

**BIOLOGICAL ASSESSMENT
957 VALBORG DRIVE
SAN MARCOS, CALIFORNIA**

APN 222-121-09-00

Prepared for:

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San Marcos, California 92078

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REPORT SUMMARY

Report Title: Biological Assessment
957 Valborg Drive
San Marcos, California 92078
APN 222-121-09-00

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Lead Agency: City of San Marcos

USGS Quadrangle: Rancho Santa Fe (7.5 minute)
SW1/4 of NE1/4, Section 26
Township 12 South, Range 3 West
33° 6' 12.41" N 117° 09' 45.56" W

Report Date: 13 April 2013

*Biological Assessment – 957 Valborg Drive
San Marcos, California
APN 222-021-09-00*

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Summary

The proposed action is the remodel of an existing residence at 957 Valborg Drive, San Marcos, California, APN 222-121-09-00. The proposed project is located in north San Diego County approximately 3.0 mile southeast of the City of San Marcos and approximately 4.5 miles southwest of the City of Escondido. The proposed project site is not within a Focused Plan Area and will not adversely affect the Multiple Habitat Conservation Plan reserve assembly.

The proposed project site is approximately 9.07 acres consisting of 2.63 acres of urban/developed land, 0.82 acre of disturbed land and 5.62 acres of southern mixed chaparral. The proposed project will be limited to the urban/developed and disturbed lands on the property.

The proposed brush management zone may destroy or disturb 0.09 acres of southern mixed chaparral. The disturbance is less than 0.10 acre and is not considered significant.

A drainage on the northeast side of the property is depicted on the San Marcos 7.5 minute topographic map as a blue-line stream indicating the potential presence of jurisdictional waters of the U.S. A cursory assessment of the stream indicated that jurisdictional waters are likely to be present including wetlands under the jurisdiction of the State of California. In November 2013 the site was revisited with the specific intent of providing a preliminary jurisdictional determination and to identify and delineate any wetlands that may be present. A closer examination of the suspected stream did not find evidence of wetlands or of jurisdictional waters. Based on guidance provided by the Army Corps of Engineers and the Environmental Protection Agency the ravine would be considered an erosional feature, i.e. a gully or small wash characterized by low volume, infrequent, and short duration flows

Prior to construction to insure that project related activities do not extend into adjacent southern mixed chaparral the limits of disturbance shall be delineated with silt fence. The project biologist shall be present during installation of the silt fence and will inspect the limits of disturbance throughout construction. The project biologist shall prepare a final biological monitoring report upon completion of the project. If disturbance extends beyond the limits of disturbance the report will include recommendations for restoration or other mitigation.

The property supports habitat suitable for use by nesting birds protected by the Migratory Bird Treaty Act and the California Fish and Wildlife Code. If clearing, grubbing and grading are scheduled to occur during the general nesting bird season a nesting bird survey shall be conducted. If active nests are found or suspected an appropriate buffer (100 to 300 foot radius depending on the species of bird) shall be established around each active nest. The buffer shall be noted on project plans and no activity may occur within the buffer until the biologist has

determined the young have fledged or the nest is no longer active.

A wildlife movement corridor has been identified on the east side of the property. Steps to minimize human intrusion into the corridor and to minimize or avoid adverse affects of runoff, noise and artificial lighting have been included in avoidance, minimization and mitigation recommendations. These measures include a fence along the east side of the limits of disturbance, directing all drainage from the site into energy disappators and allowin runoff to percolate into the ground, limiting construction to between dawn and dusk, using low power sodium outdoor lights, shielding or directing lighting away from the wildlife corridor along the east side of the property and using native plants along the east side of the limits of disturbance to shield the wildlife corridor from night time outdoor lighting.

Brush management activity may adversely affect plant species protected by state and federal endangered species acts and the MHCP. Prior to the removal or modification of vegetation the brush management area shall be delineated with stakes. Brush management may not extend beyond the staked area. A qualified botanist/biologist shall search the delineated brush management zone for protected plant species. If any of these species are found within the brush management area they shall be flagged for avoidance. Flagged plants shall not be trimmed/pruned or removed.

If mitigated as recommended the proposed project would not significantly affect sensitive biological resources.

1.0 INTRODUCTION

1.1 Purpose of Report

The purpose of this report is to document the biological resources present, or potentially present, on the proposed Tuller residence project site, 957 Valborg Drive, San Marcos, California (APN 222-121-09-00). This report is intended to identify potential effects of the proposed project on biological resources, as well as to recommend measures to avoid, minimize or mitigate significant impacts consistent with the California Environmental Quality Act (CEQA), the County of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan.

1.2 Project Location

The proposed project is located in north San Diego County approximately 3.0 mile southeast of the City of San Marcos and approximately 4.5 miles southwest of the City of Escondido (Figure 1). The proposed project site is depicted on the USGS 7.5 minute Rancho Santa Fe quad sheet, Southwest ¼ of the Northeast ¼ Section 26, Range 3 West, Township 12 South. The center of the proposed project site is at 33° 06' 11.95" N, 117° 09' 45.30" W (Figure 2).

1.3 Project Description

The proposed action is the remodeling of an existing residence at 957 Valborg Drive, San Marcos, California. The remodel includes a tennis court, pool and putting greens, and the improvement and maintenance of existing dirt roads and trails (Figure 3). The proposed project shall be limited to the existing homesite pad and will not affect adjacent southern mixed chaparral or the seasonal stream on the northeast side of the property.

2.0 METHODS AND SURVEY LIMITATIONS

Prior to the site visit the Multiple Habitat Conservation Program (MHCP) for North San Diego County, the California Natural Diversity Data Base (CNDDB) ArcGIS 9.x (CDFG 2012a), and Rarefind 4 (CDFG 2011b) were reviewed to determine if sensitive species may be present on or near the proposed site. National Wetland Inventory (USFWS 2008) maps for the site were consulted to determine if mapped wetlands may be present. Appropriate United States Geological Survey maps (7.5 minute) were reviewed to determine if drainage features, including "blue-line streams," may be present. The Web Soil Survey (WSS 2012) was consulted to

identify soils associated with the proposed site, and the National List of Hydric Soils (NRCS 2007) was reviewed to determine if any of these soils may be hydric in nature.

A site visits were made on 11 November 2012, 18 February and 17 November 2013. The site was surveyed on foot by one biologist slowly walking over the site in a series of random transects to provide visual coverage of the entire site. Vegetation and wildlife species observed were recorded as field observations were made. Wildlife signs (scat, bones, feathers, tracks, dens, and burrows) were also recorded as encountered. Frequent pauses were made during the survey to watch and listen for wildlife. During the 17 November site visit the ravine and suspected seasonal water course were evaluated to determine if wetlands or jurisdictional waters may be present.

3.0 SURVEY RESULTS

At the time of the November 2012 site visit the temperature was approximately 68 degrees Fahrenheit, winds were 3.0 to 5.0 miles per hour out of the southwest. Visibility was unlimited. Cloud cover was high and less than 30 percent. During the February 2013 site visit the temperature was approximately 74 degrees Fahrenheit, winds were 0.0 to 3.0 out of the south, no cloud cover and unlimited visibility. During the 17 November 2013 site visit the temperature was approximately 73 degrees Fahrenheit, winds were 0.0 to 5.0 varying out of the south and southwest, high cloud cover and unlimited visibility.

3.1 Physical Characteristics

3.1.1 Land Use

The proposed project site and adjacent properties are rural residential.

The project is not within a focused plan area (FPA¹). The proposed action will not adversely affect the proposed MHCP preserve assembly.

3.1.2 Topography

The proposed project site is located on a ridge line. The grade along the ridge top where the current residence is located is approximately 0.0 to 1.0 percent. A deep ravine is present along the east side of the property. The elevation changes from 1300 feet above mean sea level

¹ Focused Plan Areas are areas of high biological value that are included in, or are proposed for inclusion in, the MHCP Preserve Assembly.

to 1000 feet over a horizontal distance of approximately 205 feet or a slope of approximately 68 percent. To the north, south and west percent slope ranges from 4.0 to 6.0 percent.

3.1.3 Soils

Soils associated with the proposed project site are Exchequer rocky silt loam on 30 to 70 percent slopes. Exchequer soils are silt loams eroded from meta basic rock (igneous rock formed deeper in the earth's crust than usual). These soils are found in mountainous areas and have slopes of 30 to 70 percent. Native vegetation associated with Exchequer soils is usually chaparral species including black sage (*Salvia melifera*), laurel sumac (*Malosma laurina*), California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), grasses and forbs.

3.1.4 Jurisdictional and Non-jurisdictional Wetlands and Waters

The Rancho Santa Fe 7.5 minute USGS topographic map depicts a seasonal "Blue-Line"² stream in the ravine along the east side of the property. This seasonal stream is tributary to Escondido Creek, a traditional navigable water. A preliminary assessment of the drainage and what appeared to be well defined bed and bank configuration and an "Ordinary High Water Mark (OHWM)"³. Initially the drainage was identified as a jurisdictional water of the United States and the State of California. On 17 November the project site was revisited with the express intent of conducting a preliminary jurisdictional determination and to identify and delineate any wetlands that may be present in the drainage on the east side of the property. The drainage was walked from near its origin north of the north property line to a point approximately 100 meters south of the south property line. On closer examination what appeared to be an OHWM was discoloration of the rocks in one small area near the head of the drainage. Nothing resembling an OHWM could be detected anywhere else in the drainage. The well defined bed and bank configuration initially reported appears the result of scouring that has exposed bedrock over time. Accumulations of leaf litter and other plant debris did not display water stains or sediment deposits that would be associated with water deposition of these materials.

The drainage was also carefully searched for the presence of one or more of three wetland criteria; hydrophytic vegetation, hydric soils and wetland hydrology. None of the criteria were observed. There is no hydrophytic vegetation present. Hydric soils were not

² Blue line streams are generally used to depict the presence of traditional navigable waters.

³ The "Ordinary High Water Mark" defines the extent of U.S. Army Corps of Engineers jurisdiction.

observed and there was no evidence of wetland hydrology (i.e. No evidence of saturation or ponding during a significant portion of the year).

In conclusion, after closer examination it appears the ravine is not a jurisdictional water of California or the U.S. Wetland criteria were not observed. The site does not support wetlands. The drainage is an erosional feature as defined by U. S, Army Corps of Engineers and the U.S. Environmental Protection Agency in accordance with guidance established as a result of *Rapanos v. United States*, i.e. a gully or small wash characterized by low volume, infrequent, and short duration flow (USACE/EPA 2007).

3.1.5 Vernal Pools

Vernal pools are seasonal wetlands that occur in depressions. These depressions are underlain by an impervious layer that allows water to pond in the depression. In San Diego County vernal pools fill during winter rains and then dry out following the rainy season. Vernal pools are often short-lived and the plant and animal species associated with them are uniquely adapted to vernal pool conditions often completing their entire life cycle in a matter of days. Vernal pools in San Diego County have been significantly affected by development and they are considered sensitive habitats. Many of the species associated with vernal pools are listed under state and federal endangered species acts.

The proposed project site was searched for vernal pools and vernal pool topography. Vernal pools are not present on the proposed project site or in the immediate vicinity.

3.2 Biological Resources

3.2.1 Plant Communities

The SanGIS vegetation map for San Diego County depicts the proposed project site as disturbed habitat and southern mixed chaparral. The site visit confirmed the presence of southern mixed chaparral, disturbed southern mixed chaparral and urban/developed land. Disturbed Lands are also present (Figure 4).

3.2.1.1 Urban/Developed Land (Element Code 12000⁴)

Urban/developed land has been constructed upon or otherwise altered to the extent native vegetation is no longer supported. Urban/developed land is characterised by permanent and semi-permanent structures, paved areas, and landscaped areas requiring irrigation (Oberbauer et al 2008).

The urban/developed land on the proposed project site (2.63 acres) includes the house site, the adjacent semi-permanent structures and areas landscaped with non-native plant species (Figure 5). Plant species in this area include citrus trees and several species of non-native ornamental plants.

3.2.1.2 Disturbed Land (11300⁴)

Disturbed lands are areas that have been physically disturbed by past human activity and are no longer recognizable as native or naturalized plant communities. Vegetation, when present, is typically non-native plant species such as ornamentals and weed species. The disturbed lands (0.82 acre) are found on the northeast side of the project site (Figure 5). Plant species present in this area included Eucalyptus (*Eucalyptus* spp), Tree tobacco (*Nicotina glauca*), short-pod mustard (*Hirschfeldia incana*). The eucalyptus trees in this area have recently been cleared to reduce fire risk to the existing home.

3.2.1.3 Southern Mixed Chaparral (Element Code 37120⁴)

Southern mixed chaparral is characterized by broad-leaved sclerophyllous shrubs⁵. Southern mixed chaparral is found in the coastal foothills of San Diego County. Vegetation associated with this plant community includes manzanita (*Arctostaphylos* spp), wild lilac (*Ceanothus* spp), chamise (*Adenostoma fasciculatum*), mission manzanita (*Xylococcus bicolor*), chaparral yucca (*Yucca whipplei*) and laurel sumac (*Malosma laurina*).

Southern mixed chaparral occurs on 5.62 acres of the proposed project site. Plant species observed on-site include; manzanita (*Arctostaphylos glandulosa*), wild lilac (*Ceanothus* spp), chamise (*Adenostoma fasciculatum*), mission manzanita (*Xylococcus bicolor*), chaparral yucca (*Yucca whipplei*), laurel sumac (*Malosma laurina*), summer holly (*Comorostaphylos*

⁴ Oberbauer et al 2008

⁵ Vegetation characterized by hard, leathery, evergreen foliage adapted to prevent moisture loss.

diversifolia) and scattered non-native grasses and forbs. A portion of the southern mixed chaparral on the proposed project site has been disturbed by brush management directed at fire control (Figure 5) and will continue to be maintained as a Brush Management Zone. The Brush management Zone is located on an adjacent parcel also owned by the project proponent.

Southern mixed chaparral is considered a sensitive plant community and disturbance requires mitigation in accordance with the MHCP. When the southern mixed chaparral includes wart-stem ceanothus and summer holly the mitigation ratio is 1:1.

The proposed action would adversely affect 0.09 acre of southern mixed chaparral. This area affected is less than 0.10 ac and would not be considered significant..

Table 1 Plant Communities Tuller Residence 957 Valborg Drive APN 222-121-09-00 San Marcos, California	
Plant Community	Acreage
Urban/Developed Land	2.63 ac
Disturbed Land	0.82
Southern Mixed Chaparral	5.62
Total	9.07 ac

A complete list of plants observed during site visits is in Table 2.

3.2.2 Zoological Resources

Wildlife observed on the proposed project site was representative of chaparral communities. Table 3 is a list of animal species observed during site visits.

Table 3 Wildlife Species Observed Tuller Residence 957 Valborg Drive APN 222-121-09-00 San Marcos, California	
Common Name	Scientific Name
Greater roadrunner	<i>Geococcyx californianus</i>
Canyon towhee	<i>Melospiza fusca</i>
American crow	<i>Corvus brachyrhynchos</i>
Black phoebe	<i>Sayornis nigricans</i>
Western scrub jay	<i>Aphelocoma californica</i>
Yellow-rumped warbler	<i>Setophagia coronata</i>
California jackrabbit	<i>Lepus californicus bennettii</i>
Brush rabbit	<i>Sylvilagus auduboni</i>
Wood rat	<i>Neotoma spp</i>
Coyote	<i>Canis latrans</i>

3.2.3 Wildlife Movement Corridors

Wildlife movement corridors provide avenues for wildlife to move between patches of habitat. When wildlife movement corridors are destroyed or interrupted the interconnected habitat patches become isolated islands of habitat. These islands become less productive in terms of species diversity. The isolation of the species trapped in the island of habitat may lead to serious population declines and could result in the local extinction of a species. Wildlife corridors are considered to be biologically sensitive.

Drainages and riparian/riverine areas may act as wildlife movement corridors. The seasonal drainage/ravine on the northeast side of the property provides a local wildlife movement corridor allowing wildlife to move from the project vicinity downstream to Escondido Creek and to habitat patches along Escondido Creek. The City of San Marcos General Plan identifies a wildlife movement corridor along the east of the property (Figure 5). Appropriate steps shall be taken to insure the proposed project does not adversely affect the wildlife movement corridor east of the property (See Section 6.0, Mitigation and Monitoring Requirements).

4.0 RARE, THREATENED, ENDANGERED, NARROW ENDEMIC AND/OR SENSITIVE SPECIES OR MHCP COVERED SPECIES

The California Natural Diversity Data Base (CNDDB 2012), the Multiple Habitat Conservation Program (MHCP) for North San Diego County, and the Draft Natural Community Conservation Plan (NCCP) for the City of San Marcos were consulted to determine what sensitive species, if any, may be present on or near the proposed project site. For the purposes of this report sensitive species are considered to be species that are listed under state and/or federal endangered species acts, and those species covered by the MHCP plan.

Twenty-eight sensitive species were identified as potentially present on or near the proposed project site (Appendix 2). These species were assessed to determine their potential to occur on or near the project site. Determinations regarding the probability of a species occurring on the site are based on:

- Recorded occurrences of the species in the immediate vicinity (two mile radius) of the property,
- The presence of suitable habitat for the species, and
- The quality of suitable habitat, if present.

A species was determined to have a high potential for occurrence if there are recorded occurrences within 5.0 miles of the project site and suitable habitat of good quality is present on the site. A species is determined to have a moderate potential for occurrence if there are no recorded occurrences within 5.0 miles but suitable habitat of reasonable quality is present. A species is determined to have a low potential for occurrence if there are no recorded occurrences within 5.0 miles and habitat is fragmented or of low quality. A species is considered to have no potential to occur on the site if there are no recorded occurrences within 5.0 miles and suitable habitat is not present. Twenty-two of these sensitive species were determined to have some potential to occur on or near the proposed project site (Appendix 2). These species are discussed below.

Del Mar manzanita***Arctostaphylos glandulosa crassifolia***

Del Mar manzanita has been listed as endangered by the U.S. Fish and Wildlife Service. The state has not listed this species at this time. The California Native Plant Society (CNPS) (2012) considers Del Mar manzanita seriously endangered in California. This species is covered by the MHCP.

Del Mar manzanita is restricted to eroding sandstone soils in southern maritime chaparral along the south-central coast of San Diego County. It is often found in association with wart-stem ceanothus and chamise (Reiser 1994).

There are numerous recorded occurrences of Del Mar manzanita in the vicinity of the proposed project site. Suitable habitat for this species is present on the proposed project site. Del Mar manzanita has a high probability to be present in the undisturbed southern mixed chaparral on the proposed project site however Del Mar manzanita was not observed during site visits and is not likely present. Del Mar manzanita is a listed species and prior to any clearing Del Mar manzanita shall be searched for and flagged for avoidance if found.

Encinitas baccharis***Baccharis vanessae***

Encinitas baccharis is listed as threatened by the U.S. Fish and Wildlife Service and endangered by the State of California. The California Native Plant Society (2012) considers Encinitas baccharis seriously endangered in California. This species is covered by the MHCP.

Encinitas Baccharis is found in mature low growing chaparral dominated by chamise (*Adenostoma fasciculatum*). Reiser (1994) indicates that edaphic factors may play an important role in this plants distribution. This species has been recorded on Corralitos loamy sand and Cieneba rocky coarse sandy loam.

There are several recorded occurrences of this species in the vicinity of the proposed project site. Suitable habitat (soils) for this species is not present on the proposed project site. Encinitas baccharis was not observed during the site visit and is not likely to be present. Although habitat (soils) for this species is not present it is a listed species and occurs nearby. Prior to any clearing Encinitas baccharis shall be searched for and flagged for avoidance if found.

Wart-stem ceanothus***Ceanothus verrucosus***

Wart-stem ceanothus has not been listed by the U.S. Fish and Wildlife Service. The State of California considers wart-stem ceanothus a species of special concern⁶. The California Native Plant Society (2012) considers this species seriously endangered in California. Wart-stem ceanothus is covered by the provisions of the MHCP and the NCCP.

Wart-stem ceanothus (also known as coast white ceanothus) is usually found in association with chamise and mission manzanita in mixed chaparral. It is often the dominant shrub within this community, especially on north-facing slopes. Wart-stemmed ceanothus is abundant in the undisturbed southern mixed chaparral on the property. The chaparral on the property is outside the limits of disturbance and will not be affected by the proposed action.

Orcutt's spine-flower***Chorizanthe orcuttiana***

Orcutt's spineflower has been listed as endangered by the U.S. Fish and Wildlife Service³ and the State of California. The California Native Plant Society (2012) considers this species seriously endangered in California. Orcutt's spineflower is covered under the provisions of the MHCP.

Orcutt's spine flower is associated with openings in coastal chaparral and loose sand soils. According to Reiser (1994) the limited distribution of this species may be related to the lack of loose sandy soils in coastal chaparral. Loose sandy soils do not occur on the proposed project site. Orcutt's spineflower was not observed during the site visit and is not likely to be present.

Summer holly***Comarostaphylos diversifolia diversifolia***

Summer holly is considered a species of concern by the U.S. Fish and Wildlife Service and has been listed as endangered by the State of California. The California Native Plant Society (2012) considers this species to be fairly endangered in California. Summer holly is covered under the provisions of the MHCP and the NCCP.

⁶ Species of Special Concern are to be treated as listed species for the purposes of the California Environmental Quality Act and the National Environmental Policy Act

Summer holly is generally found in Southern Mixed Chaparral, usually on north facing slopes. Reiser (1994) indicates this species is concentrated west of I-15. Large numbers of this species are found south of San Marcos. Summer holly was observed in the undisturbed Southern Mixed Chaparral in the undisturbed southern mixed chaparral on the property. The chaparral on the property is outside the limits of disturbance and will not be affected by the proposed action.

Del Mar Mesa sand aster *Corethrogyne filaginifolia linifolia*

Del Mar Mesa sand aster is considered a species of concern by the U.S. Fish and Wildlife Service. The State of California considers Del Mar sand aster a Species of Special Concern. The California Native Plant Society (2012) considers this species to be fairly endangered in California. Del Mar Mesa sand aster is covered by the provisions of the MHCP.

Del Mar sand aster is generally found in openings in coastal sage scrub, chaparral and coastal bluff scrub on sandy soils. There are numerous recorded occurrences of this species in the vicinity of the proposed project site. This species was not observed during the site visit and is not present on the proposed project site.

Short-leaved dudleya *Dudleya brevifolia*

Short-leaved Dudleya is not listed by the U.S. Fish and Wildlife Service at this time. The state has listed this species as endangered. The California Native Plant Society (2012) considers short-leaved Dudleya as seriously endangered in California. This species is covered by the MHCP.

Short-leaved Dudleya is generally found in openings in chamise chaparral. This species is frequently associated with Torrey sandstone with soils mapped as Carlsbad gravelly loamy sand (Reiser 1994). There are several reported occurrences of short-leaved Dudleya in the vicinity of the proposed project site. Short-leaved dudleya was not observed during the site visit and is not present on the proposed project site.

Sticky dudleya***Dudleya viscida***

Sticky dudleya has not been listed by the U.S. Fish and Wildlife Service at this time. The State of California considers sticky dudleya to be a Species of Special Concern. The California Native Plant Society (2012) considers this species to be fairly endangered in California.

Sticky dudleya generally occurs in coastal sage scrub, chaparral, coastal bluff scrub and open cismontane woodlands. There are two recorded occurrences of this species in the vicinity of the proposed project site. Suitable habitat is present. Sticky dudleya was not observed during the site visit and is not likely to be present.

San Diego barrel cactus***Ferrocactus viridescens***

The U.S. Fish and Wildlife Service and the State of California consider San Diego barrel cactus a Species of Special Concern. The California Native Plant Society (2012) considers this species to be highly endangered in California. San Diego barrel cactus is covered under the provisions of the MHCP.

San Diego barrel cactus is generally found on cobbly soils in coastal sage scrub. There is one recorded occurrence of this species in the vicinity of the proposed project site. Suitable habitat is not present on the site. San Diego barrel cactus was not observed during site visits and is not present on the project site.

Orcutt's hazardia***Hazardia orcutti***

Orcutt's hazardia is considered a Species of Concern by the U.S. Fish and Wildlife Service and has been listed as threatened by the State of California. The California Native Plant Society (2012) considers this species to be extremely endangered in California. Orcutt's hazardia is covered by the provisions of the MHCP.

Orcutt's Hazardia generally occurs in open chaparral with chamise. Suitable habitat is present in the undisturbed southern mixed chaparral on the property. The chaparral on the property is outside the limits of disturbance and will not be affected by the proposed action.

San Diego goldenstar***Bloomeria clevelandii***

The U.S. Fish and Wildlife Service consider San Diego goldenstar to be a Species of Special Concern. This species does not have official status with the state. The California Native Plant Society (2012) considers San Diego goldenstar to be extremely endangered in California. This species is covered under the provisions of the MHCP.

San Diego goldenstar is usually found in grasslands often in association with vernal pools. It may also be found chaparral and coastal sage scrub. There are numerous recorded occurrences of this species in the vicinity of the proposed project site. Marginally suitable habitat is present on the project site. There is a moderate possibility this species may be present in the undisturbed southern mixed chaparral on the property. The chaparral on the property is outside the limits of disturbance and will not be affected by the proposed action.

Parry's tetracoccus***Tetracoccus dioicus***

Parry's tetracoccus is considered a Species of Special Concern by the U.S. Fish and Wildlife Service and the State of California. The California Native Plant Society (2012) considers this species to be fairly endangered in California. Parry's tetracoccus is covered by the provisions of the MHCP and the NCCP.

Parry's tetracoccus is generally found in chamise chaparral and in coastal sage scrub. There are numerous recorded occurrences of this species in the vicinity of the proposed project. Marginally suitable habitat is present on the project site. There is a low to moderate probability that Parry's tetracoccus may be present in the undisturbed southern mixed chaparral on the property. The chaparral on the property is outside the limits of disturbance and will not be affected by the proposed action.

Red diamond rattlesnake *Crotalus ruber*

The red diamond rattlesnake has not been listed by the U.S. Fish and Wildlife Service. The California Department of Fish and Game considers the red diamond rattlesnake a Species of Special Concern. This species is covered by provisions of the NCCP.

Orange-throated whiptail (*Cnemidophorus hyperythrus beldingi*)

The orange-throated whiptail has not been listed by the U.S. Fish and Wildlife Service. The California Department of Fish and Game considers the orange-throated whiptail a Species of Special Concern. This species is covered by provisions of the MHCP.

The orange-throated whiptail is found in brushy areas with loose soils and rocks particularly in washes, along stream sides, and on rocky hillsides. Suitable habitat for this species is present throughout the project site. There are numerous recorded occurrences of this species within five miles of the project site. There is a high probability this species is present on the project site. The orange-throated whiptail, however, is considered adequately conserved by the provisions of the MHCP. Development of habitat on the project site would not adversely affect conservation of this species.

San Diego horned lizard (*Phrynosoma coronatum*)

The San Diego horned lizard has not been listed by the U.S. Fish and Wildlife Service. The California Department of Fish and Game considers the San Diego horned lizard a Species of Special Concern. This species is covered by provisions of the MHCP and NCCP.

The San Diego horned lizard is associated with coastal sage scrub, chaparral, grassland, coniferous forest, oak woodland, and some riparian areas. This species seems to prefer areas with loose, fine soils. A good population of native ants is required for this species to thrive. Suitable habitat for this species is found throughout the project site. There are two recorded occurrences of San Diego horned lizards within two miles of the property. There is high potential for this species to be present on the project site. The San Diego horned lizard, however, is considered adequately conserved by the provisions of the MSCP. Development of habitat on the project site would not adversely affect conservation of this species.

Bell's sage sparrow *Amphispiza belli belli*

Bell's sage sparrow is considered a species of Special Concern by the U.S. Fish and Wildlife Service and the State of California. This species is covered by the provisions of the MHCP and the NCCP. Bell's sage sparrow is also protected by Section 3503 of the California Fish and Game Code

In San Diego County Bell's sage sparrow is generally found in somewhat open chaparral, sage scrub and chamise chaparral. This species is less common in taller, dense, old chaparral. There is one recorded occurrence of this species in the vicinity of the proposed project. Suitable habitat for this species is present in the more open chaparral on the northeastern portion of the proposed project site. There is a high probability this species is present on the property.

Bell's sage sparrow is adequately conserved by the provisions of the MHCP and the NCCP. Development of habitat on the project site would not adversely affect conservation of this species.

Coastal California gnatcatcher (*Poliophtila californica californica*)

The coastal California gnatcatcher is listed as endangered by the U.S. Fish and Wildlife Service and is a State of California Species of Special Concern. The coastal California gnatcatcher is covered by provisions of the MHCP and NCCP.

The coastal California gnatcatcher is a small, non-migratory songbird that is considered a coastal sage scrub obligate, i.e. occurs almost exclusively in coastal sage scrub. There are numerous records of gnatcatchers in the vicinity however, where plant communities have been identified in the records they have all occurred in coastal sage scrub. The coastal California gnatcatcher was not observed during site visits is not likely to be present.

California rufous crowned sparrow

Aimophila ruficeps canescens

The California rufous-crowned sparrow has not been listed by the U.S. Fish and Wildlife Service. The California Department of Fish and Game considers the California rufous-crowned sparrow a Species of Special Concern. This species is covered by provisions of the MHCP and NCCP. The rufous crowned sparrow is also protected by Section 3503 of the California Fish and Game Code

The California rufous-crowned sparrow is a year-round resident throughout its range. This species occurs in open stands of chaparral and coastal sage scrub and appears to prefer distinct open shrubby habitat on rocky, dry slopes. Suitable habitat for this species is present in the chaparral community on the project site. There are numerous recorded occurrences of this

species within 5- miles of the project site. There is a high probability this species is present on the property. The project has been designed to avoid habitat for this species and the rufous-crowned sparrow is not likely to be adversely affected by the proposed action.

Golden eagle (*Aquila chrysaetios*)

The golden eagle has not been listed by the U.S. Fish and Wildlife Service. The California Department of Fish and Game considers the golden eagle a Species of Special Concern. This species is covered by provisions of the MHCP. The golden eagle is also protected by the California Fish and Game Code (Sections 3503, 3503.5, 3505 and 3513), the California Code of Regulations (Title 14, Sections 251.1, 652 and 783-786.6) and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d).

The golden eagle is an uncommon resident of eastern San Diego County. This species may be seen soaring over all habitat types but seems to prefer large expanses of grasslands, open chaparral, or sage scrub for foraging. Nesting occurs on steep ledges or in solitary trees on steep slopes. Marginal foraging habitat for this species is present on the project site. Suitable nesting sites are not available on the project site. There are no recorded occurrences of this species within five miles of the project site. The golden eagle may be an occasional visitor in the vicinity of the project site but will not be affected by the proposed project.

Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*

The California Department of Fish and Game and the U.S. Fish and Wildlife Service consider the northwestern San Diego pocket mouse a Species of Special Concern. This species is covered by provisions of the MHCP

The northwestern San Diego pocket mouse is generally found in coastal sage scrub, grassland, and chaparral with a strong preference for coastal sage scrub particularly on moderately gravelly and rocky substrates. There are three recorded occurrences of this species within 5-miles of the proposed project site. Marginally suitable habitat is present in the chaparral on the property. There is a low probability the northwestern San Diego pocket mouse is present on the site. The project has been designed to avoid habitat for this species and the northwestern San Diego pocket mouse is not likely to be adversely affected by the proposed action.

Southern mule deer *Odocoileus hemionus fuliginata*

The southern mule deer is not listed by the U.S. Fish and Wildlife Service or the State of California. The southern mule deer is protected as a game animal under the California Fish and Game Code. This species is covered under provisions of the MHCP.

The southern mule deer is limited to southern California and Baja California. The southern mule deer species are browsers, feeding primarily on woody vegetation as opposed to grasses. Mule deer occur in a wide range of habitats. Suitable habitat for this species is present on the project site but no deer were observed. This species is adequately conserved by the MHCP and would not be adversely affected by the proposed project.

Mountain lion

Puma concolor

The mountain lion is not listed by the U.S. Fish and Wildlife Service or the State of California. The mountain lion is protected as a game animal under the California Fish and Game Code. This species is covered under provisions of the MHCP.

The mountain lion is a successful generalist and is found in almost all habitat types. Suitable habitat for this species is present on the project site but mountain lions or mountain lion sign were not observed. This species is adequately conserved by the MHCP and would not be adversely affected by the proposed project.

5.0 PROJECT IMPACT ANALYSIS

The limits of disturbance associated with the proposed project includes the construction pad and the 150-foot brush management zone around the residence. The limits of disturbance encompass approximately 4.5 acres. This includes approximately 1.19 acres of the brush management zone that extends onto APN 222-121-10 which is also owned by the applicant. The proposed action would result in the alteration of 0.82 acre of Disturbed Land and 2.63 acres of Urban/Developed Land on APN 222-121-09 (Figure 6). Impacts to these lands are not considered significant and would not require mitigation or other compensatory action.

The Brush Management Zone for the proposed project includes 1.19 acres on the adjacent parcel (APN 222-121-10). Of the total 1.19 acres, 1.10 acres has already been cleared for fuel management and is described as "Disturbed southern mixed chaparral". An additional 0.09 acres of undisturbed southern mixed chaparral has the potential to be disturbed by brush management

Steps shall be taken to protect sensitive species that may be present in undisturbed portion of the fuel modification zone. An approved biologist or botanist shall conduct a survey of the 150-foot brush management zone. All sensitive species such as Del Mar manzanita, Encinitas baccharis and wart-stem ceanothus shall be flagged for avoidance and shall not be trimmed, pruned or removed. (See Section 5.1, Sensitive Habitats and Section 6.3, Mitigation and Monitoring Requirements).

Table 4 Potential Project Impacts Plant Communities Tuller Residence 957 Valborg Drive APN 222-121-09-00 San Marcos, California			
Plant Community	Acreage	Affected	Unaffected
Urban/Developed Land	2.63 ac	2.63 ac	0.0
Disturbed Land	0.82	0.82	0.0
Southern Mixed Chaparral	5.62 ac ⁷	0.00	5.62 ac
Total	9.07 ac	3.45 ac	5.62 ac

5.1 Sensitive Habitats

Brush management may adversely affect sensitive species such as Del Mar manzanita, Encinitas baccharis and wart-stem ceanothus. Del Mar Manzanita and Encinitas baccharis are not likely to be present but are listed species and an effort must be made to insure they are not affected by the proposed action. Wart stem ceanothus and summer holly are present in the brush management zone. Prior to any brush management activity including pruning and thinning steps shall be taken to protect sensitive plant species. A qualified biologist shall conduct a survey of the 150-foot brush management zone and sensitive species such as Del Mar manzanita, Encinitas baccharis, summer holly and wart-stem ceanothus shall be flagged for avoidance and shall not be trimmed/pruned or removed.

5.2 Jurisdictional Waters

In November 2014 a preliminary jurisdictional determination was conducted of of a

⁷Does not include 0.09 acre of disturbed southern mixed chaparral in the brush management zone.

drainage on the east side of the property. No evidence of jurisdictional waters was found in the drainage. The drainage is an erosional feature as defined the U.S. Army Corps of Engineers and the Environmental Protection Agency (USACE/EPA 2007). Jurisdictional waters are not present on the property and would not be affected by the proposed action.

5.3 Vernal Pools

Vernal pools and vernal pool species are not present on the proposed project site and would not be affected by the proposed action.

5.4 Wildlife Movement Corridors

Activities associated with the proposed project have the potential to adversely affect the wildlife movement corridor along the east side of the property. Lighting, domestic animals, drainage, the generation of toxic materials such as pesticides and fertilizers used in landscaping and the introduction of invasive non-native plants may contribute to the disruption of wildlife movement along the corridor. Appropriate steps shall be taken to avoid or minimize the potential adverse affects of the project on wildlife movement (See Section 6.0, Mitigation and Monitoring Requirements).

5.4 Rare, Threatened, endangered, Narrow Endemic and/or Sensitive Species or MHCP Covered Species

Twenty-eight sensitive species were identified as potentially present on or near the proposed project site (Appendix 2). The proposed action is restricted to urban/developed land and disturbed land. The project has been designed to avoid habitats on the property where sensitive species may occur. Sensitive species and their habitats will not be affected by the proposed action.

6.0 MITIGATION AND MONITORING REQUIREMENTS

6.1 Southern Mixed Chaparral

Southern mixed chaparral, a sensitive habitat, on the property is outside of the limits of disturbance and would not be adversely affected by the proposed action. In order to insure there are no accidental intrusions into the adjacent chaparral the limits of disturbance identified in Figure 6 shall be delineated with silt fence. The

project biologist shall oversee the installation of the silt fence and shall inspect the silt fence throughout construction. Upon completion of the project the project biologist shall prepare a final biological monitoring report for submission to the City of San Marcos. If there have been intrusions into the southern mixed chaparral on the property the report shall include recommendations for restoration or mitigation of any disturbance that may have occurred as a result of accidental intrusions into the chaparral community.

6.2 Nesting birds protected by the Migratory Bird Treaty Act and the California Fish and Game Code

The property provides suitable habitat for nesting migratory birds protected by the Migratory Bird Treaty Act and the California Fish and Game Code. Removal of vegetation should be scheduled to avoid the general bird nesting season, 1 February through 15 September. If removal of vegetation is to occur during the nesting season a survey shall be conducted by a qualified biologist to determine if nesting birds are present. If active nests are encountered or suspected an appropriate buffer shall be established around each nest location. No disturbance shall be permitted inside the buffer until the biologist has determined the young have fledged or the nest is no longer active.

6.3 Wildlife Movement Corridors

The proposed project has the potential to adversely affect the wildlife movement corridor east of the property (Figure 5). Steps shall be taken to avoid and/or minimize these affects.

6.3.1 Barriers

The presence of humans and domestic pets has the potential to disrupt use of the wildlife movement corridor. A suitable barrier or fence shall be constructed along the limits of disturbance on the east side of the developed area. This barrier would discourage entry by humans and domestic animals and limit dumping and other destructive actions. The barrier shall be indicated on the site plan for the project. In addition, any future work involving the area outside of the current limits of disturbance shall require environmental review.

6.3.2 Drainage

Allowing run-off from the proposed project to enter the ravine along the east side of the property may alter the plant communities in the ravine and disrupt or discourage the use of the wildlife movement corridor. Erosion and sedimentation as a result of run-off from the project may also adversely affect use of the corridor. All drainage from the developed portion of the property will be directed to energy dissipaters and allowed to percolate into the soil eliminating excessive run-off and erosion.

6.3.3 Lighting

Wildlife movement along the corridor east of the property is likely to be nocturnal or crepuscular. Outdoor lighting such as that around the proposed tennis court has the potential to disrupt wildlife movement, therefore all outdoor lighting shall use low power sodium lights and be directed towards the ground and away from the movement corridor on the east side of the property. In addition, native vegetation should be incorporated into landscaping along the east side of the limits of disturbance to provide shielding from outdoor lighting. Appropriate species for planting in this area would include laurel sumac, Eastwood manzanita and wart-stem ceanothus.

6.3.4 Noise

Construction related noise has the potential to adversely affect use of the wildlife movement corridor. This potential is particularly high at night and at dusk and dawn when wildlife are most likely to be using the corridor. Construction shall not be permitted between dusk and dawn.

6.3.5 Toxics

Runoff from the project may include toxics such as fertilizer, pesticide and herbicide residues. Allowing run-off from the project to enter the ravine on the east of the property would likely adversely affect vegetation and wildlife. As noted in Section 6.4.2, Drainage, All drainage from the developed portion of the property will be directed to energy dissipaters within the developed area and

allowed to percolate into the soil thereby containing potential toxics in the developed area.

6.3 Rare, Threatened, endangered, Narrow Endemic and/or Sensitive Species or MHCP Covered Species

Brush management activity may adversely affect plant species protected by the MHCP. Prior to the removal or modification of vegetation the brush management area shall be delineated with stakes. A qualified biologist shall search the area for plant species protected by the MHCP. If any of these species are found within the brush management area they shall be flagged for avoidance. Flagged plants shall not be trimmed, pruned or removed.

7.0 CERTIFICATION

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

DATE:

SIGNED:

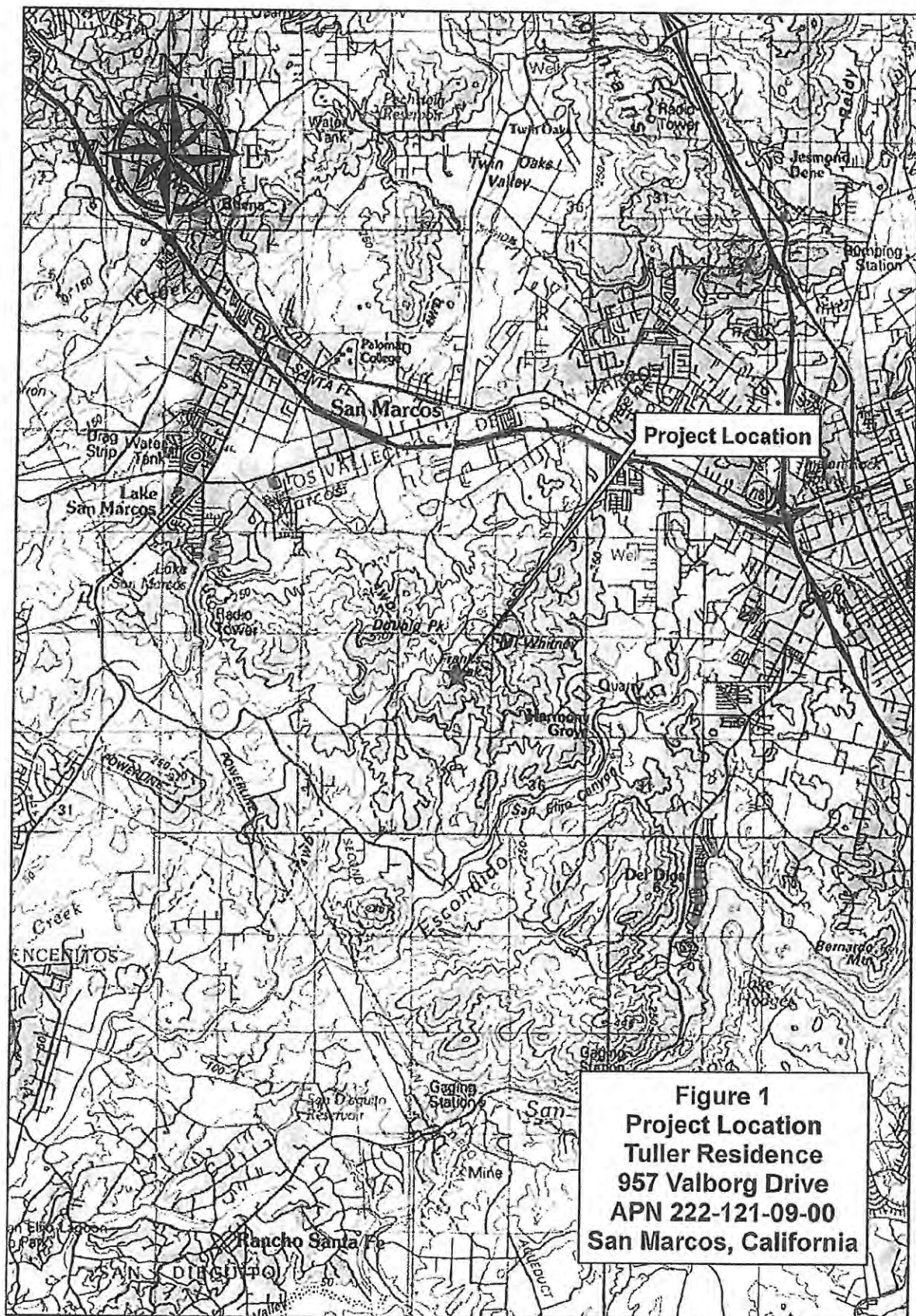


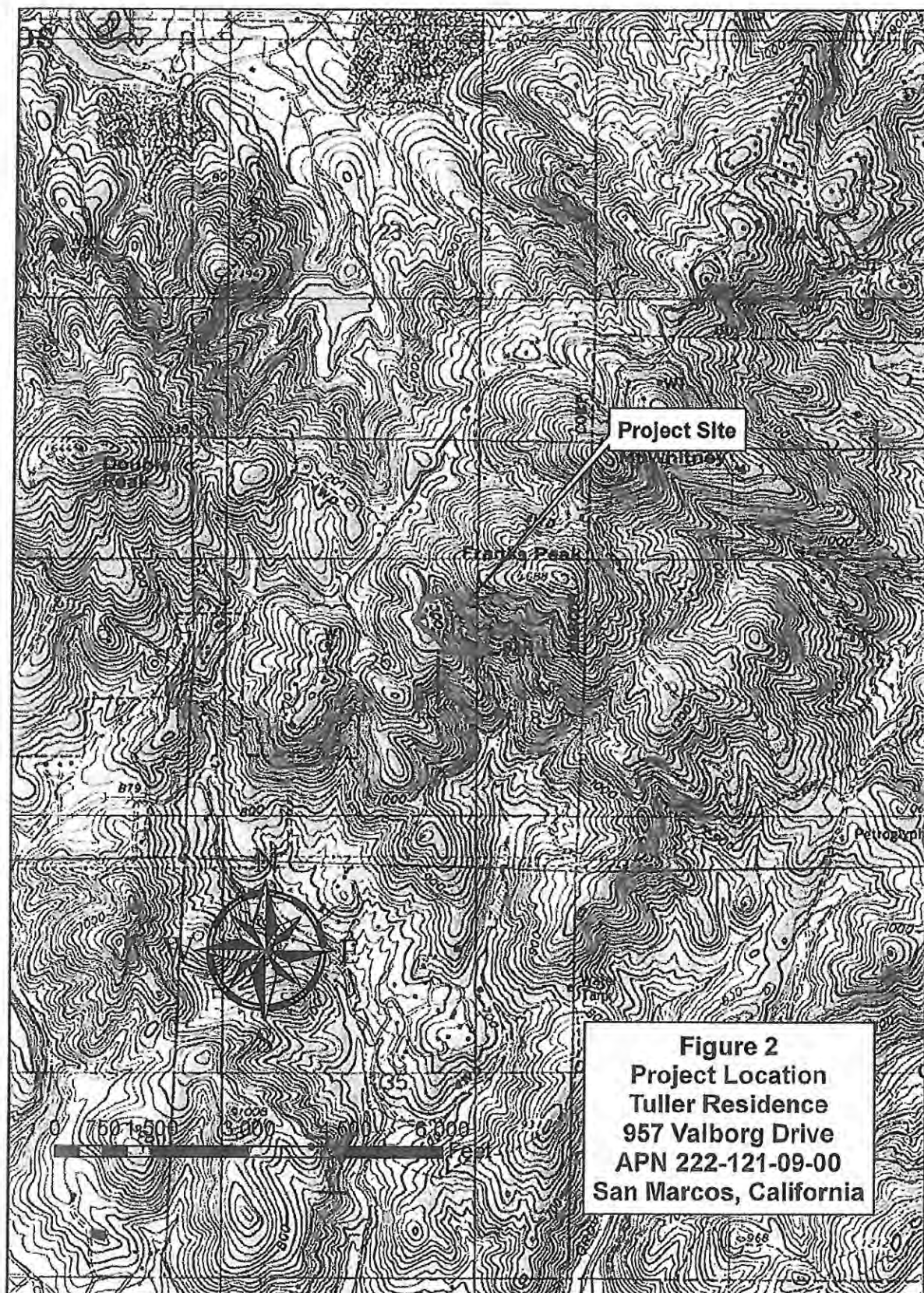
Laurence N. Dean, Senior Wildlife Ecologist

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APPENDIX 1
FIGURES





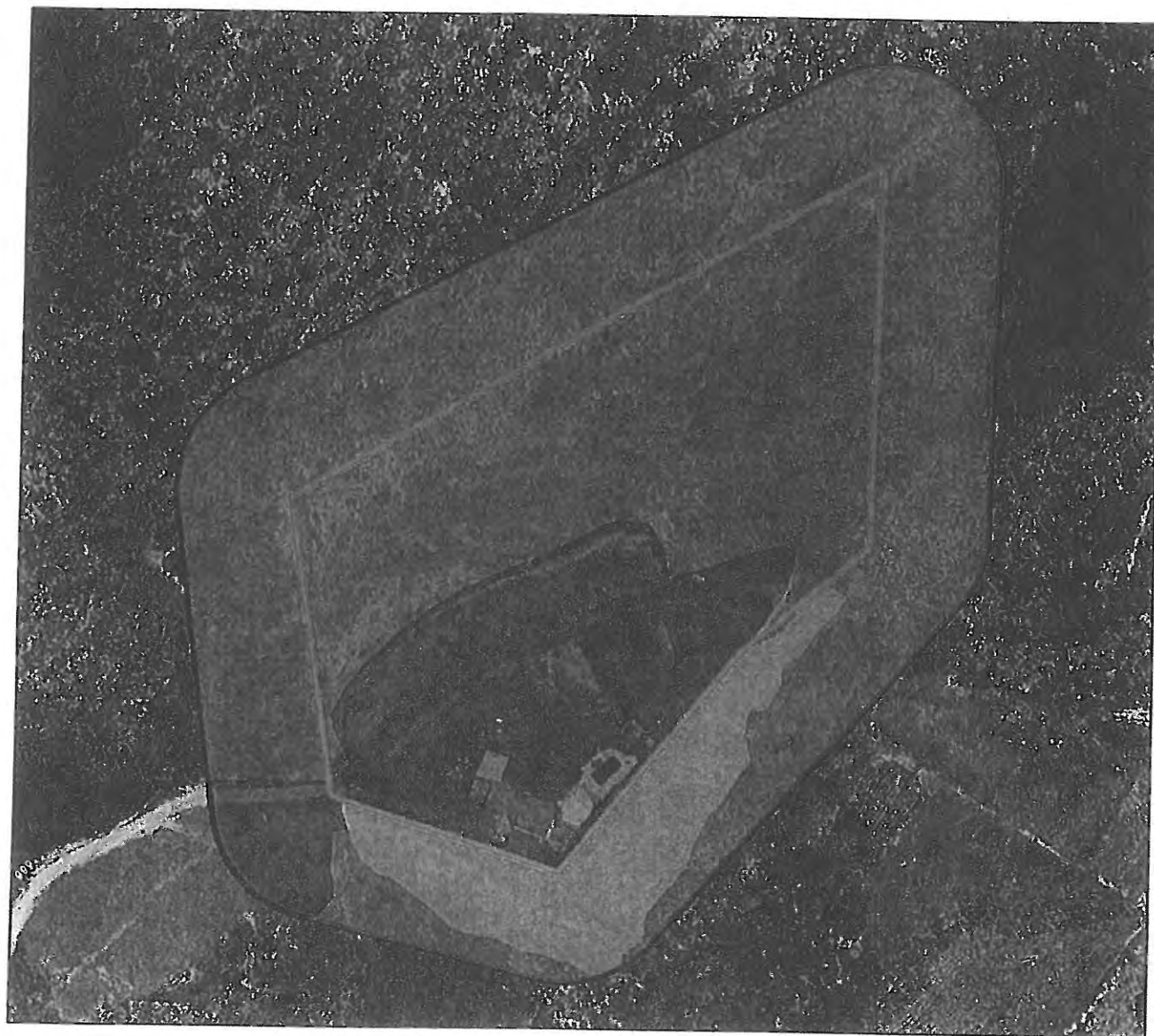
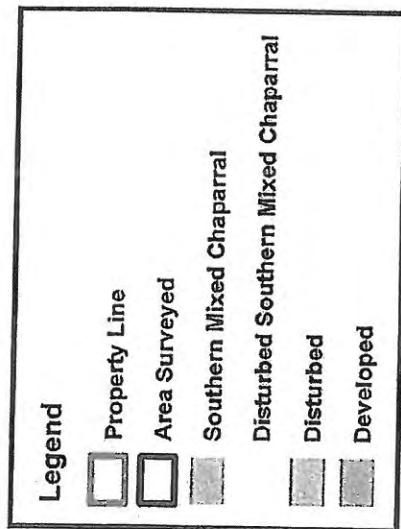
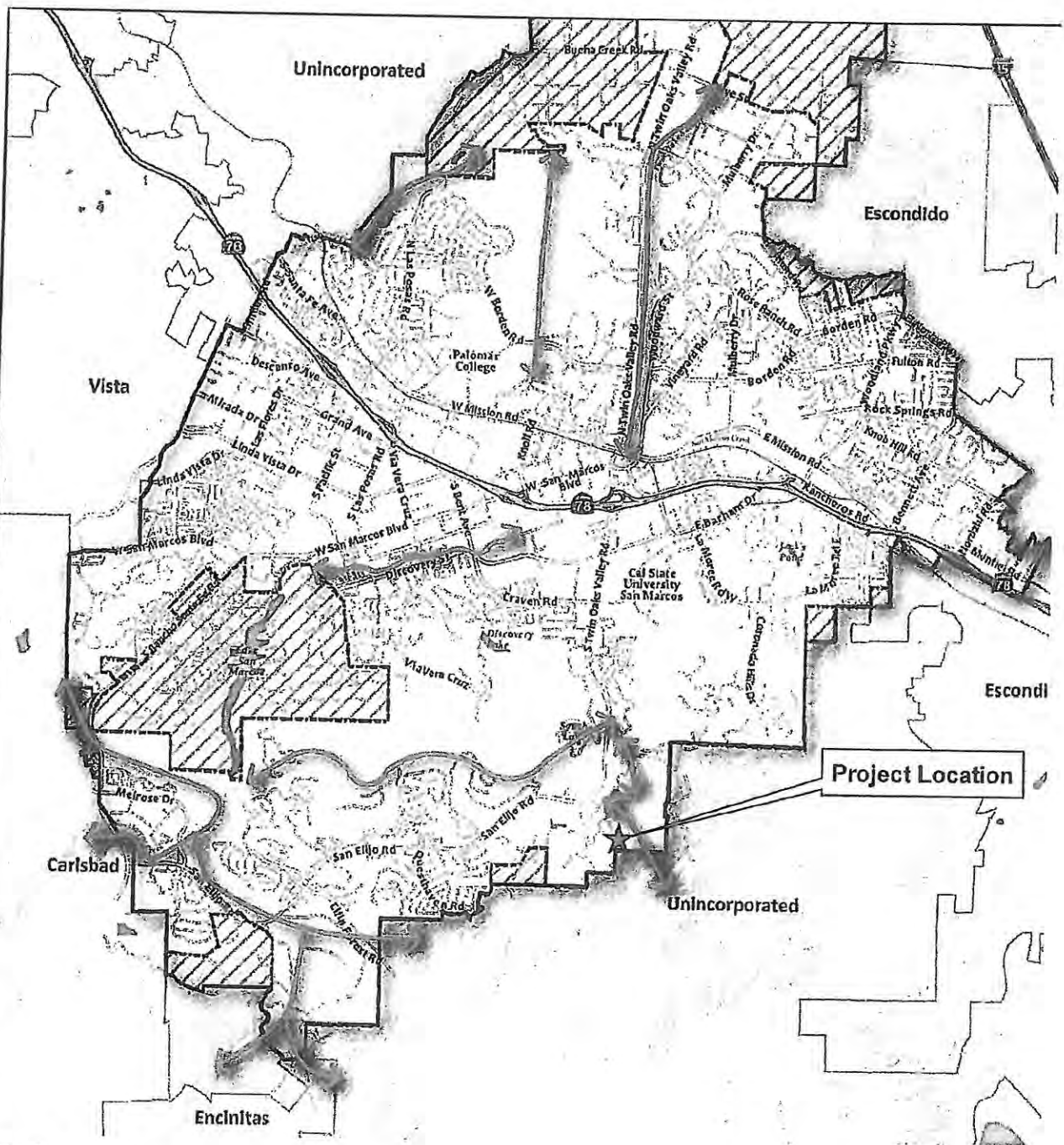


Figure 4
Plant Communities
Tuller Residence
957 Valborg Drive
APN 222-121-00
San Marcos, California



N

150 75 0 150 Feet

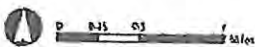


4

CONSERVATION AND
OPEN SPACE ELEMENT

FIGURE 4-2

City of San Marcos Wildlife Corridor and Linkage



SOURCE OF DATA:
City of San Marcos GIS

Every effort has been made to assure the accuracy of the maps and data provided; however, some information may not be accurate or current. The City of San Marcos assumes no responsibility arising from use of this information and incorporates its disclaimer regarding the lack of any warranties, whether expressed or implied, concerning the use of the same. For additional information, see the Disclaimer of the City's website.

- San Marcos City Limits
- Sphere of Influence
- Planning Area
- Major Hydrologic Features
- Creeks
- Railroad
- Freeway
- Highway
- Major Road
- Minor Road
- Wildlife Corridor

Figure 5 Project Relationship to Wildlife Movement Corridors In The City of San Marcos

Source:
City of San Marcos General Plan

Figure 6

Potential Impacts of the Proposed Project
957 Valborg Drive
APN 222-121-09-00
San Marcos, California

Legend

-  Area Potentially Affected By The Proposed Action
-  Area Surveyed
-  Property Line
-  Disturbed
-  Southern Mixed Chaparral
-  Seasonal Stream
-  Developed

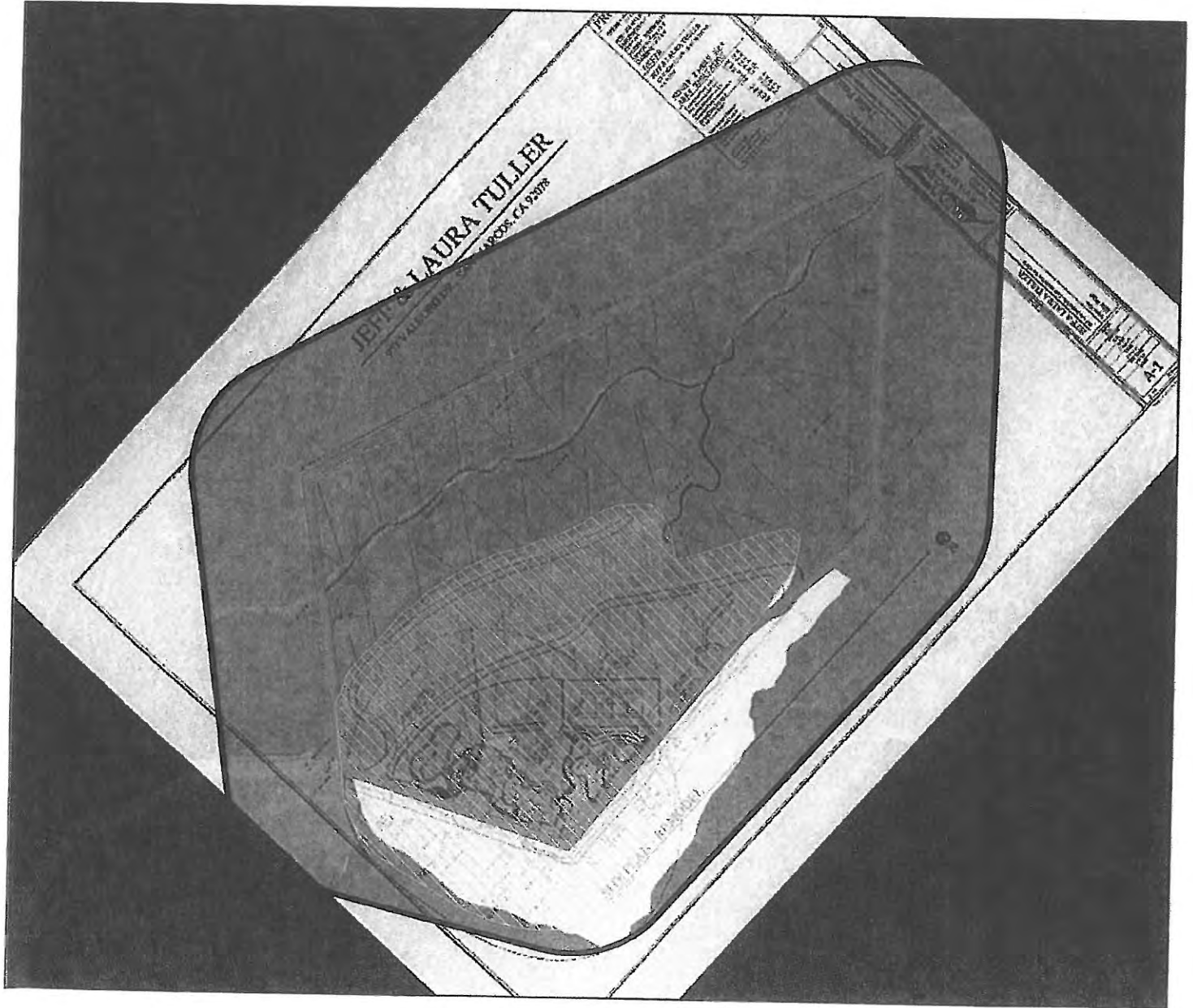
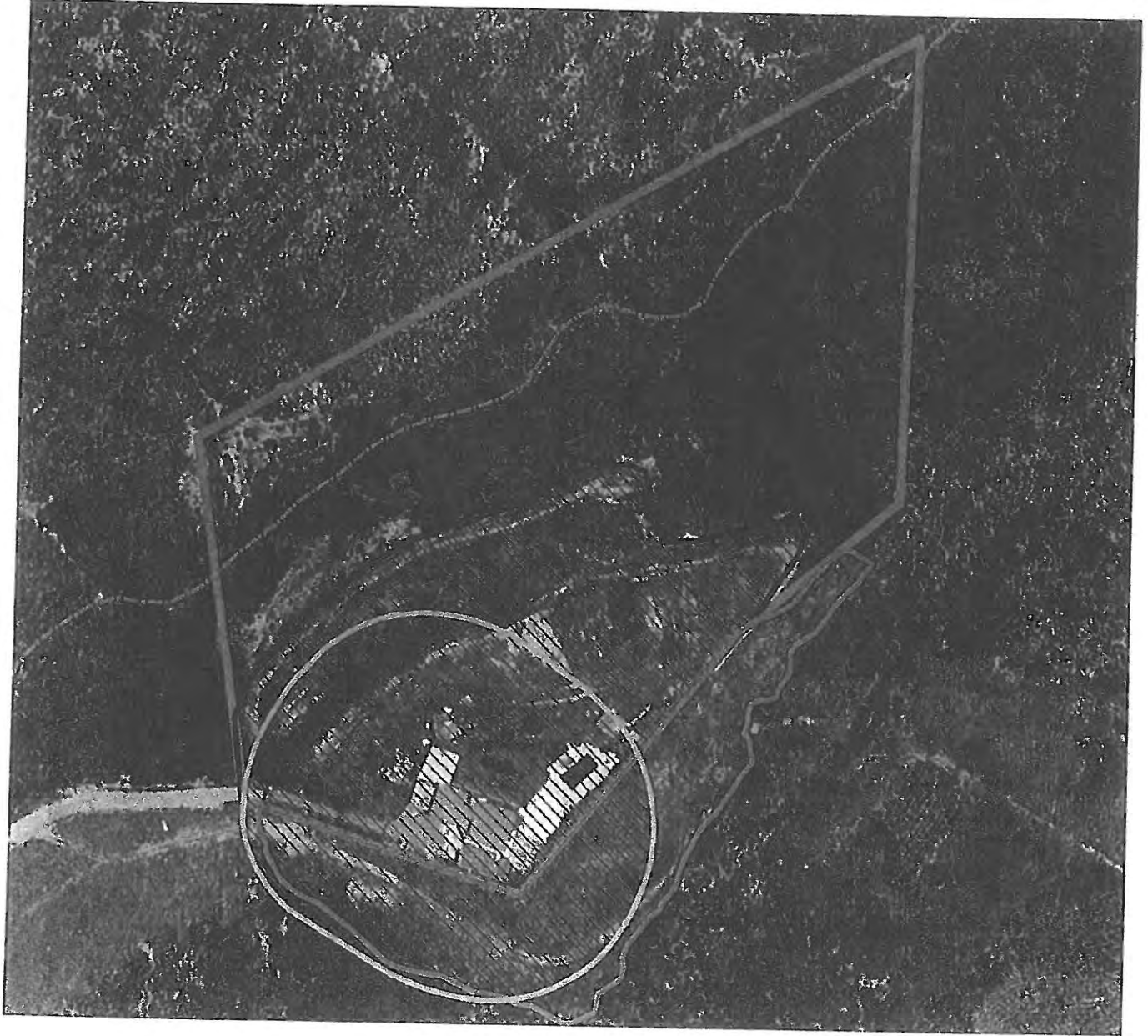


Figure 7
Overview of Potential Impacts
of the Proposed Project
Including Existing and
Proposed Brush Management Zones
957 Valborg Drive
APN 222-121-09-00
San Marcos, California

- Legend**
-  Proposed 150-Foot Brush Management Zone
 -  Existing Brush Management Zone
 -  Area Potentially Affected By The Proposed Action
 -  Property Line
 -  Seasonal Stream



**APPENDIX 2
PROJECT SPECIFIC
LIST OF SENSITIVE
SPECIES
POTENTIALLY
ASSOCIATED WITH
THE PROPOSED
PROJECT**

APPENDIX 2

PROJECT SPECIFIC ANNOTATED LIST OF STATE AND FEDERALLY LISTED SPECIES AND MSHP/NCCP COVERED SPECIES POTENTIALLY PRESENT ON THE PROPOSED PROJECT SITE TULLER RESIDENCE 957 VALBORG DRIVE SAN MARCOS, CALIFORNIA

Common Name	Scientific Name	Federal Status	State Status	CNPS Status	MSHP /NCCP	Habitat Associations	Probability to occur
PLANTS							
California adolphia	<i>Adolphia californica</i>	--	--	0.1	Yes	Chaparral, Coastal Sage Scrub, Valley and Foothill Grasslands	Numerous recorded occurrences within 5-miles Suitable habitat present Not observed Not present
San Diego ambrosia	<i>Ambrosia pumilla</i>	E	--	0.1	Yes	Coastal Sage scrub, Disturbed Areas	No recorded Occurrences within 5-miles Not observed Not present
Del Mar manzanita	<i>Arctostaphylos glandulosa crassifolia</i>	E	--	0.1	Yes	Southern Mixed Chaparral	Numerous recorded occurrences within 5-miles Suitable habitat present High probability to occur

Encinitas bacharis	<i>Bacharris vanessae</i>	T	E	0.1	Yes	Chaparral, Southern Mixed Chaparral	Numerous recorded occurrences within 5-miles Suitable habitat present High probability to occur
Wart-stem ceanothus	<i>Ceanothus verrucosus</i>	SC	--	0.2	Yes	Chaparral	Present
Orcutt's spine-flower	<i>Chorizanthe orcuttiana</i>	E	E	0.1	Yes	Southern Mixed Chaparral	No recorded occurrences within 5-mile Suitable habitat is present Moderate probability of occurrence.
Summer holly	<i>Comarostaphylos diversifolia diversifolia</i>	SC	E	0.2	Yes	Chaparral	Numerous recorded occurrences within 5-miles Suitable habitat present High probability of occurrence.
Del Mar Mesa sand aster	<i>Corethrogyne flaginifolia linifolia</i>	SC	--	0.1	Yes	Coastal Sage Scrub, Chaparral, Southern Mixed Chaparral	Three recorded occurrences within 5-miles. Suitable habitat present on site. High probability of occurrence.

Short-leaved dudleya	<i>Dudleya blochmaniae brevifolia</i>	SC	E	0.1	Yes	Southern Mixed Chaparral	No recorded occurrences in the vicinity. Suitable habitat is present. Moderate probability of occurrence.
Sticky dudleya	<i>Dudleya viscida</i>	SC	--	0.2	Yes	Coastal Sage Scrub, Chaparral	Two recorded occurrences within 5-miles. Suitable habitat present on site. High probability of occurrence
San Diego barrel cactus	<i>Ferrocactus viridescens</i>	SC	--	0.1	Yes	Coastal Sage Scrub, Chaparral, Maritime Succulent Scrub	One recorded occurrence in the vicinity. Suitable habitat present on site. High probability of occurrence
Orcutt's hazardia	<i>Hazardia orcutti</i>	SC	T	0.1	Yes	Chaparral	No recorded occurrences in the vicinity. Suitable habitat is present. Moderate probability of occurrence.

Orcutt's lianthus	<i>Lianthus orcuttii</i>	--	--	0.3	Yes	Montane chaparral	No recorded occurrences in the vicinity. Suitable habitat is not present. Not likely to be present
San Diego goldenstar	<i>Mullia clevelandia</i>	SC	--	0.1	Yes	Grassland, Chaparral, Coastal Sage Scrub	Numerous recorded occurrences in vicinity. Suitable habitat present on site. High probability of occurrence.
California adder's tongue fern	<i>Ophioglossum californicum</i>	--	--	0.2	Yes	Grassland, Chamise Chaparral, Vernal Pools	No records in CNDDb. Suitable habitat not present Not likely to occur.
Torrey pine	<i>Pinus torreyana torreyana</i>	SC	--	0.2	Yes	Southern Mixed Chaparral, Torrey Pine Forest	No recorded occurrences in vicinity. Suitable habitat present Not observed on or near project site.
Nuttall's scrub oak	<i>Quercus dumosa</i>	SC	--	0.2	Yes	Southern Mixed Chaparral	No recorded occurrences in vicinity. Suitable habitat present Not observed on or near project site.

Engelmann oak	<i>Quercus engelmannii</i>	-	-	0.2	Yes	Chaparral, Coast Grassland, Coast Live Oak Woodland	No recorded occurrences in vicinity. Suitable habitat present Not observed on or near project site.
Ashy spike moss	<i>Selaginella cinerascens</i>	-	-	0.1	Yes	Chaparral Coastal Sage Scrub	No records in CNDDB. Suitable habitat is present Not observed during site visit Not present
Parry's tetracoccus	<i>Tetracoccus dioicus</i>	SC	-	0.2	Yes	Chaparral, Coastal Sage Scrub	Numerous recorded occurrences in vicinity. Suitable habitat present on site. High probability of occurrence.
AMPHIBIANS AND REPTILES							
Arroyo toad	<i>Anaxyrus californicus</i>	E	SC	NA	Yes	Along streams in coastal sage scrub and chaparral	No recorded occurrences in the vicinity. Suitable habitat not present No potential to occur

Red diamond rattlesnake	<i>Crotalus ruber ruber</i>	--	SC	NA	Yes	All habitats in vicinity	Two recorded occurrences in the vicinity however this species is known to be abundant here. Suitable habitat present High probability of occurrence
San Diego horned lizard	<i>Phrynosoma coronatum blainvillei</i>	SC	SC	NA	Yes	Chaparral, Coastal Sage Scrub	Numerous recorded occurrences in vicinity. Suitable habitat present on site. High probability of occurrence.
Orange throated whiptail lizard	<i>Cnemidophorus hyperythrus beldingi</i>	SC	SC	NA	Yes	Chaparral, Coastal Sage Scrub, Grasslands	Numerous recorded occurrences in vicinity. Suitable habitat present on site. High probability of occurrence.

BIRDS							
So. California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	--	-	NA	Yes	Chaparral, Coastal Sage Scrub, Grasslands	Numerous recorded occurrences in vicinity. Suitable habitat present on site. High probability of occurrence.
Golden eagle	<i>Aquila</i>	P	P	NA	Yes	Chaparral, Coastal Sage Scrub, Grasslands	No recorded occurrences in the vicinity. Suitable foraging habitat present No nesting habitat In vicinity Not likely to be present except as an occasional visitor.
Bells sage sparrow	<i>Amphispiza belli belli</i>	SC	SC	NA	Yes	Chaparral, Coastal Sage Scrub	Two recorded occurrences in the vicinity. Suitable habitat is present. High probability of occurrence
Burrowing owl	<i>Athenae clangula hypugae</i>	SC	SC	NA	Yes	Agricultural areas, Grasslands Open Scrub	One recorded occurrence in the vicinity. Suitable habitat not present Not observed during site visit Not present

Coastal California gnatcatcher	<i>Poliophtila californica californica</i>	T	SC	NA	Yes	Numerous recorded occurrences in vicinity. Suitable habitat is not present on site. Low probability of occurrence.
MAMMALS						
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	SC	SC	NA	Yes	Numerous recorded occurrences in vicinity. Suitable habitat present on site. High probability of occurrence
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	SC	SC	NA	Yes	Present.
Southern mule deer	<i>Odocoileus hemionus fuliginata</i>	--	Game species	NA	Yes	Not reported in CNDDB Suitable habitat present Moderate probability of occurrence
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	E	SC	NA	Yes	No recorded occurrences in the vicinity. Suitable habitat is not present present. Not present.

Mountain Lion	<i>Puma concolor</i>	—	P	MNA	Yes	Coastal Sage Scrub, Chaparral, riparian Woodlands	No recorded occurrences in the vicinity. Suitable habitat is present. Moderate probability of occurrence
---------------	----------------------	---	---	-----	-----	---	---

E Endangered
 T Threatened
 SC Species of Concern
 Yes Covered by MHCP
 P Protected by other than endangered species act
 0.1 Seriously endangered in California
 0.2 Fairly endangered in California
 NA Not applicable
 -- Not covered

APPENDIX 3
PHOTOGRAPHS



Photo 1. Existing homesite and associated urban/developed land.



Photo 2. Home site viewed from the southwest. The cleared area is the 150 foot brush management zone southwest of the residence. This area has been categorized as Disturbed Southern Mixed Chaparral.



Photo 3. Home site viewed from the south.



Photo 4. Disturbed Land on northeast side of project site.



Photo 5. Southern mixed chaparral on northeast side of proposed project site. Vegetation seen here is representative of chaparral on the project site. This area will not be disturbed by the proposed action

APPENDIX 4
RESUME
SENIOR WILDLIFE
ECOLOGIST

Laurence N. Dean

Senior Wildlife Ecologist, Senior Wetland Scientist

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Education

Graduate Studies, Zoology/Wildlife Biology, Humboldt State University, California 1968 - 1972

Bachelor of Science, Wildlife Ecology, Humboldt State University, California 1965 - 1968

Specialized Education/Training:

Flat-tailed Horned Lizard Workshop, BLM Field Office El Centro

Identifying Native and Naturalized Grasses of Southern California, Native Grasslands Association

San Diego County Sensitive Butterfly Workshop

Laboratory Course - Introduction to the fairy shrimps, tadpole shrimps and clam shrimps: their ecology, biology, and assessing their habitat

Field Course - Introduction to the fairy shrimps, tadpole shrimps and clam shrimps: their ecology, biology, and assessing their habitat

Desert Tortoise Monitoring and Handling Workshop, Ridgecrest, CA (2010, 2008, 2005)

Wetlands Identification and Delineation, Wetlands Training Institute

Habitat Suitability Index Modeling, USFWS

Habitat Evaluation Procedures, USFWS

Experience

Senior Biologist 2005-2012
Brian F. Smith and Associates, Inc.

Senior Scientist September 2003-February 2005
Engineering-Environmental Management

Senior Scientist July 2001-June 2003
Anteon Corporation

Project Biologist November 1999-June 2001
Dean Ryan Consultants and Designers

Senior Scientist, Lead, Life Sciences Group June 1990-August 1997
Advanced Sciences Incorporated

Refuge Manager, Mid-Columbia National Wildlife Refuge, OR/WA 1972-1986
Refuge Manager, Salton Sea National Wildlife Refuge, CA
Refuge Manager, (Assistant), Havasu National Wildlife Refuge, CA/AZ
Refuge Manager (Assistant), Great Swamp National Wildlife Refuge, NJ
U.S. Fish and Wildlife Service, Division of Wildlife Refuges

Wildlife Biologist U.S. Fish and Wildlife Service, Division of Ecological Services	1971-1972
Teaching Assistant, Wildlife Diseases Humboldt State University, California	1968-1971
Park Ranger (seasonal) U.S. National Park Service, Point Reyes National Seashore, California	1966-1969

Military Service

U.S. Army, Honorable Discharge, 1962 - 1964

Representative Experience

Senior Biologist, Brian F. Smith and Associates

Supervise and conduct field assessments and biological monitoring related to Multiple Species Conservation Planning and Natural Communities Conservation Planning in San Diego, Riverside Counties, Orange and San Bernardino. Conduct wetland delineations throughout San Diego, Riverside, and San Bernardino Counties. Supervise focused surveys and oversee/conduct noise level monitoring for sensitive species such as coastal California gnatcatcher, least Bell's vireo, and southwest willow flycatcher.

Senior Biologist, Natural Communities Conservation Plan (NCCP) Compliance. Supervised and participated in field assessments and preparation of Pre-activity Site Reports for maintenance activities conducted by Sempra Utilities in compliance with the NCCP.

Senior Biologist, Wing Infrastructure Development Outlook (WINDO) Wetland Survey and Delineation.

Supervised and participated in wetland identification, delineation and mapping, Beale Air Force Base (AFB), California.

Senior Biologist, Environmental Assessment/Biological Assessment, Anti-Terrorism/Force Protection Upgrades for Beale AFB, California. Senior biologist for assessment of direct and indirect impacts to biological resources as a result of the proposed construction of 37 miles of woven steel fence and four major access points. Oversight of wetland identification and delineation of vernal pools and other seasonal wetlands.

Senior Biologist, California Ground Squirrel Control, March Air Reserve Base (ARB), California. Conducted pre- and post-treatment surveys of California ground squirrels and western burrowing owls to determine the impact of fumigation with phosgene gas as a ground squirrel control measure. Supervised pesticide applicators.

Senior Biologist, Environmental Assessment, California Ground Squirrel Control, March ARB, Riverside, California. Preparation of Environmental Assessment for the control of California ground squirrel along the flight line at March ARB. The Environmental Assessment addressed direct and indirect impacts on vernal pools, their associated endangered species and the western burrowing owl (Species of Concern).

Task Lead, Construction and Reclamation Monitoring, Communication Towers and Access Roads, BLM Needles Field Office. Monitored construction of access road and cell tower pad. Monitored compliance with reclamation requirements imposed on the contractor by the Needles Field Office, Bureau of Land Management. Performed searches for plant species of concern along the right-of-way, relocating as needed. Assisted with desert tortoise monitoring.

Task Lead, Death Valley Junction Water/Plant Study. Population surveys for federally listed Amargosa niterwort and Ash Meadows gumplant. Study also involved determination of plant water pressures and identification of isotopic signatures of oxygen and hydrogen in an attempt to determine source of water used by the above species.

Task Lead, Sensitive Species Surveys. Task lead, population surveys for Mojave fringe-toed lizard, Mojave ground squirrel, desert tortoise, nesting raptor surveys and vegetation surveys in the BLM Barstow Field Office area.

NEPA Manager, EA, Combat Engineer Training Range, MCAS Mira Mar, San Diego, CA. Project Manager for the preparation of an environmental assessment for the development of a combat engineer training facility. Effort addressed threatened and endangered species, vernal pools and wetlands delineation.

NEPA Manager, EIS for the Disposal and Reuse of Naval Station Treasure Island, California. Project manager with oversight of the preparation of EIS, Section 106 NHPA compliance, developed Memorandum of Agreement between Navy, Advisory Council on Historic Preservation and State Historic Preservation Officer with City of San Francisco and Treasure Island Development Authority as invited signatories.

NEPA Manager, EIS/EIR for the Disposal and Reuse of Fleet Industrial Supply Center, Naval Fuel Depot, Point Molate, California. Project manager with oversight of the preparation of Joint EIS/EIR, Section 106 NHPA compliance, developed Memorandum of Agreement between Navy, Advisory Council on Historic Preservation and State Historic Preservation Officer, prepared ROD.

Senior Biologist, NEPA and other environmental documentation, Marine Corps Base (MCB) Camp Pendleton, Marine Corps Air Station (MCAS), Camp Pendleton, California. Designed and implemented field surveys for biological resources. Prepared NEPA documents and other environmental reports. Conducted reconnaissance surveys for Endangered Species and performed wetlands identification and delineation.

Senior Biologist, NEPA and other environmental documentation, U.S. Department of Transportation, Federal Highway Administration. Project manager. Conducted environmental surveys, wetlands delineations and prepared BA and Endangered Species Status Reports.

Project Manager/Senior Biologist, Natural Resources Management Plan, Los Alamos National Laboratory, Los Alamos, New Mexico. Compiled regulatory drivers pertaining to natural resource management at Department of Energy facilities. Developed a natural resources management plan for Los Alamos National Laboratory based on these drivers. Conducted field reconnaissance of facility and resources.

Senior Biologist, C-17A Aircraft Deployment and Bed-down EIS, National Guard Bureau. Conducted literature searches, field surveys and prepared biological resource sections of EIS. Proposed action included evaluation of Military Operations Areas on the eastern seaboard and along the Gulf of Mexico. Evaluated impacts on waterfowl, other migratory birds and endangered species on numerous state and federal refuges or wildlife management areas.

Senior Scientist, Hanford Nuclear Reservation, Washington. Managed and conducted field surveys and investigations, site inspections, and regulatory compliance audits. Prepared environmental reports, floodplain and wetland assessments, and environmental assessments and other reports under NEPA. NEPA documents included Hanford Remedial Action EIS, Tank Waste Remediation System EIS, and Redox Plutonium Facility Decommissioning and Demolition EA. Trained and certified in Habitat Evaluation Procedures, a computer model used for NEPA related impact analysis and mitigation design. Conducted habitat assessments using a Geographic Information System (ArcInfo, ArcView2) and used remote sensing data to assess potential project impacts and recommend mitigation.

Project Manager, Senior Biologist, NEPA Support, Federal Aviation Administration (FAA) Managed and prepared EA's and Endangered Species Reports for construction and operation programs at FAA sites throughout the Pacific Northwest and the Intermountain West. Proposed actions included facility construction/upgrades, removal of underground storage tanks and associated cleanup, and other program activities at radar facilities throughout the Pacific Northwest and Intermountain West.

Program Manager/Field Auditor, Environmental Compliance Audits, Bureau of Land Management (BLM).

Managed and participated in a large program of site surveys, preliminary assessments and environmental compliance audits for municipal solid waste disposal facilities on BLM lands. Objective of audits was to determine compliance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA) and state regulations pertaining to the operation of municipal landfills.

Project Manager, Environmental Reports, Bonneville Power Administration (BPA). Managed and prepared all environmental documentation in support of proposed gas-powered generating facility near Pasco, Washington. Developed checklists for field surveys, implemented field program for data collection, conducted endangered species surveys and prepared reports. Coordinated recommendations related to Section 7 of the Endangered Species Act.

Natural Resources Manager/Wildlife Biologist, U.S. Fish and Wildlife Service. Performed site reconnaissance and proposed conditions for permits under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Conducted biological surveys of coastal/estuarine wetlands. Developed habitat and species management plans. Used remote sensing data to identify and delineate coastal salt marshes. Conducted wildlife and habitat surveys for waterfowl, other migratory birds and big game. Conducted endangered species surveys, prepared management and recovery plans and Section 7 consultations under the Endangered Species Act. Evaluated rangeland and developed permanent range condition transects for long-term analysis of rangeland recovery. Developed land use plans and coordinated land use zoning with local counties and municipalities. Also served as Emergency Field Response Coordinator for oil and other hazardous material spills; environmental compliance/construction monitor on two major dike/seawall construction projects and one facility construction project; and project supervisor for a heavy equipment operators school operated on USFWS lands. \Experience includes serving as refuge Manager at Salton Sea and Havasu National Wildlife Refuges. Developed and implemented habitat management plans for desert riparian and upland habitats in the Mojave and Lower Colorado Desert..