

## Biological Resource Letter Report and Forensic Assessment Dyke Major Grading PDS2016-LDGRMJ-30079

Prepared for the County of San Diego

UTM (NAD 83): 11-S: 520,000 mE; 3,634,000mN; Latitude 32° 50' 39.6" N; Longitude 116° 47' 15.12" W APN: 403-380-64-00

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January 11, 2023

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# Biological Resource Letter Report and Forensic Assessment Dyke Major Grading PDS2016-LDGRMJ-30079

### **Summary**

The forensic biological assessment indicated that prior to the discharge of fill on the parcel, the site was covered by Granitic Southern Mixed Chaparral. Dated arial photographs indicate the sequence of activity on the site since 1985. The site had been part of a prior regional wildlands fire a few years prior to the fill activity. The native soil substrate of the site is the widespread Cieneba series soils. Some host plants for the Quino Checkerspot Butterfly occur in the native chaparral on the periphery of the site and were identified by dried remains due to the summer season of the assessment. No sage scrub habitat for the Coastal California Gnatcatcher occurs or probably occurred on the site or nearby area prior to filing. The site has been filled and the slopes re-contoured with a western drainage feature restored within the property boundary. Mitigation involves offsite purchase of credits through a County approved mitigation bank.

### **Project Description**

At the direction of County staff, a forensic biological assessment of the 3.86 acres (APN: 403380-64-00), and adjacent off-site areas to the north and west, was made on behalf of the landowner through the assistance of Snipes-Dye Associates. The proposed project is to rectify a grading violation, control erosion on the fill site, and remove the western, off-site fill incursion of 0.29 acre, and revegetate the area, according to an erosion control plan prepared by a County authorized specialist.

### **Purpose of Study**

The County of San Diego requested, in a document dated 11 October 2016, that the property owner submit a biology survey and forensic assessment which identifies any sensitive habitats which may have existed on the project site prior to the clearing and grading and disposal of aggregate construction materials.

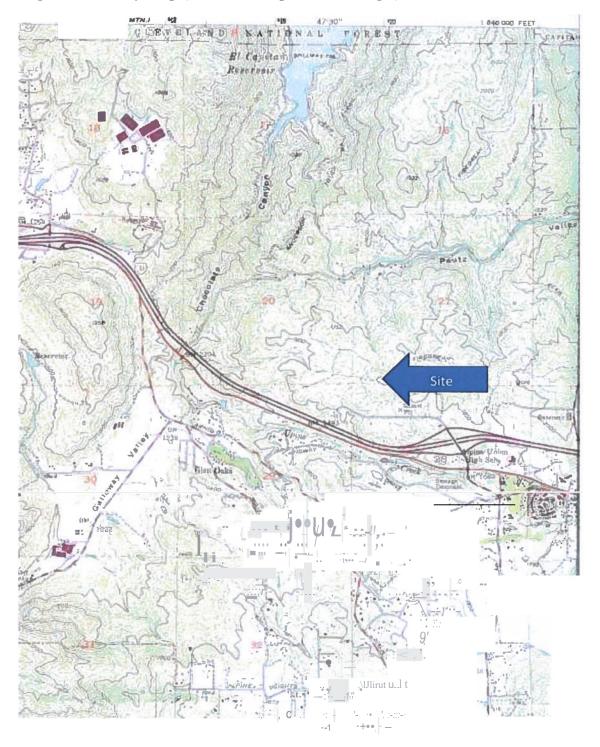
To determine the impact to native vegetation that existed on the site prior to the clearing, grading, and filling, the forensic assessment utilized arial photographs of the site prior to clearing. Since the site was modified following the implementation of the MSCP program, part of the assessment is to determine the vegetation affected and its sensitivity level and the associated compensating mitigation required.

### **Project Setting**

The site is one of many private parcels at the west end of Tavern Road, north of Interstate Highway 8. The site lies on the southern side of a small east-west tending ridge in the unincorporated Alpine area of San Diego County. The coordinates of the site are: UTM (NAO83): 11-S: 520,000 mE; 3,634,000mN; Latitude 32° 50' 39.6" N; Longitude 116° 47' 15.12" W. It lies in the north portion of Section 28, RIE T15S. Elevation range of the site involves a highpoint of 1786 feet at northeastern comer and 1730 feet at southwestern area.

Soil mapped for the site is Cieneba rocky coarse sandy loam, 9 to 30 percent slopes, eroded (CmE2) (Bowman 1973). Surficial geology of the site is Cretaceous Las Bancas Tonalite of the granitic batholith (Victoria 1978).

Figure 1. Vicinity Map (USGS 7.5' Alpine Quadrangle)



### Methods

Pacific Southwest conducted a search of the California Department of Fish and Wildlife's Natural Diversity Data Base (CNDDB) for the USGS 7.5' Viejas Mountain and Alpine topographic quadrangles and reviewed the County of San Diego of listings of sensitive plant and animal taxa monitored in the region. This search revealed several federal or state-listed species, or MSCP Covered Species that have been recorded within the region of the property. Another site assessment has been in progress with the consultant on the east side of the Alpine region, so the assessment of habitats was with similar results.

General zoological and botanical surveys, as well as focused surveys for listed species, their habitat components and host plants, have been previously conducted in the Alpine area of San Diego County by Pacific Southwest. The entire property, as well as adjacent, natively vegetated lands were surveyed on foot, visiting all vegetation types while watching and listening for wildlife. Species presence was primarily determined by visual observation and/or auditory detection. Binoculars (8x50-power) were used to assist in the identification of wildlife.

The property is sufficiently small that the entire area was visited during one visit. Mr. Beauchamp's observations are the basis for this assessment. The consulting biologist walked the site and the native-vegetation peripheral properties on 25 August 2021 from 10:00 am to 11:03 am. During the time of the survey the air temperature was 80° F with hazy breeze-less skies. Vegetation communities were mapped on various ages of aerial photographs of the property. Conversation with the on-site guard was also generally useful in determining animal use of the site.

### **Regional Context**

The site lies in a mesa-like feature, north of Interstate 8. Much of the surrounding area has been similarly altered for storage and commercial/industrial uses. Residential housing lies to the east. The site is located within the Metro-Lakeside-Jamul segment of the County's Multiple Species Conservation Program (MSCP) and outside of the Pre-Approved Mitigation Area (PAMA).

### Results

### **Biological Resources Map**

The topographic map of the site depicting the current fill condition was used to assess the site, as well as to map the extent of disturbed and native conditions. The fill activity entered into adjacent land owned by others to the east and northwest comer. The extent of this off-site incursion and fill was clearly marked by prior surveyed staking and surface delineation.

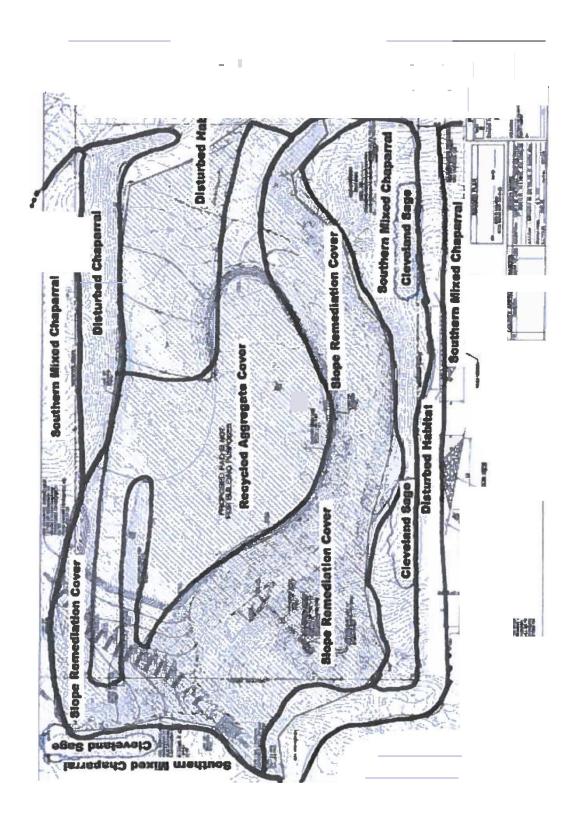
### Habitats

Below are discussed the various cover types on the site.

### Granitic Southern Mixed Chaparral, 0.5 acre, #37121

The chaparral on the small, undisturbed periphery along the southern site boundary, as well as in the adjacent off-site slopes and gullies is representative of the Alpine area. The presence of Cleveland Sage (Salvia clevelandii) gave cause to assess the potential for gabbroic soils, but only the Cleveland Sage was noted. Elsewhere in the Alpine area, i.e., Palo Verde Ranch, where the author has been involved the assessment of the site since 2004, gabbroic soils do occur with Cleveland Sage and also Star Golden Rush (Xanthisma juncea). However, the chaparral on this subject site is not mafic chaparral.

Figure 2. Biotic Resource Map



### Disturbed Granitic Southern Mixed Chaparral, 0.26 acre, #37121

A slope at the northeastern comer of the site was brushed in the past to remove the vegetative cover. This vegetation has regrown. The disturbance, however, as resulted in the introduction of African Fountain grass (*Pennisetum setaceum*) on the slope.

### Disturbed Habitat, 0.81 acre, #11300 (off-site 0.04 acre)

The verge of the road to the site as well as the graded dirt road on the off-site southern boundary of the property is also devoid of vegetation.

### Recycled Aggregate Cover, 0.75 acre, #11300

The top, lever surface of the fill pad has a cover of sub-one-inch sized crushed asphalt roadbed. Aside from the invasion of Stinkweed (Dittrichia graveolens), the feature is bare and serves to abate dust generation.

### Slope Remediation Cover, 1.54 acre, #11300 (off-site 0.3acre)

The slopes about the fill pad have an eclectic collection of vegetation types, largely dominated by Star-thistle (*Centaurea melitensis*), as well as some planted landscape stock, largely Acacias that persist despite lack of irrigation. Nonetheless, this cover seems to be holding the slope in light of the absence of erosion rills down the slopes.

### **Prior Vegetation Cover**

Based upon the observation of on-site remnants and adjacent vegetation, the site was covered by Granite Southern Mixed Chaparral prior to the filling and grading activity. This involved an area of 3.86 acres.

### **Plants**

The observed flora of the site is listed in Appendix 1. The floristic composition is typical of exposed chaparral areas of the foothill regions of central San Diego County. The site had been burned prior to 2003, so some successional flora, i.e., Deerweed (*Acmispon glabra*), was evident about the natural areas, on site and on adjacent lands.

### **Animals**

Animals observed or reported on the site are listed in Appendix 2. The faunal composition of the site reflects the open nature of the site, with no closed canopy associated species observed or reported.

### **Sensitive Resources**

### **Sensitive Vegetation Communities**

The Granitic Southern Mixed Chaparral on the site is considered a Tier III habitat, requiring mitigation if impacted.

### **Sensitive Plants**

The Cleveland Sage (Salvia clevelandii) was the local sensitive plant taxon observed. This is a local endemic without any listing or legislated status.

No other special-status plant species were noted on the site. Appendices 3 address the status of other sensitive plants speculated to be on the site and their potential to occur.

### **Sensitive Animals**

County staff indicated that focused searches were to be made for two animal species known in the Alpine area. They are discussed below. Appendices 4 below addresses the status of other sensitive animals speculated to be on the site and their potential to occur.

### Ouino Checkerspot Butterfly (Euphydryas editha quino)

A nearby assessed site, Palo Verde Ranch, was the subject of a similar County staff request. Protocol surveys there in 2006, 2018 and 2019 did not encounter this butterfly. The protocol survey for sensitive lepidopterans was negative (Sage 2018a). Similar conditions occur on the subject site, as determined by host plant searches and comparison of habitats of know QCB occurrences, i.e., Campo Indian Reservation landfill project (PSBS 1999). The site assessmentwas not done during the flight season and, in drought years since such surveys results are not approved. The flight season generally spans late February to early March.

The QCB was listed as an Endangered species by the U.S. Fish and Wildlife Service (USFWS) on 16 January 1997 (FR 62: 2313-2322 2313) (USFWS 1997). The QCB has no state listed status by the California Department of Fish and Game (CDFG).

The purpose of this habitat assessment was to determine if the site could have included QCB habitat based on observations onsite and in adjacent areas. The Wright's Field observation has been the only valid sighting and is not a recent occurrence.

The project site had a minimal population of host plant, *Cordylanthus rigidus* (Birds-beak). Although QCB are known to occur in the Alpine area, they have not been recently documented in the area. No evidence of take can be attributed to the prior action on the project site, particularly in light of the pre-listing clearing of the site.

### Coastal California Gnatcatcher (Polioptila californica californica)

The project site is east of the known range of the Coastal California Gnatcatcher (Unitt 2004, USFWS 2007). Also, the lack of adequate sage scrub precludes the presence of these birds atthis site. A subsequent protocol survey for the bird was performed on the adjacent, southern parcel in August 2022 with negative results (Sage Wildlife Biology 2022).

No special-status wildlife species were noted on the site.

### **Jurisdictional Wetlands and Waterways**

The site contains two drainage features that qualify only as Waters of the State of California, and not as local or federal features. The eastern feature is intact, and the western feature has been restored to the pre-grading condition, without any loss of original function. These areas appear to have been the result of the subject grading, and were not present prior to the grading, (see lower left photograph, page 36). No wetland habitat occurs on the adjacent downstream areas.

### Wildlife Corridors

Wildfire movement of meso-predators and deer occurs in the area, but the truck traffic and fencing are major hinderances of use from animals entering from the east in the DescansoRanger District of the Cleveland National Forest.

### **Impacts**

Dated arial photographs of the project site indicated that it was clear of native vegetation as of May 1994, as seen by the reduced density of vegetation from apparent resprouting of the chaparral. A February 2004 image shows that the area had been through a fire. The first grading of the site and deposition of stockpile materials appeared between October 2012 and November 2012. The operative date of the South County Subarea MSCP is 1 January 1997.

### BIOLOGICAL RESOURCE CORE AREA (BRCA)

The area of the project site has been so fragmented by clearings, fencing and roadways over the past 30 year such that it no longer serves and any regionally significant habitat area. The massive extent of similar habitat in the adjacent Cleveland National Forest supplies this function in what remaining of the natural habitat of eastern San Diego County. For these reasons, the site also does not meet any of the criteria of a BRCA under Section 86.506(a)(1) of the Biological Mitigation Ordinance (BMO).

### **Direct Impacts**

The assumption, therefore, based upon the adjacent, largely undisturbed chaparral vegetation, is that the site was covered with Southern Mixed Chaparral. The lack of adequate larval host plants and limited nectar plants for adults, indicates that Quino Checkerspot Butterfly was not involved on the site. Similarly, no habitat for the Coastal California Gnatcatcher is on or near the site.

Due to the majority of the site being filled or graded, and its limited extent in are already of developed parcels, revegetation is not a viable option. Off-site purchase of credits is a more logical and sustainable option. Similarly, imposition of an open space easement would serve not practical function due to the limited parcel size, therefore 1.68 acres of credits would be purchased at a County approved mitigation bank, within a BRCA in the MSCP.

Table 1. Summary of Cover Types, Impact and Mitigation Requirement

Cover type	Present cover (acres)	Off- site (acre s)	Original cover-acres	Mitigation ratio (if off- site mitigation is BRCA)	Required mitigation (acres)
Granitic Southern Mixed Chaparral	0.50	0.0	3.86	0.5:1	3.36x0.5=1.68
Disturbed Chaparral	0.26	0.0	0.0		
Disturbed Habitat	0.81	0.04	0.0		
Recycled Aggregate Cover	0.75		0.0		
Slope Remediation Cover	1.54	0.30	0.0		
Total	3.68	0.34	3.86		1.68

Figure 3. May 1994 First Vegetation Clearing

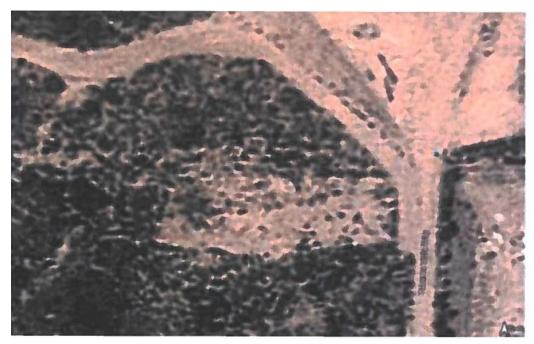


Figure 4. February 2004 Fire

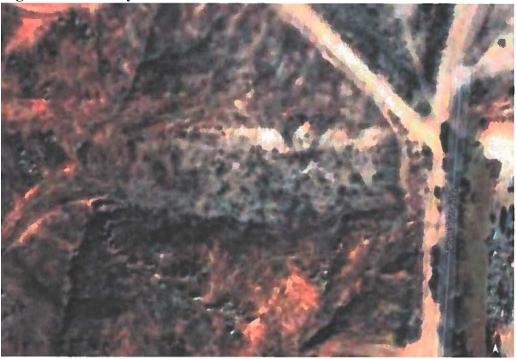


Figure 5. November 2013 First filling



### **Conclusions and Mitigation Recommendations**

The prior filling resulted in the removal of 3.36 acres of Granitic Southern Mixed Chaparral vegetation. The proposed project is to stabilize the fill area and adjacent slopes. Additional grading is proposed to stabilize the slope from erosion damage and contain and attenuate run-off into the two adjacent gullies to the south. Best Management Practices would be utilized to stabilize slopes for erosion control, using native plant species from the area. Mitigation would be by off-site mitigation credit acquisition.

### **Cumulative Impacts**

The site is one of several adjacent areas cleared of native vegetation for commercial or industrial purposes. The action is in concert with planned uses of this area of Alpine. No significant areas of wildlife habitat occur in this area. Cumulative loss of this habitat reduces the potential for wildfires. Fencing continues to fragment the area. The subject site represents an infill of the continuing clearing of natural vegetation in this area.

#### REFERENCES

- American Ornithologists' Union. 1998. Checklist of North American Birds, 7<sup>th</sup> Edition. American Ornithologists' Union. 829 pp.
- Ballmer, G. R., D. C. Hawks, K. H. Osborne, and G. F. Pratt. 2001. The Quino Checkerspot Butterfly (*Euphydryas editha quino*). Year 2000 QCB Workshop.
- Bowman, R.H. 1973. Soil Survey of the San Diego Area, California, Part I. United States Department of Agriculture, Soil Conservation Service and Forest Service, in cooperation with the University of California Agricultural Experiment Station, The United States Marine Corps, the Department of Housing and Urban Development, and the County of San Diego Planning Department. December, 1973.
- California Department of Fish and Game. 2012. Designated endangered, threatened or rare plants and candidates with official listing dates. California Department of Fish and Game, January 2012. California Native Plant Society. 2012. Inventory of Rare and Endangered Plants of California (on-line edition). California Native Plant Society. Sacramento, CA.
- Chesser, R. Terry, Richard C. Banks, F. Keith Barker, Carla Cicero, Jon L. Dunn, Andrew W. Kratter, Irby J. Lovette, Pamela C. Rasmussen, J. V. Remsen, James D. Rising, Douglas F. Stotz, and Kevin Winker. 2012. Fifty-third supplement to the American Ornithologists' Union Check- List of North American Birds. Auk 129(3): 573-588.
- Emmel, T. C. and J. F. Emmel. 1973. The Butterflies of Southern California. Natural History Museum of Los Angeles County. Science Series 26. 148 pp.
- Garth, J. S. and J. W Tilden. 1986. California Butterflies. University of California Press. Berkeley, California. 246 pp.
- Hickman, J.C., ed. 1993. The Jepson Manual, Higher Plants of California. University of California Press, Berkeley. 1400 pp.
- Holland, R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California (as amended 1996). California Department of Fish and Game, Sacramento. 156 pp.
- Jameson, E.W., Jr. and H.J. Peeters. 2004. California Mammals. University of California Press, Berkeley. 440 pp.
- Kennedy, Michael P. and Tan, Siang S. 2007. Geological Map of the Oceanside 30' x 60' Quadrangle, California. Compiled by Michael P. Kennedy and Siang S. Tan 2007, State of California, Department of Conservation, and U.S. Geological Survey
- Mattoni, R., G. F. Pratt, T. R. Longcore, J. F. Emmel, and J. N. George. 1997. The endangered Quino checkerspot butterfly, *Euphydryas editha quino* (Lepidoptera: Nymphalidae). J. Res. Lepid. 34:99-118.
- Murphy, D. D. and R.R. White. 1984. Rainfall, resources, and dispersal in southern populations of *Euphydryas editha* (Lepidoptera: Nymphalidae). Pan-Pac Entomol. 60:350-354.
- Oberbauer, T. A., 1996. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions.
- Opler, P.A. 1986. A Field Guide to Western Butterflies. Peterson Field Guides. Houghton Mifflin Company. 215 Park Avenue South, New York, New York. 10003. 370 pp.

- Osborne, K.H. 1998. Microhabitat conditions associated with the distribution of post-diapauselarvae of *Euphydryas editha quino* and its host, *Plantago erecta* (Chapter 4). In A description of arthropod community structure in southern Californian coastal sage scrub(Chapter 4). Master's Thesis, University of California, Riverside, CA.
- Pacific Southwest Biological Services Inc. 1999 Biological Assessment of the Campo LandFill Site. Campo Tribe of Kumeyaay Indians.
- Pyle, R. M. 1981. National Audubon Society Field Guide to North American Butterflies. Alfred A. Knopf, Inc. New York.
- Sage Wildlife Biology. 2019b. Alpine Palo Verde Ranch Project: Quino CheckerspotButterfly Survey Report, July 11, 2019. Prepared for Pacific Southwest Biological Services, Inc.
- Sage Wildlife Biology. 2022. Taberna Way General Wildlife Reconnaissance Surveys Alpine, San Diego County, California 23 August 2022.
- Scott, J, A. 1986. The Butterflies of North America, a Natural History and Fields Guide. Stanford University Press, Stanford, California. 583 pp.
- Todd, Victoria R. 1978. Geologic Map of the Viejas Mountain Quadrangle, San Diego County, California. United States Department of the Interior, Geological Survey, Open-file Report 78- 113.
- Unitt, P. San Diego County Bird Atlas. San Diego Society of Natural History, Proceedings No. 39, 31 October 2004. 645 p.

### LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

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### Consultant Resume

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Born July 15, 1946, National City, California.

Married 16 November 1968 to Martha M. Gorham, having two daughters; Vanessa Beth, PhD, Plant Biology, Professor of Biology, Towson University, Maryland; and Nolina Lynn, English teacher, Buena Park High School, August 2004.

#### NATIONALITY

Immigrated as a Mexican Citizen 2004 with bi-national citizenship

#### **EDUCATION**

1972-1974 Post-graduate study at City University of New York and New York Botanical Garden, NY. 1972 M.

Sc., Biology, California State University, San Diego. Master's Thesis: Floral Diversity of San Diego

County, California.

1968 B.Sc., Botany, San Diego State College

#### MILITARY EXPERIENCE

Commissioned as an Ensign, U.S. Naval Reserve 1968 -1970 aboard USS Henry W. Tucker (DD-875) Western Pacific and Viet Nam Conflict.

#### **EMPLOYMENT HISTORY**

Pacific Southwest Biological Services, Inc., consultant biologist and owner, 1976-presentTierra Madre Consultants, Inc., consultant biologist and owner. 1995-present

Asesoria Biológica y Ambiental, botanico, Tijuana, B Cfa 1993-1996

Ferrocarriles Peninsulares del Noroeste, gerente general, Tijuana, B Cfa 2003-presentSweetwater River Press, author and owner. 1986-present

#### PROFESSIONAL EXPERIENCE

#### **Certifications**

Responsible Corporate Officer – California Landscape Contractor, C-27 License #5431247Certified Wetlands Delineator # 1697

Certified Arborist

### **COMMUNITY PARTICIPATION**

**Member**, Technical Advisory Committee, Office of Spill Prevention and Response, Department of Fish and Game, appointed by the Speaker of the Assembly. 2002-2018

**Honorary Board Member,** Women's Transportation Seminar, San Diego Chapter. 1998-present **Director,** Sweetwater Authority, appointed representative of the City of National City. 2002-2009 **City Treasurer,** City of National City 2008-present

Councilman, City of National City, California. 1994-2002

Member, Joint Committee on Regional Transit. 1998-2002

Chairman, Member, MTDB/S D Unified Port District Metropolitan Freight Rail Committee. 1998-2002

Director, Metropolitan Transit Development Board, San Diego, California. 1995-2002

Member, Finance Committee, San Diego Trolley. 1999-2001

Sponsor, National City Girl's Amateur Softball Association Team. 1998-2002

Chairman, San Diego and Arizona Eastern Railway-MTDB Ad Hoc Committee. 1998-2000

Director, San Diego Trolley. June!998-June 2001

Rey Mago - San Diego Railroad Museum, Reyes Magos Event, Tecate, B. Cfa., Mexico. 1998-2004

Vice-Mayor, City of National City, California. 1997, 2001

Board Member, National City Community Food Bank Board of Directors. 1996-2003

Director, Futures Foundation, appointed by Supervisor Cox. 2000-2003

Member, Otay River Valley Regional Park Citizens' Adv. Comm., appointed by Supervisor Cox. 2001-2004 Chairman, Board of Trustees, First Baptist Church of National City, California. 1995-1998, 2000 Board Member, National City Living History Preserve (Stein Fann) Board of Directors. 1993-2016. Board Member, San Diego Electric Railway Association, 2005-present

**Organist**, First Baptist Church of N C, 1989-present and First Congregational Ch, N C 1996-present **Chairman**, Planning Commission, National City, California. 1985-1988

Member, California Native Plant Advisory Committee, Department of Fish and Game. 1977-1986.

Member, Local Board, Selective Service System, South Bay, San Diego. 1977-1980

### RELATED ACTIVITIES

**Consulting Arborist,** National Christmas Tree – Calculation of Weight of Engelmann Spruce for PCL for delivery to the White House, Christmas, 1996.

Director, Southwest Wetlands Interpretive Association. 1981-1982.

Chairman, Public Information Committee, California Native Plant Society. 1980-1982.

Editor, Association of Western Native Plant Societies Bulletin, Hesperian. 1979-198 I.

**Editor** for the American Plant Life Society journal, *Herbertia*, an international botanical journal of petaloid monocots. 1977- 1989.

**Editor**, *Bulletin* of the California Native Plant Society. 1977-1980. **Member**, San Diego County Parks Advisory Committee, 1975-1980. **Member**, San Diego County Off-Road Advisory Committee, 1974-1975.

### REPORTS AND PUBLICATIONS Book

A Flora of San Diego County, California. Sweetwater River Press. 1986. 254 pp. Flora Peninsularae – Listado Floristico de la Peninsula de Baja California, Mexico – in preparation

#### In-house Reports

Pacific Southwest Biological Services in-house biological impact assessment reports. Prepared or supervised production of survey reports for over 2500 private and public development projects in Southern California.

#### Periodical Articles

California's Wild Garden-A Living Legacy, California Department of Fish and Game & California Native Plant Society, Phyllis M. Faber, ed. 1997. Chapters on Torrey Pine Forest and Otay Mountain Metavolcanic Peaks by **RMB**. Aliso 14(3):197-203. 1996. Baccharis ma/ibuensis (Asteraceae): A New Species From The Santa Monica Mountains, California.

Environmental Monitor, Spring 1994. Fire: The Recycler... The Reviver.

San Diego Home/Garden 9(11): 65-127, July 1988. Special Report: Return to the Native.

San Clemente Island: Remodeling the Museum, pp. 575-8 in Conservation and Management of Rare and Endangered Plants, Proceedings for a Conference of the California Native Plant Society, Thomas S. Elias, ed. 1987. CNPS, Sacramento. 1987.

Phytologia 46(4):216-222, July 1980. "Baccharis vanessae, a new species from San Diego County, California." Espinas v Flores. San Diego Cactus and Succulent Society – miscellaneous short articles. 1979

Cactus and Succulent Journal 47(1):18-19, January-February 1975. "The Northern Limit of Bergerocactus emo,yi." Brittonia 26(2):106-108, April-June 1974. "A new Senecio (Compositae) from California."

Fremo11tia 1(1):14-18, 1973. "California's Channel Islands." Madrono 21(6): 404, May 1972. "New Locality for Lavatera venosa." California Garden – contributing editor. 1965-1967.

# **Appendix 1.** Floral Checklist of Species Observed DICOTYLEDONS

**Anacardiaceae** – Sumac Family

Malosma laurina (Torr. & Gray) Abrams Laurel-leaf Sumac

Rhus ovata Wats. Sugar Bush

\*Schinus molle L. Peruvian Pepper Tree

**Asteraceae** – Sunflower Family

Artemisia californica Less. California Sagebrush

Baccharis pilularis DC. Coyote Brush

Baccharis salicifolia (R.& P.) Pers. Mule Fat

\*Centaurea melitensis L. Tocalote, Star-thistle

\*Dittrichia graveo/ens (L.) Desf. Stinkweed

Enceliafarinosa Torr. Brittlebush

Eriophyllum confertiflorum (DC.) Gray var. confertiflorum Golden-yarrow

Gutierrezia californica (DC.) Torr. & Gray Broom Matchweed

Hazardia squarrosa ssp. grindelioides (DC.) Clarke Saw-toothed Goldenbush

Helianthus gracilentus Gray Slender Sunflower

Heterotheca grandiflora Nutt. Telegraph Weed

**Boraginaceae** – Borage Family

\*Echium candida Webb. Pride of Madeira

Brassicaceae – Mustard Family

\*Hirschfeldia incana (L.) Lagr.-Fossat Short-pod Mustard

**Chenopodiaceae** – Goosefoot Family

Chenopodium berlandieri Moq. Pitseed Goosefoot

Salsola tragus L. Russian Thistle

Cistaceae – Rock-Rose Family

Helianthemum scoparium Nutt. Peak Rush-Rose

**Ericaceae** – Heath Family

*Xylococcus bicolor* Nutt. Mission Manzanita

**Euphorbiaceae** – Spurge Family

Chamaesyce polycarpa (Benth.) Millsp. Small-seed Sandmat

\*Ricinus communis L. Castor-bean

**Fabaceae** – Legume Family

\*Acacia latifolia Benth. Golden Wattle

\*Acacia redo/ens Maslin Low Wattle

Lotus salsuginosus Greene ssp. brevivexilus Ottley Humble Lotus

Lotus scoparius ssp. brevialatus (Ottley) Munz Deerweed

\*Melilotus indica (L.) All. Sourclover

**Hydrophyllaceae** – Waterleaf Family

Phacelia cicutaria Greene var. hispida Gray Caterpillar Phacelia

**Lamiaceae** – Mint Family

Salvia apiana Jeps. White Sage

Salvia clevelandii (Gray) Greene Cleveland Sage

### **Myoporaceae** – Myoporum Family

\*Myoporum parviflorum R. Br.

**Myrtaceae** – Myrtle Family

**Polygonaceae** – Buckwheat Family

Eriogonumfasciculatum Benth. var.fasciculatum Flat-top Buckwheat

Rhamnaceae – Buckthom Family

Ceanothus tomentosus C. Parry Ramona Ceanothus

Endotropus crocea (Torr. & Gray) Haushauer Spiny Redberry

**Rosaceae** – Rose Family

Adenostoma fascicu/atum Hook & Am. Chamise

**Sapindaceae** – Spondia Family

\*Koerlreuteria paniculata Laxm. Varnish Tree

**Scrophulariaceae** – Figwort Family

Cordylanthus rigidus (Benth.) Jeps. ssp. setigerus Chuang & Heckard Dark-tip Bird's Beak

Penstemon spectabi/is Gray Showy Penstemon

**Solanaceae** – Nightshade Family

\*Nicotiana g/auca Grah. Tree Tobacco

**Tamaricaceae** – Tamarisk Family

### **MONOCOTYLEDONS**

### Agavaceae

Hesperoyucca whipplei (Torr.) Trel. ssp. whipplei K. H. Clary Our Lord's Candle

**Poaceae** – Grass Family

<sup>\*</sup>Eucalyptus citriodora Hook. Lemon-scented Gum

<sup>\*</sup>Eucalyptus sideroxylon Benth. Red Ironbark

<sup>\*</sup>Tamarix parviflora DC. European Tamarisk

<sup>\*</sup>Avena barbata Link Slender Wild Oat

<sup>\*</sup>Bromus madritensis L. ssp. rubens (L.) Husnot Red Brome

<sup>\*</sup>Pennisetum setaceum Forsk. Fountain Grass

<sup>\*</sup>Vulpia myuros (L.) Gmelin var. hirsuta (Hacketl) Asch & Graetoner Foxtail Fescue

<sup>\* -</sup> Denotes non-native plant taxa

### Appendix 2. Faunal Checklist of Observed or Otherwise Detected Species

COMMON NAME SCIENTIFIC NAME LEPIDOPTERA- BUTTERFLIES & MOTHS

Pieridae (White and Sulfur Butterflies)Cabbage WhitePieris rapaeNymphalidae (Brushfoot Butterflies)PaintedLadyVanessa cardui

Nymphalidae (Brushfoot Butterflies) (continued)
Monarch
Danaus plexippus
Mourning Cloak
Nymphalis antiopa

### **COLEOPTERA-BEETLES**

Tenebrioidae

Darkling Beetle Coe/ocnemis californicus

Coccinellidae (Ladybird Beetles)

Seven-spotted Ladybird Coccine//a septempunctata

**HYMENOPTERA-ANTS, WASPS & BEES** 

Red Harvester Ant Pogonon (Myrmex barbatus)

Apidae (True Bees)

European Honey Bee Apis mellifera

**REPTILES** 

Phrynosomatidae (Spiny Lizards)

Western Fence Lizard Sceloporous ccidentalis Side-blotched Lizard Uta stansburiana

Viperidae

Red Diamond Crota/us mber

Rattlesnake

**BIRDS** 

Cathartidae (New World Vultures)

Turkey Vulture Cathartes aura

Accipitridae (Hawks, Eagles, Harriers, Kites)

Red-tailed Hawk Buteo jamaicensis

Phasianidae/ Odontophoridae (New World

Quails) California Quail Callipepla califomica

Columbidae (Pigeons and Doves)

Mourning Dove Zenaida macroura

Cuculidae (Cuckoos)

Greater Roadrunner Geococryx californian11s

Trochilidae (Hummingbirds)

Costa's Hummingbird Cafypte costae
Anna's Hummingbird Cafypte anna

Picidae (Woodpeckers)

Northern Flicker Colaptes auratus

**Tyrannidae** (Tyrant Flycatchers)

Black Phoebe Sayomis nigricans

Corvidae Qays, Crows and Ravens)

Western Scrub Jay Aphelocoma coeru/escens
American Crow Corvus brach\_y,ynchos

Aegithalidae (Bushtits)

Bushtit Psa/triparus minimus

**Mimidae** (Mockingbirds and Thrashers)
Northern Mockingbird Mimus po/yglottos

Sturnidae

European Starling Sturnis vulgaris

Fringillidae (Finches)

Lesser Goldfinch Cardue/is psa/tria
House Finch Haenlorhus mexicanus

Emberizinae (Towhees, Sparrows)

California Towhee *Me/ozone crissalis* 

**MAMMALS** 

Canidae (Foxes, Wolves, and Relatives)
Coyote Canis/atrans

Felididae

Bobcat Fe/is nljils
Mountain Lion Puma conco/or

Cervidae

Mule Deer Oocoi/ells hemionus

Geomyidae (Pocket Gophers)

Botta's Pocket Gopher Thomom ys bottae

Leporidae - Lagomorphs

Audubon's Cottontail S ylvilagus aud 1 lbonii

Mustelidae

Striped Skunk Mephitis mephitis

Procyonidae

Raccoon Proryon /otor

Sciuridae

California Ground Squirrel Spermophi/11s beecheyi

### **Appendix 3. Sensitive Plants Potential to Occur**

Scientific Name and Common Name	Sensitivity Code & Status Federal/State/CNPS/SDCo	Habitat Preference/ Requirements	Potential to Occur on Site (Obs or L/M/H/Unlikely)
Acanthomintha ilicifolia San Diego Thorn-mint	FT/SE/1B (2-3-2)/ Narrow Endemic, A	Chaparral, coastal scrub, valley & foothill grassland, vernal pools, endemic to active vertisol clay soils of mesas & valleys, usually on clay lenses within grassland or chaparral communities, 10-935 m.	Unlikely. Site lacks clay soils.
Artemisia palmeri San Diego Sagewort	None/None/2 (2-2-1)/D	Chaparral, coastal sage scrub, riparian scrub & woodland/sandy, mesic, 15- 915 m.	Unlikely. Site lacks sufficiently moist drainages. Nearest site is Sweetwater River to the southeast.
Asplenium vespertinum Westerm Spleenwort	D	Rocky areas of chaparral.	Unlikely. Site lacks rock outcrops.
Atriplex parishii Parish's Brittlescale	FE/None/1B (3-3-2)/A	Alkali meadows, vernal pools, chenopod scrub, playas. Usually on drying alkali flats w/fine soils. Collected only once in CA since 1974 (1993).	Unlikely. Site lacks alkaline areas.
Baccharis vanessae Encinitas Baccharis	FT/SE/1B (2-3-3)/Narrow Endemic, Covered, A	Chaparral, endemic to SD Co., especially on sandstone soils in steep, open, rocky areas w/chaparral associates, 60-720 m.	Unlikely. Site lacks rock outcrops. Nearest site is Crest to the west.
Bahiopsis [Viguiera] laciniata San Diego Sunflower	None/None/4 (1-2-1)/A	Chaparral, coastal scrub; 60-750 m.	Low. Occurs nearby along Interstate 8.
Brodiaea orcuttii Orcutt's Brodiaea	FSC/None/1B (1-3- 2)/Covered, A	Vernal pools, valley & foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows, especially mesic, clay habitats, occ serpentine, in vernal pools & small drainages, 30-1615 m.	Unlikely. Site lacks mesic, clay areas.
California [Erodium] macrophylla Round-leaved filaree	None/None/1B.1/None	Calcarious soils and substrates	Unlikely. Site lacks calcareous soils.
Ceanothus cyaneus Lakeside Ceanothus	FSC/None/1B (3-2- 2)/Covered, Narrow Endemic, A	Closed cone coniferous forest, chaparral. In CA, known only for RIV & SD Cos., 100-1515 m.	Unlikely. Site lacks acid igneous rocks.
Ceanothus foliosus var. viajensis Viejas Mountain Ceanothus	New species not classified	Chaparral, on N-facing ridges on N sides of Viejas Mountain, 330-450 m.	Unlikely. A local endemic recently described on protected slopes.

Chorizanthe leptotheca Peninsular Spineflower	None/None/4 (1-2-2)/D	Coastal scrub, chaparral, lower montane coniferous forest, alluvial fan, granitic soils, 300-1900 m.	Low. Sought, but no remains encountered in open areas of Chaparral.
<i>Clarkia delicata</i> Delicate Clarkia	None/None/2 (1-2-1)/A	Cismontane woodland, grassland, chaparral, only in SD Co., 235-1,000 m.	Unlikely. Site lacks woodland/grassland interface.
Clinopodium [Satureja] chandleri San Miguel Savory	None/None/4 (1-2- 2)/Covered, A	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley & foothill grassland, especially gabbroic or metavolcanic substrate, 120-1005 m.	Unlikely. Site lacks metamorphic and gabbro soils.
Erodium [California]macrophyllum Round-leaved Filaree	None/None/2 (2-3-1)/B	Cismontane woodland, valley & foothill grassland. Clay soils, 15-1200 m.	Unlikely. Site lacks calcareous soils.
Fritillaris biflora Chocolate Lily	D	Clay grasslands 100-1500m.	Unlikely. Site lacks clay soils. Nearest site is Wright's Field to the southeast.
Harpagonella palmeri Palmer's Grapplinghook	None/None/4 (1-2-1)/D	Chaparral, coastal scrub, valley & foothill grassland, especially clay soils, open grassy areas, 15-830 m.	Unlikely. Site lacks clay soils.
Horkelia truncata Ramona Horkelia	None/None/1B (3-1-2)/A	Chaparral, cismontane woodland, especially in habitats mixed chaparral, vernal streams, & disturbed areas near roads, gabbro soil, 400-1300 m.	Unlikely. Site lacks clay soils.
Lepechinia cardiophylla Heart-leaved Pitcher Sage	None/None/1B (3-2- 2)/Covered, Narrow Endemic, A	Closed cone coniferous forest, chaparral, cismontane woodland, metavolcanic soils 550-1370 m.	Unlikely. Site lacks gabbroic soils.
<i>Machaeranthera</i> [ <i>Xanthisma</i> ] <i>juncea</i> Rush-like Bristle Bush	None/None/4 (1-1-1)/D	Chaparral, 200-1300 m.	Low. Sought but not encountered. Nearest site is Palo Verde Ranch to the southeast.
Monardella hypoleuca ssp. lanata Felt-leaved Monardella	None/None/1B (2-2- 2)/Covered, A	Chaparral, cismontane woodland, esp. in understory in mixed chaparral, chamise chaparral & so. oak woodland; esp. sandy soil, 300-1190 m.	Unlikely. Site lacks rock outcrops.
Navarretia fossalis Spreading Navarretia	FT/None/1B (2-3-2)/A	Vernal pools, chenopod scrub, marshes & swamps, playas, especially in SD hardpan & SD claypan vernal pools, in swales & vernal pools, often surrounded by other habitat types, 30-1300 m.	Unlikely. Site lacks marshes & swamps, playas, especially chenopod scrub, marshes & swamps, playas, vernal pools, chenopod scrub, marshes & swamps, clay soils.

Nolina cismontana Chaparral Beargrass	None/None/1B (3-2-3)/A	Chaparral, cismontane woodland, coastal scrub, esp. gabbroic or metavolcanic substrate, 120- 1,005 m.	Unlikely. Limited to northern San Diego and Orange Counties.
Nolina interrata Dehesa Nolina	FT/SE/1B (3-3-2)/Covered, Narrow Endemic, A	Chaparral, esp. on rocky hillsides or ravines in ultramafic soils (gabbro & peridotite), 185-855 m.	Unlikely. Site lacks gabbro soils. Nearest site below Crest on the west.
Packera [Senecio] ganderi Gander's Ragwort	FSC/SR/1B (3-2- 3)/Covered, A	Chaparral, esp. recently burned sites, gabbroic outcrops, 400-1200 m.	Unlikely. Site lacks gabbro soils.
Piperia leptopetala Narrow-petaled Rein Orchid	None/None/4.3/D	Chaparral, Foothill Woodland, Yellow Pine Forest, Red Fir Forest, Northern Coastal Scrub, Closed-cone Pine Forest, 0- 7,220 ft.	Unlikely. Site lacks Foothill Woodland / Chaparral interface.
Polygala [Rhynotropisl] cornuta var. fishiae Fish's Milkwort	None/None/4 (1-1-2)/D	Chaparral, cismontane woodland, riparian woodland, 100-1100 m. May-Aug.	Unlikely. Site lacks riparian conditions. Nearest site of Palo Verde Ranch to the southeast.
Quercus engelmannii Engelmann Oak	None/None/4(1-2-2)/D	Chaparral, cismontane woodlands, riparian woodland, valley & foothill grassland.	Low. Occurs in the area but not close to the site.
Ribes canthariforme Moreno Currant	FSC/None/1B (3-1-3)/A	Chaparral, endemic to SD Co., especially among boulders in oak-manzanita thickets, shaded or part shaded sites, 340-1200 m.	Unlikely, Known in Chaparral at Terranitos to the east.
Scutellaria bolanderi ssp. austromontana Southern Skullcap	None/None/1B (2-2-3)/A	Chaparral, cismontane woodlands, lower montane coniferous forest, especially in gravelly soils on stream banks or in mesic sites in oak or pine woodland, 425-2000 m.	Unlikely. Site lacks clay soils. Nearest site is Wright's Field to the southeast.
Tetracoccus dioicus Parry's Tetracoccus	FSC/None/1B (3-2- 2)/Covered, A	Chaparral, coastal scrub, especially stony fine sandy decomposed gabbro soil, 165-1000 m.	Unlikely. Site lacks gabbro soils.

### **Appendix 4. Sensitive Animals Potential to Occur**

Scientific Name and	Sensitivity Code & Status Federal/State	Habitat Preference/ Requirements	Potential to Occur on Site (Obs or
Common Name			L/M/H/Unlikely)
San Diego Banded Gecko Coleonyx variegates abbotti	None/None/None/Group 1	Variety of habitats, associated w/ rocks & crevices.	Low. Rock outcrops not on-site but occur elsewhere in the area.
Large-blotched Salamander Ensatina escholtzii klauberi	FSC/None/None/Group 1	Moist or flowing drainages in coastal and montane so CA.	Unlikely. Mesic conditions absent.
San Diego Horned Lizard Phrynosoma coronatum blainvillii	FSC/None/SSC/Covered, Group 1	Coastal sage scrub, chaparral in arid and semi-arid climate, esp. friable, rocky, or shallow sandy soils.	Low. Not observed and native ant host density low.
Belding's Orange- throated Whiptail Aspidoscelis [Cnemidophorus] hyperythrus beldingi	FSC/None/SSC/Covered, Group 2	Coastal scrub (low elev.), chaparral, valley & foothill hardwood, especially washes & sandy areas w/patches of brush & rocks.	Low. Not observed and native termite host density low.
Coastal Whiptail Aspidoscelis [Cnemidophorus] tigris stejnegeri	FSC/None/None/Group 2	Deserts & semiarid areas w. sparse vegetation & open areas, also in woodland & riparian areas, esp. where ground may be firm soil, sandy, or rocky.	Low. Not observed and native termite host density low.
Coastal Rosy Boa Charina trivirgata roseofusca	FSC/None/Protected/Group 2	Desert & chaparral from coast to Mojave & Colorado Deserts, especially in moderate to dense vegetation & rocky cover; habitats w/mix of brushy cover & rocky soil like coastal canyons & hillsides, desert canyons, washes & mountains.	Low. Not observed in adjacent native vegetation.
San Diego Ring- necked Snake Diadophis punctatus similis	None/None/None/Group 2	Woodlands, forest, grassland, chaparral, gardens; under bark, logs, stones, & boards.	Low. Habitat limited in adjacent native vegetation.
Northern Red Diamond Rattlesnake Crotalus [exsul] ruber ruber	FSC/None/SSC/Group 2	Chaparral, woodland, grassland & desert areas, especially in rocky areas & dense vegetation.	High. Guard staff on adjacent site report rattlesnake presence, but most likely Western Diamondback.
Turkey Vulture Cathartes aura (breeding)	None/None/None/Group 1	Specialized static soarer, forages over roads, fields, open forests, & other open habitats.	Low. Not observed but regional foraging is common.
White-tailed Kite Elanus leucurus	None/None/CFP/Group 1	Low rolling foothills/valley margins w/scattered oaks & river bottoms or marshes adj to deciduous woodland, esp. open grasslands, meadows, margins close to trees for nesting.	Low. Not observed but regional foraging is common.

Northern Harrier Circus cyaneus hudsonius (nesting)	None/None/SSC/Covered, Group 1	Coastal salt marsh & fresh- water marsh, nest and forage in grasslands and farmlands.	Low. No mesic nesting sites nearby.
Sharp-shinned Hawk Accipiter striatus (nesting)	None/None/SSC/Group 1	Riparian woodlands, forests; forages at edges of open habitats.	Low. Tree density limited to Eucalyptus and other cultivated trees about the area.
Cooper's Hawk Accipiter cooperi	None/None/SSC/Covered, Group 1	Woodland, usu. open, interrupted, or marginal type, nests mainly in riparian areas.	Low. Tree density limited to Eucalyptus and other cultivated trees about the area.
Red-shouldered Hawk Buteo lineatus	None/None/None/Group 1	Riparian woodlands, forests; forages at edges of open habitats.	Low. Tree density limited to Eucalyptus and other cultivated trees about the area.
Golden Eagle Aquila chrysaetos	None/None/SSC, CFP/Covered, Narrow Endemic, Group 1	Foothills, mountains grasslands, deserts, and shrub habitats.	Low. Known to forage regionally.
Burrowing Owl Athene [Speotyto] cunicularia (burrow sites)	FSC/None/SSC/Covered, Narrow Endemic, Group 1	Open dry annual or perennial grasslands, desert & scrublands w/low growing vegetation, uses ground squirrel burrows for nesting.	Unlikely. No suitable nesting burrows noted, despite extensive fill slopes.
Southwestern Willow Flycatcher Empidonax traillii extimus	FE/SE/None/Covered, Narrow Endemic, Group 1	Extensive thickets of low, dense willows, often near streams.	Unlikely. No riparian habitats nearby.
Loggerhead Shrike Lanius Iudovicianus	FSC/None/SSC/Group 1	Open habitats with scattered shrubs & other perches.	Low. Not noted but foraging habitat present.
Least Bell's Vireo Vireo bellii pusillus	FE/SE/None/Covered, Narrow Endemic, Group 1	Summer resident in So. Cal., inhabits low riparian growth in vic. of water or in dry river bottoms, below 2000 ft, usu. willow, baccharis, mesquite.	Unlikely. No riparian habitats nearby.
Coastal California Gnatcatcher Polioptila californica californica	FT/None/SSC/Covered, Group 1	Coastal sage scrub, below 2,500 ft in So. Cal., especially low coastal scrub in arid washes, mesas & slopes	Unlikely. No suitable sage scrub habitat in the area.
Western Bluebird Sialia mexicana	None/None/None/Group 2	Small groups in fields or open woodlands, often perched on wires or fences.	Low. May forage in area with cultivated trees about.
Yellow Warbler Dendroica petechia brewsteri	None/None/SSC/Group 2	Riparian plant associations, prefers willows, cottonwoods, aspens, sycamores & alders for nesting & foraging, especially nests in montane shrubbery in open conifer forests.	Unlikely. No riparian habitats nearby.
Yellow-breasted Chat Icteria virens	None/None/SSC/Group 1	Summer resident in riparian thickets of willow & other brushy tangles near watercourses, nests in low, dense riparian habitat.	Unlikely. No riparian habitats nearby.

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Southern California Rufous-crowned Sparrow Aimophila ruficeps canescens	FSC/None/SSC/Covered, Group 1	Coastal sage scrub, sparse chaparral, especially rel. steep, often rocky hillsides w/grass & forb patches.	Low. Sought during site assessment but not encountered or heard.
Bell's Sage Sparrow Amphispiza belli	FSC/None/SSC/Covered, Group 1	Coastal chaparral, coastal sage scrub, and sagebrush desert habitat.	Low. Sought during site assessment but not encountered or heard.
Tricolored Blackbird  Agelaius tricolor  (colony)	FSC/None/SSC/Covered, Group 1	Breeds near fresh water in emergent wetlands w/dense cattails or tules. Feeds in grassland & cropland.	Unlikely. No riparian habitats nearby.
Spotted Bat Euderma maculatum	None/None/SSC/Group 2	Roosting sites are not well known.	Unlikely. The rarest bat in the county and unlikely to be foraging in the area.
Yuma Myotis <i>Myotis yumanensis</i>	FSC/None/SSC/Group 2	Open forest & woodlands. Closely tied to bodies of water.	Moderate. Forages through the coastal and foothill regions of the county and requires open water supply.
Long-eared Myotis  Myotis evotis	FSC/None/SSC/Group 2	Trees, buildings, caves, and mines. Brush, woodland, forest, > 4,000 ft.	Moderate. Forages in foothill and mountain areas.
Fringed Myotis Myotis thysanodes	FSC/None/None/Group 2	Caves, buildings, rock crevices, and trees. Variety of habitats, open habitats, streams, lakes, and ponds used as foraging areas.	Unlikely. Foraging limited to montane regions.
Long-legged Myotis Myotis volans	FSC/None/SSC/Group 2	Trees, rock crevices, buildings, caves, & mines. Wide variety of habitats, uncommon to rare above 8000 ft.	Unlikely. Foraging limited to montane regions.
Small-footed Myotis Myotis ciliolabrum	FSC/None/SSC/Group 2	Cliffs, rock crevices, possibly in caves & mines. Variety of habitats from sea level to 8900 ft.	Moderate. Associated with chaparral as foraging habitat.
Western Red Bat Lasiurus blossevillii	None/None/None/Group 2	Trees along or near waterways with open foraging areas. Feeds over grasslands, shrublands, woodlands & forests.	Low. Largely associated with riparian and cultivated trees and ranges little from roosting sites in largely in coastal areas.
Townsend's Big- eared Bat Corynorhinus townsendii	FSC/None/SSC/Group 2	Day roosts include caves & mines but may be found in buildings. Distribution not well known. Prefers mesic habitats.	Low. Roosts in caves and old buildings and forages throughout the county.
Pallid Bat Antrozous pallidus	None/None/SSC/Group 2	Caves, tunnels, attics, crevices, variety of other locations. Grassland, shrublands, woodlands, forests, most common in open dry habitats with rocky areas.	Moderate. Forages throughout the county.

Pocketed Free-tailed Bat Nyctinomops femorosaccus	None/None/SSC/Group 2	Small colonies in rocky cliffs or crevices. Found in desert scrub, desert riparian, scrublands, pinyon-juniper woodlands. Rocky areas with high cliffs.	Moderate. Forages throughout the cismontane area of the county, with nesting at exposed quarry sites in La Mesa and Sweetwater Lake.
Big Free-tailed Bat Nyctinomops macrotis	None/None/SSC/Group 2	Small colonies in rocky cliffs or crevices. Found in desert scrub, desert riparian, scrublands, pinyon-juniper woodlands. Rocky areas with high cliffs.	Low. Mostly migrates through the region with limited forage.
Western Mastiff Bat Eumops perotis californicus	FSC/None/SSC/Group 2	Small colonies in rocky cliffs or crevices. Variety of open habitats including woodlands, coastal sage scrub, grasslands, chaparral, desert scrub, and urban.	Moderate. Forages throughout the county but roosts in high, steep cliffs and outcrops.
San Diego Black- tailed Jackrabbit Lepus californicus bennettii	FSC/None/SSC/Covered, Group 2	Variety of habitats including coastal sage scrub, chaparral, & desert scrub.	Moderate. Detected from scat about the natural and fill site.
Northwestern San Diego Pocket Mouse Chaetodipus fallax fallax	None/None/SSC/Covered, Group 2	Coastal scrub, chaparral, grasslands, sagebrush, etc. in southwestern CA, esp. sandy, herbaceous areas w/rocks or coarse gravel.	Moderate. May be present in natural areas.
Dulzura (California) Pocket Mouse Chaetodipus californicus femoralis	FSC/None/SSC/Group 2	Variety of habitats incl coastal scrub, chaparral, sagebrush, & grassland. Attracted to grassland-chaparral edges.	Moderate. May be present in natural areas.
Stephen's Kangaroo Rat <i>Dipodomys</i> stephensi	Fe/CT/None/Group 1	Open Grasslands.	Unlikely. Outside of known range of species.
Southern Grasshopper Mouse Onychomys torridus ramona	FSC/None/SSC/Group 2	Coastal sage scrub, mixed chaparral, sagebrush, low sage, and brittlebush habitats. Uncommon in valley foothills & montane riparian.	Unlikely. Range in county is largely desert hills.
San Diego Desert Woodrat Neotoma lepida intermedia	FSC/None/SSC/Group 2	Mixed & chamise-redshank chaparral, sagebrush & other habitats. Prefers rocky areas to build stick nest.	Low. No diagnostic nests observed on the site, but presence in the area would be anticipated.
Coyote Canis latrans	None/None/None	Variety of habitats, including urban canyons.	Moderate. Assumed to be present with native and domestic small mammals in the area as prey.
American Badger <i>Taxidea taxus</i>	None/None/Covered, Group 2	Uncommon resident throughout the state. Abundant in drier open shrub, forest, & herbaceous habitats with friable soils.	Unlikely. Site and area have too much daily business activity.

Mountain Lion Felis (Puma) concolor	None/None/Protected/Covered, Group 2	Widespread, uncommon resident ranging from sea level to alpine meadows. Variety of habitats except xeric regions of the deserts.	Moderate. Site is open for Mule Deer grazing opportunities which would be an attraction.
Bobcat Lynx rufus	None/None/None/Covered	Wide range of habitats, incl. brush land, foothill chaparral, sagebrush, and forests.	Moderate. Site is open for Mule Deer grazing opportunities which would be an attraction.
Ringtail Bassariscus astutus	None/ None/CFP/Group 2	Widely distributed, common to uncommon permanent resident. Occurs in various riparian habitats, and in brush stands of most forest and shrub habitats, at low to middle elevations. Usually not found more than 1 km fr/water.	Unlikely. Rock outcrops and water sources not on site.
Southern Mule Deer Odocoileus hemionus	None/None/Game Species/Covered, Group 2	Common to abundant w/ wide distribution throughout state. Prefers mosaic of variousaged vegetation habitats, brushy areas & tree thickets important for escape cover.	Moderate. Site is open for Mule Deer grazing opportunities, but no sign observed.
Monarch Butterfly Danaus plexippus	None/None/None	Winter roost sites extend along coast from N. Mendocino to Baja Calif.; roosts located in wind-protected tree groves (eucalyptus, Monterey Pine, Cypress), with nectar and water source nearby.	Unlikely. Site lacks nectaring sources.
Quino Checkerspot Butterfly Euphydryas editha quino	FE/None/None/Narrow Endemic, Group 1	Sunny openings in chaparral & coastal sage shrublands in parts of RIV & SD Cos; especially on hills & mesas near coast, w/high densities of host plants Plantago erecta, P. insularis, Orthocarpus purpurescens.	Unlikely. Site lacks larval host plants.
Hermes Copper Hermelycaena (Lycaena) hermes	FSC/None/SSC/Group 1	Endemic to SD Co. Continuous stands of southern mixed chaparral/coastal sage scrub with both host plant Rhamnus crocea and primary nectaring plant Eriogonum fasciculatum in very close proximity. Species usually found along fairly open dirt roads/trails. Fallbrook is most northern record. Flight season: late May-early July.	Unlikely. Site lacks larval host shrub in sufficient density.

Arroyo Toad Bufo californicus	FE/None/SSC/ Covered, Narrow Endemic, Group 1	Semi-arid regions near washes or intermittent streams, incl. valley-foothill & desert riparian, desert wash, etc., especially rivers w/sandy banks, willows, cottonwoods, sycamores w/loose, gravelly areas. Site too far from wetlands	Unlikely. Site lacks water sources.
California Red- legged Frog Rana aurora draytonii	FT/None/SSC/ Covered, Narrow Endemic, Group 1	Marshes, streams, lakes, reservoirs, ponds and other permanent water sources.	Unlikely. Site lacks water sources
Silvery Legless Lizard Anniella pulchra pulchra	FSC/None/SSC/Group 2	Sparse vegetation of chaparral and riparian, loose soil for burrowing.	Unlikely. Sie lacks sandy soils
Coast Patch-nosed Snake Salvadora hexalepis virgultea	FSC/None/SSC/Group 2	Brushy or shrubby vegetation in coastal so. CA, esp. uses small mammal burrows for refuge.	Possibly present.

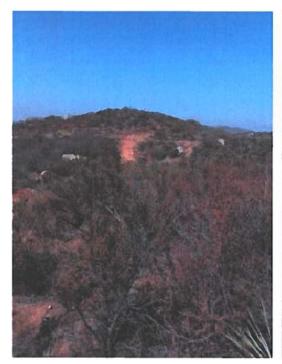
Appendix 5. W579 Alpine Site Photographs-25 August 2021



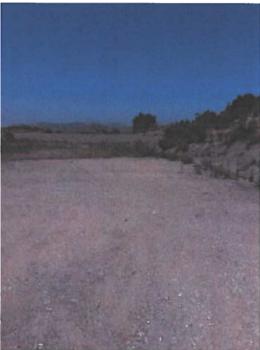


Chaparral at SE corner

Off-site dirt roadway along S boundary







Recycled asphalt at NE corner



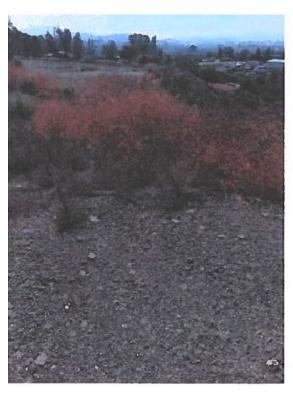
View to S and SE of recycled asphalt cover

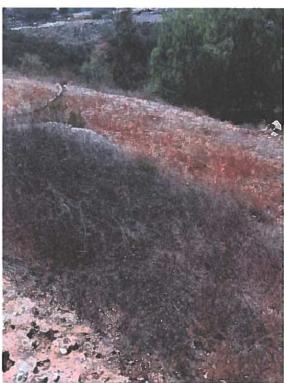


Slope remediation cover along S side

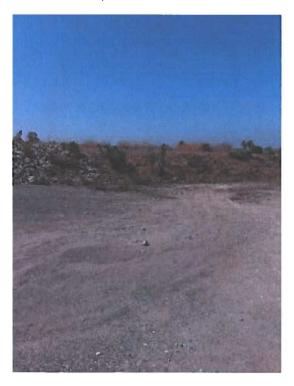
Chaparral and off-site rocks at NW corner

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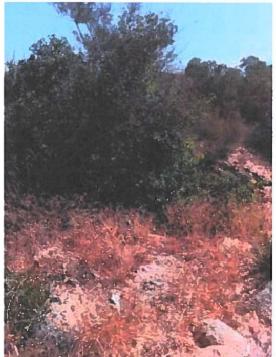




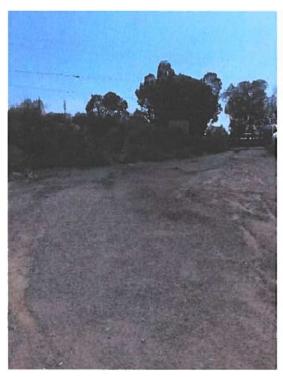
View S from asphalt cover area



Slope remediation growth at W intrusion



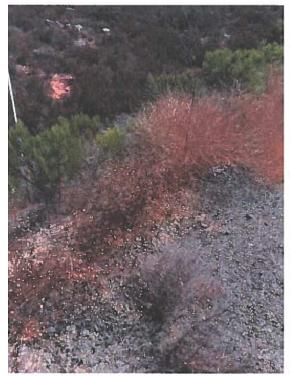
Disturbed chaparral slope and recycled asphalt Persistent trees on slope reclamation area

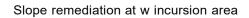




Recycled asphalt area at E end of pad

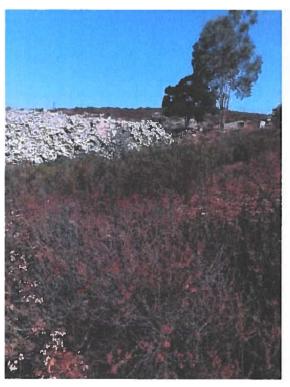
Slope remediation at W end of pad





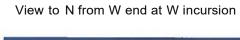


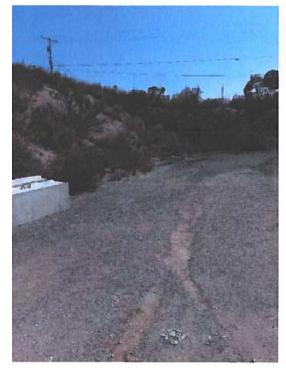
View to S at W end of incursion

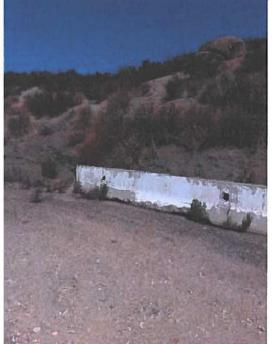




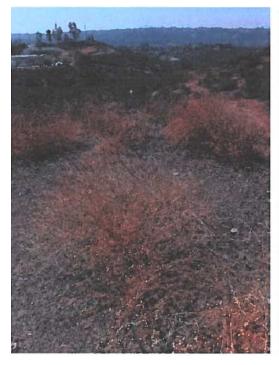
Chaparral at SE corner

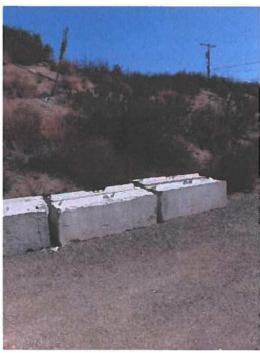






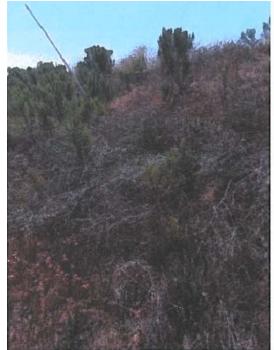
Disturbed chaparral at E end of Recycled Asphalt

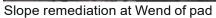


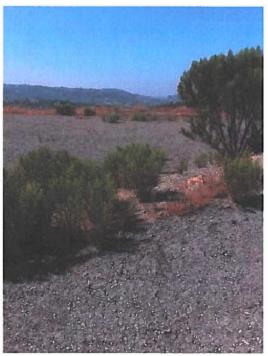


View to S with dead Stinkweed infestation

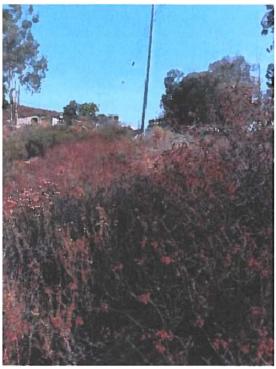
E end of recycled asphalt pad /disturbed chaparral

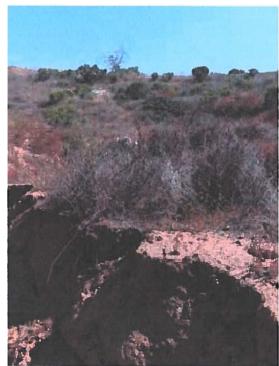






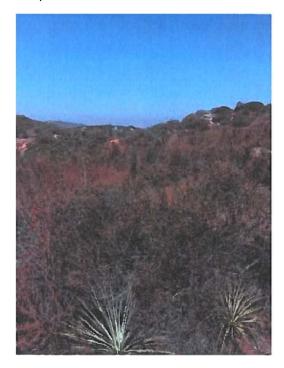
Chaparral broom on slope between asphalt pads



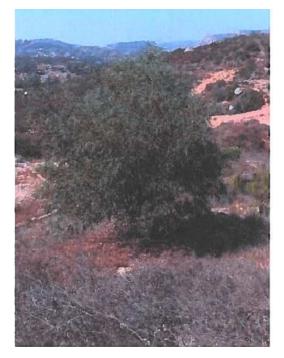


Chaparral at SE corner

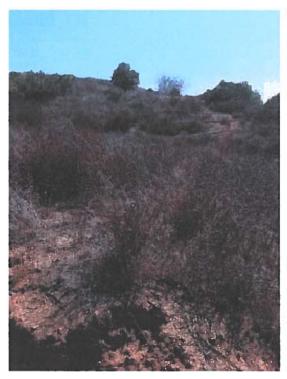
View to N of slope remediation at W end

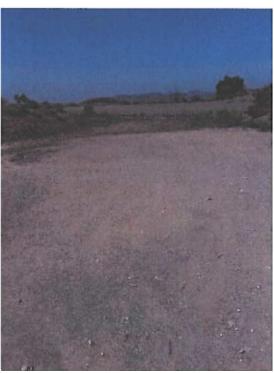






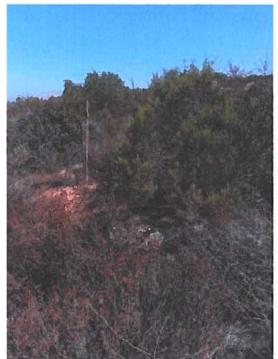
Landscape acacia as part of slope remediation

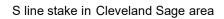




View to E of W end slope remediation

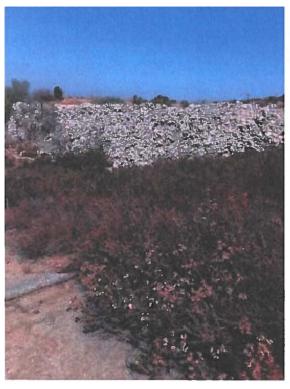
View W across recycled asphalt



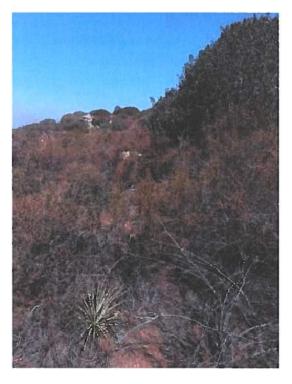




Chaparral along S boundary

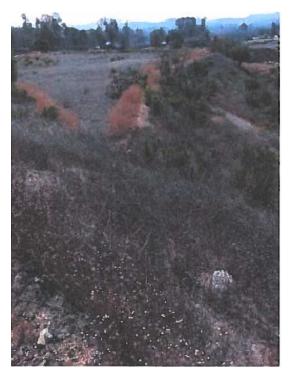


Area of rip-rap slope at E end of pad

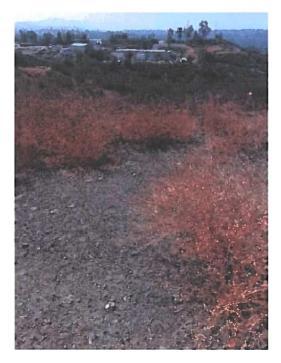


Chaparral along N boundary

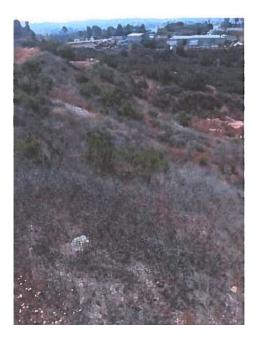
Star-thistle on slope remediation



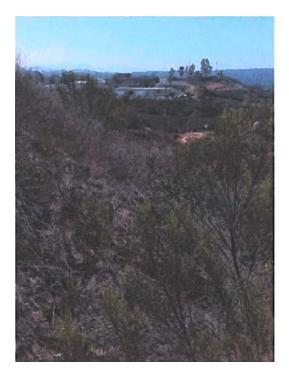
View to E of S side of pad



View to S at W end of pad with Stinkweed



View to S of slope remediation at W end of pad



View to S of slope remediation

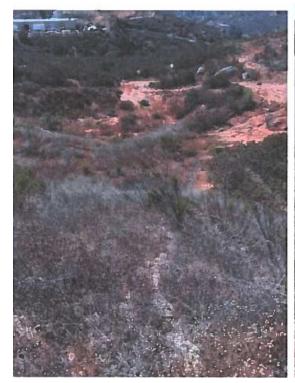


NW area of recycled asphalt



SW corner of site looking N





Non-jurisdictional drainage at SW corner



Stinkweed infestation on recycled asphalt pad