

Alexander Vardy  
13074 Polvera Ave  
San Diego CA, 92128

June 9<sup>th</sup>, 2020

**Subject: Biological Letter Survey Report for APN 272-482-14, San Diego California.**

Dear Mr. Vardy:

Klutz Biological Consulting (KBC) is pleased to provide this general biological survey and letter report for APN 272-482-14, San Diego, California (Figure 1). It is understood the subject property (parcel 272-482-14) is being considered for development. The proposed project would include construction of a single-family home, landscaping and a driveway. This letter summarizes the biological resources present within the study area and the potential for the proposed project to impact sensitive biological resources.

### **Survey Methods and Limitations**

The study area is comprised of the subject property and a 100-foot buffer, which includes native vegetation, adjacent homes, hardscape, and ornamental landscaping. A general survey of the study area was conducted by Lindsay Willrick on June 19, 2018 between 10:30 a.m. and 1:30 p.m. Weather conditions during the survey consisted of temperatures between 70 and 76-degrees Fahrenheit, 30 percent cloud cover, and winds between 1 to 3 mph. The survey was conducted by slowly walking meandering transects within, and around the study area where feasible, while recording all plant and wildlife species observed.

Prior to the survey a desktop analysis of the California Natural Diversity Database (CNDDDB; CDFG 2018) Escondido Quadrangle was also conducted to identify sensitive species known to occur in the general vicinity of the study area. Although the study area was surveyed, it should be noted that some sensitive resources may not have been detected due to the duration and season of the survey event. Rare annual plants may not have been apparent, and any wildlife species that are not active during the day (e.g. strictly nocturnal), are secretive in their habits, or use the study area only periodically may not have been detected during the survey. The entirety of the 100-foot buffer was surveyed directly on foot where possible and indirectly with binoculars as to avoid trespass on adjacent private properties.

### **Survey Results**

#### **Physical Characteristics**

The approximately 3.2-acre parcel is located southeast of Lake Hodges along the southern foothills of the San Pasqual Valley (Figure 1). The site lies between Highland Valley Road and Polvera Avenue (Figure 2). Elevation on the parcel ranges from approximately 300 feet above mean sea level (amsl) along the northern property boundary to approximately 600 feet amsl along the southern property boundary. The property is steeply sloped

up from the north to south with a north facing aspect. The property largely supports native or naturalized vegetation.

Soils within the study area are limited to Fallbrook-Vista sandy loams (9 to 15, and 15 to 30 percent slopes), and Cieneba very rocky coarse sandy loam (9 to 30 and 30 to 75 percent slopes) (Bowman 1973 and Soil Survey Staff 2018; Figure 3). The site visit confirmed that soils derived from granitic rock with a coarse to sandy loam nature were the dominant soil types onsite. No unique soils types (e.g. clay or alkali soils) were observed onsite during the site visit.

### **Vegetation Communities**

The study area contains two distinct landcover types including disturbed habitat and urban/developed lands (Figure 4). Each of the landcover types are discussed in more detail below and a complete list of botanical resources observed is provided in Appendix B.

**Disturbed Habitat** - Disturbed habitat is any land on which the native vegetation has been significantly altered by agriculture, construction, or other land-clearing activities, and the species composition and site conditions are not characteristic of the disturbed phase of a plant association. The portion of the study area that is considered disturbed habitat is located along the existing access road and associated with an adjacent fuel management zone that is located west of the access road (Figure 4).

**Urban/Developed Lands** - Urban/developed lands refer to any built areas that are maintained and are not vegetated. Within the study area urban/developed lands include neighboring homes and hardscape features. Within this landcover type, there are development features (driveways and ornamental vegetation) associated with the adjacent residential dwellings (Figure 4).

**Non-Native Grasslands** - Non-native grasslands is a naturalized vegetation community typically dominated by annual grasses such as slender wild oat (*Avena barbata*), rip-gut (*Bromus diandrus*), and foxtail (*Bromus reubens*). Onsite this vegetation type is located adjacent to the mature coast live oak (*Quercus agrifolia*) trees that primarily occur along the northern portion of the property.

**Diegan Coastal Sage Scrub** - Diegan coastal sage scrub consists predominantly of low- growing, aromatic, and generally soft-leaved shrubs. Diegan coastal sage scrub is a native plant community characterized by soft, low, aromatic shrubs and subshrubs characteristically dominated by drought-deciduous species. This community typically occurs on sites with low moisture availability, such as dry slopes and clay-rich soils that are slow to release stored water. The representative species in this habitat type are California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), and laurel sumac (*Malosma laurina*).

**Coast Live Oak Woodland** – Coast live oak woodland is a vegetation community comprised primarily of coast live oak trees and an understory typically of non-native grasses and native shrubs including poison oak (*Toxicodendrum diversiloba*), and California buckwheat. Onsite this is the dominant vegetation type and is abundant both onsite and offsite along the slopes adjacent to the San Pasqual Valley (Figure 4).

### **General Wildlife Observations**

Wildlife species observed during the survey was limited to four invertebrate species, 15 bird species, three mammal species and one reptile. All species observed are common in developed areas and a full compendium of species observed can be found in Attachment B.

### **Sensitive Plant and Wildlife Species**

Sensitive biological resources are those defined as follows: (1) species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened population sizes; (2) species and habitat types recognized by local and regional resource agencies as sensitive; (3) habitat areas or plant communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; (4) wildlife corridors and habitat linkages; and (5) those species covered under the City's Multiple Species Conservation Program (MSCP) plan.

Six plant species were identified by the CNDDDB search as potentially occurring within the project vicinity. Sensitive plants species detected by the literature search included wart-stemmed ceanothus (*Ceanothus verrucosus*), California adolphia (*Adolphia californica*), San Diego ambrosia (*Ambrosia pumila*), San Diego sagewort (*Artemisia palmeri*), southern tarplant (*Centromadia parryi* ssp. *australis*) and smooth tarplant (*Centromadia pungens* ssp. *laevis*). No sensitive plant species were observed during the survey effort. No threatened or endangered plant species were detected on the subject property. There is a low potential for sensitive species including threatened or endangered plant species to occur on-site (Attachment C).

Sixteen sensitive wildlife species were also identified by the CNDDDB search as potentially occurring within the project vicinity. These species include arroyo toad (*Anaxyrus californicus*) southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's sage sparrow (*Artemisiospiza belli belli*), orangethroat whiptail (*Aspidoscelis hyperythra*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), Swainson's hawk (*Buteo swainsoni*), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), rosy boa (*Charina trivirgata*), red-diamond rattlesnake (*Crotalus ruber*), southwestern willow flycatcher (*Empidonax traillii extimus*), western pond turtle (*Emys marmorata*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), San Diego desert woodrat (*Neotoma lepida intermedia*), coast horned lizard (*Phrynosoma blainvillii*), coastal California gnatcatcher (*Polioptila californica californica*), western spadefoot (*Spea hammondi*), and least Bell's vireo (*Vireo bellii pusillus*). Of these species the California rufous-crowned sparrow, Bell's sage sparrow, orangthroat whiptail, coastal whiptail, rosy boa, red-diamond rattlesnake, San Diego black-tailed jackrabbit, San Diego desert woodrat, coast horned lizard, coastal California gnatcatcher and western spadefoot all have moderate potential to occur onsite. However, none of these sensitive wildlife species were detected during the survey. No threatened or endangered wildlife species were detected on the subject property (Attachment C).

### **Critical Habitat**

The northern portion of the study area contains critical habitat for the federally endangered arroyo toad (Figure 4). Please note that the critical habitat within the study area is outside of the proposed project impacts. Direct impacts to critical habitat will not occur as a result of the construction of the proposed residential project.

### **Jurisdictional Waters and Wetlands**

Wetlands or waters do not occur within the study area as observed in the field. Wetlands or waters as regulated by the United States Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB) or the California Department of Fish and Wildlife (CDFW) do not occur on-site.

### **Multiple Species Conservation Program (MSCP)**

The Multi-Habitat Planning Area (MHPA) is land that has been included within the City's Multiple Species Conservation Program's (MSCP) Subarea Plan for habitat conservation (City 1997). These areas have been determined to provide the necessary habitat quantity, quality and connectivity to support the future viability of San Diego's unique biodiversity and thus are considered to be a sensitive biological resource. Vegetation communities occurring within the MSCP study area have been divided into four tiers of sensitivity based on rarity and ecological importance. Tier I habitats, being the most sensitive, include southern foredunes, Torrey pine forest, coastal bluff scrub, maritime succulent scrub, maritime chaparral, native grasslands, and oak woodlands. Tier II includes coastal sage scrub and coastal sage scrub/chaparral. Tier IIIA includes mixed chaparral and chamise chaparral. Tier IIIB includes non-native grassland. Tier IV, the least sensitive classification, includes disturbed land, agriculture, and ornamental vegetation. In general, wetlands are considered highly sensitive habitats. Mitigation ratios are provided in the City Biological Guidelines (City 2010) for impacts to biological resources or vegetation communities and vary depending on the resource sensitivity (i.e., tier classification), and whether impacted resources are located within or outside of the MHPA.

The proposed project is located outside of the MHPA but the northern portion of the study parcel is located within the MHPA. The project will impact Tier II, Tier III and Tier IV landcover types that are outside of the City's MHPA. Impacts to Tier II-III will require mitigation. Impacts to Tier IV landcover types do not require mitigation. Since the project is adjacent to the MHPA the City's MHPA Land Use Adjacency Guidelines also apply. However, please note that the proposed development is approximately 150 feet away from the closest portion of the MHPA and also 100 feet lower in elevation.

### **MHPA Land Use Adjacency Guidelines**

Land uses planned or existing adjacent to the MHPA must comply with the MHPA Land Use Adjacency Guidelines. These guidelines are detailed in the City's MSCP Subarea Plan (City of San Diego 1997) and include guidance to ensure minimal impacts to the MHPA occur as a result of adjacent land uses. Specific items that must be addressed by projects adjacent to the MHPA include: Drainage, Toxics, Lighting, Noise, Barriers, Invasives, Brush Management, and Grading/Land Development. A discussion of the how the proposed project will comply with the MHPA Land Use Adjacency Guidelines is provided below:

1. Drainage – The proposed project will not drain directly into the MHPA. Developed areas onsite will not release toxins, chemicals, petroleum products, exotic plant materials and other elements that may degrade or harm the habitat quality within the adjacent MHPA. The proposed project has been designed to ensure storm water or any runoff from the site does not drain directly into the MHPA.
2. Toxics – As detailed in the drainage discussion toxic waste or chemicals will not be allowed to impact the habitat quality of the adjacent MHPA. The proposed project will not directly drain any toxics chemicals or waste into the MHPA.

3. Lighting – The proposed project will comply with the MHPA lighting guidelines by ensuring that all lighting onsite is directed away from the MHPA.
4. Noise – The project is designed to minimize noise impacts to the adjacent MHPA. The MHPA is approximately 150 feet away from the closest portion of the proposed residential building. In addition, the MHPA is also approximately 100-feet lower in elevation than where the proposed developed area will occur. These buffer distances will ensure that the proposed project does not degrade MHPA with adjacent noise. However, due to the site's location adjacent to the MHPA, construction noise will need to be avoided, if possible, during the breeding season of the California gnatcatcher (3/1-8/15). If construction is proposed during the breeding season for the species, U.S. Fish and Wildlife Service protocol surveys will be required in order to determine species presence/absence. If the species is/are not identified within the MHPA, no additional measures will be required. If present, measures to minimize noise impacts will be required and should include temporary noise walls/berms. If a survey is not conducted and construction is proposed during the species' breeding season, presence would be assumed, and a temporary wall/berm would be required. Noise levels from construction activities during the bird breeding season should not exceed 60 dBA hourly LEQ at the edge of the occupied MHPA, or the ambient noise level if noise levels already exceed 60 dBA hourly LEQ.
5. Barriers – The topography of the site which slopes steeply to the south (100-foot elevation differences between site pad and MHPA boundary) creates a natural barrier that will prevent unnecessary intrusion into the MHPA.
6. Invasives – The proposed project will not introduce invasive non-native plant material into or adjacent to the MHPA.
7. Brush Management – The proposed project complies with City regulation regarding the necessary brush management areas. This includes the establishment of brush management zone one within the developed pad area which is outside of the MHPA.
8. Grading/Land Development – Per the direction provided in the land use adjacency guidelines all grading and land improvements proposed have been included in the development footprint. The proposed project will not directly impact the MHPA with any grading or land development.
9. Bird strikes – The proposed project includes aluminum windows that face north towards the MHPA. However, since the MHPA is more than 150 feet away and also 100 feet lower in elevation the proposed project is not anticipated to create a bird strike issue that would directly or indirectly impact the MHPA.

## **Project Impact Analysis**

### Vegetation Communities

The proposed development of a new residence will directly impact 0.06-acre of coast live oak woodland, 0.70-acre of Diegan coastal sage scrub (Tier II), 0.35-acre of non-native grassland (III) and 0.03 acres of disturbed habitat (Tier IV) (Figure 5). Table 1 below details the total amount acres by each vegetation community onsite, the acreage within Brush Management Zone 2 (which is considered impact neutral) and the acres that will be directly impacted by the proposed project (proposed project improvements and Brush Management Zone 1) (Figure 5). It should be noted that brush management zones are proposed to be 35-feet wide for Zone 1 and 65-feet wide 1 for Zone 2. Zone 1 begins at the edge of the proposed residential structure and Zone 2 begins at the outer perimeter of Zone 1 (Figure 5). Table 1 also details the amount of habitat that will remain in the proposed project open space easement. This includes habitat both inside and outside the City's MHPA.

**Table 1. Project Impacts**

<b>Vegetation Communities</b>	<b>Acres within Project Parcel*</b>	<b>Project Impacts Including Zone 1 BMZ</b>	<b>BMZ Zone 2</b>	<b>Outside of MHPA and Proposed Project Features (not impacted by the proposed project)</b>	<b>Open Space Inside MHPA</b>
Coast Live Oak Woodland (Tier I)	1.52	0.00	0.06	0.96	0.50
Diegan Coastal Sage Scrub (Tier II)	1	0.37	0.33	0.30	0.00
Non-Native Grassland (Tier III)	0.4	0.06	0.29	0.05	0.00
Disturbed Habitat (Tier IV)	0.14	0.03	0.00	0.11	0.00
Urban/Developed Lands (Tier IV)	0.14	0.00	0.00	0.14	0.00
<b>Total</b>	<b>3.2</b>	<b>0.46</b>	<b>0.68</b>	<b>1.56</b>	<b>0.50</b>
* = Note that the development footprint does not include the existing access road					

Sensitive Species

The project has the potential to impact suitable habitat for the following sensitive wildlife species: California rufous-crowned sparrow, Bell’s sage sparrow, orange throat whiptail, coastal whiptail, rosy boa, red-diamond rattlesnake, San Diego black-tailed jackrabbit, San Diego desert woodrat, coast horned lizard, coastal California gnatcatcher and western spadefoot (aestivation habitat only – breeding habitat does not occur on-site).

Sensitive Habitats

Diegan coastal sage scrub and non-native grasslands are considered sensitive habitats by the City of San Diego and impacts to these habitat types will require mitigation. Coast live oak woodland is also considered a sensitive habitat type by the City, but BMZ 2 impacts to 0.06-acre of coast live oak woodland are considered impact neutral and will not require mitigation.

Jurisdictional Waters (Wetlands)

Wetlands or waters do not occur within the study area as observed in the field. Wetlands or waters as regulated by the United States Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB) or the California Department of Fish and Wildlife (CDFW) do not occur on-site and will not be impacted by the proposed project.

**Mitigation**

As discussed previously, impacts to Tier II and Tier III habitats require mitigation (Table 2). Table 2 below details the City’s mitigation ratios that are applicable to the proposed project. Please note that the project will be able to fully mitigate the proposed impacts by conserving on-site habitat within the MHPA. The proposed mitigation strategy is consistent with the City’s biology guidelines and specifically will involve mitigating impacts to Tier II and Tier III habitat by conserving Tier I habitat inside the MHPA (City Land Development Code Section B.1.b.2).

**Table 2 Mitigation Ratios**

TIER	MITIGATION RATIOS			
TIER II	Location of Preservation			
			Inside	Outside
	Location of Impact	Inside	1:1	2:1
		Outside	1:1	1.5:1
TIER III	Location of Preservation			
			Inside	Outside
	Location of Impact	Inside	1:1	1.5:1
		Outside	0.5:1	1:1

The required mitigation would involve at a minimum the conservation of 0.40-acre of habitat (Table 3) (1:1 ratio for Diegan coastal sage scrub and 0.5:1 ratio for non-native grassland). The project applicant will conserve a total of 0.50 acres of coast live oak woodland habitat inside and the MHPA (See Table 1 and Table 3). In addition, it

should be noted that an additional 1.31 acres of habitat will remain outside of the MHPA. The habitat outside of the MHPA includes 0.96-acre of coast live oak woodland, 0.30-acre of Diegan coastal sage scrub and 0.05-acre of non-native grassland.

**Table 3 Mitigation Ratios and Mitigation Acreages**

Vegetation Community	Acres Impacted	Mitigation Ratio	Required Mitigation Acreage
Diegan Coastal Sage Scrub (Tier II)	0.37	1:1	0.37
Non-native Grassland (Tier III)	0.06	0.5:1	0.03
<b>Total</b>	0.50	NA	0.40

**Conclusion and Recommendations**

The project as currently proposed will require mitigation for impacts to Diegan coastal sage scrub and non-native grassland habitats. Mitigation will be achieved through the onsite conservation of coast live oak woodland habitat within the City’s MHPA. It should also be noted that the proposed project is subject to the MHPA land use adjacency guidelines (detail on page four and five above).

If you have questions regarding the analysis or conclusions presented herein, please contact me at (760) 492-3342.



Korey Klutz  
Principal Biologist

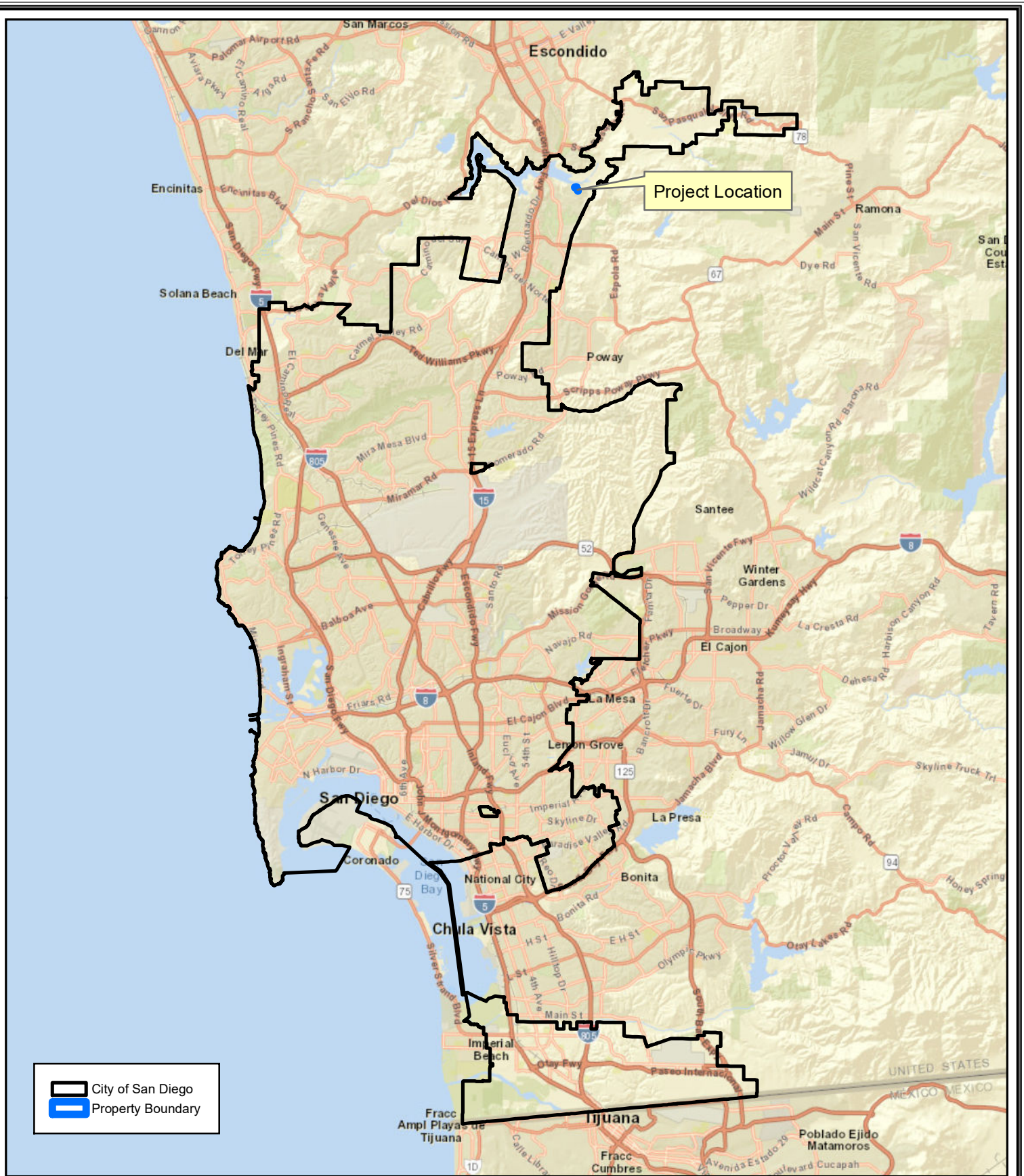
**Attachments**

- Figure 1 – Regional Location
- Figure 2 – Project Location
- Figure 3 – Soils
- Figure 4 – Biological and Jurisdictional Resources
- Figure 5 – Project Impacts
- Attachment A – Botanical Resources Observed
- Attachment B – Zoological Resources Observed
- Attachment C – Sensitive Species with the Potential to Occur
- Klutz Resume



## References

- Bowman, R. (1973). *Soil Survey of the San Diego Area, California, Part 1*. Accessed May 2018: [https://www.nrcs.usda.gov/Internet/FSE\\_MANUSCRIPTS/california/CA638/0/part1.pdf](https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/CA638/0/part1.pdf)
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Vardy Residence

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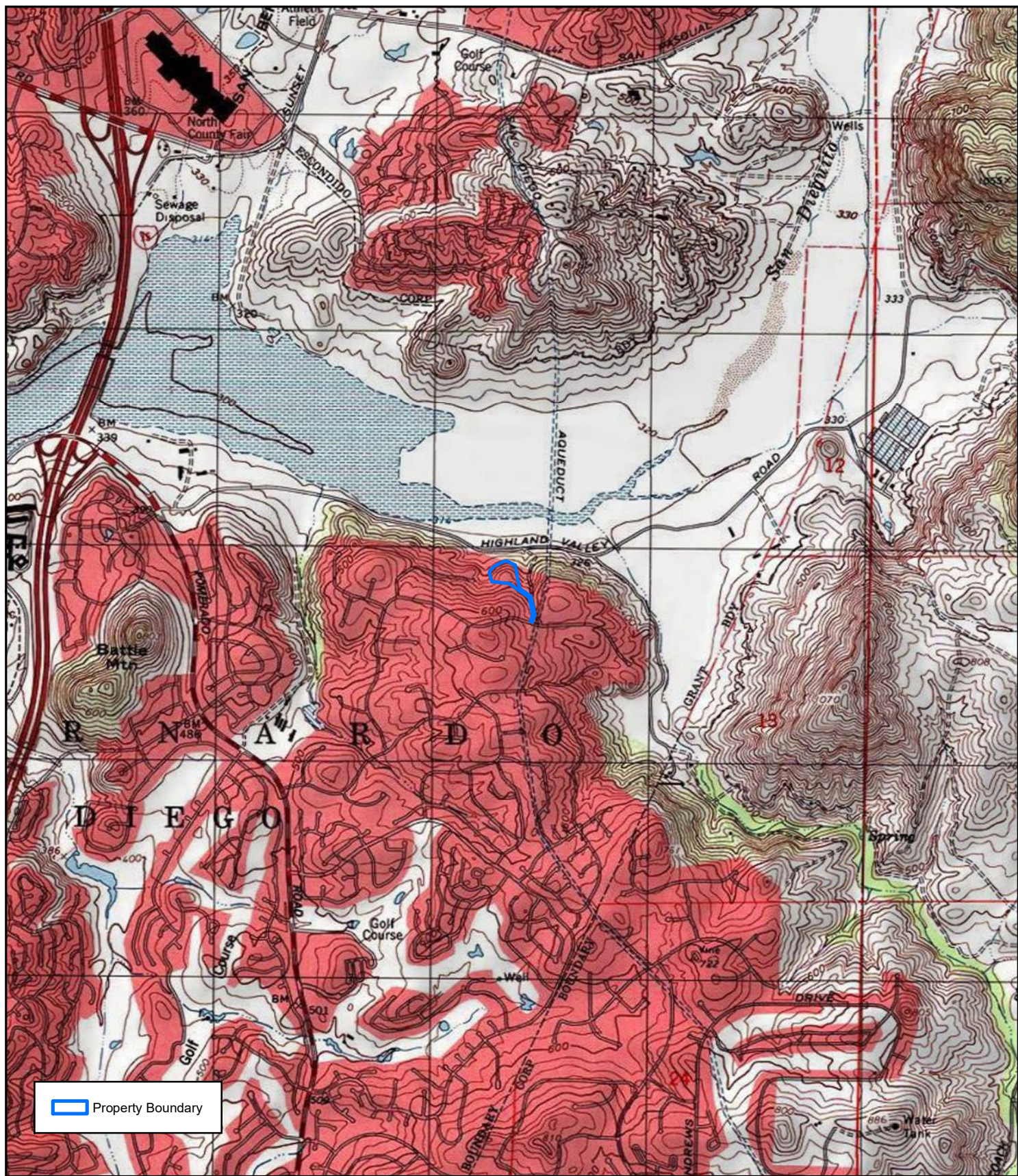
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0.25 Miles



**Figure 1**  
**Regional Location**



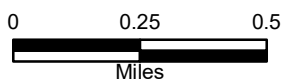
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
**Figure 2  
Project Location**

Fallbrook-Vista  
sandy loams, 15 to  
30 percent slopes

Cieneba very rocky  
coarse sandy loam, 30  
to 75 percent slopes

Fallbrook sandy  
loam, 9 to 15 percent  
slopes, eroded

Cieneba rocky coarse  
sandy loam, 9 to 30  
percent slopes , eroded

 Property Boundary  
 Soils

### Vardy Residence

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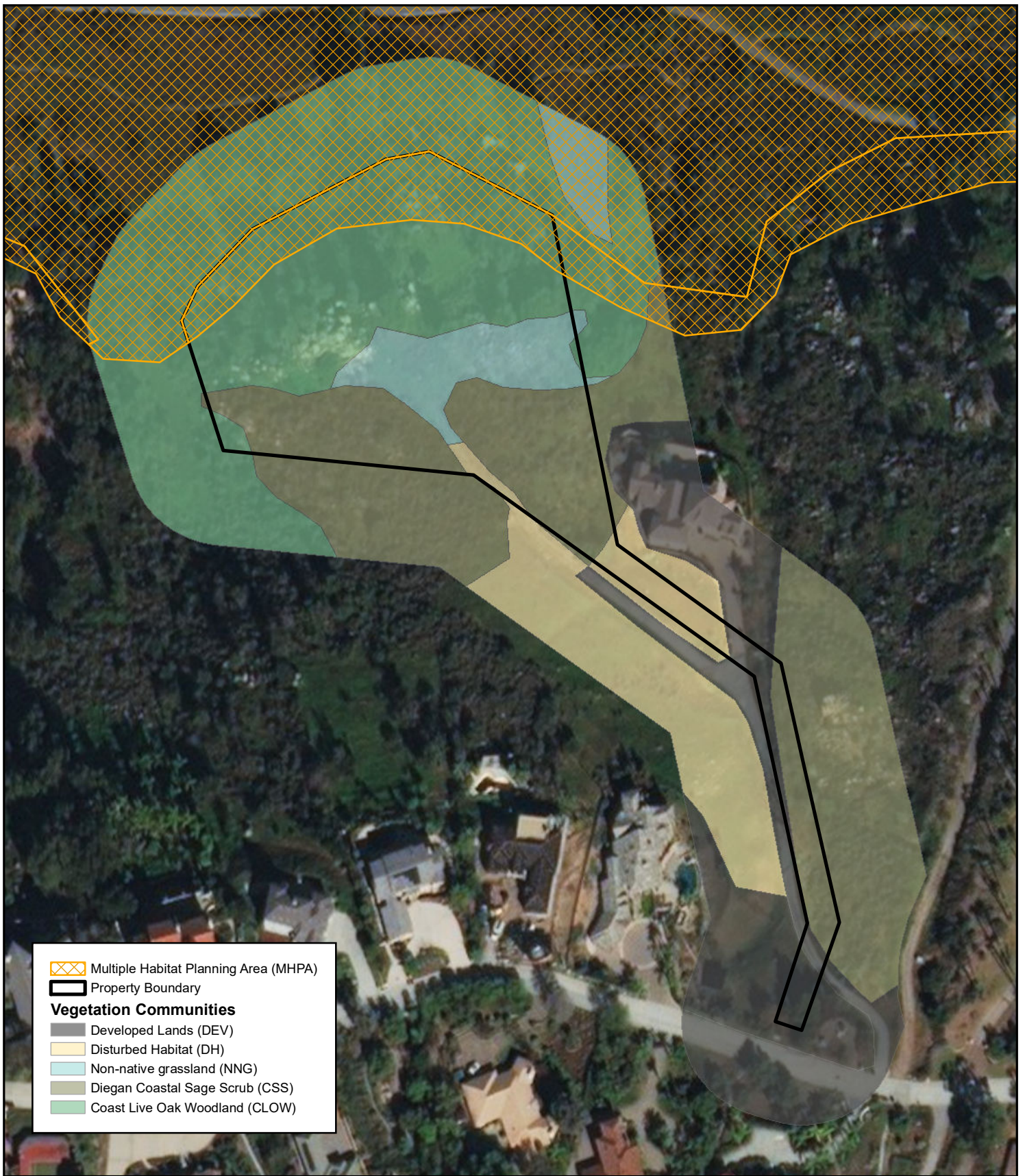
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**Figure 3**  
**Soils**



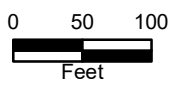
	Multiple Habitat Planning Area (MHPA)
	Property Boundary
<b>Vegetation Communities</b>	
	Developed Lands (DEV)
	Disturbed Habitat (DH)
	Non-native grassland (NNG)
	Diegan Coastal Sage Scrub (CSS)
	Coast Live Oak Woodland (CLOW)

**Vardy Residence**

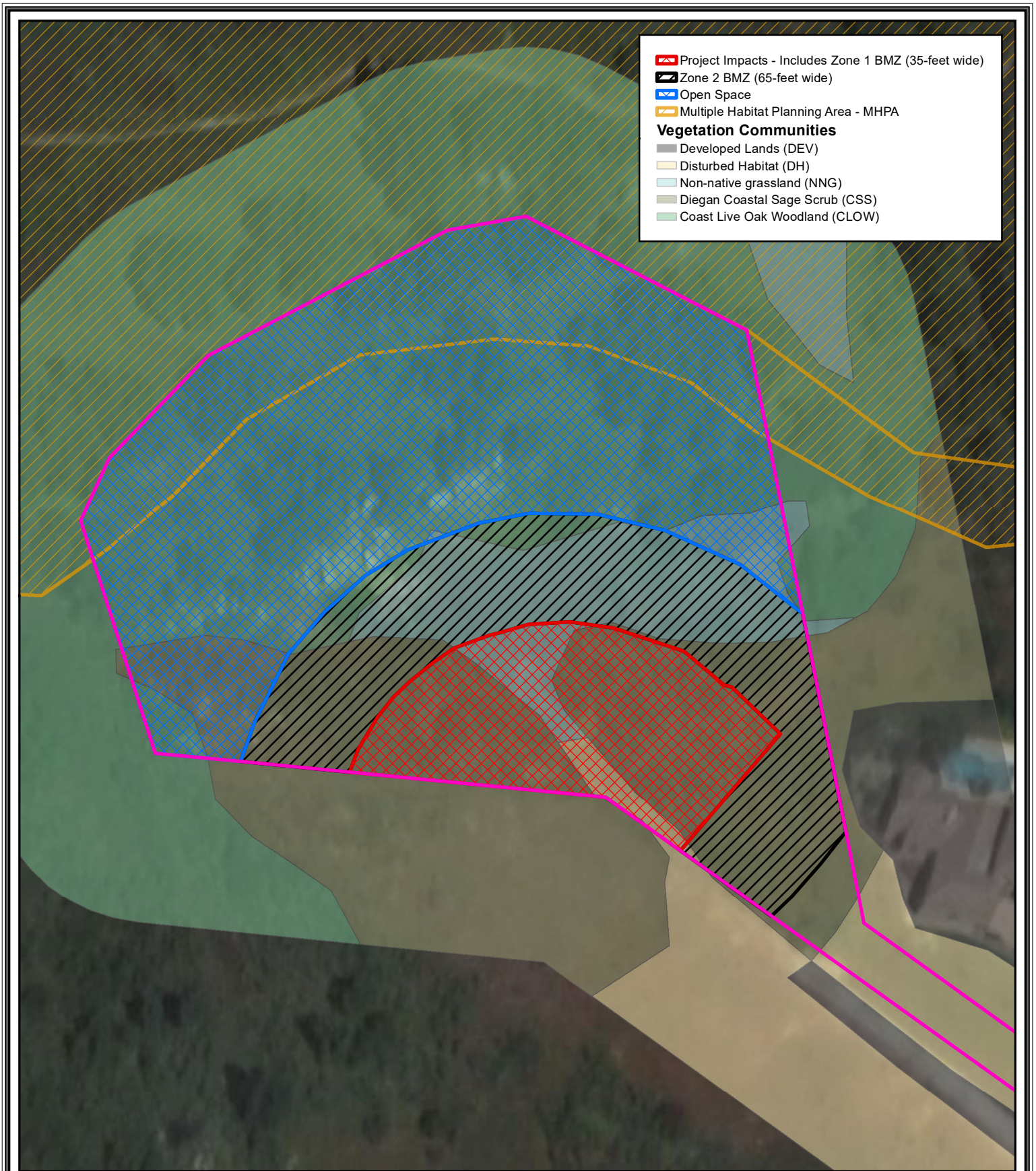
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**Figure 4**  
**Biological Resources**



- Project Impacts - Includes Zone 1 BMZ (35-foot wide)
- Zone 2 BMZ (65-foot wide)
- Open Space
- Multiple Habitat Planning Area - MHPA

**Vegetation Communities**

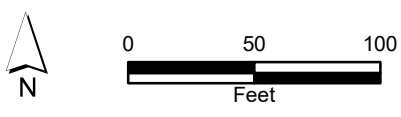
- Developed Lands (DEV)
- Disturbed Habitat (DH)
- Non-native grassland (NNG)
- Diegan Coastal Sage Scrub (CSS)
- Coast Live Oak Woodland (CLOW)

**Vardy Residence**

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**Figure 5**  
**Project Impacts**

### Attachment A Vascular Plants Observed

Family	Non-native *	Scientific Name	Common Name
Pteridaceae - Brake family			
		<i>Pellaea andromedifolia</i>	Coffee fern
Adoxaceae - Muskroot family			
		<i>Sambucus nigra ssp. caerulea</i>	Blue elderberry
Anacardiaceae - Sumac Or Cashew family			
		<i>Malosma laurina</i>	Laurel sumac
		<i>Rhus ovata</i>	Sugar bush
		<i>Toxicodendron diversilobum</i>	Western poison oak
Asteraceae - Sunflower family			
		<i>Acourtia microcephala</i>	Sacapellote
		<i>Artemisia californica</i>	California sagebrush
		<i>Baccharis salicifolia ssp. salicifolia</i>	Mule fat
		<i>Baccharis sarothroides</i>	Broom baccharis
		<i>Brickellia californica</i>	California brickellbush
	*	<i>Centaurea melitensis</i>	Tocalote
		<i>Eriophyllum confertiflorum</i>	Golden-yarrow, yellow-yarrow
	*	<i>Gazania linearis</i>	Treasureflower
		<i>Hazardia squarrosa</i>	Saw-toothed goldenbush
		<i>Heterotheca grandiflora</i>	Telegraph weed
	*	<i>Hypochaeris glabra</i>	Smooth cat's-ear
	*	<i>Logfia gallica</i>	Daggerleaf cottonrose
Brassicaceae - Mustard family			
	*	<i>Brassica nigra</i>	Black mustard
Chenopodiaceae - Goosefoot family			
	*	<i>Salsola tragus</i>	Russian thistle, tumbleweed
Convolvulaceae - Morning-glory family			
		<i>Calystegia macrostegia</i>	Island false bindweed
Cucurbitaceae - Gourd family			
		<i>Marah macrocarpa</i>	Chilicothe
Euphorbiaceae - Spurge family			
		<i>Croton setiger</i>	Dove weed

## Attachment A Vascular Plants Observed

Fabaceae - Legume family			
	*	<i>Acacia longifolia</i>	Sydney golden wattle
		<i>Acmispon americanus</i> var. <i>americanus</i>	American bird's foot trefoil
		<i>Acmispon glaber</i>	Deerweed, California broom
Fagaceae - Oak family			
		<i>Quercus agrifolia</i>	Coast live oak
Geraniaceae - Geranium family			
	*	<i>Erodium botrys</i>	Longbeak stork's bill
Lamiaceae - Mint family			
	*	<i>Marrubium vulgare</i>	Horehound
		<i>Salvia apiana</i>	White sage
Malvaceae - Mallow family			
		<i>Malacothamnus fasciculatus</i>	Chaparral mallow
Myrsinaceae - Myrsine family			
	*	<i>Anagallis arvensis</i>	Scarlet pimpernel
Nyctaginaceae - Four O'clock family			
		<i>Mirabilis laevis</i>	Desert wishbone-bush
Onagraceae - Evening Primrose family			
		<i>Clarkia purpurea</i>	Winecup Clarkia
Phrymaceae - Lopseed family			
		<i>Mimulus aurantiacus</i>	Bush monkeyflower
Plantaginaceae - Plantain family			
		<i>Antirrhinum nuttallianum</i>	
		<i>Keckiella antirrhinoides</i>	Snapdragon penstemon
Platanaceae - Plane Tree, Sycamore family			
	*	<i>Platanus xhispanica</i>	London plane tree
Plumbaginaceae - Leadwort family			
	*	<i>Limonium perezii</i>	Perez's sea lavender
Polemoniaceae - Phlox family			
		<i>Eriastrum filifolium</i>	Lavender woollystar
Polygonaceae - Buckwheat family			
		<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	Coastal California buckwheat
Ranunculaceae - Buttercup family			
		<i>Clematis pauciflora</i> <i>Clematis pauciflora</i>	Few flowered clematis



### Attachment A Vascular Plants Observed

Rhamnaceae - Buckthorn family			
		<i>Rhamnus crocea</i>	Spiny redberry
		<i>Rhamnus ilicifolia</i>	Hollyleaf redberry
Rubiaceae - Madder family			
		<i>Galium angustifolium ssp. angustifolium</i>	Narrowleaf bedstraw
		<i>Galium aparine</i>	Goose grass
Salicaceae - Willow family			
		<i>Salix lasiolepis</i>	Arroyo willow
Scrophulariaceae - Figwort family			
		<i>Scrophularia californica</i>	California figwort
Solanaceae - Nightshade family			
		<i>Datura wrightii</i>	Jimsonweed
	*	<i>Nicotiana glauca</i>	Tree tobacco
Tamaricaceae - Tamarisk family			
		<i>Tamarix sp.</i>	Tamarisk
Arecaceae - Palm family			
	*	<i>Phoenix canariensis</i>	Canary Island palm
	*	<i>Syagrus romanzoffiana</i>	Queen palm
Poaceae - Grass family			
	*	<i>Avena barbata</i>	Slender wild oat
	*	<i>Bromus diandrus</i>	Ripgut grass
	*	<i>Bromus hordeaceus</i>	Soft chess
	*	<i>Bromus madritensis</i>	Compact brome
		<i>Cortaderia sp.</i>	Pampas grass
		<i>Distichlis littoralis</i>	Shore grass
Themidaceae - Brodiaea family			
		<i>Dichelostemma capitatum</i>	Blue dicks

**Table X.** Wildlife Species Detected

<b>Scientific Name</b>	<b>Common Name</b>	<b>Special Status</b>
<b>INVERTEBRATES</b>		
<b>Insects</b>		
<i>Pogonomyrmex ssp.</i>	Harvester Ant	
* <i>Apis mellifera</i>	Honey Bee	
<b>Moths, Skippers and Butterflies</b>		
<i>Euphilotes bernardino</i>	Bernardino Dotted-Blue	
<i>Apodemia virgulti</i>	Behr's Metalmark	
<b>VERTEBRATES</b>		
<b>Reptiles</b>		
<i>Sceloporus occidentalis</i>	Western Fence Lizard	
<b>Birds</b>		
<i>Cathartes aura</i>	Turkey Vulture	
<i>Buteo lineatus</i>	Red-shouldered Hawk	
<i>Zenaida macroura</i>	Mourning Dove	
<i>Calypte anna</i>	Anna's Hummingbird	
<i>Calypte costae</i>	Costa's Hummingbird	
<i>Melanerpes formicivorus</i>	Acorn Woodpecker	
<i>Picoides nuttallii</i>	Nuttall's Woodpecker	
<i>Corvus brachyrhynchos</i>	American Crow	
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow	
<i>Chamaea fasciata</i>	Wrentit	
<i>Mimus polyglottos</i>	Northern Mockingbird	
<i>Phainopepla nitens</i>	Phainopepla	
<i>Icterus cucullatus</i>	Hooded Oriole	
<i>Carpodacus mexicanus</i>	House Finch	
<i>Carduelis psaltria</i>	Lesser Goldfinch	
<b>Mammals</b>		
<i>Sylvilagus audubonii</i>	Desert Cottontail	
<i>Thomomys bottae</i>	Botta's Pocket Gopher	
<i>Canis latrans</i>	Coyote	

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<b>Scientific Name</b>	<b>Common Name</b>	<b>Special Status</b>
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**Legend**

\*= Non-native or invasive species

Special Status:

Federal:

FE = Endangered

FT = Threatened

State:

SE = Endangered

ST =Threatened

CSC = California Species of Special Concern

CFP = California Fully Protected Species

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**ATTACHMENT C SPECIAL STATUS SPECIES WITH POTENTIAL TO OCCUR**

**Plant Species**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Special Status</b>	<b>Habitat Requirements</b>	<b>PTO</b>
California adolphia	<i>Adolphia californica</i>	CRPR 2	Perennial shrub that occurs in coastal sage scrub, non-native grassland and maritime succulent scrub.	Not detected, suitable habitat occurs onsite, but this species would have been easily detected during the field surveys. Low potential to occur onsite.
San Diego ambrosia	<i>Ambrosia pumila</i>	FE, CRPR 1B.1, City MSCP Covered	Rhizomatous herb. Sandy loam or clay soils in chaparral, coastal sage scrub, grassland, vernal pools; often in disturbed areas. Sometimes alkaline areas, creek beds, seasonally dry drainages, or floodplains; 66–1,362 ft. Blooming period: April–October	Not detected, suitable hydrological conditions not occur on site. This species has low potential to occur on site.
San Diego sagewort	<i>Artemisia palmeri</i>	CRPR 4.2	Deciduous shrub. Sandy soils in mesic areas in chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland; 49–3,002 ft. Blooming period: February–September	Not detected, suitable habitat occurs on site, but this species would have been easily detectable during field surveys. This species has low potential to occur on site.

Southern tarplant	<i>Centromadia parryi ssp. australis</i>		CRPR 1B.1	Annual herb. Found within the margin of marshes and swamps, vernal mesic soils in grassland, and vernal pools; 0–1,574 ft. Blooming period: May–November	Not detected, suitable mesic habitat does not occur on site.
Smooth tarplant	<i>Centromadia pungens ssp. laevis</i>		CRPR 1B.1	Annual herb. Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and grassland; 0–2,100 ft. Blooming period: April–September	Not detected, suitable (low) habitat does occur on site.
<b>Common Name</b>	<b>Scientific Name</b>	<b>Special Status</b>	<b>County</b>	<b>Habitat Requirements</b>	<b>PTO</b>
<b><u>Wildlife Species</u></b>					
Arroyo Toad	<i>Anaxyrus californicus</i>	FE, CSC, City MSCP Covered		Breeds in slow moving streams with sandy shallow pools with nearby sandbars and adjacent stream terraces. Inhabit upland habitats when not breeding, such as sycamore-cottonwood woodlands, oak woodlands, coastal sage scrub, chaparral and grassland from 984-3,280 ft	Not detected, suitable habitat does not occur on site.

Western Spadefoot	<i>Spea hammondi</i>	CSC	<p>Breeding habitat includes turbid pools with little to no cover such as vernal pools or other ephemeral ponds, pools in ephemeral streams, and cattle tanks.</p> <p>Upland habitat includes open areas with sandy/gravelly soils among mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains from sea level to 4,500 ft. Rain pools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.</p>	Not detected, suitable habitat does not occur on site.
Southwestern Pond Turtle	<i>Actinemys pallida</i>	CSC, City MSCP Covered	Inhabits slack- or slow-water aquatic habitat with basking sites, located in woodland, forest, and grasslands. This species is primarily aquatic and only moves to nearby adjacent areas for egg laying from sea level to approximately 6,600 ft.	Not detected, suitable habitat does not occur on site.
Blainville's Horned Lizard	<i>Phrynosoma blainvillii</i>	CSC, City MSCP Covered	Prefers open areas of sandy soil and low vegetation in valleys, foothills, and semiarid mountains from sea level to 8,000 ft; requires abundant ant colonies for foraging.	Not detected, suitable habitat occurs on site. Moderate potential remains for this species to occur.

Belding's Orange-throated Whiptail	<i>Aspidoscelis hyperythra beldingi</i>	WL, City MSCP Covered	Floodplains or terraces along streams and in low-elevation coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Closely tied to coastal sage scrub and chaparral habitats from sea level to 2,000 ft.	Not detected, suitable habitat occurs on site. Moderate potential remains for this species to occur.
San Diegan Tiger Whiptail	<i>Aspidoscelis tigris stejnegeri</i>	CSC	Found in arid and semiarid desert to open woodlands where the vegetation is sparse to allow for greater mobility (running) from sea level to 6,986 ft.	Not detected, suitable habitat occurs on site. Moderate potential remains for this species to occur.
Coastal Rosy Boa	<i>Lichanura trivirgata roseofusca</i>	None	Typically occurs in rocky areas in coastal sage scrub, chaparral, and desert scrub. Often associated with riparian areas, although does not require permanent water source.	Not detected, suitable habitat occurs on site. Moderate potential remains for this species to occur.
Red Diamond Rattlesnake	<i>Crotalus ruber</i>	CSC	Inhabits arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland and cultivated areas. Prefers rocky areas with dense vegetation from Southern California to Baja California, Mexico.	Not detected, suitable habitat occurs on site. Moderate potential remains for this species to occur.

Swainson's hawk	<i>Buteo swainsoni</i>	CE, City MSCP Covered	Prefer wide-open spaces of throughout the American West. They primarily forage in grasslands and agricultural feeds, but also use sage flats. Nests are placed in trees, often in the only tree visible for miles.	Not detected suitable habitat does not occur on site. Low potential remains for this species to occur.
Cactus wren	<i>Campylorhynchus brunneicapillus sandiegensis</i>	CSC, City MSCP Covered	Coastal sage scrub, maritime succulent scrub with dense stands of cactus thickets for breeding.	Not detected, suitable foraging habitat occurs on site. Moderate potential remains for this species to occur.
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	FE, SE, City MSCP Covered	Breeds in riparian woodlands with multi-storied canopy along rivers, streams, or other wetlands. Nesting typically occurs within close proximity of water or very saturated soil.	Not detected, suitable habitat does not occur on site.
Least Bell's Vireo	<i>Vireo bellii pusillus</i>	FE, SE, City MSCP Covered	Breed and forage in riparian habitat either near water or in dry portions of river bottoms; nests along margins of bushes and forages low to the ground; may also be found using mesquite and arrow weed in desert canyons.	Not detected, suitable habitat does not occur on site.



California Gnatcatcher	<i>Polioptila californica californica</i>	FT, CSC, City MSCP Covered	Breed and forage in scrub dominated plant communities, strongly associated with coastal scrub, sage scrub, and coastal succulent scrub communities. Distribution ranges from southern Ventura County down through Los Angeles, Orange, Riverside, San Bernardino and San Diego counties.	Not detected, suitable habitat occurs on site. Moderate potential remains for this species to occur.
Southern California Rufous-crowned Sparrow	<i>Aimophila ruficeps canescens</i>	City MSCP Covered	Breed and forage in chaparral, coastal sage scrub and coastal bluff scrub, especially in recently burned areas. Prefers sparsely vegetated scrubland on hillsides and canyons from 197-4,593 ft. for breeding.	Not detected, suitable habitat occurs on site. Moderate potential remains for this species to occur.
Bell's Sage Sparrow	<i>Artemisiospiza belli belli</i>	WL	Found in chaparral and coastal sage scrub in southern California and Baja California. This mostly ground-dwelling species prefers open chaparral and sage scrub and is one of the first species to inhabit recently burned habitat.	Not detected, suitable habitat occurs on site. Moderate potential remains for this species to occur.
San Diego Desert Woodrat	<i>Neotoma lepida intermedia</i>	CSC	Common to abundant in Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats. Also found in a variety of other habitats. Moderate to dense canopies preferred. Particularly abundant in rock outcrops and rocky cliffs and slopes. Elevational range from sea level to 8,500 ft.	Not detected, suitable habitat occurs on site. Moderate potential remains for this species to occur.

## **Korey Klutz – Principal Biologist, Restoration Planner**

Korey Klutz is a biologist and project manager with more than 20 years of experience managing and conducting biological services within the City and County of San Diego. Project management and research experience includes conservation biology, rare plant surveys, sensitive wildlife surveys, and habitat restoration planning. Korey also has considerable experience managing and conducting construction monitoring on mass grading sites, linear pipelines, residential developments, and school construction sites. He also has extensive experience in preparing biological technical reports for California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), Federal Endangered Species Act (FESA), California Endangered Species Act (CESA) and local jurisdictional agency compliance.

Korey brings valuable insight and knowledge of the biological resources that occur within the southwest. During this work he has acquired an intimate familiarity with local rare plants, threatened and endangered species, and native vegetation communities.

### **Education**

BS, Plant Evolution and Systematics, San Diego State University, 1999

### **Work Experience**

- Klutz Biological Consulting (2011 – Current)
- Jones & Stokes/ICF International (2001 – 2011)
- Tierra Environmental Services (1999 – 2001)
- San Diego State Foundation (1997-2000)

### **Licenses/Certifications**

- County of San Diego PDS approved consultant for Biology
- County of San Diego PDS approved consultant for Restoration Planning
- USFWS Permit QCB (TE-036065-2)

### **Areas of Expertise**

- Conservation Biology
- Restoration Planning
- Program and Project Management
- Mitigation Analysis, Planning and Management
- CEQA/NEPA, Environmental Compliance
- Special Status Species Surveys (Botany & Wildlife)
- Construction and Restoration Monitoring
- Habitat Assessment and Vegetation Mapping
- GIS Analysis and Mapping

### **Relevant Project Experience**

**County of San Diego Advanced Planning MSCP (2009-present)**

Lead conservation biologist working collaboratively with the CDFW, USFWS, and County staff on multiple County projects including the North County Multiple Species Conservation Program (MSCP), and the Draft Quino Amendment to the South County MSCP.

### **SDG&E Access Road Grading (2007-2010)**

Mr. Klutz served as the Project Manager and led a team of biologist who were responsible for creating a GIS database to document water crossings features that occurred along a network of SDG&E access roads. Work included sampling over 600 miles of dirt access roads and recording more than 1,600 water or erosion features. Biologist duties also included close coordination with SDG&E access road graders to ensure seasonal maintenance did not impact any jurisdictional features.

### **SDG&E Sunrise Powerlink (2006-2012)**

Duties included a variety of roles including general biological surveys for the proposed northern alignment and the approved southern alignment. Work performed included focused surveys for arroyo toad, rare plants, and QCB. Provided additional support on the project as needed including preparing PSR's for geo-technical testing, and eventually performed construction monitoring services related to the installation of the Preferred Alignment.

### **Otay Water District San Miguel Habitat Management Area (2002-2009)**

Lead Biologist and Habitat Restoration Specialist responsible for the long-term maintenance and management of the Otay Water District's 230-acre habitat preserve and associated on-site and off-site revegetation projects.

### **Wetland Mitigation GIS Database—City of San Diego Transportation Department, San Diego, California (2006)**

Prepared a GIS database to present the results of a series of biological surveys conducted with the intent of defining mitigation opportunities for the City's Transportation Department. The project included the use of handheld computers and a GPS to create the backbone of the GIS database within the field.

### **Lake Hodges Pump Station—City of San Diego Metropolitan MWWD, San Diego, California (2001)**

Conducted general biological surveys, technical report preparation, and construction monitoring for a linear pipeline maintenance project located within the San Dieguito River Park, San Diego, California.