakeside, CA 92040

Prepared By:

Gretchen Cummings



Cummings Environmental, Inc.
1721 Main Street, Suite 104
Ramona, CA 92065
(760)440-0349

Revised 11 January 2022
Revised 17 September 2021
Revised 10 December 2020
28 May 2020
Job Number 1823.21C

Table of Contents

Attachments:

SUMMARY

Assessor's Parcel Numbers 392-070-10 and 392-070-07, also known as the Hurrell Subdivision project, currently contain three residential structures and undisturbed, natural lands. The proposed development entails subdivision of the property into five parcels with one of the parcels being a remainder parcel to be used for future development and open space. This Biological Technical Report is being prepared to aid in the process of acquiring permits for this proposed project.

The property is currently occupied by three habitat types: Diegan Coastal Sage Scrub, Urban/Developed Land, and Disturbed Habitat. There is also a drainage in the southwestern portion of the site that is considered waters of the state and waters of the U.S., but not as a Resource Protection Ordinance wetland. It runs parallel to the access road but has been avoided through project design. Proposed impacts include 5.06-acres of on-site impacts and 0.065-acre of off-site impacts to Diegan Coastal Sage Scrub occupied by the California Gnatcatcher. These combined impacts of 5.125-acres are proposed to be mitigated by dedicating 7.689-acres of Diegan Coastal Sage Scrub on-site protected by an open space easement (a 1.5:1 mitigation ratio). It should be noted that included within these 5.125-acre impacts are 0.1-acre of impacts to potential Hermes Copper habitat. To mitigate for the loss of this potential habitat, 0.1-acre of similar potential Hermes Copper habitat will be preserved on-site within the proposed open space (a 1:1 ratio).

1.0 INTRODUCTION, PROJECT DESCRIPTION, LOCATION, AND SETTING

The subject property is located north of the San Diego River, and west of State Route 67 off Lakeside Avenue in the unincorporated community of Lakeside in the County of San Diego (see Figures 1 and 2). The 15.17-acre site contains a ridgeline in the northwest property corner that contains three residential structures. From that ridgeline, the property slopes down to the west, east and south (see Figure 1). The total elevational difference across the site is 270-feet with a low of 410-feet along the southern edge of the property by the off-site self-storage unit, and a high of 680-feet at the location of the existing residence on proposed parcel 3. The proposed project entails subdivision of the property into five parcels with one parcel as a remainder parcel for future development and open space (see Figures 3 and 7). Access to the subdivision will be via the existing access road off of Lakeside Avenue. An off-site water easement will connect to an existing line along Coping Place to the northwest (see Figures 3 and 7).

The 15.17-acre property was visited nineteen times in 2019. Twelve visits comprised the federal protocol Quino Checkerspot Butterfly survey (see attached Appendix A for dates, times and weather data), five visits consisted of the protocol survey for the Hermes Copper Butterfly survey (see attached Appendix B for dates, times and weather data), and three visits comprised the federal protocol California Gnatcatcher survey (see attached Appendix C for dates, times and weather data). Please note that during three of the survey dates, multiple surveys were conducted in the same day. If conducted on the same day, surveys did not overlap. For example, if the California Gnatcatcher survey was conducted in the morning, then the Quino Checkerspot

Butterfly survey was conducted in the afternoon. In addition to these focused protocol surveys for the California Gnatcatcher, Quino Checkerspot Butterfly, and Hermes Copper Butterfly, two survey dates were dedicated to the general biological survey (please see the table on the next page for dates, times, and weather conditions of the two general biological assessment visits).

Hurrell Property, APNs 392-070-10 and 392-070-07									
Survey	Date	Beginning of Observation Period				End of Observation Period			
		Time	Cloud Cover	Wind	Air Temp	Time	Cloud Cover	Wind	Air Temp
General Biological Assessment	28 Mar 2019	1100	60%	1.3 – 5.0 mph	71.7°F	1200	50%	2.8 – 6.0 mph	71.6°F
General Biological Assessment	23 Feb 2019	1045	100%	< 2.0 mph	66.5°F	1245	100%	< 1.9 mph	67.6°F

During the general biological survey dates, vegetative communities were mapped (see Figure 3), plant species were identified (see Table 1), and all wildlife utilizing the property were noted (see Table 2 for a complete list of all wildlife noted during all nineteen survey dates). Please note that the entire property was surveyed, as was an area out 100-feet from the parcel boundaries. All of the adjacent properties are privately owned. As such, surveys within the 100-foot buffer were conducted through binoculars.

Data collected during the nineteen field visits indicated that the site contains one sensitive vegetation community: Diegan Coastal Sage Scrub (Tier II). Six sensitive wildlife species and one sensitive plant species were detected during the surveys. The one sensitive plant species is the San Diego County Viguiera (*Viguiera laciniata*). The six sensitive wildlife species observed were the Orange-throated Whiptail, Cooper's Hawk, Rufous-crowned Sparrow, Turkey Vulture, Nuttall's Woodpecker, and California Gnatcatcher. As currently designed, the proposed project will impact 5.1~~5~~25-acres of Diegan Coastal Sage Scrub habitat on-site and off-site which contains potential Hermes Copper Butterfly habitat and is occupied by the federally threatened California Gnatcatcher. Mitigation for the loss of habitat will be mitigated by preserving 7.~~7~~689-acres of similar Diegan Coastal Sage Scrub habitat on-site.

2.0 REGIONAL CONTEXT

In California, there is a state-wide effort known as the Natural Community Conservation Planning (NCCP) program established to preserve ecosystems, while at the same time allowing for planned development. Locally, there are several jurisdictions that have established plans as part of the NCCP program. The County of San Diego is a participant in the local Multiple

Species Conservation Program (MSCP) with an approved South County Plan and two other plans in north and east county that are not yet approved. The proposed project is located within the approved South County Plan.

The South County Plan has documents and maps that can be found at the County's website [https://www.sandiegocounty.gov/content/sdc/pds/mscp/sc/]. Per the South County Plan, APN 392-070-07 is located outside of the Pre-Approved Mitigation Area (PAMA) and is mapped as part of the Metro-Lakeside Jamul Segment, while APN 392-070-10 is located partly within and partly outside of the PAMA. Per the County's Biological Mitigation Ordinance (San Diego, County of. 2010c), the property is considered a Biological Resources Core Area (BRCA) since a portion of the property falls within the PAMA, and a portion of it is mapped as "high habitat value" on the Habitat Evaluation Map found in Attachment J of the Biological Mitigation Ordinance.

3.0 HABITATS/VEGETATION COMMUNITIES

The subject property contains Diegan Coastal Sage Scrub (Holland Element Code 32500), Urban/Developed Land (Holland Element Code 12000), and Disturbed Habitat (Holland Element Code 11300). The attached Figure 3 shows the vegetation mapping on the site, and Table 1 contains a list of the plant species observed on the property. The soils underlying these three habitat types are mapped by Bowman (1973) as Cieneba-Fallbrook rocky sandy loams, 30-65% slopes eroded (CnG2), and Tujunga Sand 0-5% slopes.

Diegan Coastal Sage Scrub (Tier II vegetation community). Most of the property (12.88-acres of the 15.17-acre property) is classified as Diegan Coastal Sage Scrub (Holland Element Code 32500). Shrubs indicative of this habitat type include California Sagebrush (*Artemisia californica*) and California Buckwheat (*Eriogonum fasciculatum*). Other large shrubs within this habitat include Laurel Sumac (*Malosma laurina*), Broom Baccharis (*Baccharis sarothroides*), Deerweed (*Acmispon glaber*), San Diego County Viguiera (*Viguiera laciniata*), and Redberry (*Rhamnus crocea*). This habitat occurs in the northwest corner of the site and on the slopes coming down off the ridge in the northwest part of the site (see Figure 3 for mapping and Figure 4 for site photos). It should be noted that there is an ephemeral drainage within this habitat type that occurs parallel to the lower portion of the access road (see Figure 3).

Urban/Developed Land (no Tier level). The Urban/Developed Land classification (Holland, as modified by Oberbauer, Element Code 12000) includes the residential structures and yards, a portion of the access road and an area at the southern property corner that is used for garbage and recycling bins by the adjacent self-storage facility (see Figure 3 for mapping and Figure 5 for site photos). On-site, the Urban/Developed Land classification totals 1.96-acres.

Disturbed Habitat (Tier IV vegetation community). The Disturbed Habitat (Holland, as modified by Oberbauer, Element Code 11300) occupies 0.33-acre and is a result of the fuel modification clearing associated with the residential structures (see bottom photo in Figure 5).

4.0 SPECIAL STATUS SPECIES

One principal goal of the biological survey was the determination of the presence or absence of sensitive plant and animal species. Focused lists of these sensitive plant and animal species have been compiled using the nine-quad search function of the California Native Plant Society Electronic Database, the California Natural Diversity Database, the County of San Diego Sensitive Plant List found as Table 2 in the County of San Diego Guidelines for Determining Significance for Biological Resources (2010a), and the County of San Diego Sensitive Animal List found as Table 3 in the same document. These lists are attached as Tables 3 and 4.

One hundred and fifteen sensitive plant species were analyzed in Table 3 and the reader's attention is directed to that Table for detailed information. Of those one hundred and fifteen plants, one was found on-site. The one sensitive plant species on the property is the San Diego County Viguiera (*Viguiera laciniata*). Eighty-four of the remaining one hundred and fourteen species are unlikely to be found on-site due to the types of habitats, soils, and elevations on the property. Nine plant species have a low probability of occurring on-site, fourteen have a medium chance of occurrence, and seven have a high probability of being found on-site. The seven sensitive plant species with a high probability are:

Western Spleenwort	*Asplenium vespertinum*
Brewer's Calandrinia	*Calandrinia breweri*
Graceful Tarplant	*Holocarpha virgata* ssp. *elongata*
Decumbent Goldenbush	*Isocoma menziesii* var. *decumbens*
Golden-rayed Pentachaeta	*Pentachaeta aurea* ssp. *aurea*
White Rabbit-Tobacco	*Pseudognaphalium leucocephalum*
San Diego County Needle Grass	*Stipa diegoensis*

San Diego County Viguiera. The San Diego County Viguiera (*Viguiera laciniata*) is a perennial shrub that blooms from February to June. It is categorized as a List 4.3 species by the California Native Plant Society (CNPS, 2020) and as a List D species on the County of San Diego's Sensitive Plant List (San Diego, County of, 2010a). This shrub in the sunflower family is a component of the Diegan Coastal Sage Scrub habitat on-site (see inset to the right).

Western Spleenwort. The Western Spleenwort (*Asplenium vesptertinum*) is a perennial rhizomatous herb that blooms from February to June. It is categorized as a List 4.2 species by the California Native Plant Society (CNPS, 2020) and as a List D species on the County of San Diego's Sensitive Plant List (San Diego, County of, 2010a). This species is found among boulders and rocky outcrops within Sage Scrub, Chaparral and Cismontane Woodland habitats. It has been documented within the El Cajon quad (the quad in which this property occurs). However, it was not detected during the field surveys.

Brewer's Calandrinia. Brewer's Calandrinia (*Calandrinia breweri*) is an annual herb that blooms from March to June. It is categorized as a List 4.2 species by the California Native Plant Society (CNPS, 2020) and as a List D species on the County of San Diego's Sensitive Plant List (San Diego, County of, 2010a). This species is found in Sage Scrub or Chaparral habitats underlain by sandy or loamy soils. It has been documented within the El Cajon quad (the quad in which this property occurs). However, it was not detected during the field surveys.

Graceful Tarplant. The Graceful Tarplant (*Holocarpha virgata* ssp. *elongata*) is an annual herb that blooms from May to November. It is considered a List 4.2 species by the California Native Plant Society (CNPS, 2020) and as a List D species on the County of San Diego's Sensitive Plant List (San Diego, County of, 2010a). This species is found in Sage Scrub, Chaparral, Cismontane Woodland, and Valley and Foothill Grassland habitats. It has been documented within the El Cajon quad (the quad in which this property occurs). However, it was not found during the field surveys.

Decumbent Goldenbush. Decumbent Goldenbush (*Isocoma menziesii* var. *decumbens*) is a perennial shrub that blooms from April to November. It is considered a List 1B.2 species by the California Native Plant Society (CNPS, 2020) and as a List A species on the County of San Diego's Sensitive Plant List (San Diego, County of, 2010a). The closest CNDDB record is < 0.5-mile to the east of the property (CDFW, 2020a). However, Decumbent Goldenbush was not detected during the field surveys.

Golden-rayed Pentachaeta. The Golden-rayed Pentachaeta (*Pentachaeta aurea* ssp. *aurea*) is an annual herb that blooms from March to July. It is considered a List 4.2 species by the California Native Plant Society (CNPS, 2020) and as a List D species on the County of San Diego's Sensitive Plant List (San Diego, County of, 2010a). This species is found in a variety of habitats and has been documented within the El Cajon quad (the quad in which this property occurs). However, this species was not found during the field surveys.

White Rabbit-Tobacco. White Rabbit-Tobacco (*Pseudognaphalium leucocephalum*) is a perennial herb that blooms from August to November. This species is considered a List 2B.2 species by the California Native Plant Society (CNPS, 2020), but is not found on the County of San Diego's Sensitive Plant List (San Diego, County of, 2010a). It is found in Sage Scrub, Chaparral, Riparian Woodland and Cismontane Woodland habitats. This species has been recorded from the El Cajon quad (the quad in which this property occurs) and the closest CNDDB record is 1.0-mile to the east of the property on Willow Road (CDFW, 2020a). However, it was not detected during the field surveys.

San Diego County Needle Grass. San Diego County Needle Grass (*Stipa diegoensis*) is a perennial herb that blooms from February to June. It is considered a List 4.2 species by the California Native Plant Society (CNPS, 2020) and as a List D species on the County of San Diego's Sensitive Plant List (San Diego, County of, 2010a). This species is found in Sage Scrub and Chaparral habitats on rocky soils, such as those found on-site. It has been documented within

the El Cajon quad (the quad in which this property occurs). However, it was not detected during the field surveys.

A diligent search for all sensitive plant species was conducted in March and May 2019 at times when the plants would have had above-ground expressions, but as mentioned above, only the San Diego County Viguiera was identified on-site.

Seventy-seven sensitive wildlife species were analyzed in Table 4. Of those seventy-seven species, six were found on-site during the surveys. Those six sensitive wildlife species were the Orange-throated Whiptail, Cooper's Hawk, Rufous-crowned Sparrow, Turkey Vulture, Nuttall's Woodpecker, and California Gnatcatcher. Of the remaining seventy-one species, forty-four of them were unlikely given the habitats and/or soils on the property. Ten sensitive wildlife species have a low probability of occurring on-site, twelve have a medium potential, and five have a high probability of being found on the property. The five species with a high potential to be found on the property are:

San Diego Banded Gecko	*Coleonyx variegatus abbottii*
Red Diamond Rattlesnake	*Crotalus ruber*
Coast Horned Lizard	*Phrynosoma blainvillii*
Red-shouldered Hawk	*Buteo lineatus*
Costa's Hummingbird	*Calypte costae*

All sensitive wildlife species were searched for during the site visits, and three focused surveys were conducted for the Quino Checkerspot Butterfly, Hermes Copper Butterfly, and California Gnatcatcher. The Quino Checkerspot Butterfly and Hermes Copper Butterfly protocol surveys were negative (see attached Appendices A and B). Only the California Gnatcatcher protocol survey was positive (see attached Appendix C and the paragraph on the California Gnatcatcher below). As mentioned above, the Orange-throated Whiptail, Cooper's Hawk, Rufous-crowned Sparrow, Turkey Vulture, and Nuttall's Woodpecker were also detected on-site, along with the California Gnatcatcher. These six sensitive species are described in more detail below as are the five sensitive wildlife species with a high probability of being found on-site.

Orange-throated Whiptail. The Orange-throated Whiptail (*Aspidoscelis hyperythra*) is on a Watch List by the California Department of Fish and Wildlife (CDFW, 2019a), and is a Group 2 species on the County of San Diego's Sensitive Animal List (San Diego, County of, 2010a). This reptile was observed throughout the site during seven of the site visits (see Figure 6 for locations).

Cooper's Hawk. Where it is nesting, the Cooper's Hawk (*Accipiter cooperi*) is on a Watch List by the California Department of Fish and Wildlife (CDFW, 2019a), and is a Group 1 species on the County of San Diego's Sensitive Animal List (San Diego, County of, 2010a). A single individual was observed as an overflight during the 16 March 2019 and 1 April 2019 visits (see Figure 6 for locations).

Rufous-crowned Sparrow. The Rufous-crowned Sparrow (*Aimophila ruficeps* ssp. *canescens*) is on a Watch List by the California Department of Fish and Wildlife (CDFW, 2019a), and is a Group 1 species on the County of San Diego's Sensitive Animal List (San Diego, County of, 2010a). This species was detected throughout the site and off-site to the southwest during eight of the site visits (see Figure 6 for locations of sightings).

Turkey Vulture. The Turkey Vulture (*Cathartes aura*) holds no state or federal status, but it is a Group 1 species on the County of San Diego's Sensitive Animal List (San Diego, County of, 2010a). There are no suitable nest sites on-site for this species, but individuals were seen as overflights during the 16 March 2019, 11 June 2019, and 18 June 2019 visits (see Figure 6 for locations).

Nuttall's Woodpecker. The Nuttall's Woodpecker (*Picoides nuttallii*) holds no state or county status but is considered a Bird of Conservation Concern by the U.S. Fish and Wildlife Service in our Bird Conservation Region 32 (USFWS, 2008). During the 18 June 2019 visit, an individual was heard > 100-feet off-site to the west in some Eucalyptus trees around an adjacent residence

California Gnatcatcher. The California Gnatcatcher (*Polioptila californica californica*) is a small, gray bird (see inset to the right of the adult male of the pair on-site) that is associated with Sage Scrub and Chaparral/Sage Scrub where the two habitats intermix. This bird is federally listed as a threatened species under the Endangered Species Act (USFWS, 1993). Statewide, it is considered a species of special concern (CDFW, 2019a) and it is a Group 1 species on the County of San Diego's Sensitive Animal List (San Diego, County of, 2010a). One pair successfully fledged three young on-site during the 2019 nesting season (see attached Appendix C for the California Gnatcatcher report and Figure 6 for the locations of the sightings).

San Diego Banded Gecko. The San Diego Banded Gecko (*Coleonyx variegatus abbottii*) holds no federal status but is considered as species of special concern by the California Department of Fish and Wildlife (CDFW, 2019a). It is a Group 1 species on the County of San Diego's Sensitive Animal List (San Diego, County of, 2010a). This species is found in rocky situations west of the mountains in Sage Scrub and Chaparral habitats. The closest CNDDB record is < 1-mile to the east (CDFW, 2020a). However, this species was not found on-site.

Red Diamond Rattlesnake. The Red Diamond Rattlesnake (*Crotalus ruber*) is a reddish rattlesnake found in a variety of habitats. It holds no federal status but is categorized as a species of special concern by the California Department of Fish and Wildlife (CDFW, 2019a) and a Group 2 species on the County of San Diego's Sensitive Animal List (San Diego, County of, 2010a). The closest CNDDB record is 1.1-miles to the northeast (CDFW, 2020a). However, this

species was not found on-site. It should be mentioned that a rattlesnake was heard during one of the visits but was unable to be seen for species identification.

Coast Horned Lizard. The Coast Horned Lizard (*Phrynosoma blainvillii*) is a round, dinosaur-looking lizard found in a variety of semi-open vegetation where its primary prey species, the harvester ant, is found. This lizard species holds no federal status but is categorized as a species of special concern by the California Department of Fish and Wildlife (CDFW, 2019a) and a Group 2 species on the County of San Diego's Sensitive Animal List (San Diego, County of, 2010a). Numerous harvester ant colonies were noted throughout the site and there is an historic CNDDB record that covers a small part of the southwest corner of the property (CDFW, 2020a). However, this species was not detected on-site.

Red-shouldered Hawk. The Red-shouldered Hawk (*Buteo lineatus*) is found in wooded areas with nearby openings and water. This buteo holds no federal or state status but is a Group 1 species on the County of San Diego's Sensitive Animal List (San Diego, County of, 2010a). While there are no wooded areas on-site, there are some Eucalyptus trees along the access road and around the adjacent residences that could provide nest sites. However, this species was not found on-site.

Costa's Hummingbird. The Costa's Hummingbird (*Calypte costae*) holds no state or county status but is considered a Bird of Conservation Concern by the U.S. Fish and Wildlife Service in our Bird Conservation Region 32 (USFWS, 2008). This hummingbird species is found in a variety of habitats, such as the Diegan Coastal Sage Scrub found on the property. However, this species was not detected on-site.

No indications of large mammal use of the site were detected during the nineteen site visits (no tracks or scat/pellets). Since the undeveloped portions of the property occur on steeply sloped lands with only shrubs for vegetative cover, the denser, taller riparian habitat off-site to the south of the property within the San Diego River channel is more likely to function as a movement corridor for large mammals. The San Diego River channel provides vegetative cover and a source of water for 7-miles up to El Capitan Reservoir and the U.S. Forest Service lands to the northeast of the property.

As mentioned above, a single Cooper's Hawk was noted as an overflight of the property during two site visits. In addition, a pair of Red-tailed Hawks successfully nested just off-site to the west in a Eucalyptus tree. The presence of these raptors in the vicinity of the property combined with the occurrence of scattered Eucalyptus trees along the access road and around the existing residences indicate a high potential for raptors to nest on-site. In addition, the presence of suitable prey, such as the California Ground Squirrel, the Audubon's Cottontail, and small passerines within the open habitats on-site provides suitable foraging habitat for raptors.

5.0 JURISDICTIONAL WETLANDS AND WATERWAYS

The subject property contains a ridgeline in the northwest portion of the site. From that ridgeline, the property slopes to the east down to State Route 67, to the south down to Lakeside Avenue, and to the southwest down towards the access road (see Figures 1 and 2). Adjacent to the access road on the east side is an ephemeral drainage that flows parallel to the lower portion of the access road down to a brow ditch associated with the off-site self-storage facility. The brow ditch enters a culvert under Lakeside Avenue and then discharges into the San Diego River (see Figures 2 and 3). Under the current definitions, this drainage is considered waters of the state, and waters of the U.S., but not as a Resource Protection Ordinance (RPO) wetland. Specifically, the drainage does not support a predominance of hydrophytes, the substratum is not predominantly undrained hydric soil, and although the drainage is ephemeral, the substratum is not predominately non-soil and this drainage does not contribute *substantially* to the biological functions or values of wetlands in the drainage system. To eliminate the need for permits through the California Department of Fish and Wildlife, the Regional Water Quality Control Board, and the U.S. Army Corps of Engineers, ~~it~~ the drainage has been avoided through project design (see Figure 3). Riprap has been proposed outside of the Ordinary High Water Mark of this drainage so as to avoid any fill. Since impacts to the drainage have been completely avoided through project design, no mitigation is required or recommended.

6.0 OTHER UNIQUE FEATURES/RESOURCES

The west-, south-, and east-facing slopes on the property contain steep slopes which are considered to be a unique feature. The majority of these slopes will be placed into open space for use as on-site mitigation to Diegan Coastal Sage Scrub. There are no other unique features or resources on this property in Lakeside (i.e. no special soils, wildlife corridors, etc.). Although the San Diego River is located just across Lakeside Avenue from the property, the steep slopes of the site and the surrounding humanity in the forms of roads and residences, do not facilitate wildlife movement to and/or from the river (see Figure 2). Rather, the San Diego River channel itself is the wildlife corridor.

7.0 SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

As proposed, the subdivision will have the following habitat impacts. The table below details the types of habitats that will be impacted and the mitigation for those impacts, if required. Under the County of San Diego Biological Mitigation Ordinance (BMO), no mitigation is required for impacts to Urban/Developed Land or Disturbed Habitat (San Diego, County of. 2010c). Urban/Developed Land has no Tier level and Disturbed Habitat is a Tier IV vegetation community. The impacts to the Diegan Coastal Sage Scrub habitat (a Tier II vegetation community), however, do require a 1.5:1 mitigation ratio under the BMO. The 5.06-acres of on-site Diegan Coastal Scrub impacts and the 0.065-acres of off-site impacts are proposed to be mitigated on-site by dedicating 7.689-acres of Diegan Coastal Sage Scrub as an open space

easement (see Figure 7). Since a portion of the site is within the PAMA and given the occurrence of six sensitive species on the property, this on-site mitigation is appropriate and is at a mitigation ratio higher than what is required by the BMO (1.5:1). The proposed on-site open space where it abuts the proposed development at the top of the hill will be temporarily fenced where the open space abuts clearing and/or grading activities per the County's Report Format and Content Requirements (San Diego, County of. 2010b). Given the steep terrain of the proposed open space and the limited number of residences adjacent to the open space, permanent fencing is not necessary, just the placement of open space signs (see Figure 7).

Vegetation Impact and Mitigation Summary

Vegetative Community	Acres On-Site	Acres Dedicated for Right-of-Way	Acres Impacted On-Site[1]	Acres Impacted Off-Site[2]	Mitigation Ratio[3]	Acres of Proposed On-site Open Space
Diegan Coastal Sage Scrub[4]	12.88	0.0	5.06	0.065	1.5:1	7.689 (1.5:1)
Urban/Developed Land	1.96	0.0	1.871	0.024	N/A	0.0
Disturbed Habitat	0.33	0.1	0.45	0.0	N/A	0.0
Totals:	15.17	0.1	7.381	0.089		7.689

[1] Calculated on-site impacts include those due to grading, the 20-foot wide existing water, sewer, gas and electric line easements, the future development area on Parcel 5, the limited building zone easements, and fuel modification.
[2] Off-site impacts include those due to the proposed new water easement connection to the northwest at Coping Place.
[3] The mitigation ratio for the impacts to the Diegan Coastal Sage Scrub were taken from the BMO for Tier II habitats. The impacted land meets the criteria for a biological resource core area since it contains a portion of the PAMA, and the mitigation site meets the criteria for a biological resource core area because it is the same property that contains a portion of the PAMA.
[4] The Diegan Coastal Sage Scrub habitat category includes potential Hermes Copper Butterfly habitat.

It should be mentioned that even though the focused survey for the Hermes Copper Butterfly was negative on-site during the 2019 flight season (see Appendix B for results), there is 0.2-acre of potential habitat for this butterfly species on the property (see Figures 6 and 7). According to the Interim Guidelines for the Hermes Copper (San Diego, County of, 2010b), potential Hermes Copper habitat occurs anywhere mature Redberry shrubs are within 15-feet of California Buckwheat shrubs (see inset to the left showing Redberry and California Buckwheat growing right next to each other). Any impacts to this potential Hermes Copper habitat require mitigation per the County of San Diego regulations (San Diego, County of, 2010b) at a 1:1 ratio. Given the current

design, 0.1-acre of potential Hermes Copper habitat will be impacted, and 0.1-acre of potential Hermes Copper habitat will be protected via an open space easement on-site (see Figure 7).

The only other potential impact resulting from the project is the direct impact to migratory birds that may nest on the property. In order to avoid these potential direct impacts, an avian breeding season avoidance measure is recommended. Bird species protected under the Migratory Bird Treaty Act (MBTA) have the potential to nest on-site. As such, vegetation removal should not occur during the avian breeding season of 15 February to 31 August. If there is a need to remove vegetation during the breeding season, then a biologist should survey the property for nesting birds prior to any land or vegetation disturbance. Given the occupancy of the property by the threatened California Gnatcatcher, any pre-construction surveys should include a federal protocol survey for the California Gnatcatcher. If no nests are found, then the clearing and grading activities can proceed. However, if nesting birds are found, then avoidance measures would need to be implemented until the nesting period is complete. These avoidance measures may include up to a 500-foot buffer around the nest, and/or noise barriers.

8.0 CUMULATIVE IMPACTS

Impacts to Diegan Coastal Sage Scrub and potential Hermes Copper habitat are proposed to be mitigated at a 1.5:1 and 1:1 ratio, respectively. These ratios are in accordance with San Diego County regulations and MSCP mitigation requirements. As such, these impacts are not considered to be cumulatively significant.

9.0 REFERENCES

Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., and Wilken, D.H. eds. 2012. The Jepson Manual Vascular Plants of California, 2nd Edition. University of California Press, Berkeley, xxii + 1568 pp.

Beauchamp, R. Mitchel. 1986. A Flora of San Diego County, California. Sweetwater River Press. National City, Calif. 241 pp.

Bond, Suzanne I. 1977. An Annotated List of the Mammals of San Diego County, California. San Diego Society of Natural History, Transactions 18(14):229-248.

Bowman, Roy H., et al. 1973. Soil Survey of the San Diego Area, California. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

California Native Plant Society. 2020. Electronic Inventory of Rare and Endangered Plants of California at http://www.rareplants.cnps.org/.

Fish and Wildlife, California Department of. 2019a. California Natural Diversity Data Base: Special Animals. The Author, Sacramento, California, 67 pp. [available at http://www.dfg.ca.gov/wildlife/nongame/list.html], edition of August 2019.

Fish and Wildlife, California Department of. 2019b. California Natural Diversity Data Base: State and Federally Listed Endangered and Threatened Animals of California. The Author, Sacramento, California, 16 pp. [available at http://www.dfg.ca.gov/wildlife/nongame/list.html], edition of August 2019.

Fish and Wildlife, California Department of. 2020a. California Natural Diversity Database. Rare Find 5 Commercial Version Updated 5 May 2020. Biogeographic Data Branch, Sacramento, CA.

Fish and Wildlife, California Department of. 2020b. California Natural Diversity Data Base: Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication, 140 pp. [available at http://www.dfg.ca.gov/wildlife/nongame/list.html], edition of January 2020.

Fish and Wildlife, California Department of. 2020c. California Natural Diversity Data Base: State and Federally Listed Endangered, Threatened, and Rare Plants of California. The Author, Sacramento, California, 13 pp., [available at http://www.dfg.ca.gov/wildlife/nongame/list.html], edition of January 2020.

Hall, E. Raymond. 1981. The Mammals of North America. The Ronald Press, New York. Second edition, Volumes I and II, pp. xv + 1181.

Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, California. iii + 155 pp.

Jameson, Jr. E. W. and H. J. Peeters. 2004. Mammals of California (Revised Edition). University of California Press, Berkeley. xi + 429 pp.

Jennings, Mark R. and M. P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. California Department of Fish and Game, Rancho Cordova, Calif., final report, Contract No. 8023, 255 pp.

Lemm, Jeffrey M., 2006. Field Guide to Amphibians and Reptiles of the San Diego Region. California Natural History Guides, University of California Press, Los Angeles, CA. pp. xii + 326.

Oberbauer, Thomas A. 1996. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Unpublished manuscript, County of San Diego, Department of Planning and Land Use, 7 pp [copies available from the County of San Diego].

Peeters, Hans, and Pam Peeters. 2005. Raptors of California. University of California Press, Los Angeles, California. xi + 294 pp.

Rebman, Jon P. and Michael G. Simpson. 2006. Checklist of the Vascular Plants of San Diego County, 4th ed. San Diego Natural History Museum, San Diego, CA, 4th ed., xx+100 pp.

San Diego, County of. 1997. Multiple Species Conservation Program — County of San Diego Subarea Plan. Adopted October 22, 1997.1997. [Available at http://www.sdcounty.ca.gov/dplu/mscp/docs/SCMSCP/MSCP_County_Subarea_Plan.pdf].

San Diego, County of. 2010a. County of San Diego Guidelines for Determining Significance and Report Format and Contents for Biological Resources. Fourth Revision. Available from the County's website at https://www.sandiegocounty.gov/content/dam/sdc/pds/ ProjectPlanning/docs/ Biological_ Guidelines.pdf.

San Diego, County of. 2010b. County of San Diego Report Format and Content Requirements for Biological Resources. Fourth Revision. Document available at https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/ Biological_Report_Format.pdf.

San Diego, County of. 2010c. County of San Diego Biological Mitigation Ordinance. Document available from Planning and Development Services, 17 pp. + attachments.

San Diego County of. 2012. Resource Protection Ordinance (Amended by Ordinance No. 10224 (New Series)). Document available at https://www.sandiegocounty.gov/pds/docs/res_prot_ord.pdf, 17 pp.

Sibley, David Allen. 2003. The Sibley Field Guide to Birds of Western North America. Alfred A. Knopf, New York, NY, 473 pp.

Stebbins, Robert C. 2003. A Field Guide to Western Reptiles and Amphibians. 3rd Ed., Houghton Mifflin Company, Boston, Mass., xiii + 533 pp.

Unitt, Philip. 2004. San Diego County Bird Atlas. San Diego Natural History Museum, San Diego, Calif. vii + 645 pp.

U.S. Fish and Wildlife Service. 1993. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Coastal California Gnatcatcher. Federal Register 58(59):16742-16757.

U.S. Fish and Wildlife Service. 2008. Birds of Conservation Concern 2008. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, VA. 85 pp. [Online version available at http://library.fws.gov/Bird_Publications/BCC2008.pdf].

10.0 PREPARER AND PERSONS/ORGANIZATIONS CONTACTED

Preparer:

Gretchen Cummings
Cummings Environmental, Inc.
1721 Main Street, Suite 104
Ramona, CA 92065
(760)440-0349
gretchen.bc@sbcglobal.net

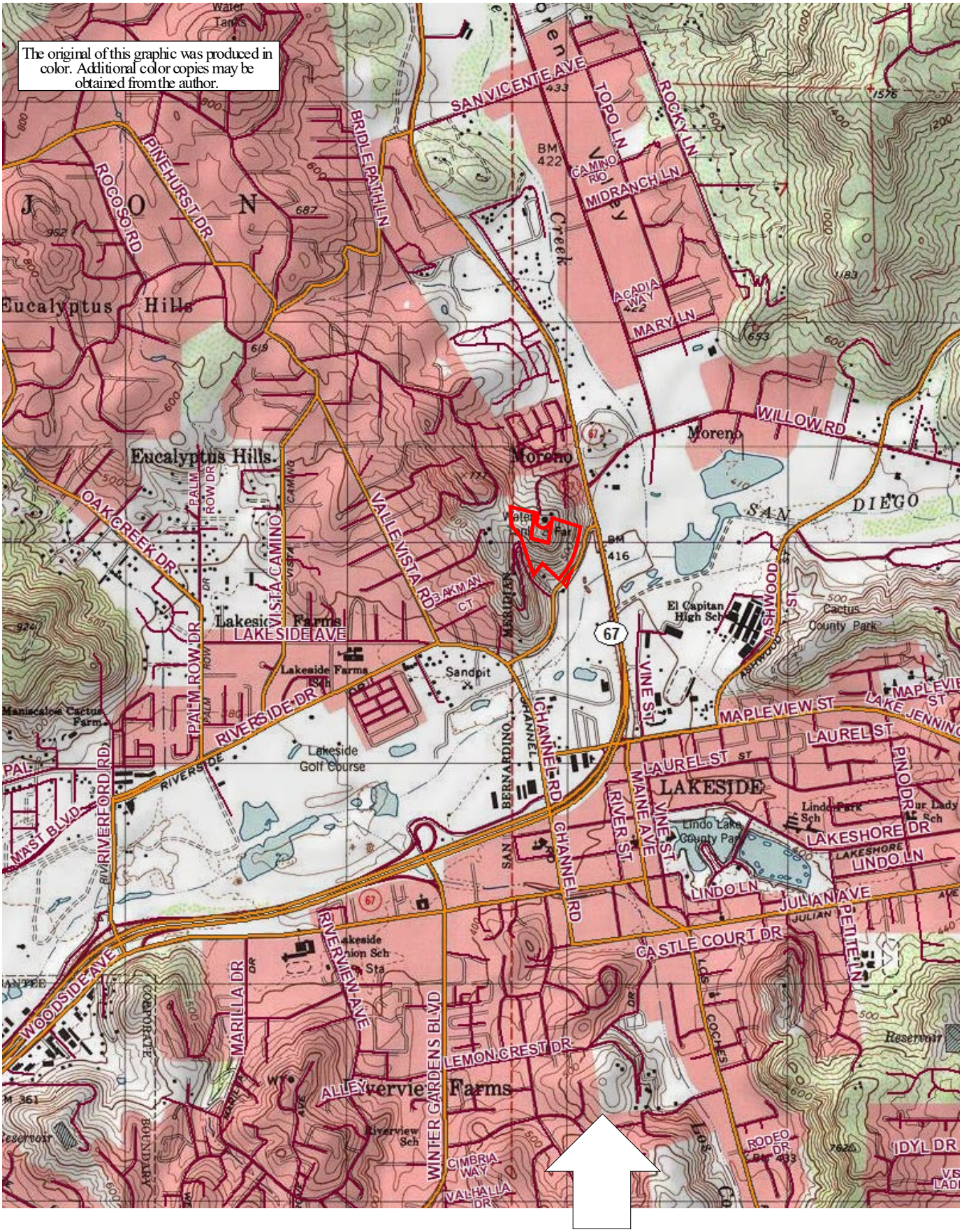
Persons/Organizations Contacted:

Mr. Jim Hurrell
12392 Lakeside Avenue
Lakeside, CA 92040

Mr. Andrew Kann and Mr. Cole Stafford
Omega Engineering Consultants
4340 Viewridge Avenue, Suite B
San Diego, CA 92123

Kendalyn White
Land Use and Environmental Planner
County of San Diego
Planning & Development Services
5510 Overland Avenue, Suite 310
San Diego, CA 92123
(619)323-4122

[:\1823-LetterReport-rev3rd clean.doc]



Scale: 1-inch = 2,000-feet

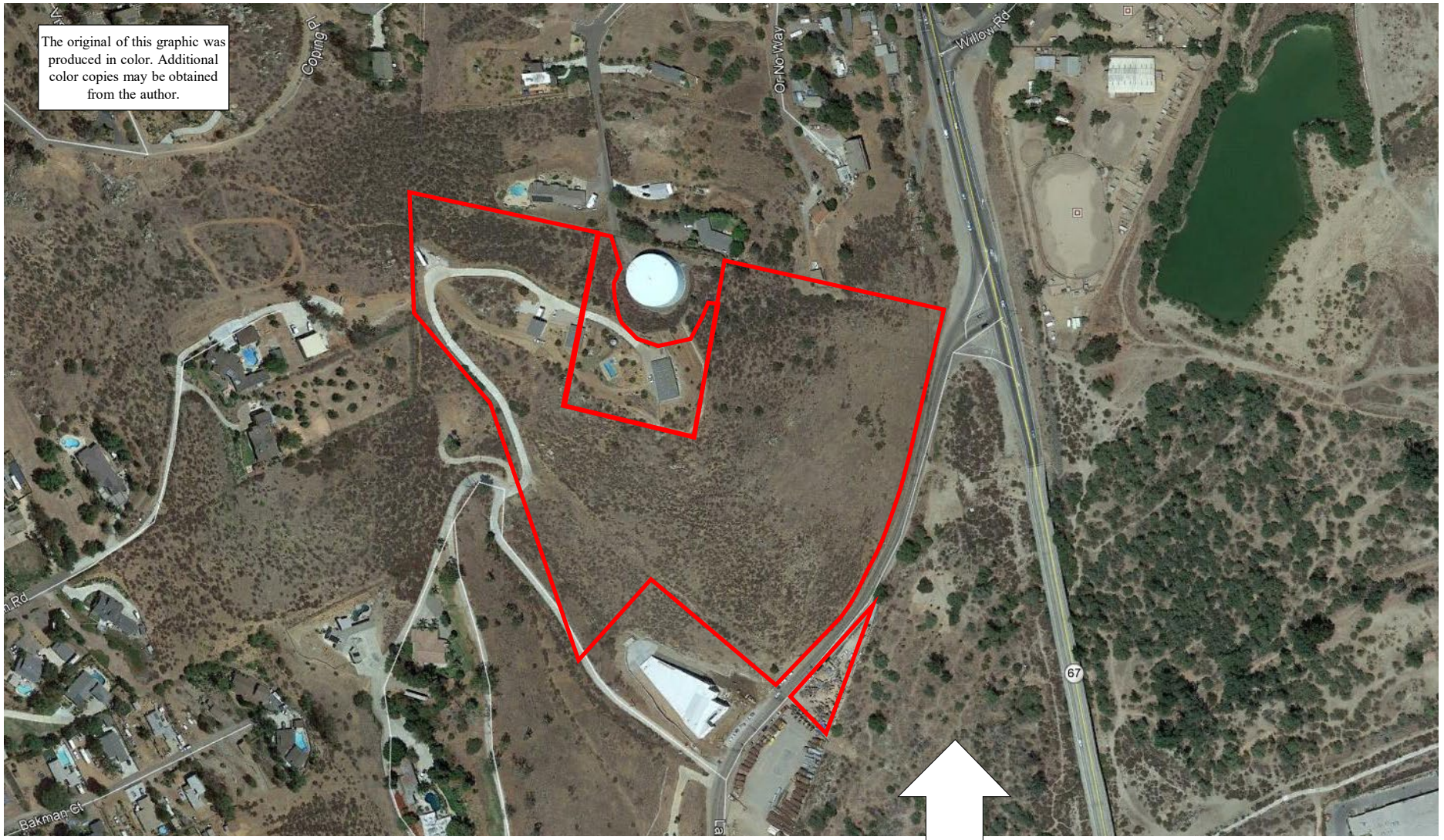
Cummings Environmental Job Number 1823.21C 7 July 2021 [:\1823-Fig-1-rev.pptx]

Cummings Environmental

APNs 392-070-10 and -07 Shown on the U.S.G.S. 7 ½-min El Cajon Quad Map

[Base Map Created with TOPO!® ©2006 National Geographic; ©2005 TeleAtlas]

Figure 1



Scale: 1-inch = 300-feet

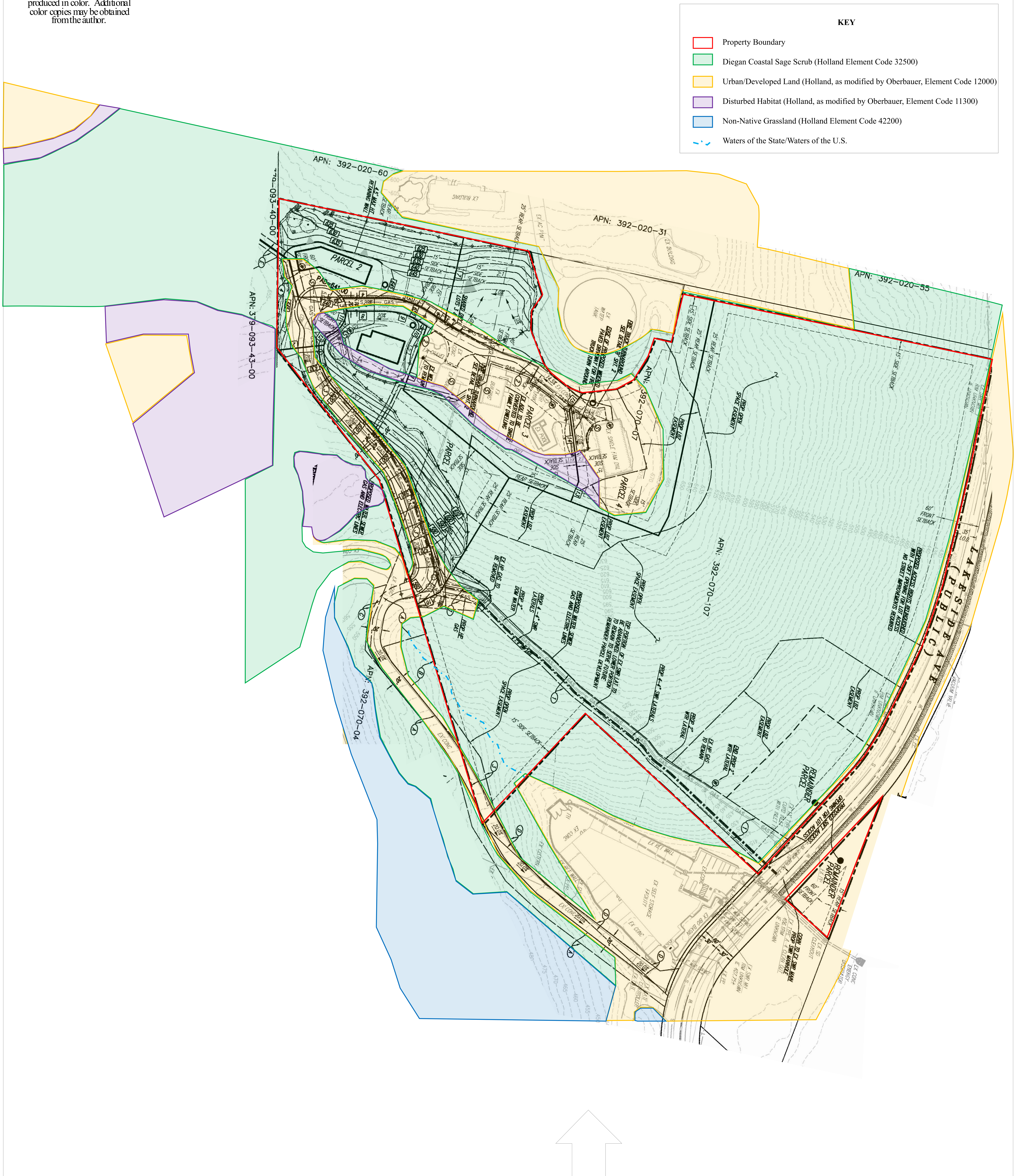
Cummings Environmental Job Number 1823.21C 7 July 2021 [:\1823-Fig-2-rev.pptx]

Cummings Environmental

APNs 392-070-10 and 392-070-07 Shown on an Aerial Photo [Base Photo © 2018 Google; Imagery Date 8/13/2018]

Figure 2

The original of this graphic was produced in color. Additional color copies may be obtained from the author.



Scale: 1-inch = 50-feet

Cummings Environmental Job Number 1823.21C 6 January 2022 [:\1823-Fig-3-rev3rd.ppp]

Cummings Environmental

Vegetation Map for APNs 392-070-10 and 392-070-07 and Off-site Water Easement Shown on the Tentative Parcel Map
[Base Plan Provided by Omega Engineering]

Figure 3

Cummings Environmental Job Number 1823.21C 27 May 2020 [:\1823-Fig-4.pptx]

Cummings Environmental	**Site Photos: Top Photo of Diegan Coastal Sage Scrub South of the Residential Structures; Bottom Photo of Diegan Coastal Sage Scrub in the Northeast Portion of the Site**	**Figure 4**

Cummings Environmental Job Number 1823.21C 27 May 2020 [:\1823-Fig-5.pptx]

Cummings Environmental	**Site Photos: Top Photo of Part of the Access Road; Bottom Photo of One of the Residential Structures and Disturbed Habitat Along the Southern Edge of the Residential Structures**	**Figure 5**

The original of this graphic was produced in color. Additional color copies may be obtained from the author.

Cummings Environmental Job Number 1823.21C 6 January2022 [:\1823-Fig-6-rev3rd.ppp]

Cummings Environmental

Sensitive Species Locations and Potential Hermes Copper Habitat on APNs 392-070-07 and 392-070-10 and Along the Off-site Water Easement Shown on the Tentative Parcel Map [Base Plan Provided by Omega Engineering]

Figure 6

The original of this graphic was produced in color. Additional color copies may be obtained from the author.

Scale: 1-inch = 50-feet

Cummings Environmental Job Number 1823.21C 6 January 2022 [:\1823-Fig-7-rev7th.ppp]

Cummings Environmental

Proposed Open Space for the Hurrell Subdivision Project Shown on the Tentative Parcel Map
[Base Plan Provided by Omega Engineering]

Figure 7

Table 1

Vascular Plants Observed on the Hurrell Subdivision Project

Plant Family	*Scientific Name* Common Name	Vegetative Community in which the Species was Observed[1]	Native (N) or Introduced (I)
Adoxaceae **Muskroot Family**	*Sambucus nigra* ssp. *caerulea* Blue Elderberry	DCSS	N
Agavaceae **Century Plant Family**	*Hesperoyucca whipplei* Chaparral Yucca	DCSS	N
Anacardiaceae **Sumac Family**	*Malosma laurina* Laurel Sumac	DCSS	N
Apiaceae **Carrot Family**	*Apiastrum angustifolium* Mock Parsley	DCSS	N
	Daucus pusillus Wild Carrot	DCSS	N
Apocynaceae **Dogbane Family**	*Funastrum cynanchoides* var. *hartwegii* Climbing Milkweed	DCSS	N
Asteraceae **Sunflower Family**	*Artemisia californica* California Sagebrush	DCSS	N
	Baccharis sarothroides Broom Baccharis	DCSS	N
	Bebbia juncea Sweetbush	DCSS	N
	Brickellia californica California Brickellbush	DCSS	N
	Centaurea melitensis Tocalote	DCSS, Dev and Dist	I
	Chaenactis artemisiifolia White Pincushion	DCSS	N
	Encelia farinosa Brittlebush	DCSS	N

Plant Family	*Scientific Name* Common Name	Vegetative Community in which the Species was Observed[1]	Native (N) or Introduced (I)
	Erigeron canadensis Horseweed	DCSS, Dev and Dist	N
	Eriophyllum confertiflorum Golden-Yarrow	DCSS	N
	Glebionis coronaria Crown Daisy	Dev	I
	Hazardia squarrosa Saw-toothed Goldenbush	DCSS	N
	Hypochaeris glabra Smooth Cat's-Ear	DCSS, Dist	I
	Lasthenia gracilis Common Goldfields	DCSS	N
	Pseudognaphalium beneolens Fragrant Everlasting	DCSS	N
	Pseudognaphalium californicum California Everlasting	DCSS	N
	Sonchus oleraceus Common Sow Thistle	DCSS, Dev and Dist	I
	Stephanomeria diegensis San Diego Wreath Plant	DCSS	N
	Viguiera laciniata San Diego County Viguiera	DCSS	N
Boraginaceae **Borage Family**	*Amsinckia menziesii* Common Fiddleneck	DCSS, Dev and Dist	N
	Cryptantha sp. Cryptantha	DCSS, Dev	N
	Emmenanthe penduliflora var. *penduliflora* Whispering Bells	DCSS	N

Plant Family	*Scientific Name* Common Name	Vegetative Community in which the Species was Observed[1]	Native (N) or Introduced (I)
	Eucrypta chrysanthemifolia var. *chrysanthemifolia* Eucrypta	DCSS	N
	Pectocarya linearis ssp. *ferocula* Narrow-toothed Pectocarya	DCSS	N
	Phacelia parryi Parry Phacelia	DCSS	N
	Phacelia ramosissima Branching Phacelia	DCSS	N
	Plagiobothrys sp. Popcorn Flower	DCSS	N
Brassicaceae **Mustard Family**	*Brassica nigra* Black Mustard	DCSS	I
	Hirschfeldia incana Shortpod Mustard	DCSS, Dev and Dist	I
	Lepidium nitidum Shining Peppergrass	DCSS	N
	Raphanus sativus Radish	DCSS, Dev	I
	Sisymbrium Irio London Rocket	DCSS, Dist	I
Cactaceae **Cactus Family**	*Opuntia littoralis* Coast Prickly Pear	DCSS	N
Chenopodiaceae **Goosefoot Family**	*Chenopodium album* Lamb's Quarters	DCSS, Dev	I
	Salsola tragus Russian Thistle	DCSS, Dev and Dist	I
Crassulaceae **Stonecrop Family**	*Crassula connata* Pygmy-weed	DCSS	N
	Dudleya pulverulenta Chalk Lettuce	DCSS	N

Plant Family	*Scientific Name* Common Name	Vegetative Community in which the Species was Observed[1]	Native (N) or Introduced (I)
Convolvulaceae **Morning-Glory Family**	*Calystegia macrostegia* ssp. *tenuifolia* Narrow-leaf Morning-Glory	DCSS	N
	Cuscuta californica var. *californica* Chaparral Dodder	DCSS	N
Cucurbitaceae **Gourd Family**	*Marah macrocarpa* Chilicothe	DCSS	N
Euphorbiaceae **Spurge Family**	*Chamaesyce* sp. Prostrate Spurge	DCSS, Dist	N
	Croton setigerus Turkey-Mullein	DCSS	N
Fabaceae **Legume Family**	*Acmispon glaber* Deerweed	DCSS	N
	Acmispon strigosus Strigose Lotus	DCSS	N
	Lupinus concinnus Bajada Lupine	DCSS	N
	Lupinus hirsutissimus Stinging Lupine	DCSS	N
	Lupinus truncatus Collar Lupine	DCSS	N
	Melilotus indicus Sourclover	DCSS, Dev and Dist	I
Gentianaceae **Gentian Family**	*Zeltnera venusta* California Centaury	DCSS	N
Geraniaceae **Geranium Family**	*Erodium botrys* Long-beak Filaree	DCSS, Dev	I
	Erodium cicutarium Redstem Filaree	DCSS, Dev and Dist	I
Lamiaceae **Mint Family**	*Salvia apiana* White Sage	DCSS	N

Plant Family	***Scientific Name*** **Common Name**	**Vegetative Community in which the Species was Observed[1]**	**Native (N) or Introduced (I)**
	Salvia columbariae Chia	DCSS	N
Montiaceae **Minter's Lettuce Family**	*Calandrinia ciliata* Red Maids	DCSS	N
	Calyptridium monandrum Pussypaws	DCSS	N
	Claytonia perfoliata Miner's Lettuce	DCSS	N
Myrsinaceae **Myrsine Family**	*Anagallis arvensis* Scarlet Pimpernel	DCSS, Dev and Dist	I
Nyctaginaceae **Four O'clock Family**	*Mirabilis laevis* var. *crassifolia* Wishbone Bush	DCSS	N
Onagraceae **Evening-Primrose Family**	*Camissoniopsis* cf. *hirtella* Field Sun Cup	DCSS, Dev	N
Papaveraceae **Poppy Family**	*Eschscholzia californica* California Poppy	DCSS	N
Plantaginaceae **Plantain Family**	*Antirrhinum nuttallianum* Nuttall's Snapdragon	DCSS	N
	Nuttallanthus texanus Blue Toadflax	DCSS	N
	Penstemon spectabilis Showy Penstemon	DCSS	N
Poaceae **Grass Family**	*Avena barbata* Slender Wild Oat	Dev	I
	Bromus diandrus Ripgut Brome	DCSS, Dev	I
	Bromus madritensis ssp. rubens Red Brome	DCSS, Dev	I
	Pennisetum setaceum Crimson Fountain Grass	DCSS	I

Plant Family	*Scientific Name* Common Name	Vegetative Community in which the Species was Observed[1]	Native (N) or Introduced (I)
Polygonaceae **Milkwort Family**	*Eriogonum fasciculatum* California Buckwheat	DCSS	N
Rhamnaceae **Buckthorn Family**	*Rhamnus crocea* Redberry	DCSS	N
Scrophulariaceae **Figwort Family**	*Scrophularia californica* California Figwort	DCSS	N
Selaginellaceae **Spike-Moss Family**	*Selaginella bigelovii* Bigelow Spike-Moss	DCSS	N
Solanaceae **Nightshade Family**	*Datura wrightii* Jimson Weed	DCSS	N
	Nicotiana glauca Tree Tobacco	DCSS, Dev	I
	Solanum cf. americanum White Nightshade	DCSS	N
Themidaceae **Brodiaea Family**	*Dichelostemma capitatum* ssp. *capitatum* Blue Dicks	DCSS	N
Urticaceae **Nettle Family**	*Urtica urens* Dwarf Nettle	Dev	I
Violaceae **Violet Family**	*Viola pedunculata* Johnny-Jump-Up	DCSS	N

[1] Holland Element Codes (1986) as modified by Oberbauer (1996) are as follows: Diegan Coastal Scrub (DCSS; Element Code 32500), Disturbed Habitat (Dist; Element Code 11300), and Urban/Developed (Dev; Element Code 12000).

82 Plants

[:/1823-Plant List.docx]

Table 2

Wildlife Species Observed on the Hurrell Subdivision Project

Scientific Name Common Name	Vegetative Community[1] in which the Species was Observed	Observations
Insects		
Anthocharis sara Sara Orangetip	DCSS	See attached Quino Checkerspot report.
Apodemia mormo virgulti Mormon Metalmark	DCSS	See attached Quino Checkerspot and Hermes Copper reports.
Callophrys augustinus Brown Elfin	DCSS	See attached Hermes Copper report.
Colias alexandra harfordii Harford's Sulphur	DCSS	See attached Hermes Copper report.
Danaus gilippus Queen	DCSS	See attached Quino Checkerspot report.
Erynnis funeralis Funereal Duskywing	DCSS	See attached Quino Checkerspot and Hermes Copper reports.
Junonia coenia Common Buckeye	DCSS	See attached Hermes Copper report.
Leptotes marina Marine Blue	DCSS	See attached Hermes Copper report.

Scientific Name Common Name	Vegetative Community[1] in which the Species was Observed	Observations
Nathalis iole Dainty Sulphur	DCSS	See attached Quino Checkerspot report.
Nymphalis antiopa Mourning Cloak	DCSS	See attached Quino Checkerspot report.
Papilio eurymedon Pale Swallowtail	DCSS	See attached Quino Checkerspot report.
Papilio rutulus Western Tiger Swallowtail	DCSS	See attached Quino Checkerspot report.
Papilio zelicaon Anise Swallowtail	DCSS	See attached Quino Checkerspot report.
Pieris rapae Cabbage White	DCSS	See attached Hermes Copper report.
Plebejus acmon Acmon Blue	DCSS	See attached Quino Checkerspot and Hermes Copper reports.
Pontia protodice Common White	DCSS	See attached Quino Checkerspot and Hermes Copper reports.
Strymon melinus Gray Hairstreak	DCSS	See attached Hermes Copper report.
Vanessa annabella West Coast Lady	DCSS	See attached Quino Checkerspot report.
Vanessa cardui Painted Lady	DCSS	See attached Quino Checkerspot and Hermes Copper reports.

Scientific Name Common Name	Vegetative Community[1] in which the Species was Observed	Observations
Undifferentiated Blue	DCSS	See attached Quino Checkerspot and Hermes Copper reports.
Reptiles		
Aspidoscelis hyperythra Orange-throated Whiptail	DCSS, Dist, and Dev	This sensitive lizard species was observed during the 3/28/19, 4/11/19, 4/19/19, 4/26/19, 5/3/19, 5/31/19, and 6/18/19 visits.
Crotalus sp. Rattlesnake	DCSS	During the 4/1/19 visit, a Rattlesnake was heard rattling in the southwestern portion of the site. Something besides the undersigned caused the snake to rattle because it was approximately 30-feet away in the Diegan Coastal Sage Scrub completely hidden from view.
Sceloporus occidentalis Western Fence Lizard	DCSS, Dist	Individuals of this species were seen during the 2/23/19, 3/1/19, 3/16/19, 4/11/19, and 5/3/19 surveys.
Sceloporus orcuttii Granite Spiny Lizard	DCSS	Granite Spiny Lizards were seen on boulders and rock outcrops within the Diegan Coastal Sage Scrub during the 2/23/19, 3/14/19, 3/16/19, 3/19/19, 3/28/19, 4/1/19, 4/11/19, 4/14/19, 4/26/19, 5/3/19, and 6/18/19 site visits.
U*ta stansburiana* Side-blotched Lizard	DCSS	This lizard species was detected during the 3/19/19, 3/28/19, 4/11/19, 4/19/19, 4/26/19, and 6/18/19 site visits.

Scientific Name Common Name	Vegetative Community[1] in which the Species was Observed	Observations
Mammals		
Neotoma fuscipes Dusky-footed Woodrat	DCSS	Middens assignable to this species were observed at the bases of large shrubs throughout the property.
Spermophilus beecheyi California Ground Squirrel	DCSS	This species was seen on and around boulders and rock outcrops during the 3/14/19, 4/1/19, and 4/14/19 site visits.
Sylvilagus audubonii Audubon's Cottontail	DCSS, Dist	This species was observed during the 2/23/19, 3/1/19, 3/14/19, 3/16/19, 3/19/19, 3/28/19, 4/1/19, 4/11/19, 4/14/19, 4/19/19, 4/26/19, 5/3/19, 5/8/19, and 6/18/19 site visits. Also, numerous pellets assignable to this genus were noted throughout the site.
Thomomys bottae Botta's Pocket Gopher	Dev	Burrows assignable to this species were noted around the residences and along the access road.
Birds		
Cathartes aura Turkey Vulture	N/A	This species was seen as an overflight of the property during the 3/16/19, 6/11/19 and 6/18/19 visits.
Accipiter cooperii Cooper's Hawk	N/A	During the Quino Checkers surveys on 3/16/19 and 4/1/19, a single adult was seen as an overflight.

Scientific Name Common Name	Vegetative Community[1] in which the Species was Observed	Observations
Buteo jamaicensis Red-tailed Hawk	Dev	A pair of Red-tailed Hawks were observed during most of the site visits to the property. This pair was seen copulating off-site to the southwest during the 2/15/19 visit. On 4/11/19, at least one nestling was seen in the nest located off-site to the west in a Eucalyptus tree near the residences. On 5/3/19, 5/8/19 and 5/14/19, two nestlings were visible in the nest with the two adults nearby. On 6/18/19, the two young had fledged and were seen perched on tree branches near the nest with the two adults.
Streptopelia decaocto Eurasian Collared-Dove	Dev	On 6/18/19, on Eurasian Collared-Dove was seen off-site to the west.
Zenaida macroura Mourning Dove	N/A	This species was seen on-site or overflying the property during each of the three California Gnatcatcher surveys.
Geococcyx californianus Greater Roadrunner	DCSS, Dev	One Greater Roadrunner was seen and heard in the northwestern portion of the site during the 3/28/19 visit. An individual (presumably the same one) was seen in the same area during the 6/18/19 California Gnatcatcher survey.
Aeronautes saxatalis White-throated Swift	N/A	During the 5/14/19 and 6/18/19 site visits, White-throated Swifts were heard circling over the property.
Calypte anna Anna's Hummingbird	DCSS	Multiple males and females were seen throughout the site during the surveys.

Scientific Name Common Name	Vegetative Community[1] in which the Species was Observed	Observations
Selasphorus sp. Selasphorus Hummingbird	DCSS	On 6/18/19, a single Selasphorus Hummingbird was heard on-site. Given the timing of the observation in June, this bird was suspected to be an Allen's Hummingbird.
Picoides nuttallii Nuttall's Woodpecker	Dev	During the 6/18/19 visit, an individual Nuttall's Woodpecker was heard in the Eucalyptus trees off-site to the west.
Sayornis nigricans Black Phoebe	DCSS	A single Black Phoebe was seen along the southeastern edge of the property during the 4/11/19 visit.
Tyrannus vociferans Cassin's Kingbird	DCSS	Two individuals were seen flycatching and heard calling in the northeastern portion of the site. This species was seen in the same location during all three of the California Gnatcatcher surveys.
Tyrannus verticalis Western Kingbird	Dev	During the 4/11/19 visit, a pair of Western Kingbirds were seen and heard off-site to the west.
Aphelocoma californica California Scrub Jay	DCSS	Individuals were seen and heard on-site during the 5/8/19 visit and during the last two California Gnatcatcher surveys on 5/14/19 and 6/18/19.
Corvus corax Common Raven	N/A	On 4/11, three Ravens were seen overflying the property.
Stelgidopteryx serripennis Northern Rough-winged Swallow	N/A	During the 6/18/19 visit, eight Northern Rough-winged Swallows were seen overhead and were heard vocalizing.

Scientific Name Common Name	Vegetative Community[1] in which the Species was Observed	Observations
Petrochelidon pyrrhonota Cliff Swallow	N/A	Cliff Swallows were seen overflying the property during the 5/14/19 and 6/18/19 survey dates.
Psaltriparus minimus Bushtit	DCSS	On 5/8/19, an individual was seen carrying nesting material in its bill off-site to the west. This species was also seen during all three of the California Gnatcatcher surveys. Specifically, during the 6/18/19 visit, a flock of ten were seen foraging together indicating a successful fledging nearby.
Thryomanes bewickii Bewick's Wren	DCSS	On 5/8/19, an individual was seen carrying food in its bill. This species was also seen and heard during all three of the California Gnatcatcher surveys.
Polioptila caerulea Blue-gray Gnatcatcher	DCSS	During the 3/16/19 Quino Checkerspot survey, a pair of Blue-grays were seen foraging in the drainage along the access road. They were not seen after this initial sighting.
Polioptila californica California Gnatcatcher	DCSS	A pair of California Gnatcatchers successfully fledged three young on-site. The adult female was seen on the nest during the 4/11/19 visit while the male vocalized nearby. During the 5/14/19 visit, the pair and three fledglings were observed to the northeast of the nest location which appeared to have been predated upon with a large hole in the side of it. On 6/20/19, two juveniles were observed foraging together on-site.
Chamaea fasciata Wrentit	DCSS	This species was heard during the 5/8/19 visit and a pair was observed along the southwestern property boundary during each of the three California Gnatcatcher surveys.

Scientific Name Common Name	Vegetative Community[1] in which the Species was Observed	Observations
Mimus polyglottos Northern Mockingbird	Dev	During the 3/16/19 and 3/28/19 visits, an individual was heard calling off-site to the west.
Toxostoma redivivum California Thrasher	DCSS	This species was observed during the 4/11/19, 5/14/19, and 6/18/19 surveys. During the 5/14/19 survey, a fledgling was seen near a pair of adults.
Bombycilla cedrorum Cedar Waxwing	N/A	On 5/3/19, a flock of twenty-two Cedar Waxwings was observed flying over the property.
Pipilo maculatus Spotted Towhee	DCSS	One Spotted Towhee was heard on 3/28/19 and this species was also detected during the California Gnatcatcher surveys.
Pipilo crissalis California Towhee	DCSS	This species was detected during the 3/28/19 and 5/8/19 site visits, and during all three of the California Gnatcatcher surveys. Specifically, during the 6/18/19 visit, a recent fledgling was seen with an adult pair foraging on-site.
Aimophila ruficeps canescens Southern California Rufous-crowned Sparrow	DCSS	This species was seen and heard along the steep slope off-site to the southwest during the 3/16/19, 3/19/19, 3/28/19, 4/1/19, 4/11/19, 5/14/19, 6/18/19 visits. It was also detected in the northeast portion of the site on 3/28/19. On 5/3/19, a recent fledgling was observed flying (not very well).
Zonotrichia leucophrys White-crowned Sparrow	DCSS	This winter visitor was seen and heard on 3/2/19 and 4/11/19.

Scientific Name Common Name	Vegetative Community[1] in which the Species was Observed	Observations
Icterus cucullatus Hooded Oriole	Dev	During the 5/8/19 visit, a pair of Hooded Orioles was seen along the western edge of the property. A nest in a Eucalyptus tree overhanging the access road was found after watching the male bring food to the location. At least two nestlings were heard inside the nest upon his approach. This family group was observed during all three of the California Gnatcatcher surveys. Specifically, two juveniles and an adult female were seen in the vicinity of the nest on 6/18/19.
Carpodacus mexicanus House Finch	DCSS, Dev	This species was seen foraging on-site, was heard singing, and was observed as overflights during the 3/28/19 and 5/8/19 visits. This species was also detected during all three of the California Gnatcatcher surveys.
Spinus psaltria Lesser Goldfinch	DCSS	During the 5/8/19 visit, a female with four fledglings was seen on-site. The fledglings were begging for food from the female. This species was also detected as overflights during all three of the California Gnatcatcher surveys.

[1] Holland Element Codes (1986) as modified by Oberbauer (1996) are as follows: Diegan Coastal Sage Scrub (DCSS; Element Code 32500), Disturbed Habitat (Dist; Element Code 11300), and Urban/Developed Land (Dev; Element Code 12000).

61 Species

[:\1823-Wildlife Table.doc]

Table 3

Sensitive Plant Species Known to Occur Within an Approximate 10-mile Radius[1] of the Hurrell Subdivision Project

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Acanthomintha ilicifolia San Diego Thornmint	List A/Rank1B.1/S1/CE/FT	Occurs on heavy clay soils in a variety of habitats at elevations of 32 - 3,159 feet.	N	U	The surficial soils on the property are Cieneba-Fallbrook rocky sandy loams and Tujunga sand (Bowman, 1973).
Acmispon prostratus Nuttall's Acmispon	List A/Rank 1B.1/S1/-/-	A species found in Coastal Dunes and Coastal Scrub along the immediate coast at elevations of 0 - 33 feet.	N	U	Although there is Diegan Coastal Sage Scrub habitat on this property, the site is located inland in Lakeside, not along the immediate coast. NOTE: *Lotus nuttallianus* is a synonym.
Adolphia californica California Adolphia	List B/Rank 2B.1/S2/-/-	Found on sandy/gravelly to clay soils in Coastal Sage Scrub, Chaparral, and Valley and Foothill Grassland habitats at elevations of 148 - 2,435 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat underlain by rocky sandy loams (Bowman, 1973) within the known elevational range of the species. The closest CNDDB record is 1.7-miles to the north near Vigilante Road (CDFW, 2020a). NOTE: San Diego Adolphia is a synonym.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Ambrosia chenopodiifolia San Diego Bur-sage	List B/Rank 2B.1/S1/-/-	Found in Coastal Scrub habitat, typically Maritime Succulent Scrub at elevations of 180 - 510 feet.	N	L	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. However, there is no Maritime Succulent Scrub on-site. The closest CNDDB record is 16.1-miles to the southwest in Rice Canyon (CDFW, 2020a).
Ambrosia monogyra Singlewhorl Burrobrush	- /Rank 2B.2/S2/-/-	Found on sandy soils in Chaparral and Sonoran Desert Scrub habitats at elevations of 32 – 1,645 feet.	N	U	There are no Chaparral or Sonoran Desert Scrub habitats on the property. NOTE: *Hymenoclea monogyra* is a synonym.
Ambrosia pumila San Diego Ambrosia	List A/Rank 1B.1/S1/-/FE	Found in sandy loam or clay soils in Chaparral, Sage Scrub, or Valley and Foothill Grassland habitats at elevations of 65 – 1,366 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat underlain by rocky sandy loams (Bowman, 1973) within the known elevational range of the species. There is an historic CNDDB record that encompasses the southwest portion of the site, but this population is believed to be extirpated (CDFW, 2020a). The closest extant CNDDB record is 1.8-miles to the southwest near Los Ranchitos Road (CDFW, 2020a). NOTE: Dwarf Burr Ambrosia is a synonym.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Aphanisma blitoides Aphanisma	List A/Rank 1B.2/S2/-/-	Found in dune/bluff habitats at elevations of 0 - 1,000 feet.	N	U	There are no dune/bluff habitats on this property in Lakeside.
Arctostaphylos glandulosa ssp. *crassifolia* Del Mar Manzanita	List A/Rank 1B.1/S2/-/FE	Found on sandy soils derived from marine sandstones along the coast within Chaparral and Closed-Cone Coniferous Forest habitats at elevations of 0 - 1,201 feet.	N	U	The soils on-site were derived from granitic rocks, not marine sandstones (Bowman, 1973).
Arctostaphylos otayensis Otay Manzanita	List A/Rank 1B.2/S1/-/- CA Endemic	Found in Chaparral and Cismontane Woodlands at elevations ranging from 900 - 5,600 feet. Also, this species is found on metavolcanic soils.	N	U	The property is not underlain by metavolcanic soils (Bowman, 1973).
Artemisia palmeri San Diego Sagewort	List D/Rank 4.2/S3?/-/-	Found primarily along creeks and drainages on sandy soils within Chaparral, Coastal Scrub, and riparian habitats at elevations of 49 - 3,011 feet.	N	M	There is a small drainage along the southwestern edge of the property occupied by Diegan Coastal Sage Scrub on rocky sandy loams (Bowman, 1973). The closest CNDDB record is 3.6-miles to the southeast near Forester Creek (CDFW, 2020a). NOTE: Palmer's Sage is a synonym.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Asplenium vespertinum Western Spleenwort	List D/Rank 4.2/S4/-/-	Found among boulders and rock outcrops within Chaparral, Coastal Sage, and Cismontane Woodland habitats at elevations of 592 - 3,290 feet.	N	H	Most of the site contains Diegan Coastal Sage Scrub habitat with boulders and rock outcrops within the known elevational range of the species. This species has been documented within the El Cajon quad (CNPS, 2020).
Astragalus deanei Dean's Milkvetch	List A/Rank 1B.1/S1/-/- CA Endemic	Found in Chaparral, Coastal Scrub, Cismontane Woodland, and Riparian Forest habitats at elevations of 246 - 2,287 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. The closest CNDDB record is 5.3-miles to the southeast near intersection of Dehesa Road and Vista Grande Road (CDFW, 2020a).
Astragalus oocarpus San Diego Milkvetch	List A/Rank 1B.2/S2?/-/- CA Endemic	Found in Chaparral and Cismontane Woodland habitats at elevations of 1,003 - 5,018 feet.	N	U	There are no Chaparral or Cismontane Woodland habitats on the property and the elevations on-site are lower than the known elevations of this species.
Atriplex coulteri Coulter's Saltbush	List A/Rank 1B.2/S1S2/-/-	Found on alkaline or clay soils in Coastal Bluff Scrub, Coastal Dune, Coastal Scrub, and Valley and Foothill Grassland habitats at elevations of 9 - 1,514 feet.	N	U	There are no alkaline or clay soils mapped on the property (Bowman, 1973).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Atriplex pacifica South Coast Saltscale	List A/Rank 1B.2/S2/-/-	Found on alkaline soils in Coastal Bluff Scrub, Coastal Dune, Coastal Scrub, and Playa habitats at elevations of 3 – 1,316 feet.	N	U	There are no alkaline soils mapped on the property (Bowman, 1973).
Baccharis vanessae Encinitas Baccharis	List A/Rank 1B.1/S1/CE/FT CA Endemic	Found on soils derived from marine sandstones in Chaparral habitat at elevations of 197 - 2,369 feet.	N	U	The soils on-site are derived from granitic rock, not marine sandstones (Bowman, 1973). Also, there is no Chaparral habitat on-site.
Bergerocactus emoryi Golden-Spined Cereus	List B/Rank 2B.2/S2/-/-	Found locally along the immediate coast in Coastal Scrub, Chaparral, and Closed-cone Coniferous Forest habitats at elevations of 9 - 1,300 feet.	N	U	Although the site contains Diegan Coastal Sage Scrub, the property is located inland in Lakeside, not along the immediate coast. NOTE: Golden Snake Cactus is a synonym.
Bloomeria clevelandii San Diego Goldenstar	List A/Rank 1B.1/S2/-/-	Found in a variety of habitats on clay soils at elevations of 164 - 1,530 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973). NOTE: *Muilla clevelandii* is a synonym.
Brodiaea filifolia Thread-Leaved Brodiaea	List A/Rank 1B.1/S2/CE/FT CA Endemic	Found on clay soils in a variety of habitats at 82 - 3,685 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Brodiaea orcuttii Orcutt's Brodiaea	List A/Rank 1B.1/S2/-/-	Found on clay and sometimes serpentine soils in Vernal Pools and small drainages at elevations of 98 - 5,577 feet.	N	U	There are no clay or serpentine soils mapped on the property (Bowman, 1973).
Calandrinia breweri Brewer's Calandrinia	List D/Rank 4.2/S4/-/-	Found on sandy and loamy soils in disturbed or burned Chaparral and Coastal Scrub at elevations of 32 - 4,014 feet.	N	H	Most of the site contains Diegan Coastal Sage Scrub habitat underlain by rocky sandy loams (Bowman, 1973) within the known elevational range of the species. Also, this species has been recorded within the El Cajon quad (CNPS, 2020).
Calochortus dunnii Dunn's Mariposa Lily	List A/Rank1B.2/S2S3/CR/-	Found on metavolcanic or gabbroic soils in Chaparral and Closed-Cone Coniferous Forest habitats at elevations of 608 - 6,021 feet.	N	U	There are no gabbroic or metavolcanic soils mapped on the property (Bowman, 1973).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Camissoniopsis lewisii Lewis' Evening-Primrose	List C/Rank 3/S4/-/-	Found in sandy or clay soils in a variety of habitats at elevations from 0 - 987 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat underlain by rocky sandy loams (Bowman, 1973) within the known elevational range of the species. However, this species has not been recorded within the El Cajon quad (CNPS, 2020). NOTE: *Camissonia lewisii* is a synonym.
Carex obispoensis San Luis Obispo Sedge	- /Rank 1B.2/S2S3/-/- CA Endemic	Found in Chaparral, Closed-cone Coniferous Forest, Coastal Prairie, Coastal Scrub and Valley and Foothill Grassland habitats in sand, clay, gabbroic, or serpentine soils at elevations of 32 - 2,698 feet.	N	U	There are no clay, gabbroic or serpentine soils mapped on the property (Bowman, 1973).
Castilleja plagiotoma Mojave Paintbrush	-/Rank 4.3/S4/-/- CA Endemic	Found in Great Basin Scrub, Joshua Tree Woodland, Lower Montane Coniferous Forest, and Pinyon and Juniper Woodland habitats at elevations of 987 - 8,225 feet.	N	U	There are no Great Basin Scrub, Joshua Tree Woodland, Lower Montane Coniferous Forest, or Pinyon and Juniper Woodland habitats on the property. Also, the highest elevation on-site is ± 307-feet lower than the lowest known elevation of this species' range.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Caulanthus simulans Payson's Jewelflower	List D/Rank 4.2/S4/-/- CA Endemic	Found in Juniper Woodland, Chaparral, and Sage Scrub habitats at elevations of 296 - 7,238 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. However, this species has not been recorded within the El Cajon quad (CNPS, 2020).
Ceanothus cyaneus Lakeside Ceanothus	List A/Rank 1B.2/S2/-/-	Found in Chaparral and Closed-cone Coniferous Forest habitats at elevations of 656 - 3,412 feet.	N	U	There are no Chaparral or Closed-cone Coniferous Forest habitats on the property.
Ceanothus otayensis Otay Mountain Ceanothus	-/Rank 1B.2/S1/-/-	Found in Chaparral habitats on gabbroic or metavolcanic soils at elevations of 1,950 - 3,600 feet.	N	U	There are no gabbroic or metavolcanic soils mapped on the property (Bowman, 1973).
Ceanothus verrucosus Wart-stemmed Ceanothus	List B/Rank 2B.2/S2?/-/-	Associated with Chaparral habitats, it is frequently an indicator of Southern Maritime Chaparral. Known elevations range from 3 - 1,250 feet.	N	U	There is no Chaparral habitat on the property.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Centromadia pungens ssp. *laevis* Smooth Tarplant	List A/Rank 1B.1/S2/-/- CA Endemic	Found on alkaline soils in mesic habitats, such as Meadows and Seeps, Playas, and Riparian Woodlands at elevations of 16 – 3,850 feet.	N	U	There are no alkaline soils mapped on the property (Bowman, 1973).
Chamaebatia australis Southern Mountain Misery	List D/Rank 4.2/S4/-/-	Grows in gabbroic or metavolcanic soil in Chaparral at elevations from 987 - 2,303 feet.	N	U	There are no gabbroic or metavolcanic soils mapped on the property (Bowman, 1973).
Chloropyron maritimum ssp. *maritimum* Salt Marsh Bird's-Beak	List A/Rank 1B.2/S1/CE/FE	A species found in Coastal Dunes along the immediate coast in San Diego County at elevations of 0 - 100 feet.	N	U	There are no Coastal Dunes on this inland property in Lakeside. NOTE: *Cordylanthus maritimus* ssp. *maritimus* is a synonym.
Chorizanthe leptotheca Peninsular Spineflower	List D/Rank 4.2/S3/-/-	Found on granitic soils in Chaparral, Coastal Scrub, and Lower Montane Coniferous Forest habitats at elevations of 987 - 6,251 feet.	N	U	Most of the site contains Diegan Coastal Sage Scrub habitat but, the highest elevation on-site is ± 307-feet lower than the lowest known elevation for the species.
Chorizanthe polygonoides var. *longispina* Long-Spined Spineflower	List A/Rank 1B.2/S3/-/-	Found on clay and gabbroic soils in a variety of habitats at elevations of 98 - 5,034 feet.	N	U	There are no clay or gabbroic soils mapped on the property (Bowman, 1973).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Clarkia delicata Delicate Clarkia	List A/Rank 1B.2/S3/-/-	Found in Chaparral and Cismontane Woodland habitats on gabbroic soils at elevations of 775 - 4,200 feet.	N	U	There are no gabbroic soils mapped on the property (Bowman, 1973).
Clinopodium chandleri San Miguel Savory	List A/Rank 1B.2/S2/-/-	Found on gabbroic or metavolcanic soils in a variety of habitats at elevations of 394 - 3,537 feet.	N	U	There are no gabbroic or metavolcanic soils mapped on the property (Bowman, 1973). NOTE: *Satureja chandleri* is a synonym.
Comarostaphylis diversifolia ssp. *diversifolia* Summer Holly	List A/Rank 1B.2/S2/-/-	Found in coastal and inland Chaparral habitats, as well as Cismontane Woodlands at elevations of 98 - 1,809 feet.	N	U	There are no Chaparral or Cismontane Woodland habitats on this property.
Convolvulus simulans Small-Flowered Morning-Glory	List D/Rank 4.2/S4/-/-	Grows on friable clay soils in a variety of habitats in areas devoid of shrubs. Found at elevations of 98 - 2,303 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Cordylanthus rigidus ssp. *brevibracteatus* Short-bracted Bird's-Beak	---/Rank 4.3/S4/-/- CA Endemic	Found in granitic openings within Chaparral, Lower Montane Coniferous Forest, Pinyon and Juniper Woodland, and Upper Montane Coniferous Forest habitats at elevations of 2,007 - 8,521 feet.	N	U	There are no Chaparral, Lower Montane Coniferous Forest, Pinyon and Juniper Woodland or Upper Montane Coniferous Forest habitats on the property. Also, the elevations on-site are much lower than the known elevations of this subspecies.
Corethrogyne filaginifolia var. *incana* San Diego Sand Aster	List A/Rank 1B.1/S1/-/-	Grows in coastal sandy areas at elevations of 9 - 379 feet.	N	U	This property is in Lakeside, not along the coast. NOTE: The Flora of North America (Volume 20) and the 2nd Edition of the Jepson Manual unite this variety and *C. f.* var. *linifolia* as a single species, *Corethrogyne filaginifolia.*
Cylindropuntia californica var. *californica* Snake Cholla	List A/Rank 1B.1/S1/-/-	Found in Coastal Scrub and Chaparral habitats at elevations of 98 - 494 feet.	N	L	Most of the site contains Diegan Coastal Sage Scrub habitat barely within the known elevational range of the species. The closest CNDDB record is 8.2-miles to the southwest near the Sweetwater River (CDFW, 2020a). NOTE: *Opuntia californica var. californica* and *Opuntia parryi* var. *serpentina* are synonyms.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Deinandra conjugens Otay Tarplant	List A/Rank 1B.1/S1/CE/FT	Found on clay soils in Coastal Scrub and Valley and Foothill Grassland habitats at elevations of 82 - 987 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973).
Deinandra floribunda Tecate Tarplant	List A/Rank 1B.2/S2?/-/-	Found in Chaparral and Coastal Scrub habitats, often in washes or disturbed areas, at elevations of 230 - 4,014 feet.	N	L	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. However, the closest CNDDB record is 18.8-miles to the southeast (CDFW, 2020a).
Deinandra paniculata Paniculate Tarplant	List D/Rank 4.2/S4/-/-	Found in vernally mesic areas within Coastal Scrub, Valley and Foothill Grassland, Vernal Pool or other wetland habitats at elevations of 82 -3,093 feet.	N	L	There is a small drainage along the southwestern property boundary that is occupied by Diegan Coastal Sage Scrub within the known elevational range of the species. However, this species has not been recorded within the El Cajon quad (CNPS, 2020).
Dichondra occidentalis Western Dichondra	List D/Rank 4.2/S3S4/-/-	Found in Chaparral, Cismontane Woodland, Coastal Scrub, and Valley and Foothill Grassland habitats at elevations of 164 - 1,645 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. However, this species has not been documented within the El Cajon quad (CNPS, 2020).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Dicranostegia orcuttiana Orcutt's Bird's Beak	List B/Rank 2B.1/S1/-/-	Associated with Sage Scrub habitats at elevations of 35 - 1,150 feet.	N	L	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. The closest CNDDB record is 14.5-miles to the southwest (CDFW, 2020a). NOTE: *Cordylanthus orcuttianus* is a synonym.
Diplaucus clevelandii Cleveland's Bush Monkeyflower	List D/Rank 4.2/S4/-/-	Found in Chaparral, Cismontane Woodland, and Lower Montane Coniferous Forest habitats at elevations of 1,480 - 6,580 feet.	N	U	There are no Chaparral, Cismontane Woodland, or Lower Montane Coniferous Forest habitats on the property. Also, the elevations on-site are much lower than the known elevations of the species. NOTE: *Mimulus clevelandii* is a synonym.
Dudleya variegata Variegated Dudleya	List A/Rank 1B.2/S2/-/-	Found on rocky or clay soils in Chaparral, Cismontane Woodland, Coastal Scrub and Valley and Foothill Grassland habitats at elevations of 9 - 1,909 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat underlain by rocky sandy loams (Bowman, 1973) within the known elevational range of the species. The closest CNDDB record is 2.3-miles to the northwest (CDFW, 2020a).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Ericameria palmeri ssp. *palmeri* Palmer's Goldenbush	List B/Rank 1B.1/S2/-/-	Associated with granitic soils in Chaparral and Sage Scrub habitats. Seasonally wet/moist locales are strongly preferred. Grows at elevations of 98 - 1,974 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat underlain by granitic soils (Bowman, 1973) within the known elevational range of the subspecies. However, the only areas within the property that have seasonally moist soils are within a small drainage along the southwestern property boundary. The closest CNDDB record is 1.4-miles to the northeast at the Louis A Stelzer County Park (CDFW, 2020a).
Eriodictyon sessilifolium Sessile-leaved Yerba Santa	-/Rank 2B.1/S1/-/-	Associated with volcanic soils within Coastal Sage Scrub habitats at elevations < 560 feet.	N	U	There are no volcanic soils mapped on the property (Bowman, 1973).
Eriogonum evanidum Vanishing Wild Buckwheat	List A/Rank 1B.1/S1/-/-	Found at sandy sites within Chaparral, Cismontane Woodland, Lower Montane Coniferous Forest, and Pinyon and Juniper Woodland habitats at elevations are 3,619 - 7,321 feet.	N	U	There are no Chaparral, Cismontane Woodland, Lower Montane Coniferous Forest, or Pinyon and Juniper Woodland habitats on the property. Also, the elevations on-site are much lower than the known elevations of this species. NOTE: *Eriogonum foliosum* is a synonym.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Eryngium aristulatum var. *parishii* San Diego Button-Celery	List A/Rank 1B.1/S1/CE/FE	Typically found in Vernal Pools, but this species is also tolerant of some of the habitats adjacent to Vernal Pools, such as Coastal Scrub and Valley and Foothill Grassland habitats. Grows at elevations of 49 - 2,896 feet.	N	U	There are no Vernal Pools on or adjacent to the property.
Erythranthe diffusa Palomar Monkeyflower	List D/Rank 4.3/S3/-/-	Found in Chaparral and Lower Montane Coniferous Forest habitats on sandy or gravelly soils at elevations of 4,013 - 6,021 feet.	N	U	There are no Chaparral or Lower Montane Coniferous Forest habitats on the property. Also, the elevations on-site are much lower than the known elevations of this species. NOTE: *Mimulus palmeri* and *Mimulus diffusus* are synonyms.
Euphorbia abramsiana Abrams' Spurge	-/Rank 2B.2/S2/-/-	Found in Mojavean Desert Scrub and Sonoran Desert Scrub habitats at elevations of -17 - 3,011 feet.	N	U	There are no Mojavean Desert Scrub or Sonoran Desert Scrub habitats on this property in Lakeside. NOTE: *Chamaesyce abramsiana* is a synonym.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Euphorbia misera Cliff Spurge	List B/Rank 2B.2/S2/-/-	In San Diego County, this species is found in Maritime Succulent Scrub often with a high incidence of cactus. Grows at elevations of 32 - 1,645 feet.	N	U	There is no Maritime Succulent Scrub habitat on the property.
Ferocactus viridescens San Diego Barrel Cactus	List B/Rank 2B.1/S2S3/-/-	Found in a variety of habitats, such as Sage Scrub, Chaparral, and Valley and Foothill Grassland. Often found on south-facing slopes at elevations of 9 - 1,481 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. The southern half of the site is on a south-facing slope. The closest CNDDB record is 2.0-miles to the southwest (CDFW, 2020a).
Frankenia palmeri Palmer's Frankeni	List B/Rank 2B.1/S1/-/-	A species found in Coastal Dunes, Marshes and Swamps, and Playas along the immediate coast in San Diego County at elevations of 0 - 35 feet.	N	U	There are no Coastal Dunes, Marshes and Swamps or Playas on this property in Lakeside.
Fraxinus parryi Chaparral Ash	-/Rank 2B.2/S1/-/-	Found in Chaparral at elevations of 700 - 2,040 feet.	N	U	There is no Chaparral habitat on the property, and the elevations on-site are slightly lower than the known elevations of this species.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Fremontodendron mexicanum Mexican Flannelbush	List A/Rank 1B.1/S1/CR/FE	Found on gabbroic, metavolcanic or serpentine soils within Chaparral, Cismontane Woodland and Closed-Cone Coniferous Forest habitats at elevations of 32 - 2,356 feet.	N	U	There are no gabbroic, metavolcanic, or serpentine soils mapped on the property (Bowman, 1973).
Galium proliferum Desert Bedstraw	-/Rank 2B.2/S2/-/-	Found in Joshua Tree Woodland, Mojavean Desert Scrub and Pinyon and Juniper Woodland habitats at elevations of 3,915 - 4,959 feet.	N	U	There are no Joshua Tree Woodland, Mojavean Desert Scrub, or Pinyon and Juniper Woodland habitats on the property. Also, the elevations on-site are much lower than the known elevations of this species.
Geothallus tuberosus Campbell's Liverwort	- /Rank 1B.1/S1/-/- CA Endemic	Found in Coastal Scrub and Vernal Pool habitats on mesic soils at elevations of 32 - 1,974 feet.	N	L	Most of the site contains Diegan Coastal Sage Scrub habitat, but the only locale on-site that is seasonally mesic is in a small drainage along the southwestern property boundary. The closest CNDDB record is 11.2-miles to the northwest (CDFW, 2020a).
Githopsis diffusa ssp. *filicaulis* Mission Canyon Bluecup	List C/Rank 3.1/S1/-/- CA Endemic	Found on mesic soils or in disturbed areas within Chaparral habitats at elevations of 1,480 - 2,300 feet.	N	U	There is no Chaparral habitat on the property. Also, the elevations on-site are much lower than the known elevations of this subspecies.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Grindelia hallii San Diego Gumplant	List A/Rank 1B.2/S2/-/- CA Endemic	Found in Chaparral, Lower Montane Coniferous Forest, Meadows and Seeps, and Valley and Foothill Grassland habitats, frequently in low moist areas within meadows, at elevations of 608 - 5,742 feet.	N	U	There are no Chaparral, Lower Montane Coniferous Forest, Meadows and Seeps, or Valley and Foothill Grassland habitats on the property. NOTE: *Grindelia hirsutula* var. *hallii* is a synonym.
Harpagonella palmeri Palmer's Grapplinghook	List D/Rank 4.2/S3/-/-	Found in clay soils within Chaparral, Coastal Scrub, and Valley and Foothill Grassland habitats at elevations of 65 - 3,142 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973).
Hesperocyparis forbesii Tecate Cypress	List A/Rank 1B.1/S2/-/-	Found on clay or gabbroic soils in Chaparral and Closed-cone Coniferous Forest habitats at elevations of 263 - 4,935 feet.	N	U	There are no clay or gabbroic soils mapped on the property (Bowman, 1973). NOTE: *Callitropsis forbesii* and *Cupressus forbesii* are synonyms.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Heterotheca sessiliflora ssp. *sessiliflora* Beach Goldenaster	-/Rank 1B.1/S1/-/-	Found on sandy soils within Chaparral, Coastal Dune, and Coastal Scrub habitats at elevations of 0 – 4,031 feet.	N	U	Most of this property in Lakeside contains Diegan Coastal Sage Scrub habitat underlain by rocky sandy loams (Bowman, 1973) within the known elevational range of the subspecies. However, this species is found closer to the coast. The closest CNDDB record is 18.5-miles to the southwest (CDFW, 2020a).
Holocarpha virgata ssp. *elongata* Graceful Tarplant	List D/Rank 4.2/S3/-/- CA Endemic	Found in Chaparral, Cismontane Woodland, Coastal Scrub and Valley and Foothill Grassland habitats at elevations of 197 - 3,619 feet.	N	H	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. This species has been recorded from the El Cajon quad (CNPS, 2020).
Hordeum intercedens Bobtail Barley	List C/Rank 3.2/S3S4/-/-	Occurs on alkaline flats, dry, saline streambeds, and Vernal Pool basins at elevations of 16 - 3,290 feet.	N	U	There are no alkaline flats, dry, saline streambeds, or Vernal Pool basins on the property. NOTE: Vernal Barley is a synonym.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Horkelia truncata Ramona Horkelia	List A/Rank 1B.3/S3/-/-	Found on clay, and sometimes, gabbroic soils within Chaparral and Cismontane Woodlands at elevations of 1,300 - 4,270 feet.	N	U	There are no clay or gabbroic soils mapped on the property (Bowman, 1973).
Isocoma menziesii var. *decumbens* Decumbent Goldenbush	List A/Rank 1B.2/S2/-/-	Associated with Sage Scrub and Chaparral habitats at elevations of 3 – 3,011 feet.	N	H	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. The closest CNDDB record is < 0.5-mile to the east (CDFW, 2020a).
Iva hayesiana San Diego Marsh-Elder	List B/Rank 2B.2/S2/-/-	A species found in marshy habitats in slow moving waters at elevations of 32 - 1,645 feet.	N	U	There are no marshy habitats on the property.
Juncus acutus ssp. *leopoldii* Southwestern Spiny Rush	List D/Rank 4.2/S4/-/-	Found in mesic Coastal Dunes, Meadows and Seeps, and coastal Marshes and Swamps at elevations that range from 9 - 2,961 feet.	N	U	There are no Coastal Dunes, Meadows and Seeps, or coastal Marshes and Swamps on the property.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Lasthenia glabrata ssp. *coulteri* Coulter's Goldfields	List A/Rank 1B.1/S2/-/-	Found in Salt Marshes, Playas and Vernal Pools at elevations of 3 - 4,014 feet.	N	U	There are no Salt Marshes, Playas or Vernal Pools on the property.
Lathyrus splendens Pride-of-California	List D/Rank 4.3/S4/-/-	Found in Chaparral at elevations of 658 - 5,018 feet.	N	U	There is no Chaparral habitat on the property.
Lepechinia cardiophylla Heart-leaved Pitcher Sage	List A/Rank 1B.2/S2S3/-/-	In San Diego County, this species is found in Chaparral habitat on Iron Mountain at an elevation of 2,000 feet.	N	U	There is no Chaparral habitat on this property in Lakeside.
Lepechinia ganderi Gander's Pitcher Sage	List A/Rank 1B.3/S3/-/-	Found in a variety of habitats on metavolcanic or gabbroic soils at elevations ranging from 1,003 - 3,307 feet.	N	U	There are no gabbroic or metavolcanic soils mapped on the property (Bowman, 1973).
Lepidium virginicum ssp. *robinsonii* Poor Man's Pepper	List A/Rank 4.3/S3/-/-	Found in Coastal Scrub and Chaparral habitats in relatively dry, exposed locales at elevations of 3 - 4,722 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. The closest CNDDB record is 4.7-miles to the northeast (CDFW, 2020a). NOTE: *Lepidium virginicum* var. *menziesii* is a synonym.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Leptosyne maritima Sea Dahlia	List B/Rank 2B.2/ S1S2/-/-	Found on sandstone cliffs near the ocean at elevations of 16 - 494 feet.	N	U	There are no sandstone cliffs on this inland property in Lakeside. NOTE: *Coreopsis maritima* is a synonym.
Lycium californicum California Box-Thorn	List D/Rank 4.2/S4/-/-	Grows in Coastal Bluff Scrub and Coastal Scrub at elevations of 16 - 494 feet.	N	L	The southern and eastern portions of the site contain Diegan Coastal Sage Scrub habitat barely within the known elevational range of the species. Also, this species has not been recorded within the El Cajon quad (CNPS, 2020).
Microseris douglasii ssp. *platycarpha* Small-flowered Microseris	List D/Rank 4.2/S4/-/-	Found on clay soils in Cismontane Woodland, Coastal Scrub, Valley and Foothill Grassland, and Vernal Pool habitats at elevations of 49 - 3,521 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973).
Monardella hypoleuca ssp. *lanata* Felt-Leaved Monardella	List A/Rank 1B.2/S3/-/-	Found in Chaparral and Cismontane Woodland habitats on sandy soils at elevations of 987 - 5,182 feet.	N	U	There are no Chaparral or Cismontane Woodland habitats on the property. Also, the highest elevation on-site is ± 307-feet lower than the lowest known elevation of the subspecies.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Monardella viminea Willowy Monardella	ListA/Rank1B.1/S1/CE/FE CA Endemic	A species found in canyons and washes within riparian, Sage Scrub, and Chaparral habitats at elevations of 148 - 757 feet.	N	M	There is a small drainage along the southwestern property boundary that is occupied by Diegan Coastal Sage Scrub within the known elevational range of the species. The closest CNDDB record is 3.4-miles to the northwest (CDFW, 2020a).
Myosurus minimus ssp. *apus* Little Mousetail	List C/Rank 3.1/S2/-/-	Found in Vernal Pools and occasionally in Valley and Foothill Grasslands adjacent to Vernal Pools at elevations of 65 - 2,106 feet.	N	U	There are no Vernal Pools on or adjacent to this property.
Nama stenocarpa Mud Nama	List B/Rank 2B.2/S1S2/-/-	This species is found on the muddy embankments of ponds, lakes, and occasionally rivers. Grows at elevations of 16 - 1,645 feet.	N	U	There are no ponds, lakes or rivers on this property.
Navarretia fossalis Spreading Navarretia	List A/Rank 1B.1/S2/-/FT	In San Diego County, the preferred habitat of this species is Vernal Pools. Found at elevations of 98 - 2,155 feet.	N	U	There are no Vernal Pools on or adjacent to the property.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Navarretia prostrata Prostrate Vernal Pool Navarretia	List A/Rank 1B.1/S2/-/- CA Endemic	Primarily found in mesic habitats on alkaline soils, such as Vernal Pools, but also found in Coastal Scrub and Valley and Foothill Grassland habitats. Known elevations range from 49 – 2,303 feet.	N	U	There are no alkaline soils mapped on the property (Bowman, 1973). NOTE: Prostrate Navarretia is a synonym.
Nemacaulis denudata var. *denudata* Coast Woolly-Heads	List A/Rank 1B.2/S2/-/-	A species found in Coastal Dunes along the immediate coast at elevations of 0 - 329 feet.	N	U	There are no Coastal Dunes on this inland property in Lakeside.
Nolina interrata Dehesa Nolina	List A/Rank 1B.1/S2/CE/-	Found in Chaparral habitats on gabbroic or metavolcanic soils at elevations of 592 - 2,813 feet.	N	U	There are no gabbroic or metavolcanic soils mapped on the property (Bowman, 1973).
Ophioglossum californicum California Adder's-Tongue	List D/Rank 4.2/S4/-/-	Found on the periphery of Vernal Pools and seeps and other vernally moist locales at elevations of 197 - 1,728 feet.	N	U	There are no Vernal Pools or seeps on the property, just a small ephemeral drainage along the southwest property boundary. Also, this species has not been recorded within the El Cajon quad (CNPS, 2020).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Packera ganderi Gander's Ragwort	List A/Rank 1B.2/S2/CR/- CA Endemic	A species found in Chaparral habitat on gabbroic soils at elevations of 1,316 - 3,948 feet.	N	U	There are no gabbroic soils mapped on the property (Bowman, 1973). NOTE: *Senecio ganderi* is a synonym.
Pentachaeta aurea ssp. *aurea* Golden-rayed Pentachaeta	List D/Rank 4.2/S3/-/-	Found in Chaparral, Cismontane Woodland, Coastal Scrub, Lower Montane Coniferous Forest, and Valley and Foothill Grassland habitats at elevations of 263 - 6,087 feet.	N	H	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the subspecies. Also, this subspecies has been documented within the El Cajon quad (CNPS, 2020). NOTE: The County List D only refers to the specific epithet, not to any subspecies.
Pickeringia montana var. *tomentosa* Woolly Chaparral Pea	-/Rank 4.3/S3S4/-/-	Found on gabbroic, granitic, or clay soil within Chaparral habitat at elevations of 0 - 5,593 feet.	N	U	There is no Chaparral habitat on the property.
Piperia cooperi Chaparral Rein-Orchid	List D/Rank 4.2/S3S4/-/-	Found in Chaparral, Cismontane Woodland, and Valley and Foothill Grassland habitats at elevations of 49 - 5,215 feet.	N	U	There are no Chaparral, Cismontane Woodland, or Valley and Foothill Grassland habitats on the property.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Pogogyne abramsii San Diego Mesa Mint	ListA/Rank1B.1/S1/CE/FE CA Endemic	A Vernal Pool obligate found at elevations of 296 - 658 feet.	N	U	There are no Vernal Pools on or adjacent to the site.
Pogogyne nudiuscula Otay Mesa Mint	ListA/Rank1B.1/S1/CE/FE	A Vernal Pool obligate found at elevations of 296 - 823 feet.	N	U	There are no Vernal Pools on or adjacent to the site.
Polygala cornuta var. *fishiae* Fish's Milkwort	List D/Rank 4.3/S4/-/-	Found in Chaparral, Riparian Woodland, or Cismontane Woodland with Coast Live Oaks at elevations of 329 - 3,290 feet.	N	U	There are no Chaparral, Riparian Woodland, or Cismontane Woodland habitats on the property.
Pseudognaphalium leucocephalum White Rabbit-Tobacco	-/Rank 2B.2/S2/-/-	Found in Chaparral, Coastal Scrub, Riparian Woodland and Cismontane Woodland habitats at elevations ranging from 0 - 6,900-feet.	N	H	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. The closest CNDDB record is 1.0-mile to the east along Willow Road (CDFW, 2020a). NOTE: G*naphalium leucocephalum* is a synonym.
Quercus cedrosensis Cedros Island Oak	List B/Rank 2B.2/S1/-/-	Found in Closed-cone Coniferous Forest, Chaparral, and Coastal Scrub at elevations of 838 - 3,159 feet.	N	U	Most of the site contains Diegan Coastal Sage Scrub habitat. However, the elevations on-site are lower than the known elevations of this species.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Quercus dumosa Nuttall's Scrub Oak	List A/Rank 1B.1/S3/-/-	A coastal form of the Scrub Oak found in Chaparral, Closed-cone Coniferous Forest, and Coastal Scrub habitats at elevations of 49 - 1,316 feet.	N	L	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. The closest CNDDB record is 2.5-miles to the southwest (CDFW, 2020a).
Quercus engelmannii Engelmann Oak	List D/Rank 4.2/S3/-/-	Found in Chaparral, Cismontane Woodland, Riparian Woodland and Valley and Foothill Grassland habitats at elevations of 164 - 4,277 feet.	N	U	There are no Chaparral, Cismontane Woodland, Riparian Woodland, or Valley and Foothill Grassland habitats on the property.
Ribes canthariforme Moreno Currant	List A/Rank 1B.3/S2/-/- CA Endemic	Found in Chaparral and Riparian Scrub habitats at elevations of 98 – 4,705 feet.	N	U	There are no Chaparral or Riparian Scrub habitats on the property.
Romneya coulteri Coulter's Matilija Poppy	List D/Rank 4.2/S4/-/-	Found in Chaparral, Coastal Scrub, and Desert Washes at elevations of 65 - 3,948 feet.	N	L	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. However, this species has not been recorded within the El Cajon quad (CNPS, 2020).

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Salvia munzii Munz's Sage	List B/Rank 2B.2/S2/-/-	Found in Coastal Scrub and Chaparral habitats at elevations of 394 - 3,504 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. The closest CNDDB record is 6.9-miles to the southwest at Mission Trails Regional Park (CDFW, 2020a).
Selaginella cinerascens Ashy Spike-Moss	List D/Rank 4.1/S3/-/-	Found in undisturbed Chaparral and Diegan Sage Scrub. Rarely inhabits disturbed soils. Grows at elevations of 66 - 2,106 feet.	N	M	Most of the site contains Diegan Coastal Sage Scrub habitat within the known elevational range of the species. However, this species has not been recorded within the El Cajon quad (CNPS, 2020).
Senecio aphanactis Chaparral Ragwort	List B/Rank 2B.2/S2/-/-	Found on alkaline soils in Chaparral, Coastal Scrub and Cismontane Woodland habitats. Grows at elevations of 49 - 2,632 feet.	N	U	There are no alkaline soils mapped on the property (Bowman, 1973). NOTE: Rayless Ragwort is a synonym.
Stemodia durantifolia Purple Stemodia	List B/Rank 2B.1/S2/-/-	A species of mesic, sandy areas in Sonoran Desert Scrub. Grows at elevations of 592 - 987 feet.	N	U	There is no Sonoran Desert Scrub habitat on this property in Lakeside.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Stipa diegoensis San Diego County Needle Grass	List D/Rank 4.2/S4/-/-	Found in Chaparral and Coastal Scrub habitats on rocky soils at elevations of 32 - 2,632 feet.	N	H	Most of the site contains Diegan Coastal Sage Scrub habitat underlain by rocky sandy loams (Bowman, 1973) within the known elevational range of the species. This species has been recorded within the El Cajon quad (CNPS, 2020). NOTE: *Achnatherum diegoensis* is a synonym.
Streptanthus bernardinus Laguna Mountains Jewelflower	List D/Rank 4.3/S3S4/-/- CA Endemic	Found in Chaparral or Lower Montane Coniferous Forest habitats on clay or decomposed granite soils at elevations of 2,204 -8,225 feet.	N	U	There are no Chaparral or Lower Montane Coniferous Forest habitats on the property. Also, the known elevational range of this species is much higher than the elevations on-site.
Stylocline citroleum Oil Neststraw	List A/Rank 1B.1/S3/-/- CA Endemic	Found in clay soil at elevations from 164 - 1,316 feet.	N	U	There are no clay soils mapped on the property (Bowman, 1973). NOTE: The historic specimen from San Diego County is believed to be a variant of *Stylocline gnaphaloides. Stylocline citroleum* is not found in Rebman and Simpson (2006).
Suaeda esteroa Estuary Seablite	List A/Rank 1B.2/S2/-/-	Found in Coastal Salt Marshes at elevations of 0 - 17 feet.	N	U	There are no Coastal Salt Marshes on this inland property in Lakeside.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Tetracoccus dioicus Parry's Tetracoccus	List A/Rank 1B.2/S2/-/-	Found in Chaparral and Sage Scrub habitats on stony, decomposed gabbroic soil at elevations ranging from 493 - 3,290 feet.	N	U	There are no gabbroic soils mapped on the property (Bowman, 1973).
Texosporium sancti-jacobi Woven-spored Lichen	-/Rank 3/S1/-/-	Found in Chaparral habitat with *Adenostoma fasciculatum*, *Eriogonum* sp., and *Selaginella* sp. at elevations of 954 - 2,172 feet.	N	U	There is no Chaparral habitat on the property.
Triquetrella californica Coastal Triquetrella	-/Rank 1B.2/S2/-/-	Grows within 100 feet of the coast in Coastal Bluff Scrub and Coastal Scrub habitats at elevations of 32 - 329 feet.	N	U	The subject property is located in Lakeside which is more than 19-miles from the coast.
Viguiera laciniata San Diego County Viguiera	List D/Rank 4.3/S4/-/-	Found in Chaparral and Coastal Scrub habitats at elevations of 197 – 2,468 feet.	Y	Observed	This shrub is a component of the Diegan Coastal Sage Scrub habitat on-site.

Scientific Name Common Name[2]	Sensitivity Code and Status[3]	Habitat Preference	Found On-site (Y or N)	Potential On-site[4]	Factual Basis for Potential
Xanthisma junceum Rush-like Bristleweed	List D/Rank 4.3/S4/-/-	Found in Chaparral and Coastal Scrub habitats at elevations of 789 – 3,290 feet.	N	U	Most of the site contains Diegan Coastal Sage Scrub habitat. However, the known elevations of this species are slightly higher than those represented on-site. NOTE: *Haplopappus junceus* and *Machaeranthera juncea* are synonyms.

[1] This plant list was generated by the nine quad search function of the on-line California Native Plant Society (CNPS) inventory. This list was augmented with plants from the San Diego County Sensitive Plant Lists A, B, C, and D and a nine quad search of the California Natural Diversity Data Base (CNDDB).
[2] The Common Names were taken from Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., and Wilken, D.H. eds. 2012. The Jepson Manual Vascular Plants of California, 2nd Edition. University of California Press, Berkeley, xxii + 1568 pp.
[3] The first line in the "Sensitivity Code and Status" column shows the California Rare Plant Rank with threat code extensions/the state ranking of the California Natural Diversity Database (CNDDB) with the threat rank extension/the California state threatened and endangered status code/the federal threatened and endangered status code. The second line in the "Sensitivity Code and Status" column identifies whether the species is a California Endemic as identified by the CNPS or not (blank second line). Following is a key to the codes in the table.

Key to the California Rare Plant Ranking System

Rare Plant Rank 1A - Extirpated in California, Rare or Extinct Elsewhere
Rare Plant Rank 1B - Rare, Endangered
Rare Plant Rank 2A - Extirpated in California, Common Elsewhere
Rare Plant Rank 2B -Endangered in California
Rare Plant Rank 3 - Needs Review
Rare Plant Rank 4 - Uncommon in California

Key to the California Rare Plant Rank Threat Code Extensions

.1 - Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 - Fairly threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
.3 - Not very threatened in California (< 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Key to the State Ranking of the CNDDB

S1 - Critically Imperiled - Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state/province

S2 - Imperiled - Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province

S3 - Vulnerable - Vulnerable in the state due to restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation

S4 - Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors

S5 - Secure - Common, widespread, and abundant in the state

? - By adding a question mark, it represents uncertainty. For example, a S2? means more certainty than S2S3, but less certainty than S2

Two S Ranks - Two S Ranks represent a range of values. For example, a S2S3 means the rank is somewhere between S2 and S3.

SXC - All sites in California are extirpated, but the species exists in cultivation

SH - All California sites are historical

Key to the Threat Rank Extensions of S1, S2 or S3 (if assigned)

.1 - very threatened

.2 - threatened

.3 - no current threats are known

State and Federal Threatened and Endangered Species Status Codes

CR - State of California listed as rare

CE - State of California listed as endangered

CT - State of California listed as threatened

PT - Proposed for Listing as Threatened under the Federal Endangered Species Act

PE - Proposed for Listing as Endangered under the Federal Endangered Species Act

FC - Candidate for Listing under the Federal Endangered Species Act

FE - Designated Endangered under Federal Endangered Species Act

FT - Designated as Threatened under the Federal Endangered Species Act

[4] The "Potential On-site" column assesses the potential for the particular species to occur on the subject property given the known habitat preferences and distribution of that species. The codes used in this column are defined as follows:

Observed - Individuals of this species were found within the bounds of the site

H - The potential for occurrence is "high" Habitats on-site are considered suitable for the species, and the species is known from the immediate vicinity.

M - The potential for occurrence is "medium". Habitats and conditions on-site are considered possible for the species.

L - The potential for occurrence is "low". The habitats present on-site are marginal for the species and/or extremely limited in extent. In other words, the species is not anticipated, but it's occurrence can not be precluded.

U - The potential for occurrence is "unlikely". The habitat requirements of the species are not present on the subject property.

Table 4

Sensitive Wildlife Species Known to Occur Within an Approximate 10-mile Radius[1] of the Hurrell Subdivision Project

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Insects					
Bombus crotchii Crotch Bumble Bee	—, —/CCE/—	Food plants include *Antirrhinum* spp., *Phacelia* spp., *Clarkia* spp., *Dendromecon* spp., *Eschscholzia* ssp., and *Eriogonum* spp.	N	L	While there are *Eriogonum fasciculatum*, *Phacelia* spp., *Eschscholzia californica*, and *Antirrhinum nuttallianum* on the property, the closest CNDDB record is 6.2-miles to the northwest (CDFW, 2020a).
Callophrys thornei Thorne*'s* Hairstreak	Group 1, —/—/BLM Sensitive SD County Endemic	Restricted to the vicinity of Otay Mountain. Found in Tecate Cypress groves in woody Chaparral slopes. Larval host plant is Tecate Cypress (*Callitropsis forbesii*).	N	U	There are no Tecate Cypress on this property in Lakeside. NOTE: *Mitoura thornei* is a synonym.
Cicindela gabbii Gabb's Tidal-flat Tiger Beetle	Group 2, —/—/—	This beetle is found in estuaries and mudflats.	N	U	There are no estuaries or mudflats on this inland property in Laekside. NOTE: Western Tidal-flat Tiger Beetle is a synonym.
Cicindela latesignata latesignata Western Beach Tiger Beetle	Group 2, —/—/—	This insect is found on coastal mudflats and beaches.	N	U	There are no coastal mudflats or beaches on this inland property in Lakeside.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Danaus plexippus Monarch Butterfly	Group 2, —/—/—	This species is found in a variety of open habitats typically where the larval host plants, the true Milkweeds (*Asclepias* spp.), are found. The winter roost sites are located in wind-protected tree groves (Eucalyptus, Monterey Pine and Cypress) along the California coast from northern Mendocino to Baja California, Mexico.	N	U	There are no tree groves, only a few Eucalyptus along the northeast property boundary. Also, there are no Milkweeds on the site.
Euphydryas editha quino Quino Checkerspot Butterfly	Group 1, FE/—/X-CI	The Quino is found in a variety of open canopy habitats where the butterfly's larval host plants are found. These host plants include, Dot-seed Plantain (*Plantago erecta*), Desert Plantain (*Plantago patagonica*), Owl's Clover (*Castilleja exserta*), Coulter's Snapdragon (*Antirrhinum coulterianum*), Chinese Houses (*Collinsia heterophylla*), and Thread-leaved Bird's Beak (*Cordylanthus rigidus*). It is precluded from closed canopy situations and is a hilltopping species.	N	U	The 2019 federal protocol survey for the Quino Checkerspot Butterfly was negative. Also, no larval host plants were detected on-site.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Lycaena hermes Hermes Copper Butterfly	Group 1, — /—/—	Associated closely with the larval food plant, Redberry (*Rhamnus crocea*). Recent studies indicate that the butterfly prefers those Redberry that are roughly 18-years and older.	N	U	A focused survey for the Hermes Copper was conducted with negative results during the 2019 flight season according to the County of San Diego Guidelines for Hermes Copper (San Diego, County of. 2010b). Redberry shrubs in proximity to Buckwheat shrubs (*Eriogonum fasciculatum*) were mapped as potential habitat.
Crustaceans					
Branchinecta sandiegonenis San Diego Fairy Shrimp	Group 1, FE/—/—	A Vernal Pool obligate.	N	U	There are no Vernal Pools on or adjacent to the property.
Streptocephalus woottoni Riverside Fairy Shrimp	Group 1, FE/—/—	A Vernal Pool obligate.	N	U	There are no Vernal Pools on or adjacent to the property.
Amphibians					
Anaxyrus californicus Arroyo Southwestern Toad	Group 1, FE/SSC/—	Found primarily in the foothills and mountains along stream courses that afford open, sunny sandbars.	N	U	There are no stream courses on the property. The San Diego River is located just south of the site on the opposite side of Lakeside Avenue. NOTE: *Bufo miocroscaphus californicus* and *Bufo californicus* are synonyms.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Spea hammondii Western Spadefoot Toad	Group 2, — /SSC/BLM Sensitive	A cryptic species, this toad probably occurs throughout the coastal plain and foothills, anywhere ephemeral water sources develop.	N	U	There are no ephemeral water sources on the property. NOTE: *Spea scaphiopus hammondii* is a synonym.
Reptiles					
Anniella stebbinsi Southern California Legless Lizard	Group 2, —/SSC/FS Sensitive	Occurs throughout the County (except for the low desert) where it is fossorial in soft soils and deep leaf litters. Some soil moisture is preferred.	N	M	A small portion of the southern edge of the site is underlain by Tujunga sand, but the majority of the site is occupied by rocky sandy loams (Bowman, 1973). The closest CNDDB record is < 1-mile to the south along the San Diego River (CDFW, 2020a). NOTE: This species was previously recognized as the Silvery Legless Lizard (*Anniella pulchra pulchra*).
Arizona elegans ssp. *occidentalis* California Glossy Snake	—, —/SSC/—	Found in Scrub and Grassland habitats, often on loose or sandy soils.	N	M	A small portion of the property along the southern edge contains Diegan Coastal Sage Scrub underlain by Tujunga sand (Bowman, 1973). The closest CNDDB record is 1.2-miles to the east (CDFW, 2020a).

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Aspidoscelis hyperythra Orange-throated Whiptail	Group 2, —/WL/—	Occupies scrub habitats on the coastal plain and lower foothills where Subterranean Termites (*Reticulitermes* sp.), the principal prey species, is found. Shrub cover with openings are required for thermoregulation.	Y	Observed	This species was detected throughout the property during the 3/28/19, 4/11/19, 4/19/19, 4/26/19, 5/3/19, 5/31/19, and 6/18/19 site visits. NOTE: Synonyms are *Aspidoscelis hyperythrus beldingi* and *Cnemidophorus hyperythrus*.
Aspidoscelis tigris stejnegeri Coastal Western Whiptail	Group 2, —/SSC/—	Occupies scrub habitats on the coastal plain and lower foothills where shrub cover with openings is required for thermoregulation.	N	M	The site contains open Diegan Coastal Sage Scrub habitat. The closest CNDDB record is 1.8-miles to the east near El Monte Park Road (CDFW, 2020a). NOTE: A synonym is *Cnemidophorus tigris multiscutatus*.
Charina trivirgata Rosy Boa	Group 2, —/—/—	A cryptic species found in a variety of habitats, including sage scrubs, Chaparrals and Pinyon-Juniper Woodlands. It prefers rocky soil.	N	M	Most of the site contains Diegan Coastal Sage Scrub underlain by Cieneba-Fallbrook rocky sandy loams (CDFW, 2020a).
Chelonia mydas Green Turtle	—, FT/—/—	Found in marine waters where sea grasses and algae are abundant.	N	U	There are no marine waters on this inland property in Lakeside.
Coleonyx variegatus abbottii San Diego Banded Gecko	Group 1, —/SSC—	The Gecko prefers rocky Sage Scrub and Chaparral habitats on the coastal side of the mountains.	N	H	Most of the site contains Diegan Coastal Sage Scrub underlain by Cieneba-Fallbrook rocky sandy loams (CDFW, 2020a). The closest CNDDB record is < 1-mile to the east (CDFW, 2020a).

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Crotalus ruber Red Diamond Rattlesnake	Group 2, —/SSC/FS Sensitive	In a variety of habitats, although most frequently found in Sage Scrub and Chaparral. It is found throughout the County except for the low desert.	N	H	Most of the site contains Diegan Coastal Sage Scrub. The closest CNDDB record is 1.1-miles to the northeast near Mountain Bluebird Court (CDFW, 2020a). A rattlesnake was heard during the 4/1/19 site visit, but was not seen for identification.
Diadophis punctatus similis San Diego Ringneck Snake	Group 2, —/—/FS Sensitive	In San Diego, this snake is found in a variety of habitats from the coast to the mountains. It is typically found under rotting logs, bark, rocks and damp leaves.	N	M	The site contains rock outcrops and boulders. The closest CNDDB record is 1.8-miles to the northeast near Mountain Lion Road (CDFW, 2020a).
Emys marmorata Southwestern Pond Turtle	Group 1,—/SSC/FS and BLM Sensitive	Most often found in environments where water persists year-round. It has also been found at two drainages in the desert. It prefers lakes, streams, ponds or other areas with emergent or floating vegetation and often basks on rocks or protruding logs.	N	U	There are no year-round water sources on the property. NOTE: Synonyms are *Clemmys marmorata pallida* and *Actinemys marmorata pallida*.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Masticophis fuliginosus Baja California Coachwhip	—, —/SSC/—	This species is found in open areas within grassland and Coastal Sage Scrub habitats.	N	L	In California, this snake is restricted to southern San Diego County. The property contains Diegan Coastal Sage Scrub habitat. The closest CNDDB record is 8.9-miles to the southwest near Jamacha Junction (CDFW, 2020a). NOTE: *Coluber fuliginosus* is s synonym.
Phrynosoma blainvillii Coast Horned Lizard	Group 2, —/SSC/ BLM Sensitive	Found throughout the County (except the low deserts) anywhere the primary prey species, harvester ants (*Pogonomyrmex* sp. and *Messor* sp.) are found. It requires some openings in vegetation for thermoregulation.	N	H	Harvester ants were noted on-site within the openings of Diegan Coastal Sage Scrub. There is an historic CNDDB record that covers the southwest portion of the site (CDFW, 2020a). The record is from 1937 and is mapped to the general vicinity of Lakeside. NOTE: *Phrynosoma coronatum* is a synonym.
Plestiodon skiltonianus interparietalis Coronado Island Skink	Group 2, —/WL/BLM Sensitive	In a variety of habitats ranging from coastal scrub, to Chaparral and forested slopes, into the denser desert scrub and Pinyon-Juniper Woodlands.	N	M	Most of the site contains Diegan Coastal Sage Scrub. The closest CNDDB record is 1.7-miles to the southeast near Audubon Road (CDFW, 2020a). NOTE: A synonym is *Eumeces skiltonianus interparietalis*.
Salvadora hexalepis virgultea Coast Patch-nosed Snake	Group 2, —/SSC/—	Found in arid Sage Scrub and Chaparral habitats.	N	M	Most of the site contains Diegan Coastal Sage Scrub. The closest CNDDB record is 3.3-miles to the northeast (CDFW, 2020a).

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Thamnophis hammondii Two-striped Garter Snake	Group 1, —/SSC/FS and BLM Sensitive	An aquatic snake found in association with fluvial and lacustrine environments, even cattle tanks. Aestivating individuals may be found some distance from water sources.	N	L	There are no water sources on-site, but the San Diego River is just to the south of the property across Lakeside Avenue. The closest CNDDB record is 2.2-miles to the northwest at Fanita Ranch (CDFW, 2020a).
Mammals					
Antrozous pallidus Pallid Bat	Group 2, —/SSC/FS and BLM Sensitive; WBWG High Priority	A bat that feeds on the ground (Jerusalem Crickets and scorpions are typical fare). This species prefers open, dry habitats with rocky areas for roosting. It is very sensitive to disturbance of roost sites.	N	M	The property contains rock outcrops and boulders on steep slopes. There is an historic CNDDB record that covers the southwest portion of the property. The record is from 1974 of a male specimen collected in the vicinity of Lakeside (CDFW, 2020a).
Bassariscus astutus Ringtail	Group 2, —/—/—	Found in brushy, wooded areas, generally at lower and middle elevations. The Ringtail is especially common in foothill canyons. Less common in the high mountains, but is known to live up to 2,600 m.	N	U	The site does not contain any wooded areas, just Diegan Coastal Sage Scrub and a few Eucalyptus and Elderberry trees. Given that the property is adjacent to State Route 67 on the east side, that disturbance may be to much to anticipate this shy animal.
Chaetodipus californicus femoralis Dulzura California Pocket Mouse	Group 2, —/SSC/—	Frequent in arid Chaparral-Grassland edges in the foothills and lower mountain slopes of the County.	N	U	There are no Chaparral-Grassland edges on the property.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Chaetodipus fallax fallax Northwestern San Diego Pocket Mouse	Group 2, —/SSC/—	Found in Coastal Sage Scrub, Sage Scrub/grassland ecotones and Chaparral communities. Found in open, sandy areas.	N	L	A small sliver of the property contains Diegan Coastal Sage Scrub underlain by Tujunga sand (Bowman, 1973). The closest CNDDB record is 3.8-miles to the southeast near La Cresta Road (CDFW, 2020a).
Choeronycteris mexicana Mexican Long-tongued Bat	Group 2, —/SSC/WBWG High Priority	This bat feeds on the nectar of night-blooming succulents. Occurs occasionally in extreme southern California at the northern edge of its range. Roosts in caves and buildings.	N	U	There are no suitable roost sites on the property.
Corynorhinus townsendii Townsend's Big-eared Bat	Group 2, —/SSC/BLM Sensitive; FS Sensitive; WBWG High Priority	Associated with a variety of habitats but is most common in mesic sites. It roosts in the open, hanging from walls and ceilings, but is extremely sensitive to human disturbance.	N	U	There are no suitable roost sites on the property.
Eumops perotis californicus Greater Western Mastiff Bat	Group 2, —/SSC/BLM Sensitive; WBWG High Priority	Found in a variety of habitats but is frequently associated with cliff faces, high buildings, trees and tunnels that afford a considerable vertical drop from the roost to become airborne.	N	U	There are no suitable roost sites on the property.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Lasiurus blossevillii Western Red Bat	Group 2, —/SSC/FS Sensitive; WBWG High Priority	Found in Cismontane Woodland, Lower Montane Coniferous Forest, Riparian Forest, and Riparian Woodland habitats. Roosts primarily in trees.	N	U	There are only a few Eucalyptus trees along the northeastern property boundary.
Lasiurus cinereus Hoary Bat	—, —/—/WBWG Medium Priority	Seasonally found in forested areas in proximity to water.	N	U	There are no forested areas on the property.
Lasiurus xanthinus Western Yellow Bat	—, —/SSC/WBWG High Priority	Found in Valley Foothill Riparian, Desert Riparian, Desert Wash, and Palm Oasis habitats. Roosts in trees, particularly palm trees.	N	U	There are a few Palms just off-site to the northwest of the site, but they are not part of a riparian habitat.
Lepus californicus bennettii San Diego Black-tailed Jackrabbit	Group 2, —/SSC/—	Found in a variety of habitats throughout the County but requires open or semi-open vegetation.	N	L	Most of the site contains open Diegan Coastal Sage Scrub on steep slopes. The closest CNDDB record is 1.7-miles to the northeast (CDFW, 2020a).
Myotis ciliolabrum Small-footed Myotis	Group2, —/—/BLM Sensitive; WBWG Medium Priority	Roosts alone or in small groups in rock crevices, mines, caves, or buildings.	N	L	There are some rock outcrops and boulders on the property. The closest CNDDB record is 4.7-miles to the southeast at the Crestridge Ecological Reserve (CDFW, 2020a).

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Myotis evotis Long-eared Myotis	Group 2, —/—/BLM Sensitive; WBWG Medium Priority	Found in brush, woodland and forest habitats, but prefers coniferous woodlands and forests. Caves are used for night roosts, while nursery colonies are in buildings, crevices, spaces under bark and snags.	N	L	There are no coniferous woodlands on-site. Most of the site is occupied by Diegan Coastal Sage Scrub with rock outcrops and boulders. There are a few Eucalyptus trees along the northeast property boundary. The closest CNDDB record is 8.6-miles to the southeast (CDFW, 2020a).
Myotis yumanensis Yuma Myotis	Group 2, —/—/BLM Sensitive; WBWG Low to Medium Priority	This species roosts in caves and man-made structures, and is closely associated with water sources.	N	U	There are no suitable roost sites on the property.
Neotoma lepida intermedia San Diego Desert Woodrat	Group 2, —/SSC/—	An inhabitant of Sage Scrubs and Chaparral, especially with yuccas and cacti. Typical nests are embedded in rock crevices and partially underground.	N	M	Most of the site is occupied by Diegan Coastal Sage Scrub with Yucca and rock outcrops. The closest CNDDB record is 2.2-miles to the northwest at Fanita Ranch (CDFW, 2020a).
Nyctinomops femorosaccus Pocketed Free-tailed Bat	Group 2, —/SSC/— ;WBWG Medium Priority	Roosting in a variety of situations, this species is associated with Desert Scrub and Pinyon-Juniper Woodlands. They particularly like rocky areas with high cliffs.	N	U	There are no suitable roost sites on the property.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Nyctinomops macrotis Big Free-tailed Bat	Group 2, —/SSC/WBWG Medium to High Priority	Associated with desert scrub, woodlands, and evergreen forests, where there are high cliffs and rocky outcrops for roosting.	N	L	There are no desert scrub, woodlands or evergreen forests on the property. There are rocky outcrops, but no high cliffs. There is a CNDDB record from the general vicinity of Lakeside that covers the southwest portion of the site (CDFW, 2020a).
Odocoileus hemionus Southern Mule Deer	Group 2, —/—/—	Found in habitats with sufficient vegetative cover.	N	M	Most of the site contains open Diegan Coastal Sage Scrub which may or may not provide sufficient cover for this species. The location of the San Diego River to the south of the site is presumed to be a water source for this species.
Taxidea taxus American Badger	Group 2, —/SSC/—	A fossorial species of open deserts and grassland habitats.	N	U	Most of the site is occupied by Diegan Coastal Sage Scrub underlain by Cieneba-Fallbrook rocky sandy loams (not easy to dig in).
Birds					
Accipiter cooperii Cooper's Hawk (nesting)	Group 1, —/WL/—	Nesting Cooper's generally use taller trees, including a number of horticultural species and native Oaks.	Y	Observed	This species was seen as an overflight during the 3/16/19 and 4/1/19 visits.
Agelaius tricolor Tricolored Blackbird	Group 1, BCC/CCE, SSC/BLM Sensitive	Breeding colonies are limited to ponds with adjacent, undisturbed foraging habitat.	N	U	There are no ponds on the property.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Aimophila ruficeps ssp. *canescens* Rufous-crowned Sparrow	Group 1, —/WL/—	This species nests in Sage Scrub, open or burned Chaparral, and in Non-Native Grasslands with scattered shrubs.	Y	Observed	This bird species was detected throughout the site and off-site to the southwest during the 3/16/19, 3/19/19, 3/28/19, 4/1/19, 4/11/19, 5/3/19, 5/14/19, and 6/18/19 site visits. NOTE: Southern California Rufous-crowned Sparrow is a synonym.
Ammodramus savannarum Grasshopper Sparrow (nesting)	Group 1, —/SSC/—	Found in Native, and to a lesser extent, Non-Native Grasslands.	N	U	There are no Native or Non-Native Grasslands on the property.
Aquila chrysaetos Golden Eagle (nesting and wintering)	Group 1, —/WL; Fully Protected/BLM Sensitive	The Golden Eagle nests on cliff ledges and forages in nearby grassland, Sage Scrub or Chaparral.	N	U	There are no suitable nest sites on the property. The closest CNDDB record is 5.3-miles to the northeast on El Capitan (CDFW, 2020a). According to Unitt (2004), the Golden Eagle is not known in the Eucalyptus Hills area.
Artemisiospiza belli belli Bell's Sage Sparrow	Group 1, —/WL/—	This species prefers Sage Scrub and Chaparral habitats with an open canopy and areas of bare soil.	N	M	The property contains Diegan Coastal Sage Scrub with areas of bare soil. However, this subspecies is not known from the Eucalyptus Hills area (Unitt 2004). NOTE: *Amphispiza belli belli* is a synonym.
Athene cunicularia Burrowing Owl (burrow sites)	Group 1, BCC/SSC/BLM Sensitive	This owl requires relatively flat terrain to enable the bird to survey its territory from the burrow hole. It occurs in open grasslands, and open Sage Scrub habitats.	N	U	Most of the site contains steep slopes. The portions that are flat, already contain residences.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Buteo lineatus Red-shouldered Hawk	Group 1, —/—/—	Found in dense woods with clearings and water.	N	H	Although there are no dense woods on the property, there are scattered Eucalyptus trees along the access road and around the adjacent residences that could provide nest sites According to Unitt (2004), this hawk probably breeds in the area.
Buteo swainsoni Swainson's Hawk	Group 1,—/CT/ FS Sensitive	Found on grasslands and farmlands. Nests in isolated trees. Usually solitary, but migrates in large flocks and large numbers concentrate at migration points. The Borrego Valley is on a migration corridor, the birds stopping to roost in strips of tamarisk trees and at nurseries.	N	U	There are a few Eucalyptus trees on the northeastern property boundary, but no grasslands or farmlands. Also, this site is located in Lakeside, not in the Borrego Valley.
Calypte costae Costa's Hummingbird	—, BCC/—/—	Found in a variety of habitats, including mature Sage Scrub and Chaparral.	N	H	Most of the site contains Diegan Coastal Sage Scrub, and according to Unitt (2004), this hummingbird is known to breed in the area.
Campylorhynchus brunneicapillum sandiegensis Coastal Cactus Wren	Group 1, BCC/SSC/FS Sensitive	Found in association with stands of *Opuntia* sp. and/or *Cylindropuntia* sp. along the coastal strip and lower foothills.	N	L	There are a few scattered *Opuntia* cacti on the property, but no clustered stands. The closest CNDDB record is 0.9-mile to the southeast near Lake Jennings Park Drive (CDFW, 2020a).

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Cathartes aura Turkey Vulture	Group 1, —/—/—	This species nests in rock crevices mainly in the mountains of San Diego County. However, non-breeders assemble in communal roosts elsewhere in the County.	Y	Observed	There are no suitable nest sites on the property, but this species was observed overflying the site during the 3/16/19, 6/11/19, and 6/18/19 visits.
Charadrius alexandrinus nivosus Western Snowy Plover (nesting)	Group 1, FT; BCC/SSC/—	Found on beaches, dunes, salt flats, and at some shallow inland lakes. Most populations concentrated in Camp Pendleton and the Silver Strand.	N	U	There are no beaches, dunes, salt flats or inland lakes on this property in Lakeside.
Coccyzus americanus occidentalis Yellow-billed Cuckoo (nesting)	Group 1, BCC; FT/CE/FS Sensitive	Found in extensive stands of mature riparian woods.	N	U	There are no riparian habitats on the property. NOTE: Western Yellow-billed Cuckoo is a synonym.
Coturnicops noveboracensis Yellow Rail	—, —/—/—	This species lives in dense, freshwater marshes.	N	U	There are no marshes on the property.
Elanus leucurus White-tailed Kite (nesting)	Group 1, —/Fully Protected/—	This species nests in tall trees adjacent to foraging habitat that contains its primary prey, the California Vole (*Microtus californicus*).	N	M	There are a couple of Eucalyptus trees along the northeastern property boundary and off-site to the southwest. Also, this species is known to breed in the area (Unitt, 2004). NOTE: *Elanus caeruleus* is a synonym.
Empidonax traillii extimus Southwestern Willow Flycatcher (nesting)	Group 1, FE/CE/—	This species is restricted to wide riparian habitats, generally with flowing water.	N	U	There are no riparian habitats on the property.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Eremophila alpestris actia California Horned Lark	Group 2, —/WL/—	A species of open (often disturbed), arid habitats, such as grasslands, coastal strand, and sandy deserts.	N	L	Most of the site contains Diegan Coastal Sage Scrub but there are small areas of Disturbed habitat on the property as well. According to Unitt, this species is not known to breed in the area (2004).
Falco mexicanus Prairie Falcon (nesting)	Group1, —/WL/—	This falcon nests on cliff ledges, and forages in open desert or grassland.	N	U	The site does not contain appropriate nesting habitat.
Icteria virens Yellow-breasted Chat (nesting)	Group 1, —/SSC/—	In San Diego County, this bird is typically found in the coastal lowland where riparian woodlands occur.	N	U	There are no riparian habitats on the property.
Ixobrychus exilis Least Bittern (nesting)	Group 2, —/SSC/—	The Least Bittern nests in marshes with Cattails.	N	U	There are no marshes on the property. NOTE: The SD County List includes the subspecies name of *hesperis.*
Laterallus jamaicensis coturniculus California Black Rail	Group 2, BCC/CT; Fully Protected/—	Found in coastal and freshwater wetlands.	N	U	This species has been extirpated in San Diego County with the last vagrant seen in 1983 (Unitt, 2004). Also, there are no wetlands on the property.
Pandion haliaetus Osprey	Group 1, —/WL/—	A regular year-round inhabitant in small numbers both along the coast and on inland lakes. The most frequent nest site is racks of floodlights for ball fields.	N	U	There are no lakes on this inland property in Lakeside.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Passerculus sandwichensis beldingi Belding's Savannah Sparrow	Group 1, —/CE/—	A non-migratory subspecies endemic to the coast of southern California and northern Baja California, is narrowly restricted to coastal marshes dominated by Pickleweed.	N	U	There are no coastal marshes on this inland property in Lakeside.
Phalacrocorax auritus Double-crested Cormorant	Group 2, —/WL/—	A non-breeding visitor on both fresh and salt water.	N	U	There are no water sources on-site.
Picoides nuttallii Nuttall's Woodpecker (nesting)	—, BCC/—/—	Found in Riparian, Oak, and Coniferous Woodland habitats.	Y	Observed	An individual was heard in some Eucalyptus trees off-site to the west during the 6/18/19 visit.
Polioptila californica californica Coastal California Gnatcatcher	Group 1, FT/SSC/—	An obligate inhabitant of Sage Scrub or sometimes Chaparral where the two habitats intermix.	Y	Observed	The 2019 federal protocol survey was positive with one pair successfully fledging three young on-site.
Rallus obsoletus levipes Light-footed Ridgway's Rail	Group1, FE/CE; Fully Protected/—	Habitat preferred is coastal salt marshes. The Tijuana River estuary is an especially critical site. A few individuals have colonized some new brackish or freshwater sites.	N	U	There are no coastal salt marshes on this inland property in Lakeside.
Setophaga petechia Yellow Warbler (nesting)	Group 2, BCC/SSC/—	Breeding occurs in mature riparian habitats, primarily along the coastal slope.	N	U	There are no riparian habitats on the property.
Sialia mexicana Western Bluebird	Group 2, —/—/—	Found in areas with a combination of trees and open ground.	N	U	Although Unitt (2004) documents probable breeding in the area, the site does not contain suitable nest sites.

Scientific Name Common Name	Sensitivity Code and Status[2]	Habitat Preference	Found On-site (Y or N)	Potential On-site[3]	Factual Basis for Potential
Sternula antillarum browni California Least Tern	Group1, FE/CE; Fully Protected/—	Found on sand dunes and sandbars close to water among scattered debris and grass.	N	U	There are no sand dunes or sandbars on this inland property in Lakeside.
Vireo bellii pusillus Least Bell's Vireo (nesting)	Group 1, FE/CE/—	An obligate inhabitant of dense, fairly broad, riparian woodlands with adjacent uplands that provide foraging habitat.	N	U	Although there are no riparian habitats on the property, there is suitable riparian habitat in the San Diego River just to the south of the property. According to the CNDDB, there is a documented occurrence (#94) of this species as recent as 2012 in the San Diego River just west of Highway 67 at Mapleview Street (CDFW, 2020a). Least Bell's Vireo often utilize uplands adjacent to riparian habitats for foraging, and occasionally for nesting when nearby riparian habitats are at capacity or if it has been a rainy season and the upland vegetation is exceptionally lush. So, while nesting on-site is unlikely during most years, this species may be found foraging in the Diegan Coastal Sage Scrub on-site when it is in San Diego during the breeding season (mid-March to September).

[1] This sensitive wildlife list is based on a search of the California Natural Diversity Database (CNDDB), the County of San Diego Sensitive Animal List taken from San Diego, County of. 2010a. County of San Diego Guidelines for Determining Significance and Report Format and Contents for Biological Resources. Fourth Revision. Available from the County's website at http://www.sdcounty.ca.gov/dplu/docs/Biological_Guidelines.pdf, and Fish and Wildlife, California Department of. 2019a. California Natural Diversity Data Base: Special Animals. The Author, Sacramento, California, 67 pp. [available at http://www.dfg.ca.gov/wildlife/nongame/list.html], edition of August 2019.

[2] The status codes are given in the sequence "County Group, federal/state/other." A "—" indicates no status at that level. The codes used are defined as follows:

FE — Federal Endangered
pFE — A petition for Federal Endangerment status has been submitted
FT — Federal Threatened
D — Delisted from the Endangered Species Act
BCC — Birds of Conservation Concern on the BCC 2008 list within BCR 32
CE — State Endangered
CT — State Threatened
CCE — State Candidate Endangered
SSC — Species of Special Concern
WL — California Department of Fish and Game Watch List
AFS EN — defined as an endangered species by the American Fisheries Society
Fully Protected — A species for which special state legislation exists protecting the species
FS Sensitive — defined as a sensitive species by the USDA Forest Service
BLM Sensitive — defined as a sensitive species by the Bureau of Land Management
WBWG — priority status as defined by the multi-agency Western Bat Working Group
X-CI — defined as critically imperiled by the Xerces Society

[3] The "Potential On-site" column assesses the potential for the particular species to occur on the subject property given the known habitat preferences and distribution of that species. The codes used in this column are defined as follows:

Observed — Individuals of this species were found within the bounds of the site.
H — The potential for occurrence is "high". Habitats on-site are considered suitable for the species, and the species is known from the immediate vicinity.
M — The potential for occurrence is "medium". Habitats and conditions on-site are considered possible for the species.
L — The potential for occurrence is "low". The habitats present on-site are marginal for the species and/or extremely limited in extent. In other words, the species is not anticipated, but it's occurrence can not be precluded.
U — The potential for occurrence is "unlikely". The habitat and/or food requirements of the species are not present on the subject property.

Appendix A

Report of a Federal Protocol Survey for the

Quino Checkerspot Butterfly Over the Hurrell Property,

APNs 392-070-10 and 392-070-07

County of San Diego, California

Prepared by
Cummings Environmental, Inc.
30 January 2020

Report of a Federal Protocol Survey for the Quino Checkerspot Butterfly Over the Hurrell Property, APNs 392-070-10 and 392-070-07 County of San Diego, California

Prepared For:

Mr. Jim Hurrell
12392 Lakeside Avenue
Lakeside, CA 92040

Prepared By:

Gretchen Cummings

Gretchen Cummings

Cummings Environmental, Inc.
1721 Main Street, Suite 104
Ramona, CA 92065
(760)440-0349

30 January 2020
Job Number 1823.21C

Report of a Federal Protocol Survey for the Quino Checkerspot Butterfly Over the Hurrell Property, APNs 392-070-10 and 392-070-07 County of San Diego, California

Prepared For

Mr. Jim Hurrell
12392 Lakeside Avenue
Lakeside, CA 92040

Prepared By

Cummings Environmental, Inc.
1721 Main Street, Suite 104
Ramona, CA 92065
(760)440-0349

30 January 2020
Job Number 1823.21C

Table of Contents

Attachments

Executive Summary

The Quino Checkerspot Butterfly (*Euphydryas editha quino*) is listed under the Federal Endangered Species Act (ESA) as an endangered subspecies. Prior to activities that might adversely affect habitats potentially occupied by this butterfly, protocol surveys are recommended to prevent a "take" of the species under the ESA. Assessor's Parcel Number 392-070-10 and 392-070-07, also known as the Hurrell property, are partially developed parcels with steep, undeveloped slopes. The owner is proposing to subdivide the larger parcel and create additional residential pads. A modified federal protocol Quino survey was conducted during the 2019 flight season by Cummings Environmental, Inc. No larval or adult Quino were observed during this modified federal protocol survey which occurred between 23 February and 3 May. Similarly, no larval Quino host plant species were found on-site either. As such, the proposed subdivision will not affect the Quino Checkerspot Butterfly.

I. Introduction

The Quino Checkerspot Butterfly (*Euphydryas editha quino*) is a small, spring flying butterfly listed under the Federal Endangered Species Act (ESA) as an endangered subspecies. Thought to be extinct in 1995, a small population was found in Riverside County in 1996 and the subspecies was listed as endangered in 1997 (USFWS, 1997). Critical habitat for this species was dedicated in 2002 (USFWS, 2002), then revised and finalized in 2009 (USFWS, 2009).

The Quino Checkerspot Butterfly is best thought of in two "phases". The larvae (or first "phase") are obligate feeders on a limited variety of food plants: Dot-seed Plantain (*Plantago erecta*), Owl's Clover (*Castilleja exserta*), Woolly Plantain (*Plantago patagonica*), White Snapdragon (*Antirrhinum coulterianum*), Chinese Houses (*Collinsia concolor*), and Thread-leaved Bird's Beak (*Cordylanthus rigidus*). The second "phase" is the adult butterfly which is much more mobile. The males of the species exhibit what is referred to as hilltopping behavior. They fly to prominent topographical points where they inspect each butterfly that passes-by in the hopes of finding a receptive female Quino.

This federal protocol survey for the Quino Checkerspot Butterfly was a modification of the 2014 Quino Checkerspot Butterfly Survey Protocol (USFWS, 2014). The modification was a shortened survey period ending one week earlier in May due to unfavorable conditions. The survey for the Quino focused on open areas within vegetation and between vegetation, as well as, at the northern edge of the property which serves as a high point.

II. Property Location and Description

The two parcels (APNs 392-070-10 and 392-070-07) comprise approximately 15.17-acres in the Lakeside Community within the County of San Diego. Specifically, the property is located to the west of State Route 67 on Lakeside Avenue (see Figure 1).

The underlying geology of the parcel is mapped as Granitoid rocks (Todd, 2004). The surficial soils mapped by Bowman (1973) include the following:

- Cieneba-Fallbrook rocky sandy loams, 30-65% slopes, eroded (CnG2). This complex consists of 55% Cieneba coarse sandy loams and 40% Fallbrook sandy loam. Rock outcrops and boulders each cover 10% of the site. The majority of the property is underlain by this soil complex.
- Tujunga sand, 0-5% slopes (TuB). This soil is found on alluvial fans and plains. On-site, a small portion of the drainage that parallels the driveway is underlain by this soil type.

The 15.17-acre property contains three vegetation communities: Urban/Developed; Diegan Coastal Sage Scrub; and Non-Native Grassland.

Urban/Developed Land. The Urban/Developed land on the Hurrell property includes the existing homes, yards and driveway (Holland, 1986 as modified by Oberbauer, 1996; Element Code 12000). There are three existing residential structures grouped at the north/northwestern portion of the site on top of the hill. There is an existing water tank that is off-site and adjacent to the north edge of APN 392-070-07 (see Figure 2).

Diegan Coastal Sage Scrub. Most of the site contains Diegan Coastal Sage Scrub habitat (Holland, 1986; Element Code 32500). The dominant shrubs in this habitat are California Sagebrush (*Artemisia californica*) and California Buckwheat (*Eriogonum fasciculatum*). Other shrubs within this habitat type are Deerweed (*Acmispon glaber*), Laurel Sumac (*Malosma laurina*), and White Sage (*Salvia apiana*).

Non-Native Grassland. Along the northeastern edge of the property, the Diegan Coastal Sage Scrub becomes quite sparse with a few scattered Laurel Sumacs. As such, a couple of small areas are mapped as Non-Native Grassland habitat (Holland, 1986 as modified by Oberbauer; Element Code 42200). Dominant species are Short-pod Mustard (*Hirschfeldia incana*), Red Brome (*Bromus madritensis rubens*), Slender Oat (*Avena barbata*), and Tocalote (*Centaurea melitensis*).

III. Methods

Per the 2014 Quino Checkerspot Butterfly Survey Protocol (USFWS, 2014), a site assessment was conducted on 15 February 2019 prior to the first Quino survey to determine the location of any larval host food plants – none were found. Eleven subsequent visits were conducted representing the Quino survey dates. Written authorization was received from the USFWS Carlsbad Office to end one week before the official end of the season per the protocol. During all survey efforts for the Quino Checkerspot, the undersigned was equipped with a collapsible insect net (BioQuip), close focusing photographic gear, and close focusing binoculars (8x42). The photographic gear used this season consisted of a Nikon D300 body and a 70 - 300 mm Quantaray lens with a macro function. This equipment allowed a minimum working distance of approximately fourteen inches.

During the ten field dates, wind, and air temperature were taken with a Kestrel. With this instrument, it was possible to record wind speed to the nearest 0.1 mph, and temperature to the nearest 0.1°. Weather conditions at the beginning and ending of each survey period were recorded and are presented in Table 1.

IV. Results

Although this 2019 butterfly season was a rainy, cooler one, nectar sources were available on-site throughout the survey period. A total of twelve site visits were made to the site between 15 February and 3 May. The first of the twelve visits, as mentioned above, was a site assessment, conducted to locate any populations of larval host plants for the Quino. The remaining eleven visits represented the actual surveys for the Quino Checkerspot. No larval host plants were found on-site, nor were any larvae or adult Quino Checkerspots.

The following points highlight the results of the butterfly survey effort at the Hurrell property:

- A total of 14 butterfly species were observed (see Figure 3 for photos of the representative butterfly species observed and Table 2 for a list of the butterfly species).
- Six butterfly species were seen only once as single individuals. On 11 April, a single Queen butterfly was seen. On 16 March, a single Pale Swallowtail was observed. During the 19 March visit, a single Acmon Blue was detected. On 26 April, one Anise Swallowtail was noted, and on 3 May, one Dainty Sulphur and one Mourning Cloak were noted.
- The Painted Lady migration was amazing over this property in March. This species was seen migrating north across the property during every site visit except the first one which was the site assessment. During three of the March visits, the numbers were in the hundreds.
- Mormon Metalmarks were noted during each of the survey dates except for the initial site assessment. Numbers of this species increased in late March and into April as more and more adults emerged.

A compilation of the butterflies observed during the protocol survey effort is presented as Table 2. The reader's attention is directed to that table, to the attached Figure 3, and to the attached Field Notes for additional information and details on the results of the field effort.

During the course of the survey, a concerted effort was made to identify other plant and wildlife species that would be considered sensitive. While this part of the field effort does not constitute a comprehensive survey, any observations of interest must be reported per the requirements of the federal protocol for the Quino. Five sensitive wildlife species were identified on the property during the protocol survey for the Quino. These five species were the Orange-throated Whiptail (*Aspidoscelis hyperythra*), California Gnatcatcher (*Polioptila californica californica*), Rufous-crowned Sparrow (*Aimophila ruficeps canescens*), Cooper's Hawk (*Accipiter cooperi*), Turkey Vulture (*Cathartes aura*) - see Figure 4 for locations of these observations.

V. Recommendation

The modified protocol survey for the Quino Checkerspot was negative over APNs 392-070-10 and 392-070-07 this year. Since the site is not located within designated Critical Habitat for the Quino Checkerspot Butterfly (USFWS, 2009), nor were any larval host plants, larvae or adults found during the survey, no impacts to this species will occur as a result of the subdivision.

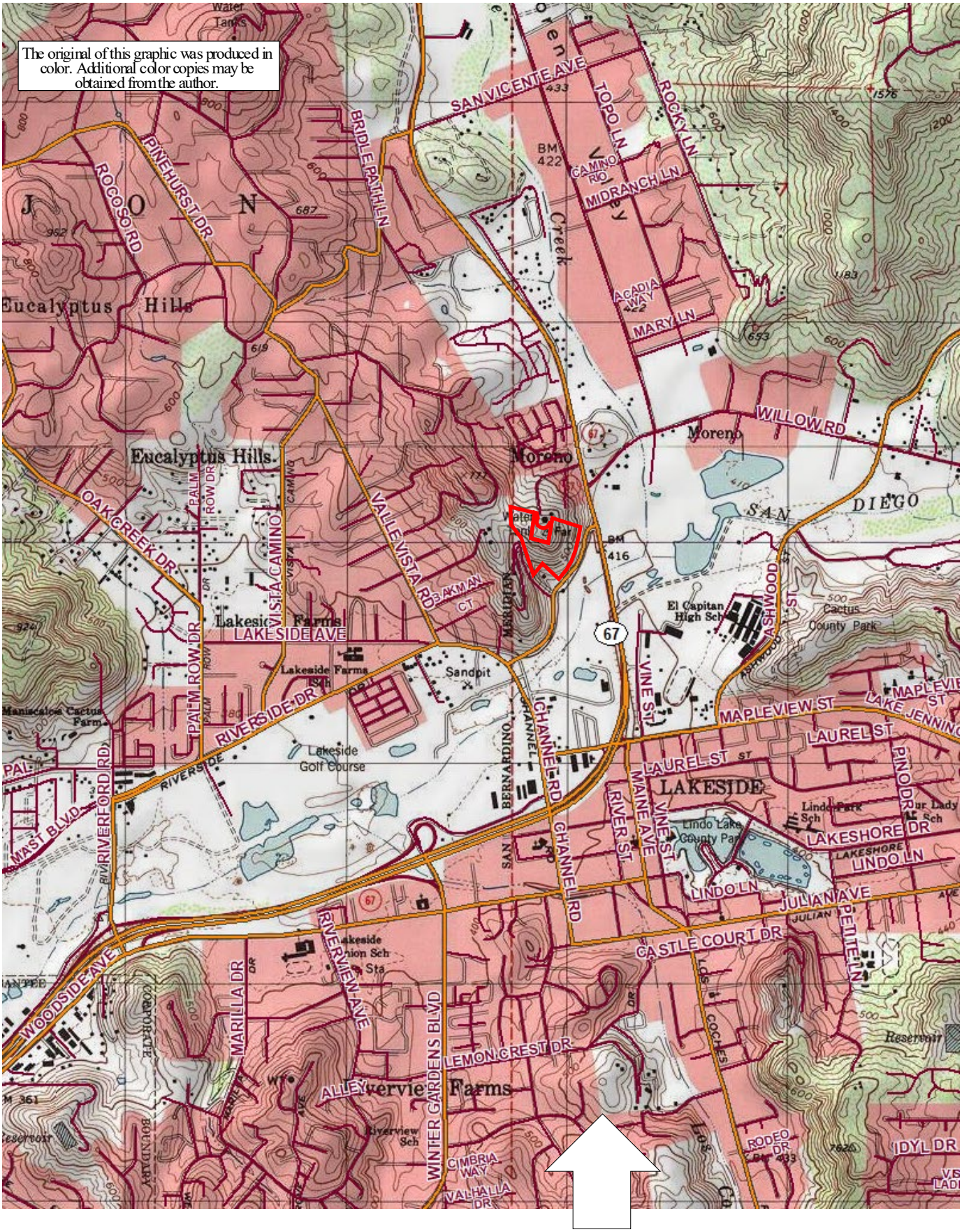
VI. Surveyor Certification

I certify that the information in this survey report and attached exhibits fully and accurately represents my work. Any errors or omissions are solely my responsibility.

Gretchen Cummings — 1/30/20

Gretchen Cummings — Date
Owner/Consulting Biologist
[TE-031850-5]

[:\1823Quino-Report.doc]



Scale: 1-inch = 2,000-feet

Cummings Environmental Job Number 1823.21C 5 February 2019 [:\1823-Fig-1.pptx]

Cummings Environmental

APNs 392-070-10 and -07 Shown on the U.S.G.S. 7 ½-min El Cajon Quad Map

[Base Map Created with TOPO!® ©2006 National Geographic; ©2005 TeleAtlas]

Figure 1

Scale: 1-inch = 300-feet

Cummings Environmental Job Number 1823.21C 5 February 2019 [:\1823-Fig-2.pptx]

Cummings Environmental

APNs 392-070-10 and 392-070-07 Shown on an Aerial Photo [Base Photo © 2018 Google; Imagery Date 8/13/2018]

Figure 2

The original of this graphic was produced in color. Additional color copies may be obtained from the author.

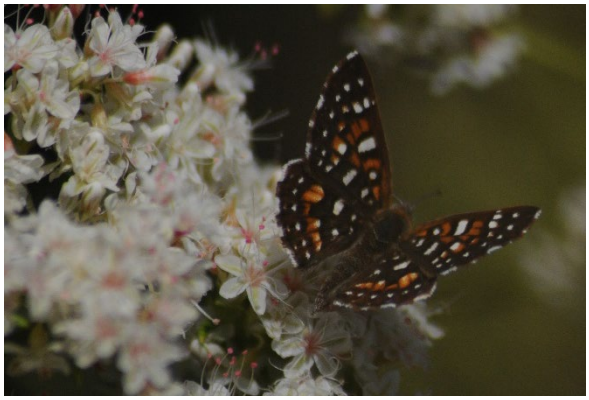
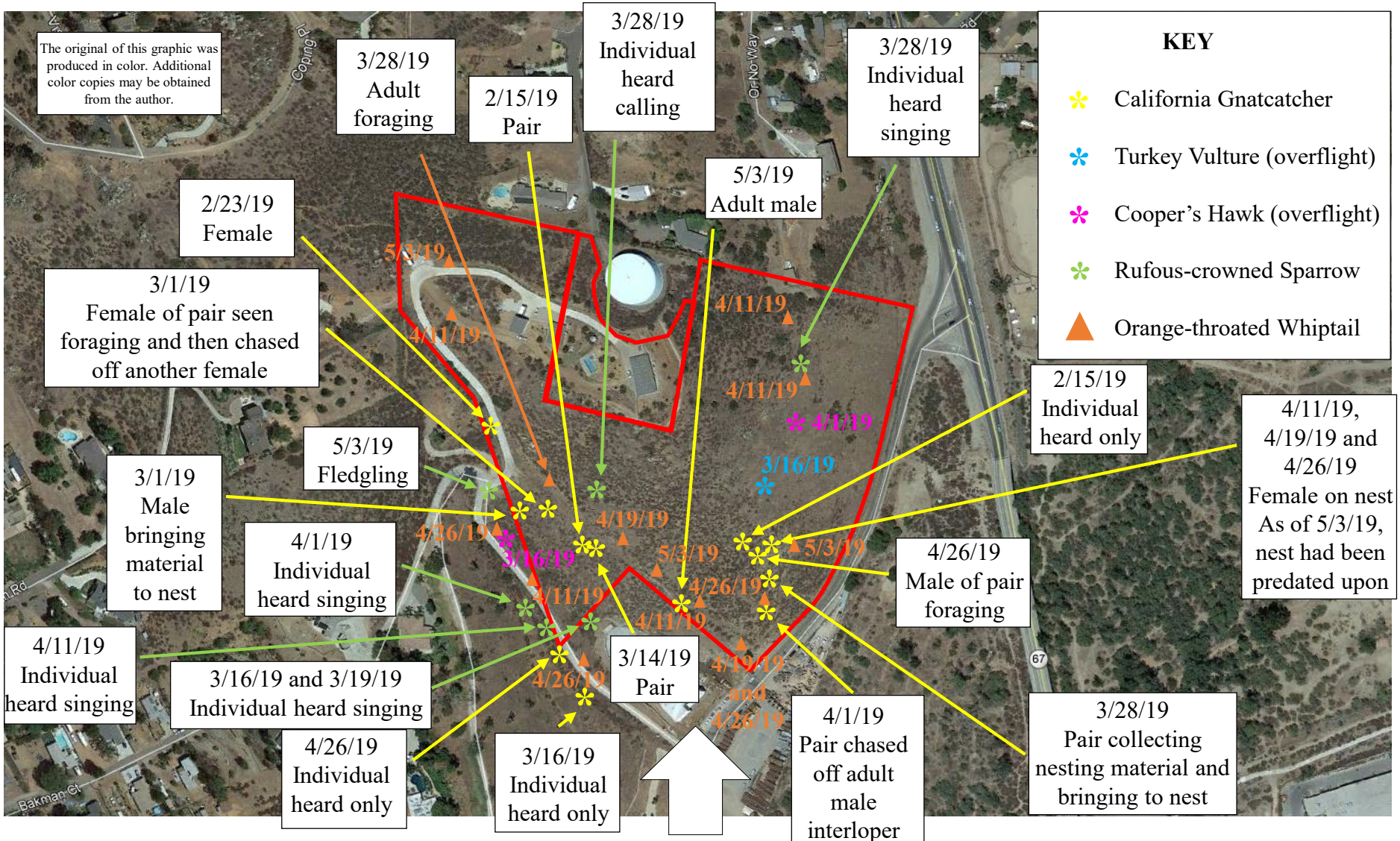


Figure 3A — Mormon Metalmark
(*Apodemia mormo virgulti*)
This species was seen during every survey (except for the initial site assessment). This photo was taken of the species on a California Buckwheat on 5/3/2019. The larvae feed on a variety of Buckwheat species. [Photo taken on-site during the Quino survey.]

Figure 3B — Common White
(*Pontia protodice*)
This species was observed during five of the eleven surveys. This photo was taken on 5/3/2019 while this male was nectaring on a Mustard plant. Larvae feed on various species in the Mustard family.
[Photo taken on-site during the Quino survey.]

Figure 3C — Painted Lady
(*Vanessa cardui*)
During March of this year (2019), there was a spectacular migration for this species. This individual stopped long enough to nectar on a *Viguiera laciniata* flower before moving on northward. [Photo taken on-site during the Quino survey.]

Figure 3D — Dainty Sulphur *(Nathalis iole)*
This was the only individual of the species noted during the eleven surveys. The larvae feed on plants in the Sunflower family. [Photo taken on-site during the Quino survey.]



Cummings Environmental Job Number 1823.21C 30 January 2020 Scale: 1-inch = 300-feet [:\1823-Quino-Fig-4.pptx]

Cummings Environmental

Locations of Sensitive Species Observed on APNs 392-070-10 and 392-070-07 During the 2019 Quino Checkerspot Survey Shown on an Aerial Photo [Base Photo © 2018 Google; Imagery Date 8/13/2018]

Figure 4

Table 1

Summary of Weather Conditions at the Time of the Individual Survey Dates

APNs 392-070-10 and 392-070-07									
Survey	Date	Beginning of Observation Period				End of Observation Period			
		Time	Cloud Cover	Wind	Air Temp	Time	Cloud Cover	Wind	Air Temp
Site Assessment	15 Feb	0810	100%	< 1.6 mph	54.7°F	1010	70%	< 2.9 mph	62.4°F
Quino Survey #1	23 Feb	1130	Clear	< 2.8 mph	62.2°F	1330	Clear	< 2.1 mph	65.3°F
Quino Survey #2	1 Mar	1200	40%	0.6 – 4.5 mph	72.2°F	1400	50%	2.9 – 5.4 mph with gusts to 6.9 mph	75.6°F
Quino Survey #3[1]	14 Mar	1100	Clear	< 2.4 mph	67.9°F	1300	Clear	< 2.0 mph	74.5 °F
Quino Survey #4[1]	16 Mar	1000	Clear	< 0.8 mph	64.6°F	1200	Clear	2.1 – 5.2 mph	77.9°F
Quino Survey #5	19 Mar	1500	Clear	< 4.7 mph	74.8°F	1700	Clear	2.5 – 5.7 mph with gusts to 7.0 mph	71.1°F
Quino Survey #6	28 Mar	1200	50%	2.8 – 6.0 mph	71.6°F	1400	30%	1.4 – 6.0 mph	73.1°F
Quino Survey #7	1 Apr	0930	70%	< 2.1 mph	71.1°F	1140	10%	0.6 – 3.8 mph	84.5°F
Quino Survey #8	11 Apr	1130	60%	0.9 – 4.5 mph	76.5°F	1330	70%	2.8 – 5.9 mph with gusts to 9.1 mph	78.2°F

APNs 392-070-10 and 392-070-07									
Survey	Date	Beginning of Observation Period				End of Observation Period			
		Time	Cloud Cover	Wind	Air Temp	Time	Cloud Cover	Wind	Air Temp
Quino Survey #9	19 Apr	1245	Clear	1.7 – 5.2 mph	84.5°F	1445	5%	4.7 – 9.2 mph	84.4°F
Quino Survey #10	26 Apr	1200	Clear	1.2 – 5.0 mph	79.1°F	1400	Clear	2.5 – 5.9 mph	82.2°F
Quino Survey #11	3 May	1315	Clear	< 4.3 mph	78.5°F	1515	Clear	3.8 – 6.6 mph with gusts to 9.0 mph	80.9°F

[1] The third Quino survey was made during week four due to inclement weather during week three. Per the protocol, the two surveys conducted in week four were not conducted on consecutive days.

[:\1823 weather-tbl.doc]

Table 2

Summary of the Butterfly Species Observed on APNs 392-070-10 and 392-070-07

Scientific Name[1]/ Common Name	15 Feb[2]	23 Feb	1 Mar	14 Mar	16 Mar	19 Mar	28 Mar	1 Apr	11 Apr	19 Apr	26 Apr	3 May
Anthocharis sara (Sara Orangetip)	-	-	2	1	-	-	2	5	21	19	7	2
Apodemia mormo virgulti (Mormon Metalmark)	-	1	1	3	1	3	10	11	23	25	23	24
Danaus gilippus (Queen)	-	-	-	-	-	-	-	-	1	-	-	-
Erynnis funeralis (Funereal Duskywing)	-	-	-	-	3	9	1	4	1	1	2	-
Nathalis iole (Dainty Sulphur)	-	-	-	-	-	-	-	-	-	-	-	1
Nymphalis antiopa (Mourning Cloak)	-	-	-	-	-	-	-	-	-	-	-	1
Papilio eurymedon (Pale Swallowtail)	-	-	-	-	1	-	-	-	-	-	-	-
Papilio rutulus (Western Tiger Swallowtail)	-	-	-	-	-	-	-	1	-	-	-	1
Papilio zelicaon (Anise Swallowtail)	-	-	-	-	-	-	-	-	-	-	1	-
Plebejus acmon (Acmon Blue)	-	-	-	-	-	1	-	-	-	-	-	-

Scientific Name[1]/ Common Name	15 Feb[2]	23 Feb	1 Mar	14 Mar	16 Mar	19 Mar	28 Mar	1 Apr	11 Apr	19 Apr	26 Apr	3 May
Pontia protodice (Common White)	-	-	-	-	-	-	2	-	11	9	28	20
Vanessa annabella (West Coast Lady)	-	2	-	-	-	-	-	-	-	-	-	-
Vanessa cardui (Painted Lady)	-	6	41	300[3]	197	26	287	17	5	1	4	4
Undifferentiated Blue	-	-	1	-	-	-	-	-	-	-	-	2
Total Individuals/ Total Species Observed	0/ 0	9/ 3	45/ 4	304/ 3	202/ 4	39/ 4	302/ 5	38/ 5	62/ 6	55/ 5	65/ 6	55/ 8

[1] For a discussion of the species observed, see text of Quino report. Nomenclature taken from: Checklist of North American Butterflies Occurring North of Mexico – Edition 2.3 accessed at naba.org.
[2] This site visit was considered the official "site assessment" according to the December 15, 2014 Quino Checkerspot Butterfly Survey Guidelines.
[3] This is a major migration year for the Painted Lady. Fifty Painted Ladies were counted during the first 30 minutes of the site visit. For the two-hour survey, it is estimated that there were 300 Painted Ladies migrating over the two parcels.

[:/1823 bug-tbl.doc]

References Cited

Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., and Wilken, D.H. eds. 2012. The Jepson Manual Vascular Plants of California, 2nd Edition. University of California Press, Berkeley, xxii + 1568 pp.

Ballmer, G. R., D. C. Hawks, K. H. Osborne, and G. F. Pratt. 2000. The Quino Checkerspot Butterfly, *Euphydryas editha quino*. Unpublished manuscript, Univ. of Calif. at Riverside, 7 pp. plus attachments.

Beauchamp, R. Mitchel. 1986. A Flora of San Diego County, California. Sweetwater River Press. National City, Calif. 241 pp.

Bowman, Roy H., et al. 1973. Soil Survey of the San Diego Area, California. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

Comstock, John Adams. 1927. Butterflies of California. Published by the Author, Los Angeles, Calif., 334 pp. + 63 plates

Ehrlich, P.R. 1965. The Population Biology of the Butterfly, *Euphydryas editha*. II. The Structure of the Jasper Ridge Colony. Evolution. 19: 327-336.

Ehrlich, Paul R. 1980. Extinction, Reduction, Stability and Increase: The Responses of the Checkerspot Butterfly (*Euphydryas*) Populations to California Drought. Oecologia 46:101-105

Emmel, Thomas C., and John F. Emmel. 1973. The Butterflies of Southern California. Natural History Museum of Los Angeles County, Science Series 26, xi + 148 pp.

Emmel, Thomas C., ed.1998. Systematics of Western North American Butterflies. Mariposa Press, Gainesville, Florida. Xviii + 878 pp.

Fish and Wildlife, California Department of. 2019. California Natural Diversity Data Base: Special Animals. The Author, Sacramento, California, 67 pp. [available at http://www.dfg.ca.gov/wildlife/nongame/list.html], edition of August 2019.

Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, California. iii + 155 pp.

Launer, A. E., et al. 1993. Puddling behavior by Bay Checkerspot Butterflies (*Euphydryas editha bayensis*). J. of Research on the Lepidoptera 32:45-52.

Lincoln, D. E., T. S. Newton, P. R. Ehrlich and K. S. Williams. 1982. Coevolution of the Checkerspot Butterfly *Euphydryas chalcedona* and its larval food plant *Diplacus aurantiacus*: Larval response to protein and leaf resin. Oecologia 52:216-223.

MacKay, Duncan A. 1985. Prealighting search behavior and host plant selection by ovipositing *Euphydryas editha* butterflies. Ecology 66(1):142-151.

References Cited (continued)

Mattoni, Rudi, et al. 1995 (1997). The endangered Quino Checkerspot Butterfly, *Euphydryas editha quino* (Lepidoptera: Nymphalidae). J. of Research on the Lepidoptera 34(1-4):99-118.

Murphy, Dennis D., A. E. Launer, and P. R. Ehrlich. 1983. The role of adult feeding in egg production and population dynamics of the Checkerspot Butterfly *Euphydryas editha*. Oecologia 56:257-263.

Murphy, Dennis D., and R. R. White. 1984. Rainfall, resources, and dispersal in southern populations of *Euphydryas editha* (Lepidoptera: Nymphalidae). Pan-Pacific Entomologist 60(4):350-354.

Opler, Paul, and A. B. Wright. 1999. A Field Guide to Western Butterflies. Houghton Mifflin Co., Boston, xiv + 540 pp.

Parmesan, Camille. 1995. Traversing the Checkerboard of *Euphydryas* Identification. American Butterflies 3(4):12-22.

Porter, Keith. 1982. Basking behavior in larvae of the butterfly *Euphydryas aurinia*. Oikos 38:308-312.

Scott, James A.1986. The Butterflies of North America. Stanford University Press, Stanford, Calif., xii + 583 pp. [CD-ROM edition published by Hopkins Technology, LLC, 1997]

Sibley, David Allen. 2000. The Sibley Guide to Birds. Alfred A. Knopf, New York, NY, 544 pp.

Todd, Victoria R. 2004. Preliminary Geologic Map of the El Cajon 30' x 60- Quadrangle, Southern California, Version 1.0. U. S. Geological Survey, Open-File Report 2004-1361 [copies available at http://pubs.usgs.gov/of/2004/1361/ec1_map/pdf].

U.S. Fish and Wildlife Service. 1994. Endangered and Threatened Wildlife and Plants; Proposed Rule to List the Laguna Mountains Skipper and Quino Checkerspot Butterflies as Endangered. Federal Register 59(149): 39868-39878.

U.S. Fish and Wildlife Service. 1997. Endangered and Threatened Wildlife and Plants: Determination of Endangered Status for the Laguna Mountains Skipper and Quino Checkerspot Butterfly. Federal Register 62(11):2313-2322.

U.S. Fish and Wildlife Service. 2002. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Quino Checkerspot Butterfly (Euphydryas editha quino); Final Rule. Federal Register 67(72):18356-18395.

U.S. Fish and Wildlife Service. 2003. Recovery Plan for the Quino Checkerspot Butterfly (*Euphydryas editha quino*). Portland, Oregon. x + 179 pp.

U.S. Fish and Wildlife Service. 2009. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Quino Checkerspot Butterfly (*Euphydryas editha quino*); Final Rule. Federal Register 74(115):28775-28862.

U.S. Fish and Wildlife Service. 2014. Quino Checkerspot Butterfly Survey Guidelines, December 15, 2014. Unpublished manuscript, available from the Carlsbad Field Office, Carlsbad, Calif., 8 pp.

References Cited (continued)

Williams, K. S., D. E. Lincoln, and P. R. Ehrlich. 1983. The coevolution of *Euphydryas chalcedona* Butterflies and their larval host plants. I. Larval feeding behavior and host plant chemistry. Oecologia 56:323-329.

[:\1823Quino-ref-cit.wpd]

Appendix A

Field Notes

2019 Field Notes for the Quino Checkerspot Survey Over APNs 392-070-10 and 392-070-07

15 February 2019

A Quino Checkerspot Butterfly site assessment was conducted over APNs 392-070-10 and 392-070-07 today (Cummings Environmental Job #1823.21C), also known as the Hurrell property. The assessment occurred between 0810 and 1010 hours. There was low fog at the onset of the visit and the sky was mostly cloudy at the end of the visit with 70% cloud cover. The temperature rose during the survey period from 54.7°F at 0810 hours to 62.4°F at 1010 hours. Wind speeds were measured at < 1.6 mph at the beginning of the survey. At the completion of the assessment, wind speeds were measured at < 2.9 mph. No butterfly species were observed during the habitat assessment.

Flowering plants included:

Hirschfeldia incana
Phacelia parryi
Erodium cicutarium
Marah macrocarpa
Viguiera laciniata

Other observations included a pair of Red-tailed Hawks copulating off-site to the west, a pair of California Gnatcatchers plus a single individual California Gnatcatcher, Audubon's Cottontail pellets (*Sylvilagus audubonii*), and Botta's Pocket Gopher (*Thomomys bottae*) holes.

23 February 2019

Today was the first of the protocol Quino surveys at the Hurrell property (Cummings Environmental Job #1823.21C). The survey occurred between 1130 and 1330 hours. The ambient temperature increased slightly from 62.2°F at the onset of the field visit to 65.3°F at the end of the survey. Wind speeds were measured at < 2.8 mph at the beginning of the visit and at< 2.1 mph at the end of the survey. The sky was sunny and clear throughout the survey. Butterflies observed were:

Apodemia mormo virgulti (1)
Vanessa annabella (2)
Vanessa cardui (6)

Flowering plants included:

Hirschfeldia incana
Phacelia parryi
Erodium cicutarium

Marah macrocarpa
Acmispon glaber
Mirabilis laevis var. crassifolia
Plagiobothrys sp.
Chamaesyce sp.
Dichelostemma capitatum
Raphanus sativus
Lupinus hirsutissimus
Camissoniopsis sp.
Cryptantha sp.
Eriogonum fasciculatum
Encelia farinosa

Other observations included one female California Gnatcatcher, three Granite Spiny Lizards (*Sceloporus orcuttii*), one Western Fence Lizard (*Sceloporus occidentalis*), and two Audubon's Cottontail (*Sylvilagus audubonii*).

1 March 2019

Today was the second of the protocol Quino surveys at the Hurrell property (Cummings Environmental Job #1823.21C). The survey occurred between 1200 and 1400 hours. The ambient temperature increased from 72.2°F at the onset of the field visit to 75.6°F at the end of the survey. Wind speeds were measured between 0.6 – 4.5 mph at the beginning of the visit and between 2.9 – 5.4 mph with gusts up to 6.9 mph at the end of the survey. The sky was partly cloudy throughout the survey with 40% cloud cover at 1200 hours and 50% cloud cover at 1400 hours. Butterflies observed were:

Vanessa cardui (41)
Anthocharis sara (2)
Undifferentiated Blue (1)
Apodemia mormo virgulti (1)

Flowering plants included:

Hirschfeldia incana
Brassica nigra
Phacelia parryi
Erodium cicutarium
Nicotiana glauca
Eriogonum fasciculatum
Chamaesyce sp.
Mirabilis laevis var. crassifolia
Cryptantha sp.
Dichelostemma capitatum

Lupinus hirsutissimus
Marah macrocarpa
Pectocarya linearis ssp. *ferocula*
Camissoniopsis sp.
Plagiobothrys sp.
Eschscholzia californica

Other observations included a male California Gnatcatcher (*Polioptila californica californica*) bringing nesting material to a nest in an *Artemisia californica* shrub, and the female of the pair foraging nearby. The female chased off an interloper while the male was working in the nest.

14 March 2019

Today, the third Quino protocol survey was conducted at the Hurrell property (Cummings Environmental Job #1823.21C). This third survey was conducted between 1100 and 1300 hours. The sky was clear throughout the survey. The temperature increased from 67.9°F at 1100 hours to 74.5°F at 1300 hours. Winds were blowing from the northwest at speeds < 2.4 mph at 1100 hours. At the end of the survey, the winds were blowing from the northeast and were measured at < 2.0 mph. Butterfly species observed during this survey were:

Anthocharis sara (1)
Vanessa cardui (300)
Apodemia mormo virgulti (3)

Flowering plants included:

Hirschfeldia incana – visited by *Vanessa cardui*
Phacelia parryi - visited by *Vanessa cardui*
Erodium cicutarium
Calystegia macrostegia
Cryptantha sp.
Pectocarya linearis ssp. *ferocula*
Phacelia ramosissima
Camissoniopsis sp.
Mirabilis laevis var. crassifolia – visited by *Vanessa cardui*
Lupinus hirsutissimus
Acmispon glaber
Plagiobothrys sp.
Chamaesyce sp.
Dichelostemma capitatum – visited by *Vanessa cardui*
Raphanus sativus
Acmispon strigosus
Lasthenia gracilis

Lupinus truncatus
Viguiera laciniata
Salvia columbariae
Amsinckia menziesii
Claytonia perfoliata

Other observations included a pair of California Gnatcatchers (*Polioptila californica californica*), one California Ground Squirrel (*Spermophilus beecheyi*), one Audubon's Cottontail (*Sylvilagus audubonii*), and one Granite Spiny Lizard (*Sceloporus orcuttii*).

16 March 2019

The four of the required Quino protocol surveys was conducted today at the Hurrell property (Cummings Environmental Job #1823.21C). The field visit occurred between 1000 and 1200 hours. The sky was clear throughout the survey. Ambient temperatures were measured at 64.6°F at the onset of the visit and at 77.9°F at the end of the observation period. At the beginning of the survey, the wind was blowing from the northwest at speeds < 0.8 mph. By the end of the visit, the wind was blowing from the southwest at speeds ranging between 2.1 – 5.2 mph. Butterfly species observed during this visit were:

Vanessa cardui (197)
Erynnis funeralis (3)
Apodemia mormo virgulti (1)
Papilio eurymedon (1)

Flowering plants included:

Hirschfeldia incana
Phacelia parryi
Cryptantha sp.
Pectocarya linearis ssp. *ferocula*
Lupinus hirsutissimus
Acmispon glaber
Chamaesyce sp.
Camissoniopsis sp.
Erodium cicutarium
Salvia columbariae
Mirabilis laevis var. crassifolia
Viguiera laciniata
Linaria canadensis
Acmispon strigosus
Lasthenia gracilis
Phacelia ramosissima
Amsinckia menziesii

Lupinus truncatus
Marah macrocarpa
Eriogonum fasciculatum
Sonchus oleraceus
Calystegia macrostegia

Other observations included Turkey Vulture, Rufous-crowned Sparrow, California Gnatcatcher, an active Red-tailed Hawk nest off-site to the west, two Audubon's Cottontail (*Sylvilagus audubonii*), one Granite Spiny Lizard (*Sceloporus orcuttii*), and one Western Fence Lizard (*Sceloporus occidentalis*).

19 March 2019

Today the fifth of the required Quino protocol surveys was conducted over the Hurrell property (Cummings Environmental Job #1823.21C). The field visit occurred between 1500 and 1700 hours. The sky was clear at the onset of the visit and was partly cloudy with 10% cloud cover at the end of the observation period. Ambient temperatures were measured at 74.8°F at 1500 hours and at 71.1°F at 1700 hours. At the beginning of the survey, the wind was blowing from the northwest at speeds < 4.7 mph with gusts up to 8.8 mph. At the end of the visit, the winds were blowing from the west, but at speeds ranging from 2.5 – 5.7 mph with gusts to 6.7 mph. Butterfly species observed during this visit were:

Vanessa cardui (26)
Erynnis funeralis (9)
Apodemia mormo virgulti (3)
Plebejus acmon (1)

Plants flowering during this visit included:

Hirschfeldia incana
Phacelia parryi
Cryptantha sp.
Pectocarya linearis ssp. *ferocula*
Lupinus hirsutissimus
Acmispon glaber
Chamaesyce sp.
Camissoniopsis sp.
Erodium cicutarium
Mirabilis laevis var. crassifolia
Viguiera laciniata
Acmispon strigosus
Phacelia ramosissima
Amsinckia menziesii
Lupinus truncatus

Marah macrocarpa
Eriogonum fasciculatum
Calystegia macrostegia
Cryptantha sp.
Dichelostemma capitatum
Linaria canadensis
Raphanus sativus
Lupinus bicolor
Glebionis coronaria
Solanum cf. *americanum*
Heterotheca grandiflora
Claytonia perfoliata

Other observations included a Rufous-crowned Sparrow, two Audubon's Cottontail (*Sylvilagus audubonii*), one Side-blotched Lizard (*Uta stansburiana*), and one Granite Spiny Lizard (*Sceloporus orcuttii*).

28 March 2019

Today, the sixth of the required Quino protocol surveys was conducted between 1200 and 1400 hours at the Hurrell property (Cummings Environmental Job #1823.21C). The sky was partly cloudy throughout the survey with approximately 50% cloud cover at 1200 hours and 30% cloud cover at 1400 hours. Temperatures increased slightly from 71.6°F at the onset of the visit to 73.1°F at the end of the observation period. Wind speeds were measured between 2.8 – 6.0 mph from the northwest at the beginning of the butterfly survey. Wind speeds were measured between 1.4 – 6.0 mph from the northwest by the end of the visit. Butterfly species observed during this visit were:

Vanessa cardui (287)
Erynnis funeralis (1)
Apodemia mormo virgulti (10)
Pontia protodice (2)
A*nthocharis sara* (2)

Plants flowering during this visit included:

Hirschfeldia incana
Phacelia parryi
Pectocarya linearis ssp. *ferocula*
Lupinus hirsutissimus
Acmispon glaber
Chamaesyce sp.
Camissoniopsis sp.
Erodium cicutarium

Mirabilis laevis var. crassifolia
Viguiera laciniata
Acmispon strigosus
Phacelia ramosissima
Lupinus truncatus
Eriogonum fasciculatum
Plagiobothrys sp.
Dichelostemma capitatum
Linaria canadensis
Raphanus sativus
Lupinus bicolor
Solanum cf. *americanum*
Chaenactis artemisiifolia
Salvia columbariae
Lasthenia gracilis
Melilotus indicus

Other observations included one Audubon's Cottontail (*Sylvilagus audubonii*), one Side-blotched Lizard (*Uta stansburiana*), one Orange-throated Whiptail (*Aspidoscelis hyperythra*), four Granite Spiny Lizards (*Sceloporus orcuttii*), California Gnatcatcher and Rufous-crowned Sparrow.

1 April 2019

The seventh Quino protocol survey was conducted at the Hurrell property (Cummings Environmental Job #1823.21C). The field visit occurred between 0930 and 1140 hours. The sky was partly cloudy during the survey. At 0930 hours, there were high, thin clouds with 70% cloud cover. By 1140 hours, the cloud cover decreased to 10%. Temperatures ranged from 71.1°F at the onset of the visit to 84.5°F at the end of the observation period. Wind speeds were measured at < 2.1 mph from the southwest at the beginning of the butterfly survey. Wind speeds were measured between 0.6 – 3.8 mph from the west by the end of the visit. Butterfly species observed during this visit were:

Erynnis funeralis (4)
Anthocharis sara (5)
Vanessa cardui (17)
Apodemia mormo virgulti (11)
Papilio rutulus (1)

Plants in bloom during the visit included:

Hirschfeldia incana
Phacelia parryi
Pectocarya linearis ssp. *ferocula*
Lupinus hirsutissimus

Acmispon glaber
Chamaesyce sp.
Camissoniopsis sp.
Erodium cicutarium
Mirabilis laevis var. crassifolia
Viguiera laciniata
Acmispon strigosus
Phacelia ramosissima
Eriogonum fasciculatum
Chaenactis artemisiifolia
Salvia columbariae
Lasthenia gracilis
Melilotus indicus
Glebionis coronaria
Calystegia macrostegia
Cryptantha sp.
Marah macrocarpa
Calyptridium monandrum
Pseudognaphalium californicum
Amsinckia menziesii

Other observations of note included one California Ground Squirrel (*Spermophilus beecheyi*), two Audubon's Cottontail (*Sylvilagus audubonii*), three Granite Spiny Lizards (*Sceloporus orcuttii*), a Rattlesnake (*Crotalus* sp.), a Cooper's Hawk, California Gnatcatchers, and a Rufous-crowned Sparrow.

11 April 2019

The eighth Quino protocol survey was conducted today at the Hurrell property (Cummings Environmental Job #1823.21C). The field visit occurred between 1130 and 1330 hours. The sky was mostly cloudy throughout the survey with 60% cloud cover at 1130 hours and 70% cloud cover at 1330 hours. Temperatures ranged from 76.5°F at the onset of the visit to 78.2°F at the end of the observation period. Wind speed measurements were 0.9 – 4.5 mph from the southwest at the beginning of the butterfly survey. By 1330 hours, wind speeds were measured between 2.8 – 5.9 mph with gusts up to 9.1 mph from the southwest. Butterfly species observed during this visit were:

Danaus gilippus (1)
Apodemia mormo virgulti (23)
Anthocharis sara (21)
Pontia protodice (11)
Erynnis funeralis (1)
Vanessa cardui (5)

Flowering plants noted during this visit included:

Hirschfeldia incana
Phacelia parryi
Pectocarya linearis ssp. *ferocula*
Lupinus hirsutissimus
Acmispon glaber
Chamaesyce sp.
Camissoniopsis sp.
Erodium cicutarium
Mirabilis laevis var. crassifolia
Viguiera laciniata
Phacelia ramosissima
Eriogonum fasciculatum
Chaenactis artemisiifolia
Salvia columbariae
Lasthenia gracilis
Glebionis coronaria
Calystegia macrostegia
Cryptantha sp.
Lupinus truncatus
Penstemon spectabilis
Apiastrum angustifolium
Nicotiana glauca
Amsinckia menziesii
Viola pedunculata

Other observations included five Orange-throated Whiptails (*Aspidoscelis hyperythra*), a female California Gnatcatcher on a nest, and one Audubon's Cottontail (*Sylvilagus audubonii*).

19 April 2019

The ninth Quino protocol survey was conducted today at the Hurrell property (Cummings Environmental Job #1823.21C). The survey occurred between 1245 and 1445 hours. The sky was clear at the onset of the visit and partly cloudy at the end of the visit with 5% cloud cover. Temperatures ranged from 84.5°F at the onset of the visit to 84.4°F at the end of the observation period. Wind speeds were blowing from the west and measured between 1.7 – 5.2 mph at the beginning of the butterfly survey. The winds were still blowing from the west at the end of the visit with speeds measured between 4.7 – 9.2 mph. Butterfly species observed during this visit were:

Anthocharis sara (19)
Vanessa cardui (1)

Apodemia mormo virgulti (25)
Erynnis funeralis (1)
Pontia protodice (9)

Flowering plants observed during this visit included:

Hirschfeldia incana
Phacelia parryi
Lupinus hirsutissimus
Acmispon glaber
Chamaesyce sp.
Camissoniopsis sp.
Erodium cicutarium
Mirabilis laevis var. crassifolia
Viguiera laciniata
Phacelia ramosissima
Eriogonum fasciculatum
Chaenactis artemisiifolia
Lasthenia gracilis
Glebionis coronaria
Calystegia macrostegia
Cryptantha sp.
Penstemon spectabilis
Nicotiana glauca
Bebbia juncea
Acmispon strigosus
Melilotus indicus
Raphanus sativus
Anagallis arvensis
Eriophyllum confertiflorum

Other observations of note included three Side-blotched Lizards (*Uta stansburiana*), three Audubon's Cottontail (*Sylvilagus audubonii*), two Orange-throated Whiptails (*Aspidoscelis hyperythra*) and a female California Gnatcatcher on a nest.

26 April 2019

Today the tenth Quino protocol survey was conducted over the Hurrell property (Cummings Environmental Job #1823.21C). The sky was clear throughout the survey. Temperatures increased from 79.1°F at the onset of the visit to 82.2°F at the end of the observation period. Wind speeds were measured between 1.2 – 5.0 mph at the beginning of the butterfly survey. By the end of the visit, wind speeds were measured between 2.5 – 5.9 mph from the southwest. Butterfly species observed during this visit were:

Pontia protodice (28)
Erynnis funeralis (2)
Apodemia mormo virgulti (23)
Vanessa cardui (4)
A*nthocharis sara* (7)
Papilio zelicaon (1)

Plants flowering during this visit included:

Hirschfeldia incana
Phacelia parryi
Acmispon glaber
Chamaesyce sp.
Camissoniopsis sp.
Viguiera laciniata
Phacelia ramosissima
Eriogonum fasciculatum
Lasthenia gracilis
Glebionis coronaria
Calystegia macrostegia
Cryptantha sp.
Penstemon spectabilis
Nicotiana glauca
Bebbia juncea
Melilotus indicus
Raphanus sativus
Eriophyllum confertiflorum
Antirrhinum nuttallianum
Chaenactis artemisiifolia
Plagiobothrys sp.
Anagallis arvensis
Amsinckia menziesii
Sisymbrium irio
Scrophularia californica
Pseudognaphalium californicum

Other observations of interest included one Side-blotched Lizard (*Uta stansburiana*), two Granite Spiny Lizards (*Sceloporus orcuttii*), four Orange-throated Whiptails (*Aspidoscelis hyperythra*), one Audubon's Cottontail (*Sylvilagus audubonii*), and California Gnatcatchers.

3 May 2019

Today the last Quino survey was conducted over the Hurrell property (Cummings Environmental Job #1823.21C). Concurrence from the USFWS was obtained for ending the protocol survey on week early due to site conditions. The field visit occurred between 1315 and 1515 hours. The sky was clear throughout the visit. Ambient temperatures increased from 78.5°F at 1315 hours to 80.9°F at 1515 hours. At the beginning of the survey, the wind was measured at < 4.3 mph. By the end of the visit, the winds were measured at speeds between 3.8 – 6.6 mph with gusts up to 9.0 mph. Butterfly species observed during this visit were:

Pontia protodice (20)
Apodemia mormo virgulti (24)
Nathalis iole (1)
Vanessa cardui (4)
Undifferentiated Blue (2)
Papilio rutulus (1)
Nymphalis antiopa (1)
Anthocharis sara (2)

Flowering plants observed during this visit included:

Hirschfeldia incana
Phacelia parryi
Acmispon glaber
Chamaesyce sp.
Camissoniopsis sp.
Viguiera laciniata
Phacelia ramosissima
Eriogonum fasciculatum
Lasthenia gracilis
Glebionis coronaria
Calystegia macrostegia
Cryptantha sp.
Penstemon spectabilis
Nicotiana glauca
Bebbia juncea
Eriophyllum confertiflorum
Antirrhinum nuttallianum
Chaenactis artemisiifolia
Anagallis arvensis
Amsinckia menziesii
Scrophularia californica
Funastrum cynanchoides var. *hartwegii*

Other observations of note included three Orange-throated Whiptail (*Aspidoscelis hyperythra*), two Audubon's Cottontail (*Sylvilagus audubonii*), one Western Fence Lizard (*Sceloporus occidentalis*), one female California Gnatcatcher, and a Red-tailed Hawk nest with young.

[1823 Field Notes.doc]

Appendix B

Report of a Protocol Survey for the

Hermes Copper Butterfly Over the Hurrell Property,

APNs 392-070-10 and 392-070-07

County of San Diego, California

Prepared by
Cummings Environmental, Inc.
8 May 2020

Report of a Protocol Survey for the Hermes Copper Butterfly Over APNs 392-070-10 and 392-070-07 on Lakeside Avenue County of San Diego, California

Prepared For:

Mr. Jim Hurrell
12392 Lakeside Avenue
Lakeside, CA 92040

Prepared By:

Gretchen Cummings

Gretchen Cummings

Cummings Environmental, Inc.
1721 Main Street, Suite 104
Ramona, CA 92065
(760)440-0349

20 May 2020
Job Number 1823.21C

Report of a Protocol Survey for the Hermes Copper Butterfly Over APNs 392-070-10 and 392-070-07 on Lakeside Avenue County of San Diego, California

Prepared For:

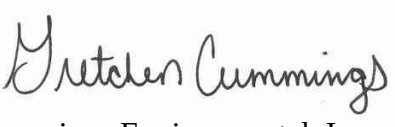
The County of San Diego
Department of Planning and Development Services
5510 Overland Avenue
San Diego, CA 92123

Project Proponent:

Mr. James Hurrell
12392 Lakeside Avenue
Lakeside, CA 92040

Prepared By:

Gretchen Cummings



Cummings Environmental, Inc.
1721 Main Street, Suite 104
Ramona, CA 92065
(760)440-0349

20 May 2020
Job Number 1823.21C

Table of Contents

Attachments

I. Introduction

The Hermes Copper (*Lycaena hermes*) is an approximately 1-inch, tailed, yellow and brown butterfly in the Lycaenidae family. This butterfly is closely tied to its larval host plant, Redberry (*Rhamnus crocea*), and is found in habitats which contain both the adult primary nectaring plant, California Buckwheat (*Eriogonum fasciculatum*), and mature Redberry. The Hermes Copper is extremely limited in range as it is found only in San Diego County and northern Baja California. This species is currently proposed as a threatened species under the federal Endangered Species Act (ESA) by the U.S. Fish and Wildlife Service (USFWS, 2020).

Prior to activities that might adversely affect habitats potentially occupied by this butterfly, surveys are required to assess occupancy and mitigation requirements (San Diego, County of, 2010a). Assessor's Parcel Numbers 392-070-10 and 392-070-07, also known as the Hurrell property (see Figure 1), are partially developed parcels with steep, undeveloped slopes. The owner is proposing to subdivide the larger parcel and create additional residential pads, dedicated open space, and a remainder parcel. A protocol Hermes Copper survey was conducted during the 2019 flight season by Cummings Environmental, Inc. Potential habitat was mapped on the property, but no larval or adult Hermes Copper were observed during this protocol survey which occurred between 31 May and 8 July. As such, the Hurrell property is not currently occupied by the Hermes Copper, but impacts to the potential habitat for the species will need to be mitigated.

II. Methods

Late winter rains and unseasonably cooler temperatures in April and May delayed the onset of the Hermes Copper flight season until the end of May this year. The typical adult flight period for the Hermes Copper occurs between mid-May and early July with a peak between June 10th - 20th. Per the County of San Diego Guidelines for Hermes Copper (*Lycaena hermes*) found in Attachment B of the County of San Diego Report Format and content Requirements for Biological Resources (San Diego, County of, 2010a), a site assessment was conducted on 14 May 2019. The site assessment determined the location of potential Hermes Copper habitat as defined by the occurrence of the larval food plant, Redberry (*Rhamnus crocea*) within 15-feet of California Buckwheat (*Eriogonum fasciculatum*). Four small patches of suitable habitat, totaling 0.2-acre, were mapped in the northern portion of the property (see Figure 2). These four patches of suitable habitat were then surveyed during the 2019 adult flight season. Weather conditions at the beginning and ending of each survey period were recorded and are presented in the attached Table 1.

During all survey efforts for the Hermes Copper, the undersigned was equipped with a collapsible insect net (BioQuip), close focusing photographic gear, and close focusing binoculars (8x42). The photographic gear used this season consisted of a Nikon D300 body and a 70 - 300 mm Quantaray lens with a macro function. This equipment allowed a minimum working distance of approximately fourteen inches. During the four survey dates, wind, and air temperature were taken with a Kestrel. With this instrument, it was possible to record wind speed to the nearest 0.1 mph, and temperature to the nearest 0.1°.

III. Results

During the protocol survey, no larval or adult Hermes Copper were seen on the Hurrell property. The following points highlight the results of the Hermes Copper survey:

- A total of 12 butterfly species were observed throughout the course of the four site visits, with no more than 9 species identified on any given site visit.
- Mormon Metalmark were noted during each of the four site visits. This is relevant in that the California Buckwheat is a larval host plant for the Mormon Metalmark and the California Buckwheat is also the primary nectar source for the Hermes Copper.

A compilation of the butterflies observed during the protocol survey effort is presented as Table 2. The reader's attention is directed to that table, to the attached Figure 3, and to the attached Field Notes for additional information and details on the results of the field effort.

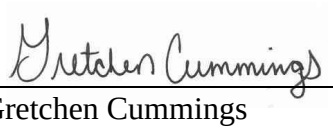
Other sensitive wildlife. While conducting the Hermes Copper surveys, three sensitive wildlife species were noted (see Figure 4 for locations of these observations). The three species noted were the Orange-throated Whiptail (*Aspidoscelis hyperythra*), California Gnatcatcher (*Polioptila californica*), and Turkey Vulture (*Cathartes aura*). The Orange-throated Whiptail is considered a Species of Special Concern by the California Department of Fish and Wildlife (Fish and Wildlife, California Department of, 2019). One adult was seen in the northeastern portion of the site during the 31 May 2019 visit. The California Gnatcatcher is a threatened species under the federal Endangered Species Act (U.S. Fish and Wildlife Service, 1993). During the 20 June 2019 visit, two juveniles were seen foraging in a Laurel Sumac along the northern property boundary. While not a federal or state protected species, the Turkey Vulture is considered a Group 1 sensitive species by the County of San Diego (San Diego, County of, 2010b). On 11 June 2019, a single Turkey Vulture was seen flying overhead in the northeastern portion of the site.

IV. Conclusion

The results of the protocol survey during the 2019 Hermes Copper flight season over the Hurrell property indicate that the suitable habitat on-site is not currently occupied by the Hermes Copper. However, per the County of San Diego Guidelines for Hermes Copper (*Lycaena hermes*) found in Attachment B of the County of San Diego Report Format and content Requirements for Biological Resources (San Diego, County of, 2010a), impacts to potential habitat for the species require a 1:1 mitigation ratio. The current design proposes to impact 0.1-acre of potential Hermes Copper habitat. The other 0.1-acre of potential habitat is proposed to be preserved on-site through an open space easement providing the 1:1 mitigation ratio required.

V. Surveyor Certification

I certify that the information in this survey report and attached exhibits fully and accurately represents my work. Any errors or omissions are solely my responsibility.

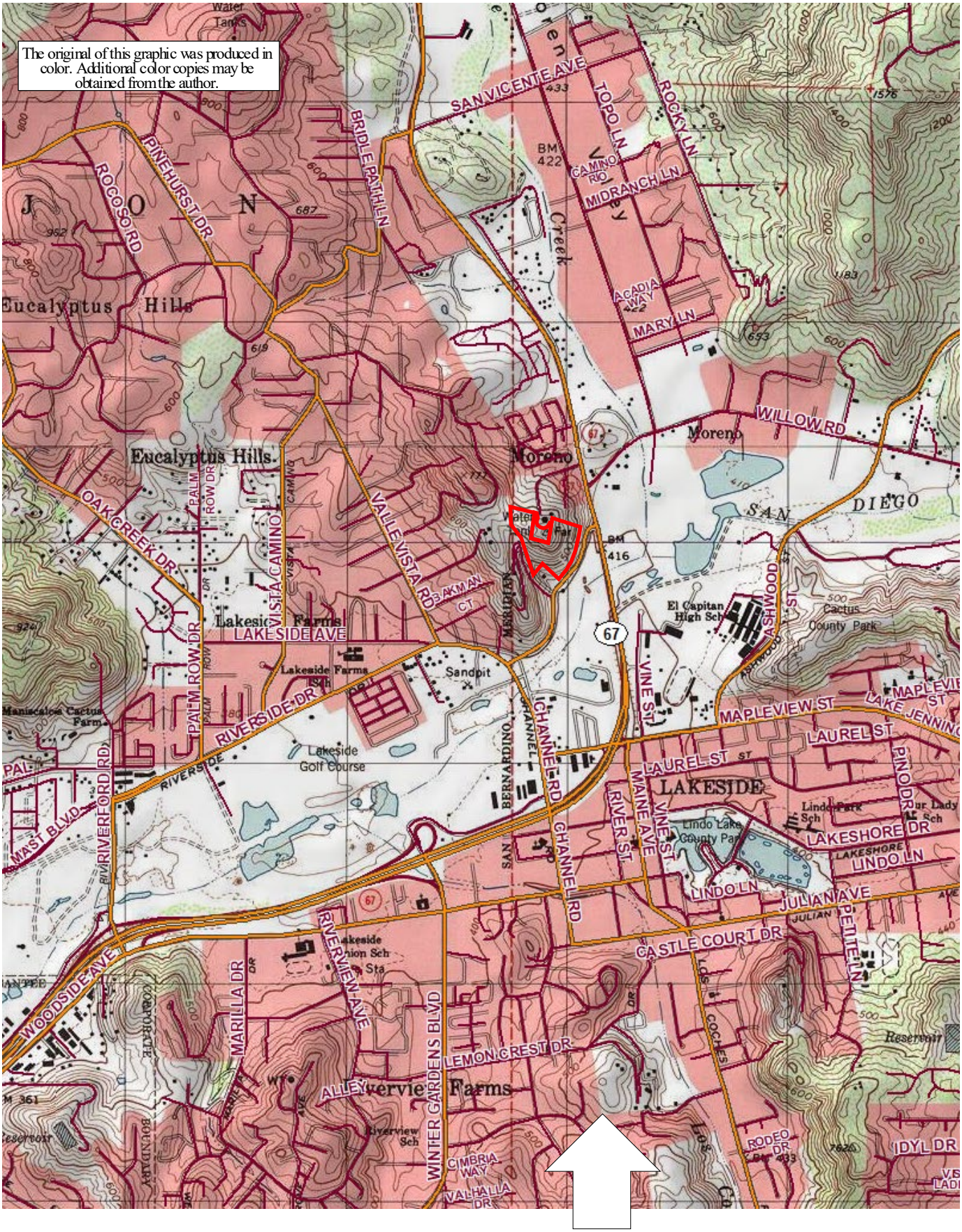


Gretchen Cummings — 5/20/20

Gretchen Cummings — Date

President/Consulting Biologist

[:\1823-Hermes Report text.dec]



Scale: 1-inch = 2,000-feet

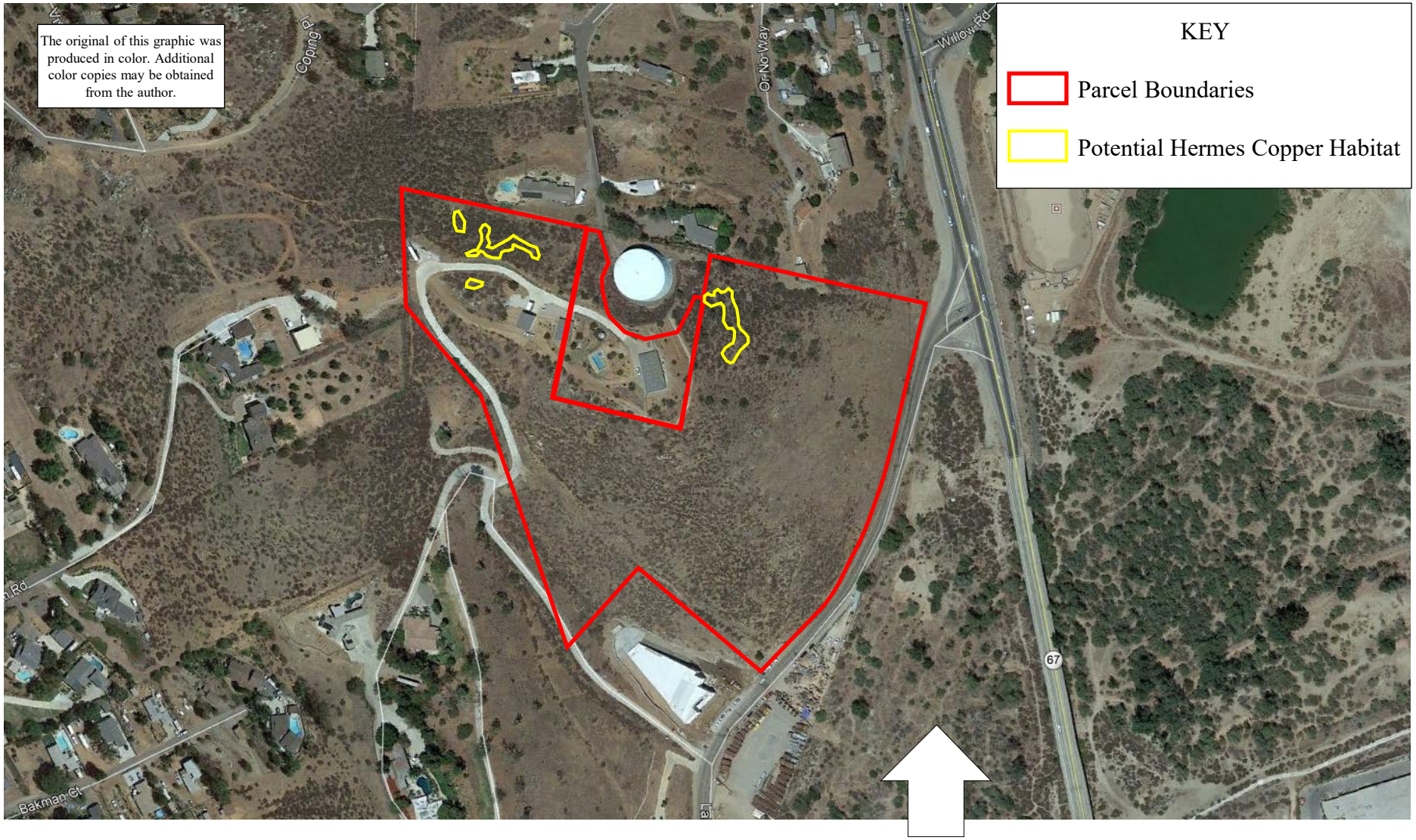
Cummings Environmental Job Number 1823.21C 5 February 2019 [:\1823-Fig-1.pptx]

Cummings Environmental

APNs 392-070-10 and -07 Shown on the U.S.G.S. 7 ½-min El Cajon Quad Map

[Base Map Created with TOPO!® ©2006 National Geographic; ©2005 TeleAtlas]

Figure 1



Scale: 1-inch = 300-feet

Cummings Environmental Job Number 1823.21C 20 May 2020 [:\1823-Hermes-Fig-2.pptx]

Cummings Environmental

Potential Hermes Copper Habitat on APNs 392-070-10 and 392-070-07 Shown on an Aerial Photo [Base Photo © 2020 Google; Imagery Date 8/13/2018]

Figure 2

The original of this graphic was produced in color. Additional color copies may be obtained from the author.

Figure 3A — Mormon Metalmark
(*Apodemia mormo virgulti*)
This species was seen during each of the four survey dates. This photo was taken of the species on a California Buckwheat on 7/8/2019. The larvae feed on a variety of Buckwheat species. [Photo taken on-site during the Hermes survey.]

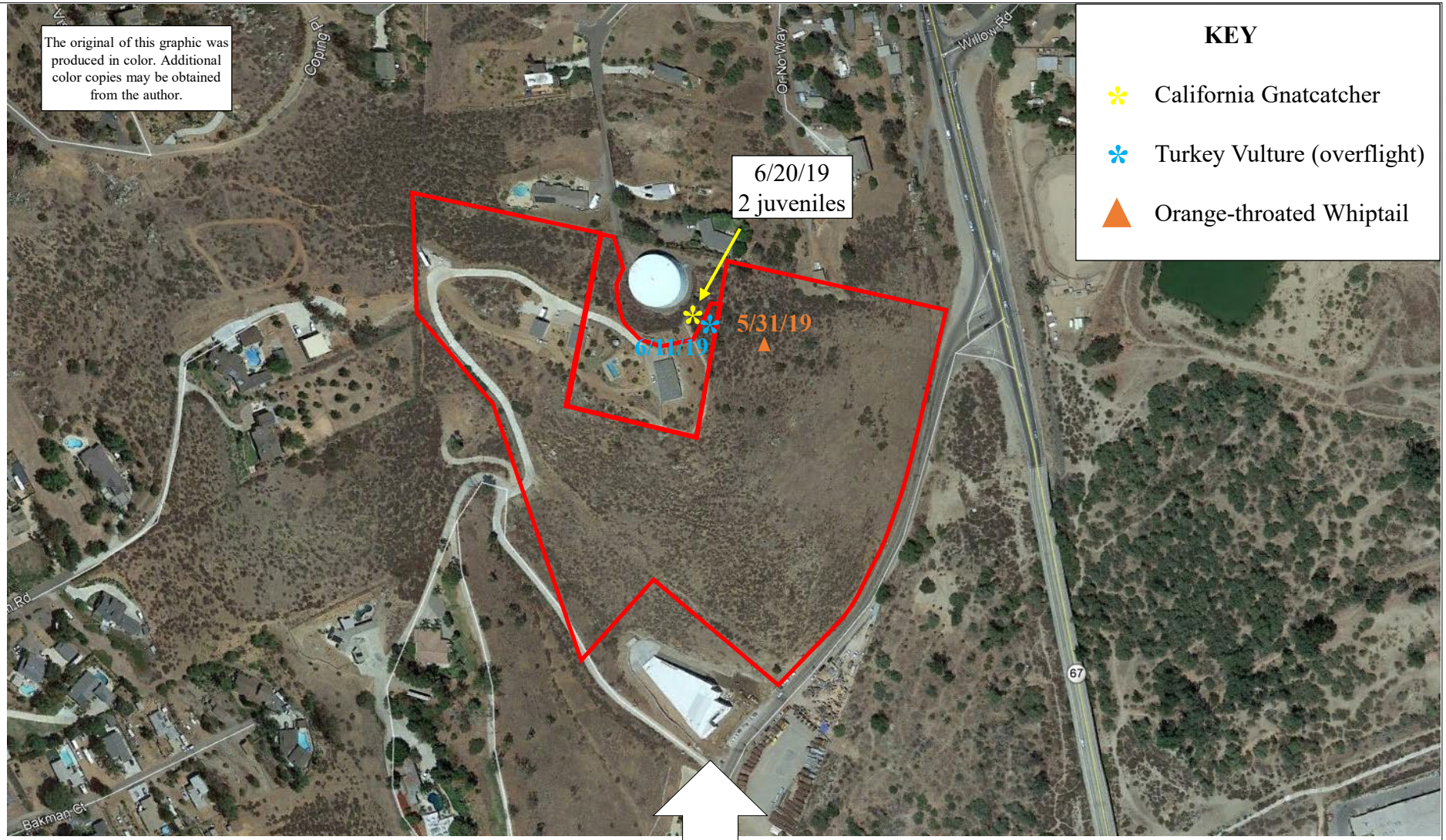
Figure 3B — Gray Hairstreak
(*Strymon melinus*)
This species was observed during the last two surveys. This photo was taken on 7/8/2019 while this female was nectaring on a California Buckwheat.
[Photo taken on-site during the Hermes survey.]

Figure 3C — Marine Blue
(*Leptotes marina*)
Individuals of this species were observed during the last two surveys. This individual stopped long enough to rest before moving on.
[Photo taken on-site during the Hermes survey.]

Figure 3D — Funereal Duskywing
(*Erynnis funeralis*)
This species was noted during all four of the surveys. This photo was taken on 5/31/2019. The larvae feed on legumes.
[Photo taken on-site during the Hermes survey.]

Cummings Environmental Job Number 1823.21C 20 May 2020 [:\1823-Hermes-Fig-3.pptx]

Cummings Environmental	**Butterfly Species Noted on APNs 392-070-10 and 392-070-07 During the 2019 Hermes Copper Survey**	**Figure 3**



Scale: 1-inch = 300-feet

Cummings Environmental Job Number 1823.21C 20 May 2020 [:\1823-Hermes-Fig-4.pptx]

Cummings Environmental

Locations of Sensitive Species Observed on APNs 392-070-10 and 392-070-07 During the 2019 Hermes Copper Survey Shown on an Aerial Photo [Base Photo © 2020 Google; Imagery Date 8/13/2018]

Figure 4

Table 1

Summary of Weather Conditions at the Time of the Individual Hermes Copper Butterfly Survey Dates

APNs 392-070-10 and 392-070-07									
Survey	Date	Beginning of Observation Period				End of Observation Period			
		Time	Cloud Cover	Wind	Air Temp	Time	Cloud Cover	Wind	Air Temp
Hermes Survey #1	31 May	1330	Clear	5.4 – 7.7 mph with gusts to 10.6 mph	79.2°F	1430	Clear	1.1 – 5.9 mph with gusts to 10.4 mph	79.1°F
Hermes Survey #2	11 June	0900	5%	< 3.0 mph	80.1°F	1010	10%	1.4 – 5.9 mph	86.7°F
Hermes Survey #3	20 June	1345	Clear	1.0 – 5.5 mph with gust to 9.9 mph	78.1°F	1445	Clear	2.9 – 5.4 mph with gusts to 9.5 mph	77.9 °F
Hermes Survey #4	8 July	1300	Clear	1.2 – 4.1 mph	82.5°F	1400	Clear	2.6 – 5.1 mph with gusts to 7.6 mph	81.9°F

Table 2

Summary of the Butterfly Species Observed on APNs 392-070-10 and 392-070-07 During the Hermes Copper Butterfly Survey

Scientific Name[1]/ Common Name	31 May	11 June	20 June	8 July
Apodemia mormo virgulti (Mormon Metalmark)	11	3	10	11
Callophrys augustinus (Brown Elfin)	-	-	3	-
Colias alexandra harfordii (Harford's Sulphur)	-	-	1	-
Erynnis funeralis (Funereal Duskywing)	4	3	1	1
Junonia coenia (Common Buckeye)	-	1	-	-
Leptotes marina (Marine Blue)	-	-	1	1
Pieris rapae (Cabbage White)	-	-	2	-
Plebejus acmon (Acmon Blue)	-	6	6	2
Pontia protodice (Common White)	6	4	5	5
Strymon melinus (Gray Hairstreak)	-	-	2	1
Vanessa cardui (Painted Lady)	1	-	-	-
Undifferentiated Blue	3	-	-	1
Total Individuals/ Total Species Observed	25/ 5	17/ 5	31/ 9	22/ 7

[1] For a discussion of the species observed, see text of Hermes report. Nomenclature taken from: Checklist of North American Butterflies Occurring North of Mexico – Edition 2.3 accessed at naba.org.

References Cited

Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., and Wilken, D.H. eds. 2012. The Jepson Manual Vascular Plants of California, 2nd Edition. University of California Press, Berkeley, xxii + 1568 pp.

Beauchamp, R. Mitchel. 1986. A Flora of San Diego County, California. Sweetwater River Press. National City, Calif. 241 pp.

Bowman, Roy H., et al. 1973. Soil Survey of the San Diego Area, California. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

Comstock, John Adams. 1927. Butterflies of California. Published by the Author, Los Angeles, Calif., 334 pp. + 63 plates

Deutschman, D.H., Berres, M.E., Marschalek, D.A., and Strahm, S.L. 2011. Two-Year Evaluation of Hermes Copper (*Lycaena hermes*) on Conserved Lands in San Diego County. Prepared for SANDAG. Available at http://www-rohan.sdsu.edu/faculty/dhd/files/Deutschmanetal 2011_FinalSANDAGHermesCopperReport.pdf

Emmel, Thomas C., and John F. Emmel. 1973. The Butterflies of Southern California. Natural History Museum of Los Angeles County, Science Series 26, xi + 148 pp.

Emmel, Thomas C., ed.1998. Systematics of Western North American Butterflies. Mariposa Press, Gainesville, Florida. Xviii + 878 pp.

Fish and Wildlife, California Department of. 2019. California Natural Diversity Data Base: Special Animals. The Author, Sacramento, California, 67 pp. [available at http://www.dfg.ca.gov/wildlife/nongame/list.html], edition of August 2019.

Glassberg, Jeffrey. 2001. Butterflies through Binoculars: The West. A field Guide to the Butterflies of Western North America. Oxford University Press, New York, New York, x +374 pp.

Marschalek, D. A., and Deutschman, D.H. 2008. Hermes copper (*Lycaena [Hermelycaena] hermes:* Lycaenidae): life history and population estimation of a rare butterfly. Journal of Insect Conservation 12:97-105.

Marschalek, D. A., and Deutschman, D.H. 2009. Larvae and oviposition of Hermes copper (Lepidoptera: Lycaenidae). Journal of Entomological Science 44:400-401.

Marschalek, D. A., and Klein, M. W. Sr. 2010. Distribution, ecology, and conservation of Hermes copper (Lycaenidae: *Lycaena* [*Hermelycaena*] *hermes*). Journal of Insect Conservation published on-line: 22 June 2010.

Opler, Paul, and A. B. Wright. 1999. A Field Guide to Western Butterflies. Houghton Mifflin Co., Boston, xiv + 540 pp.

References Cited (continued)

San Diego, County of. 2010a. County of San Diego Report Format and Content Requirements for Biological Resources. Fourth Revision. Document available at https://www.sandiegocounty.gov /content/dam/sdc/pds/ProjectPlanning/docs/Biological_Report_Format.pdf.

San Diego, County of. 2010b. County of San Diego Guidelines for Determining Significance and Report Format and Contents for Biological Resources. Fourth Revision. Available from the County's website at https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/ Biological_ Guidelines.pdf.

Scott, James A.1986. The Butterflies of North America. Stanford University Press, Stanford, Calif., xii + 583 pp. [CD-ROM edition published by Hopkins Technology, LLC, 1997]

Todd, Victoria R. 2004. Preliminary Geologic Map of the El Cajon 30' x 60- Quadrangle, Southern California, Version 1.0. U. S. Geological Survey, Open-File Report 2004-1361 [copies available at http://pubs.usgs.gov/of/2004/1361/ec1_map/pdf].

U.S. Fish and Wildlife Service. 1993. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Coastal California Gnatcatcher. Federal Register 58(59):16742-16757.

U.S. Fish and Wildlife Service. 2006. Endangered and Threatened Wildlife and Plants: 90-Day Finding on a Petition to List the Hermes Copper Butterfly as Endangered. Federal Register 71(152):44966-44976.

U. S. Fish and Wildlife Service. 2010. Endangered and Threatened Wildlife and Plants; 90-Day Finding on a Petition to List Hermes Copper Butterfly as Threatened or Endangered. Federal Register 75(85): 23654-23663.

U.S. Fish and Wildlife Service. 2011a. Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition to List Hermes Copper Butterfly as Endangered or Threatened. Federal Register 76(72): 20918-20939.

U.S. Fish and Wildlife Service. 2011b. Endangered and Threatened Wildlife and Plants; Review of Native Species That are Candidates for Listing as Endangered or Threatened; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions; Proposed Rule. Federal Register 76(207): 66370-66439.

U.S. Fish and Wildlife Service. 2012. Endangered and Threatened Wildlife and Plants; Review of Native Species That are Candidates for Listing as Endangered or Threatened; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions; Proposed Rule. Federal Register 77(225): 69994-70060.

U.S. Fish and Wildlife Service. 2013. Endangered and Threatened Wildlife and Plants; Review of Native Species That are Candidates for Listing as Endangered or Threatened; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions; Proposed Rule. Federal Register 78(226): 70104-70162.

References Cited (continued)

U.S. Fish and Wildlife Service. 2020. Endangered and Threatened Wildlife and Plants; Threatened Species Status for the Hermes Copper Butterfly With 4(d) Rule and Designation of Critical Habitat; Proposed Rule. Federal Register 85(5):1018-1050.

[:\1823Hermes-ref-cit.wpd]

Appendix A

Field Notes

2019 Field Notes for the Hermes Copper Butterfly Survey Over APNs 392-070-10 and 392-070-07

14 May 2019

Mapping of suitable habitat for the Hermes Copper Butterfly was conducted over APNs 392-070-10 and 392-070-07 today (Cummings Environmental Job #1823.21C), also known as the Hurrell property. The mapping occurred between 1015 and 1100 hours. The sky was partly cloudy at the onset of the visit with 20% cloud cover, but then completely clear at the end of the visit. The temperature rose during the survey period from 71.7°F at 1015 hours to 74.7°F at 1100 hours. Wind speeds were measured at < 4.5 mph at the beginning of the survey. At the completion of the assessment, wind speeds were measured at < 4.8 mph. No butterfly species were observed during the habitat assessment.

Flowering plants included:

Eriogonum fasciculatum
Acmispon glaber
Hirschfeldia incana
Phacelia ramosissima
Phacelia parryi
Scrophularia californica
Amsinckia menziesii
Anagallis arvensis
Eriophyllum confertiflorum
Zeltnera venusta

31 May 2019

Today was the first of the Hermes Copper Butterfly surveys at the Hurrell property (Cummings Environmental Job #1823.21C). The survey occurred between 1330 and 1430 hours. The ambient temperature stayed about the same at 79.2°F at the onset of the field visit to 79.1°F at the end of the survey. Wind speeds were measured at 5.4 – 7.7 mph with gusts up to 10.6 mph at the beginning of the visit and at 1.1 – 5.9 mph with gusts up to 10.4 mph at the end of the survey. The sky was sunny and clear throughout the visit. Butterflies observed were:

Apodemia mormo virgulti (11)
Pontia protodice (6)
Erynnis funeralis (4)
Vanessa cardui (1)
Undifferentiated Blue (3)

Flowering plants included:

Hirschfeldia incana
Eriogonum fasciculatum
Salvia columbariae
Zeltnera venusta
Centaurea melitensis
Lasthenia gracilis
Cryptantha sp.
Phacelia parryi
Antirrhinum nuttallianum
Stephanomeria diegensis
Phacelia ramosissima
Scrophularia californica
Eriophyllum confertiflorum

Other observations included one Orange-throated Whiptail (*Aspidoscelis hyperythra*).

11 June 2019

Today was the second of Hermes Copper Butterfly surveys at the Hurrell property (Cummings Environmental Job #1823.21C). The survey occurred between 0900 and 1010 hours. The ambient temperature increased from 80.1°F at the onset of the field visit to 86.7°F at the end of the survey. Wind speeds were measured at < 3.0 mph at the beginning of the visit and between 1.4 – 5.9 mph at the end of the survey. The sky was partly cloudy throughout the survey with 5% cloud cover at 0900 hours and 10% cloud cover at 1010 hours. Butterflies observed were:

Plebejus acmon (6)
Pontia protodice (4)
Apodemia mormo virgulti (3)
Erynnis funeralis (3)
Junonia coenia (1)

Flowering plants included:

Hirschfeldia incana
Eriogonum fasciculatum
Zeltnera venusta
Malosma laurina
Antirrhinum nuttallianum
Centaurea melitensis
Salvia columbariae
Chamaesyce sp.
Glebionis coronaria

Stephanomeria diegensis
Scrophularia californica
Brickellia californica
Phacelia ramosissima
Eriophyllum confertiflorum

Other observations included a Turkey Vulture (*Cathartes aura*) flying overhead and a Dusky-footed Woodrat nest (*Neotoma fuscipes*).

14 March 2019

Today, the third Hermes Copper Butterfly survey was conducted at the Hurrell property (Cummings Environmental Job #1823.21C). This third survey was conducted between 1345 and 1445 hours. The sky was clear throughout the survey. The temperature decreased from 78.1°F at 1345 hours to 77.9°F at 1445 hours. Winds were blowing from the west at speeds ranging between 1.0 – 5.5 mph with gusts up to 9.9 mph at 1445 hours. At the end of the survey, the winds were blowing from the west and were measured between 2.9 – 5.4 mph with gusts up to 9.5 mph. Butterfly species observed during this survey were:

Colias alexandra harfordii (1)
Apodemia mormo virgulti (10)
Plebejus acmon (6)
Pieris rapae (2)
Pontia protodice (5)
Erynnis funeralis (1)
Callophrys augustinus (3)
Strymon melinus (2)
Leptotes marina (1)

Flowering plants included:

Antirrhinum nuttallianum
Glebionis coronaria
Malosma laurina
Eriogonum fasciculatum
Hirschfeldia incana
Centaurea melitensis
Stephanomeria diegensis
Salvia apiana
Zeltnera venusta
Viguiera laciniata
Acmispon glaber

Other observations included two juvenile California Gnatcatchers (*Polioptila californica californica*) foraging in a Laurel Sumac being scolded by a Bewick's Wren.

8 July 2019

The fourth and final of the required Hermes Copper Butterfly surveys was conducted today at the Hurrell property (Cummings Environmental Job #1823.21C). The field visit occurred between 1300 and 1400 hours. The sky was clear throughout the survey. Ambient temperatures were measured at 82.5°F at the onset of the visit and at 81.9°F at the end of the observation period. At the beginning of the survey, the wind was blowing from the west at speeds ranging between 1.2 – 4.1 mph. By the end of the visit, the wind was still blowing from the west at speeds ranging between 2.6 – 5.1 mph with gusts up to 7.6 mph. Butterfly species observed during this visit were:

Apodemia mormo virgulti (11)
Plebejus acmon (2)
Strymon melinus (1)
Pontia protodice (5)
Erynnis funeralis (1)
Undifferentiated Blue (1)
Leptotes marina (1)

Flowering plants included:

Viguiera laciniata
Hirschfeldia incana
Eriogonum fasciculatum
Antirrhinum nuttallianum
Malosma laurina
Scrophularia californica
Calystegia macrostegia

[1823 Hermes Field Notes.doc]

Appendix C

An Assessment of the California Gnatcatcher

on the Hurrell Property, APNs 392-070-10 and 392-070-07

County of San Diego, California

Prepared by
Cummings Environmental, Inc.
30 January 2020

An Assessment of the California Gnatcatcher on the Hurrell Property, APNs 392-070-10 and 392-070-07 County of San Diego, California

Prepared For:

Mr. Jim Hurrell
12392 Lakeside Avenue
Lakeside, CA 92040

Prepared By:

Gretchen Cummings

Gretchen Cummings

Cummings Environmental, Inc.
1721 Main Street, Suite 104
Ramona, CA 92065
(760)440-0349

30 January 2020
Job Number 1823.21C

Cummings Environmental, Inc.

An Assessment of the California Gnatcatcher On the Hurrell Property, APNs 392-070-10 and 392-070-07 County of San Diego, California

SUMMARY

A federal protocol survey for the California Gnatcatcher (*Polioptila californica californica*) was conducted within suitable Diegan Coastal Sage Scrub habitat over Assessor's Parcel Numbers 392-07010 and 392-070-07 during the 2019 breeding season under permit TE-031850-5. The Gnatcatcher survey is a requirement for the environmental analysis associated with the project proposed for the property. The subject property is located on the west side of State Route 67, north of the San Diego River on Lakeside Avenue (see attached Figures 1 and 2). Based on the results of this federal protocol survey, the property is currently occupied by one pair of California Gnatcatchers.

PHYSICAL ENVIRONMENT

The underlying geology of the property is mapped as Granitoid rocks (Todd, 2004). The surficial soils mapped by Bowman (1973) are recorded as Cieneba-Fallbrook rocky sandy loams, 30-65% slopes, eroded (CnG2) over the majority of the site, and as Tujunga sand, 0-5% slopes (TuB) in a portion of the drainage that parallels the driveway along the southwestern edge of the property.

The subject property consists of a hill with three residential structures at the peak with an east-facing slope going down towards State Route 67 and south and west-facing slopes going down towards Riverside Drive. The San Diego River is located south of the property on the opposite side of Riverside Drive. There is an elevation difference across the property of approximately 240-feet. The lowest elevation occurs at the southern edge of the property by Riverside Drive at 440-feet, and the highest elevation occurs along the north-central edge of the property at the peak of the hill at 680-feet (see Figure 1).

FLORAL ENVIRONMENT

The subject property is predominantly occupied by Diegan Coastal Sage Scrub habitat (Holland, 1986; Element Code 32500). On-site, this habitat contains typical Coastal Sage Scrub species, such as California Sagebrush (*Artemisia californica*) and California Buckwheat (*Eriogonum fasciculatum*). The remainder of the property is occupied by Non-Native Grassland (Holland, 1986; Element Code 42200) and Urban/Developed land (Holland, 1986; Element Code 12000). The Non-Native Grassland occurs as small islands in between

1721 Main Street, Suite 104, Ramona, CA 92065 • (760)440-0349
Email: gretchen.bc@sbcglobal.net
Professional Environmental Services

Diegan Coastal Sage Scrub habitat along the eastern side of the property. The Urban/Developed land consists of the three residential structures at the top of the hill, their yards, and the driveway.

METHODS

The survey was conducted to determine the presence or absence of the California Gnatcatcher (*Polioptila californica californica*) in accordance with the current federal protocol (U.S. Fish and Wildlife Service, 1997). On each field date, the Diegan Coastal Sage Scrub habitat was surveyed for California Gnatcatchers. When appropriate, the recorded call of the California Gnatcatcher was utilized as a location technique (calls obtained through the Cornell Laboratory of Ornithology; the recording is of a Type I call, in the sense of Atwood (1988)).

The dates, times of survey, and weather conditions for each of the three California Gnatcatcher site visits were as follows:

APNs 392-070-10 and 392-070-07								
Date	Times of survey	Observer	Beginning of Observational Period			End of Observational Period		
			Wind	Air Temp	Cloud Cover	Wind	Air Temp	Cloud Cover
11 Apr 2019	0930 to 1130 hours	G. Cummings	1.3 – 4.2	63.7°F	Clear	0.9 - 4.5 mph	76.5°F	60%
14 May 2019	0915 to 1015 hours and 1100 to 1200 hours	G. Cummings	1.3 – 4.5 mph	67.7°F	40%	3.0 – 5.3 mph with gusts to 12.4 mph	80.6°F	Clear
18 June 2019	0930 to 1130 hours	G. Cummings	< 2.7 mph	68.9°F	100%	1.3 – 6.2 mph	72.7°F	5%

All birds heard and/or seen during the survey were noted and that information is presented as Table 1. The reader is directed to that table for information about the avifauna present within the bounds of the property.

RESULTS

A total of twenty-eight avian species were observed during the three site visits. Several species nested on-site or adjacent to the site, including the Red-tailed Hawk, Hooded Oriole, California Thrasher, California Towhee, and California Gnatcatcher (please see the attached Table 1 for more details and the following section on the California Gnatcatcher). One of the species that was observed was the White-crowned Sparrow which is a winter visitor that remains in San Diego County until the middle of April. Of the twenty-eight bird species seen, three are considered sensitive. Those three species are the California Gnatcatcher, Turkey Vulture, and Southern California Rufous-crowned Sparrow (see Figure 2 for locations of these observations).

California Gnatcatcher. The California Gnatcatcher (*Polioptila californica californica*) is a threatened species under the federal Endangered Species Act (ESA). It is an obligate inhabitant of Sage Scrub vegetation types and is also found in Chaparral habitat where it integrates with Sage Scrub. Preston, et al. (1998), Atwood (1988), and Braden (1998) have demonstrated that the typical breeding territory of the Gnatcatcher is on the order of 20-acres. This is especially true where the habitats are more xeric and less diverse. Where the habitats are more mesic and have a higher shrub diversity, such as coastal San Diego County, the territories may be significantly less than 20-acres in size.

During the 11 April visit, an adult male was calling and then began to scold me as I approached. The female of the pair was on the nest located in a San Diego County Viguiera (*Viguiera laciniata*) shrub (see Figure 2 for location). On 14 May, the pair of Gnatcatchers and three fledglings were detected just to the northeast of the nest site (which appeared to have been predated upon as there was a hole in one side of it). The male was vocalizing to the female and fledglings but was only getting soft replies from the female and one of the fledglings. The other two fledglings were being extremely secretive (again, see Figure 2 for location). During the last site visit on 18 June, a single California Gnatcatcher was heard off-site to the west (see Figure 2 for location). It quickly made its swooping flight across the driveway and into the drainage on-site that parallels the driveway. Then, I only caught brief glimpses of it as it moved north, upslope towards the houses. It is suspected that this was one of the juveniles that was spotted the month before. Neither of the adults were detected during this last survey date.

Other Wildlife (Non-Avian) Species. Two mammal species and four reptilian species were observed during the surveys. The two mammal species observed on the subject property were the Audubon's Cottontail (*Sylvilagus audubonii*), and California Ground Squirrel (*Spermophilus beecheyi*). The four reptiles seen during the surveys were the Western Fence Lizard (*Sceloporus occidentalis*), the Side-blotched Lizard (*Uta stansburiana*), the Granite Spiny Lizard (*Sceloporus orcuttii*), and Orange-throated Whiptail (*Aspidoscelis hyperythra*). Of these six non-avian species, only one is considered sensitive. The Orange-throated Whiptail is considered a Species of Special Concern by the California Department of Fish and Wildlife (Fish and Wildlife, California Department of, 2019). Three individuals were seen in openings between the Diegan Coastal Sage Scrub shrubs during the 11 April visit, and two were seen during the 18 June visit (see Figure 2 for locations).

CONCLUSIONS

The Diegan Coastal Sage Scrub habitat on APNs 392-070-10 and 392-070-07 was surveyed during the 2019 nesting season for the California Gnatcatcher. In accordance with the federal protocol for the species, a total of three site visits were made to determine the presence or absence of the bird species. Based on the results of the protocol survey, the subject property is occupied by one pair of California Gnatcatchers and this pair successfully fledged three young.

SURVEYOR CERTIFICATION

I certify that the information in this survey report and attached exhibits fully and accurately represents my work. Any errors or omissions are solely my responsibility.

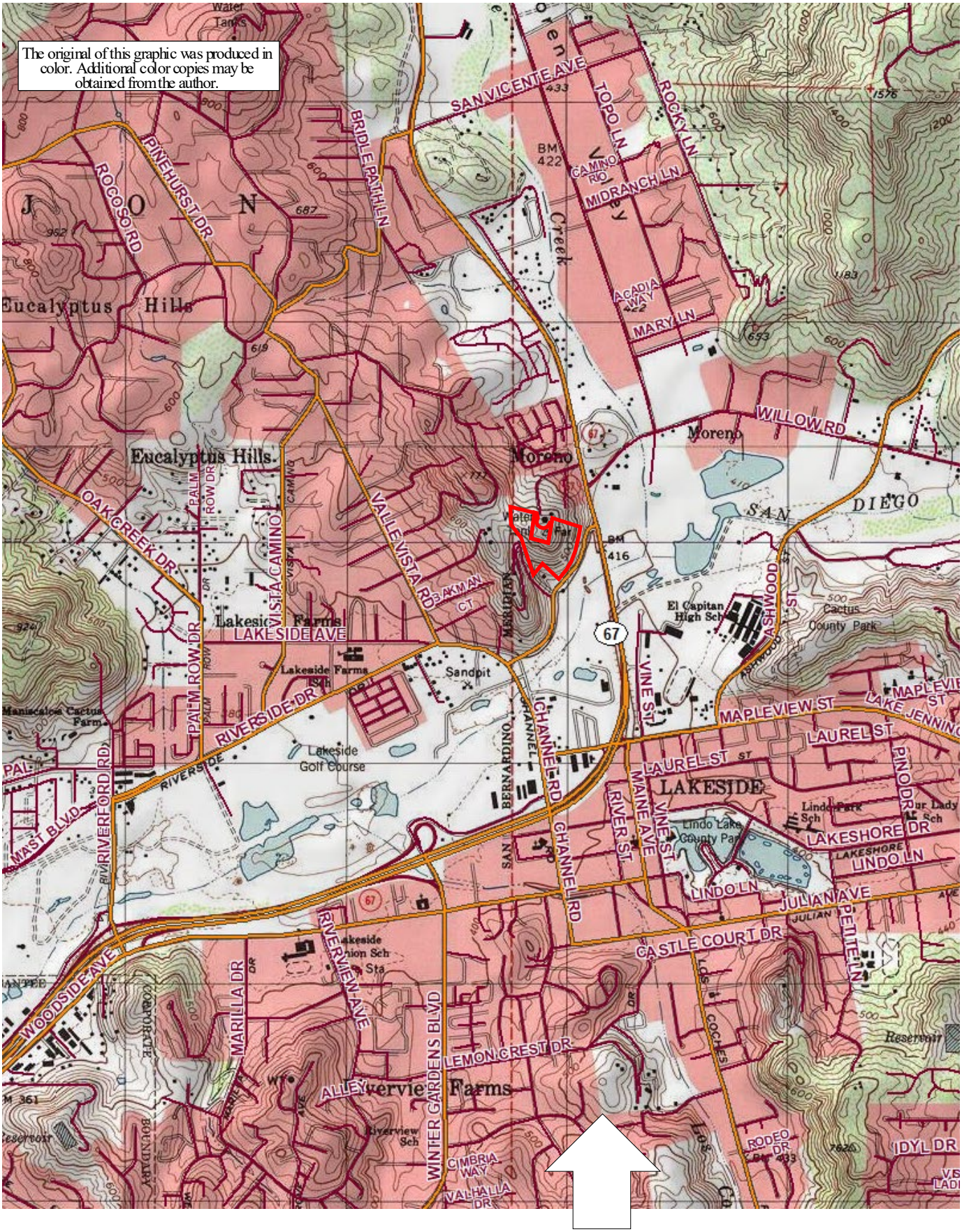
Gretchen Cummings — 1/30/20

Gretchen Cummings
Owner/Consulting Biologist
(TE-031850-5)

Date

Attachments

1. Figure 1 — APNs 392-070-10 and 392-070-07 Shown on the U.S.G.S. 7½-min El Cajon Quad Map
2. Figure 2 — Locations of Sensitive Species Observations Made During the California Gnatcatcher Survey Over APNs 392-070-10 and 392-070-07 Shown on an Aerial Photo
3. Table 1 — Bird Species Observed During the Federal Protocol California Gnatcatcher Presence/Absence Survey Over APNs 392-070-10 and 392-070-07
4. References Cited



Scale: 1-inch = 2,000-feet

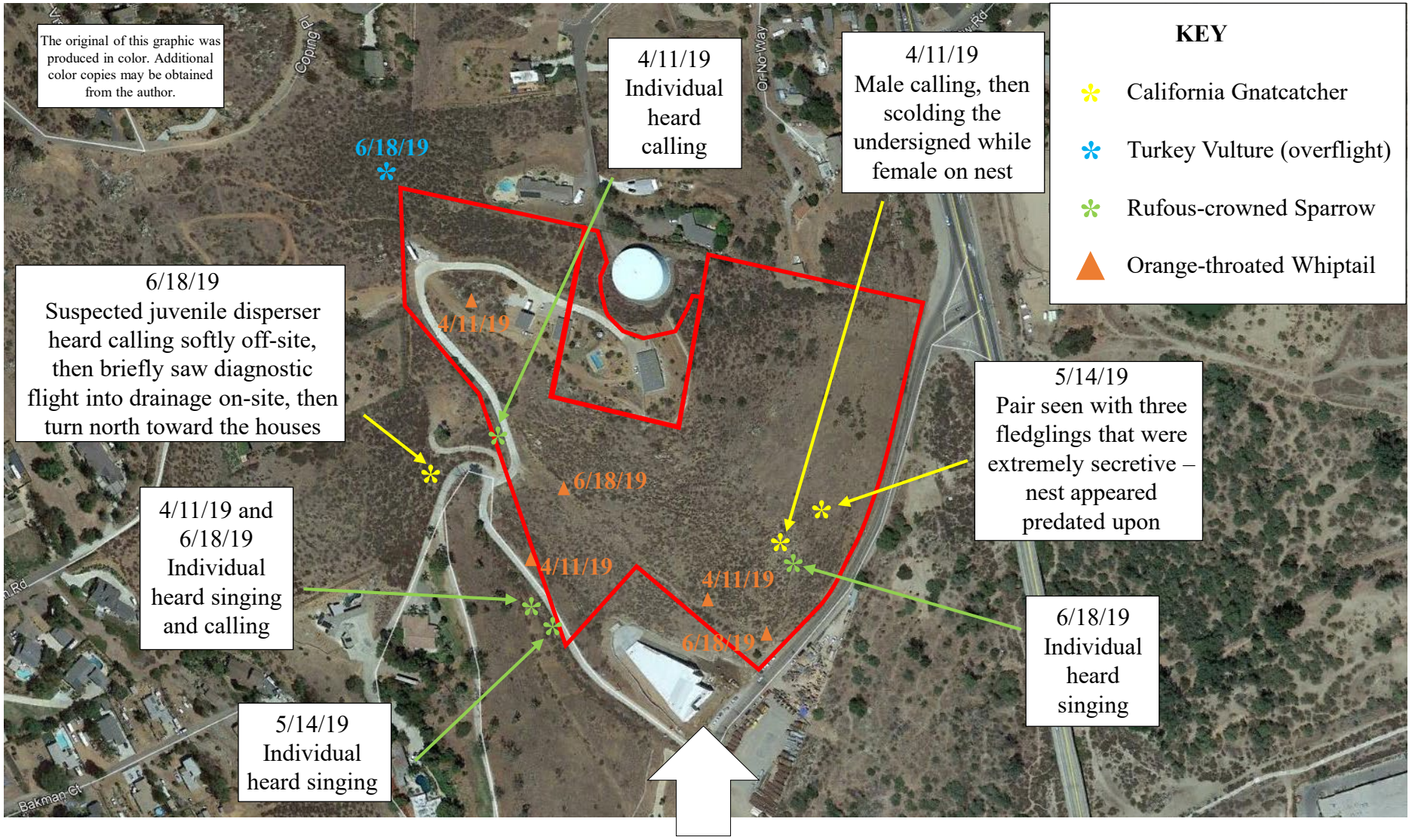
Cummings Environmental Job Number 1823.21C 5 February 2019 [:\1823-Fig-1.pptx]

Cummings Environmental

APNs 392-070-10 and -07 Shown on the U.S.G.S. 7 ½-min El Cajon Quad Map

[Base Map Created with TOPO!® ©2006 National Geographic; ©2005 TeleAtlas]

Figure 1



Cummings Environmental Job Number 1823.21C 30 January 2020

Scale: 1-inch = 300-feet

[:\1823-CAGN-Fig-2.pptx]

Cummings Environmental

Locations of Sensitive Species Observations Made During the California Gnatcatcher Survey Over APNs 392-070-10 and 392-070-07 Shown on an Aerial Photo [Base Photo © 2018 Google; Imagery Date 8/13/2018]

Figure 2

Table 1
Bird Species Observed During the Federal Protocol California Gnatcatcher Presence/Absence Survey Over APNs 392-070-10 and 392-070-07 in the County of San Diego, California

Species	11 April 2019	14 May 2019	18 June 2019	Notes
Turkey Vulture (*Cathartes aura*)	-	-	4	Four Turkey Vultures were seen circling off-site to the northwest.
Red-tailed Hawk (*Buteo jamaicensis*)	2	4	4	Egg laying is mainly from late February to mid-April (Unitt, 2004). During the 4/11 visit, an adult and at least one nestling were seen in a nest off-site to the west in a Eucalyptus tree. On the 5/14 visit, the two adults were seen near the nest with two nestlings in the nest. During the 6/18 survey, the two adults and the two juveniles were seen perched in trees near the nest. At one point, one adult and one juvenile took off together presumably foraging.
Eurasian Collared-Dove (*Streptopelia decaocto*)	-	-	1	On the last survey date, one Eurasian Collared-Dove was seen off-site to the west.
Mourning Dove (*Zenaida macroura*)	2	4	6	Nesting occurs typically from March to July (Unitt, 2004). On the 4/11 visit, two Mourning Doves were seen overflying the property. During the next Gnatcatcher survey in May, three were seen as overflights and one was heard calling on-site. During the 6/18 visit, all six were seen on-site.
Greater Roadrunner (*Geococcyx californianus*)	-	-	1	During the last Gnatcatcher survey, one individual was seen off-site to the northwest.

Species	11 April 2019	14 May 2019	18 June 2019	Notes
White-throated Swift (*Aeronautes saxatalis*)	-	3	3	During the last two Gnatcatcher surveys, White-throated Swifts were seen and heard circling overhead.
Anna's Hummingbird *(Calypte anna*)	5	5	2	Three males and two females were noted on the property during the 4/11 visit. On the 5/14 visit, three were seen perched on the tops of shrubs and two were seen fighting. During the 6/18 survey, one male was observed performing the "dive display" and one male was seen perched on a Tree Tobacco plant.
Selasphorus Hummingbird (*Selasphorus* sp.)	-	-	1	Given the timing of this sighting in mid-June, this Selasphorus Hummingbird is assumed to be an Allen's Hummingbird.
Nuttall's Woodpecker (*Picoides nuttallii*)	-	-	1	The Nuttall's Woodpecker is nonmigratory in San Diego County (Unitt, 2004). During the last Gnatcatcher survey, an individual was heard off-site to the west in the Eucalyptus trees.
Black Phoebe (*Sayornis nigricans*)	1	-	-	A single Black Phoebe was seen along the southeastern edge of the property during the 4/11 visit.
Cassin's Kingbird (*Tyrannus vociferans*)	2	1	1	Cassin's Kingbirds were seen during each of the three survey dates. During the 4/11 visit, a pair was seen perched in the top of Laurel Sumac shrub to the east of the residences.
Western Kingbird (*Tyrannus verticalis*)	2	-	-	During the 4/11 visit, a pair of Western Kingbirds were seen and heard off-site to the west.
California Scrub Jay (*Aphelocoma californica*)	-	1	3	On the 5/14 survey date, a single Scrub Jay was seen off-site to the southeast down near the San Diego River. During the last survey date, three were heard off-site to the west.

Species	11 April 2019	14 May 2019	18 June 2019	Notes
Common Raven (*Corvus corax*)	3	-	-	On 4/11, these three Ravens were seen overflying the property.
Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)	-	-	8	During the last visit, eight Northern Rough-winged Swallows were seen overhead and were heard vocalizing.
Cliff Swallow (*Petrochelidon pyrrhonota*)	-	1	3	Cliff Swallows were seen overflying the property during the May and June survey dates.
Bushtit (*Psaltriparus minimus*)	3+1	3+1	3+10	Nesting season begins as early as 9 February and continues through July (Unitt, 2004). During the April and May visits, a group of three Bushtits were seen foraging together and then a single Bushtit was seen foraging by itself. On the last survey date, a group of three were heard off-site to the southeast near the San Diego River, and a flock of ten were seen off-site to the northwest in the adjacent Sage Scrub habitat.
Bewick's Wren (*Thryomanes bewickii*)	2+1+1	1	1	A pair was seen together in the vegetation to the west of the driveway during the 4/11 visit. Two other individuals were heard and seen in other parts of the property. During the 5/14 visit, an adult scolded the undersigned while walking along the driveway. On 6/18, the undersigned was scolded yet again, but this time the bird was located in the central portion of the site.
California Gnatcatcher (*Polioptila californica*)	**2**	**5**	**1**	**See text for details.**
Wrentit (*Chamaea fasciata*)	2	2	2	Although typically a species found in Chaparral habitat, the Wrentit also utilizes Sage Scrub. This pair was seen and heard during each of the three visits along the southwestern property boundary.

Species	11 April 2019	14 May 2019	18 June 2019	Notes
California Thrasher (*Toxostoma redivivum*)	1	3	1	An individual was heard calling during the 4/11 visit. On 5/14, two adults were heard calling and one fledgling was seen near one of the calling adults. On the last visit, one adult was seen in the northwestern portion of the site.
Spotted Towhee (*Pipilo maculatus*)	2	2	-	During the first two visits, this species was heard singing on-site.
California Towhee (*Pipilo crissalis*)	6	3	3	A pair and four individuals were noted during the 4/11 survey. On 5/14 two individuals were seen foraging and one adult was seen carrying food. During the last survey, a pair plus one fledging was seen on-site.
Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)	2	1	2	This species was seen and heard calling and singing along the driveway and in the northeast corner of the property.
White-crowned Sparrow (*Zonotrichia leucophrys*)	3	-	-	During the first visit on 4/11, the last of these winter visitors were heard singing and seen foraging on-site.
Hooded Oriole (*Icterus cucullatus*)	2	2+1	3	A pair of Hooded Orioles was seen in the along the western property boundary during the 4/11 visit. On 5/14, the pair was seen again in the same area and a nest was discovered in a Eucalyptus tree along the driveway. A third Hooded Oriole was seen flying past this pair to the north. On the last visit, an adult female was near the nest from the May survey, and two juveniles were seen in the vicinity.
House Finch (*Carpodacus mexicanus*)	4	5	1	This species is a year-round resident in the vicinity. Males were heard singing, males and females were seen foraging, and some were seen as overflights.

Species	11 April 2019	14 May 2019	18 June 2019	Notes
Lesser Goldfinch (*Spinus psaltria*)	4	3	3	This species was detected mostly as overflights with the exceptions on single individuals seen foraging on-site during the last two visits.

Total Species: 28

[:\1823CAGN Table.doc]

References Cited and Bibliography

American Ornithologists' Union. 1998. Check-list of North American Birds. 7th Edition. American Ornithologists' Union, Washington, D. C., liv + 829 pp.

American Ornithologists' Union. 2018. Fifty-ninth Supplement to the American Ornithologists' Union Check-list of North American Birds. The Auk 135:798-813.

Atwood, Jonathan L. 1980. The United States distribution of the California Black-tailed Gnatcatcher. Western Birds 11(2):65-78.

Atwood, Jonathan L. 1988. Speciation and Geographic Variation in Black-tailed Gnatcatchers. American Ornithologists Union, Ornithological Monographs No. 42, Wash., D.C.

Atwood, Jonathan L. 1990. Status review of the California Gnatcatcher (Polioptila californica). Unpublished technical report, Manomet Bird Observatory, Manomet, Massachusetts. 79 pp.

Atwood, Jonathan L. 1991. Subspecies limits and geographic patterns of morphological variation in California Gnatcatchers (*Polioptila californica*) Bull. S. Calif. Acad. Sci. 90:118-133.

Atwood, Jonathan L., and J. S. Bolsinger. 1992. Elevational Distribution of California Gnatcatchers in the United States. J. Field Ornithol. 63(2):159-168.

Atwood, Jonathan L., D. R. Bontrager, and A. L. Gorospe. 1998. Use of Refugia by California Gnatcatchers Displaced by Habitat Loss. Western Birds 29(4):406-412.

Atwood, Jonathan L., et al. 1998. Factors Affecting Estimates of California Gnatcatcher Territory Size. Western Birds 29(4):269-279.

Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., and Wilken, D.H. eds. 2012. The Jepson Manual Vascular Plants of California, 2nd Edition. University of California Press, Berkeley, xxii + 1568 pp.

Beauchamp, R. Mitchel. 1986. A Flora of San Diego County, California. Sweetwater River Press. National City, Calif. 241 pp.

Bowman, Roy H., et al. 1973. Soil Survey of the San Diego Area, California. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

Braden, Gerald T., S. L. Love, and R. L. McKernan. 1994. Dispersal and Non-breeding Habitat Use by the Coastal California Gnatcatcher (*Polioptila californica californica*) in Western Riverside County. Unpublished manuscript, prepared for Southwestern Riverside County Multi-species Reserve management Committee and the Metropolitan Water District, copies available from the Fish and Wildlife Service, Carlsbad Field Office, 28 pp.

Braden, Gerald T., R. L. McKernan, and, S. M. Powell. 1997. Association of within-territory vegetation characteristics and fitness components of California Gnatcatchers. Auk 114(4):601-609.

References Cited and Bibliography (continued)

Braden, Gerald. 1998. Gnatcatcher Factoids. Unpublished manuscript, Fish and Wildlife Service, Carlsbad, Calif., 3 pp.

Dunn, J. L., and K. L. Garrett. 1987. The identification of North American gnatcatchers. Birding 19:17-29.

Famolaro, Peter and J. Newman. 1998. Occurrence and Management Considerations of California Gnatcatchers Along San Diego County Highways. Western Birds 29(4):447-452.

Fish and Wildlife, California Department of. 2019a. California Natural Diversity Data Base: Special Animals. The Author, Sacramento, California, 67 pp. [available at http://www.dfg.ca.gov/wildlife/nongame/list.html], edition of August 2019.

Fish and Wildlife, California Department of. 2019b. California Natural Diversity Data Base: State and Federally Listed Endangered and Threatened Animals of California. The Author, Sacramento, California, 16 pp. [available at http://www.dfg.ca.gov/wildlife/nongame/list.html], edition of August 2019.

Fish and Wildlife, California Department of. 2020a. California Natural Diversity Database. Rare Find 5 Commercial Version Updated 7 January 2020. Biogeographic Data Branch, Sacramento, CA.

Grinnell, Joseph and Alden H. Miller. 1944. The Distribution of the Birds of California. Cooper Ornithological Club, Berkeley, California (1986 reprint), 617 pp.

Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, California. iii + 155 pp.

Oberbauer, Thomas A. 1996. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Unpublished manuscript, County of San Diego, Department of Planning and Land Use, 7 pp [copies available from the County of San Diego].

Preston, Kristine L., M. A. Grishaver, and P. J. Mock. 1998. California Gnatcatcher Vocalization Behavior. Western Birds 29(4):258-268.

Preston, Kristine L., et al. 1998. California Gnatcatcher Territorial Behavior. Western Birds 29(4):242-257.

Pyle, Peter, et al. 1987. Identification Guide to North American Passerines. Slate Creek Press, Bolinas, Calif., x + 278 pp.

Pyle, Peter and P. Unitt. 1998. Molt and Plumage Variation by Age and Sex in the California and Black-tailed Gnatcatchers. Western Birds 29(4):280-289.

Rotenberry, John T., and, T. A. Scott. 1998. Biology of the California Gnatcatcher: Filling in the Gaps. Western Birds 29(4):237-241.

Sibley, David Allen. 2000. The Sibley Guide to Birds. Alfred A. Knopf, New York, NY, 544 pp.

References Cited and Bibliography (continued)

Stebbins, Robert C. 2003. A Field Guide to Western Reptiles and Amphibians. 3rd Ed., Houghton Mifflin Company, Boston, Mass., xiii + 533 pp.

Todd, Victoria R. 2004. Preliminary Geologic Map of the El Cajon 30' x 60- Quadrangle, Southern California, Version 1.0. U. S. Geological Survey, Open-File Report 2004-1361 [copies available at http://pubs.usgs.gov/of/2004/1361/ec1_map/pdf].

Unitt, Philip. 2004. San Diego County Bird Atlas. San Diego Natural History Museum, San Diego, Calif. vii + 645 pp.

U.S. Fish and Wildlife Service. 1993a. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Coastal California Gnatcatcher. Federal Register 58(59):16742-16757.

U.S. Fish and Wildlife Service. 1993b. Endangered and Threatened Wildlife and Plants; Proposed Special Rule to Allow Take of the Threatened Coastal California Gnatcatcher. Federal Register 58(59):16758-16759.

U.S. Fish and Wildlife Service. 1997. Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines July 28, 1997. Unpublished manuscript, 5 pp., copies available from the Carlsbad Field Office, Carlsbad, Calif.

U.S. Fish and Wildlife Service. 2007. Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the Coastal California Gnatcatcher (*Polioptila californica californica*); Final Rule. Federal Register 72(243):72009-72058.

U.S. Fish and Wildlife Service. 2016. Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition To Delist the Coastal California Gnatcatcher. Federal Register 81(169):59952-59975.

Weaver, Kenneth L. 1998. Coastal Sage Scrub Variations of San Diego County and Their Influence on the Distribution of the California Gnatcatcher. Western Birds 29(4):392-405.

Weaver, Kenneth L. 1998. A New Site of Sympatry of the California and Black-tailed Gnatcatchers in the United States. Western Birds 29(4):476-479.

[:\1823-CAGN-ref-cit.wpd]