

**BIOLOGICAL RESOURCES LETTER REPORT
FOR FUERTE TPM
PDS2018-TPM-21261**

PREPARED FOR:

**County of San Diego
Department of Planning and Land Use
5510 Overland Ave 110 & 310, San Diego,
California 92123**

PREPARED BY:



**Michael K. Jefferson
BLUE Consulting Group**

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**Michael Jefferson
SD County CEQA Biologist**



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1.0 SUMMARY

The project is a Tentative Parcel Map to subdivide the existing 2.60-acre parcel into three separate parcels. The project site is located adjacent to Fuerte Drive in the Valle De Oro Community Planning area, within unincorporated San Diego County. The site is subject to the General Plan Regional Category Semi-Rural Land Use Designation Limited Rural Residential (RR). Zoning for the site is Semi-Rural Residential (SR 0.5). The site is developed with an existing single-family residence that would be retained. Access would be provided by a public road and private easement connecting to Fuerte Drive. This report provides information regarding existing conditions, compliance with the Resource Protection Ordinance (RPO) and the Guidelines for Determining Significance and Survey, Report Format, Content and Mapping Requirements (County 2010), and performs an impact analysis based on the current site design. This letter report also identifies any potential mitigation measures to reduce any impacts to below a level of significance.

A general biological survey, sensitive species presence/potential survey, protocol preliminary U.S. Army Corps of Engineers (USACE) wetland delineation, and the Resource Protection Ordinance (RPO) Study were performed onsite. Biological resources observed include four (4) habitat types: Jurisdictional unvegetated non-wetland waters, non-native grassland, disturbed, and developed area.

Jurisdictional California Department of Fish and Wildlife (CDFW) non-wetland waters, the unvegetated channel, were observed onsite. No state or federally listed, or locally identified Special Status plant species were observed onsite. No sensitive wildlife species were either observed or detected onsite. Due to the highly disturbed nature of the site and no appropriate habitat onsite or adjacent to the Property, no special status, threatened, rare or endangered wildlife and plant species are expected to occur.

No grading impacts to the jurisdictional unvegetated, non-wetland water is proposed. The 100% avoided CDFW jurisdictional (non-RPO wetland) habitat adjacent to the north-western Property Line (PL; located both on and offsite) is 100% avoided. If future development is proposed to impact the CDFW non-wetland channel, the appropriate CDFW permit will be required. No RPO buffer is required for the unvegetated non-wetland waters.

One potentially significant biological impact is proposed to occur as a result of the loss of 1.48 acres of Non-Native Grassland; mitigation is required for this impact.

2.0 INTRODUCTION, PROJECT DESCRIPTION, LOCATION, SETTING

The proposed Project, within APN 498-151-23-00, is a Tentative Parcel Map to subdivide the existing 2.60-acre parcel into three separate parcels, each with a single-family residential house. No offsite impacts are proposed. The project site is located adjacent to Fuerte Drive in the Valle De Oro Community Planning area, within unincorporated San Diego County (Figures 1-3).

Topography, Soils, Land Use

The project site occurs within a developed landscape, with residential development on all sides. A natural channel enters the property from the northern PL and exits the southern PL. The site is generally flat to sloping, facing the south.

Soils (USDA web soil survey, 2017) are generally split with the western 50% of the Property comprised of Placentia sandy loam (thick surface; 2-9% slopes) and the eastern half of the Property comprised of Visalia sandy loam (5-9% slopes).

Onsite, the property is generally developed or disturbed as a result of the open corner location, Fuerte Drive, and residential uses. Surrounding the perimeter of the Property are Fuel Modification/Brush Management Zones protecting the existing residences (adjacent offsite neighbors), and the maintained grassland.

3.0 REGIONAL CONTEXT

The proposed project is in the County of San Diego Multiple Species Conservation Program planning area (Figure 1). The property is not within a proposed Pre-Approved Mitigation Area (PAMA). The project site is within the Unincorporated Metro-Lakeside-Jamul Segment of the MSCP. The site is in an area of existing residential development and public infrastructure. The effected parcel is surrounded by residential development.

4.0 SURVEY METHODOLOGY

BLUE senior biologist, Michael Jefferson, conducted the surveys and USACE preliminary wetland delineation within the project area on and June 6, 2018. The site was surveyed on foot and habitat mapped on a digital aerial of the Property (Figure 4).

Mapping was performed following the Guidelines for Determining Significance and Survey, Report Format, Content and Mapping Requirements (County 2010). Wildlife species were identified directly by sight or by vocalizations, and indirectly by scat, tracks, or burrows. Drainage features were delineated that could potentially be under the jurisdiction of the USACE, RWQCB, CDFW and areas that could be defined as RPO Wetlands per the County standards. Field notes were maintained throughout the surveys and species of interest were mapped. The primary focus of the survey was to document and map the size, location, and general quality of all habitat types and the presence or potential presence of any sensitive resources onsite.

TABLE 1
Survey Details

Date	Survey Type	Time	Conditions Temp (°F), Wind (mph) begin and end, Cloud Cover (CC)	Biologists
6-6-2018	General, Rare, Sensitive, JD	0830 - 1030	67°, 0 mph, 5%cc 74°, 1-2 mph, 15%cc	MJ

MJ = Michael Jefferson

JD = Jurisdictional Delineation

Vegetation communities were assessed and mapped on a color aerial with topography flown in March 2015 (Google earth). Animal species observed directly or detected from calls, tracks, scat, nests, or other sign were noted. All plant species observed on-site were also noted, and plants that could not be identified in the field were identified later using taxonomic keys.

Limitations to the compilation of a comprehensive faunal and floral checklist were few within the survey area – most of which had been previously, legally, graded and or cleared. The general quality of graded land and urbanized habitat within the survey area is, as expected, of low quality. Surveys were completed at the optimal time and due to the historic grading of the area as well as the ongoing use and maintenance it was determined that the existing site conditions precluded the recommendation of additional surveys being recommended as a comprehensive checklist was prepared.

Prior to conducting the biological survey, a thorough review of relevant maps, databases, and literature pertaining to biological resources was performed. Recent aerial imagery (Google Earth 2015), topographic maps (USGS 1994), soils maps (USDA 2012), and other maps of the project site and immediate vicinity were acquired and reviewed to obtain updated information on the natural environmental setting. In addition, a query of sensitive species and habitat databases was conducted, including the California Natural Diversity Database (CNDDDB; CDFG 2012a), the California Native Plant Society Electronic Inventory (CNPSEI; CNPS 2012), and the Consortium of California Herbarium (Consortium 2012) applications, as well as a review of regional species lists produced by the USFWS (USFWS 2012a) and CDFW (CDFW 2011, 2012a, CDFW 2012b, and 2012c).

The pre-survey investigation also included a verification of whether or not the project site falls within areas designated as final or proposed USFWS Critical Habitat for federally threatened or endangered species (USFWS 2012b). The complete list of sensitive species (CNDDDB) and habitats that have been previously recorded within the vicinity of the project site was compiled, and all recorded locations of species and other resources were mapped and overlaid onto aerial imagery using Geographic Information Systems (GIS) software. The CNDDDB list of sensitive species included all database results for areas within 9 California USGS 7.5 minute topographic quadrangles.

BLUE biologist Michael Jefferson completed the preliminary USACE jurisdictional wetland delineation. Potential features identified were then investigated further to determine whether they met the criteria of a potentially jurisdictional feature. All features meeting the USACE guidance criteria were delineated. The region received no significant rainfall within the last week before the delineations were conducted. Rainfall patterns were typical (summer 2018) for that time frame of the surveys.

Delineated boundaries of all features identified within the study area were recorded using a 1" =100' aerial photograph.

BLUE's methods for delineating federal wetlands follow the guidelines set forth by the USACE in the *Arid West Manual* (USACE 2008b). The routine onsite determination method can be used to gather field data at potential wetland areas for most projects. Visual observations of vegetation types and hydrology are used to locate areas for evaluation. Then, at each evaluation area, several parameters are considered to determine whether the sample point is within a wetland. Sampling points were inspected for primary wetland hydrology indicators (e.g., surface water [A1], saturation [A3], water marks [non-riverine, B1], sediment deposits [non-riverine, B2], drift deposits [nonriverine, B3], surface soil cracks [B6], inundation visible on aerial imagery [B7], salt crust [B11], aquatic invertebrates [B13], hydrogen sulfide odor [C1], and oxidized rhizospheres along living roots [C3]) and

secondary (e.g., water marks [riverine, B1], sediment deposits [riverine, B2], drift deposits [riverine, B3], drainage patterns in wetlands [B10], shallow aquitard [D3], and positive FAC neutral test [D5]).

Areas were determined to be potential non-wetland WUS if there was evidence of regular surface flow (e.g., bed and bank) but either the vegetation or soils criterion was not met. Jurisdictional limits for these areas were defined by the ordinary high water mark (OHWM), which is defined in 33 CFR Section 329.11 as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas."

Regulatory Background

The following sections summarize the regulations imposed on each type of jurisdictional feature potentially present onsite, including the County of San Diego Resource Protection Ordinance (RPO; see *Applicable Resource Conservation Plans and Ordinances* section, below)

The purpose of the RPO is to protect sensitive resources and prevent their degradation and loss. The sensitive resources protected by the RPO include wetlands, wetland buffer areas, and sensitive habitat lands, which are defined as follows.

Delineation of CDFW Jurisdiction

Evaluation of California Fish and Game Code jurisdiction followed the guidance of standard practices by CDFW personnel. CDFW jurisdiction was delineated by measuring the width of top of bank of watercourses, which equaled the bed and bank limits in these small systems, all of which are deeply incised under the currently existing condition. Riparian vegetation was not observed within the study area.

U.S. Army Corps of Engineers Regulated Activities

USACE-regulated activities under Section 404 of the Clean Water Act (CWA) involve a discharge of dredged or fill material into WoUS. A discharge of fill material includes, but is not limited to, grading, placing riprap for erosion control, pouring concrete, laying sod, and stockpiling excavated material into WoUS. Activities that generally do not involve a regulated discharge (if performed specifically in a manner to avoid discharges) include driving pilings, performing some drainage channel maintenance activities, constructing temporary mining and farm/forest roads, and excavating without stockpiling.

Waters of the U.S.

WoUS, as defined in the Code of Federal Regulations (CFR) title 33, section 328.3, include all waters or tributaries to waters, such as lakes, rivers, intermittent and perennial streams, mudflats, sand flats, natural ponds, wetlands, wet meadows, and other aquatic habitats.

Frequently, a WoUS (with at least intermittently flowing water or tidal influences) is demarcated by the ordinary high-water mark (OHWM), defined in CFR 328.3(e) as: *that line on the shore established by the fluctuations of water and indicated by physical characteristics such as [a] clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

Where an OHWM is present, waters may be defined as WoUS when connectivity is determined to be present.

Wetlands

According to the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (Federal Interagency Committee for Wetland Delineation 1989), three criteria must be satisfied to classify an area as a jurisdictional wetland: (1) a predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation); (2) soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils); and (3) permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology) (Environmental Laboratory 1987).

Connectivity is present in the following situations; therefore, USACE maintains jurisdiction over:

1. traditional navigable waters (TNWs) and their adjacent wetlands;
2. non navigable tributaries of TNWs that are relatively permanent (e.g., tributaries that typically flow year-round or have a continuous flow at least seasonally) and wetlands that directly abut such tributaries (e.g., not separated by uplands, berm, dike, or similar feature) (note: relatively permanent waters [RPWs] do not include ephemeral tributaries, which flow only in response to precipitation, and intermittent streams, which do not typically flow year-round or have continuous flow at least seasonally [e.g., typically three months]); and
3. non-RPWs if determined (in a fact-specific analysis) to have a significant nexus with a TNW, including non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally, wetlands adjacent to such tributaries, and wetlands adjacent to but not directly abutting a relatively permanent non navigable tributary.

Absent a significant nexus, jurisdiction is lacking.

Preliminary Jurisdictional Determination

Under RGL 08-02, dated June 26, 2008, USACE established an alternative to the approved JD process: the "preliminary JD." A preliminary JD is a non-binding written indication that there may be WoUS, including wetlands, on a project site and identifies the approximate location of these features. Preliminary JDs are used when a landowner, permit applicant, or other affected party elects to voluntarily waive or set aside questions regarding CWA jurisdiction over a particular site, usually in the interest of allowing the landowner to move ahead expeditiously to obtain 404 authorization where the party determines that it is in his or her best interest to do so. A preliminary JD is not an official determination regarding the jurisdictional status of potentially jurisdictional features and has no bearing on approved JDs. A preliminary JD cannot be used to confirm the absence of jurisdictional waters or wetlands, is advisory in nature, and cannot be appealed. It is considered "preliminary" because a recipient can later request an approved JD if one is necessary or appropriate.

Finally, although a preliminary JD may be chosen by the applicant, the district engineer reserves the right to use an approved JD where warranted. A preliminary JD is documented using the preliminary JD form, provided as Attachment 1 to RGP 08-02. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a preliminary JD treats all waters and wetlands that would be affected in any way except by the permitted activity as if they are jurisdictional. This report presents a preliminary jurisdictional determination.

2011 Draft Clean Water Act Guidance

On April 27, 2011, USACE and EPA issued draft guidance for determining jurisdiction under the CWA. The guidance supersedes the previous guidance from 2003 regarding SWANCC (68 Federal Register 1991–1995) and the 2007 *Rapanos* guidance. This document reiterated the guidance issued under the *Rapanos* decision, asserting that the following waters are protected by the CWA:

- Traditional navigable waters
- Interstate waters
- Wetlands adjacent to either traditional navigable waters or interstate waters
- Non-navigable tributaries to traditional navigable waters that are relatively permanent (meaning they contain water at least seasonally)
- Wetlands that directly abut relatively permanent waters

The guidance further clarifies the criteria for defining TNWs consistent with previous guidance. In addition, a significant nexus evaluation is required for the “other waters” category of the regulations (see item 3 in Section 2.1.1, above). The guidance divides these waters into two categories (i.e., those that are physically proximate to other jurisdictional waters and those that are not) and discusses how each category should be evaluated.

State Water Resources Control Board Regulated Activities/Regional Water Quality Control Board

In California, the SWRCB and nine Regional Water Quality Control Boards (RWQCB) regulate activities within state and federal waters under Section 401 of the CWA and the state Porter-Cologne Act. The SWRCB is responsible for setting statewide policy, coordinating and supporting the RWQCB efforts, and reviewing petitions that contest RWQCB actions. Each semi-autonomous RWQCB sets water quality standards, issues 401 certifications and waste discharge requirements, and take enforcement action for projects occurring within their boundary. However, when a project crosses multiple RWQCB jurisdictional boundaries, the SWRCB becomes the regulating agency for both of these acts and issues project permits.

Section 401 of the Clean Water Act

Section 401 of the CWA requires that any applicant for a federal permit for activities that involve a discharge to waters of the United States shall provide the federal permitting agency a certification from the state in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act.

Therefore, in California, before USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification or waiver from the RWQCB or SWRCB, as applicable. Under Section 401 of the CWA, the SWRCB/RWQCB regulates at the state level all activities that are regulated at the federal level by USACE. Therefore, SWRCB/RWQCB jurisdiction usually matches the jurisdictional boundaries for WoUS (mapped at the OHWM).

However, if waters are determined not to be WoUS, they may still be subject to SWRCB/RWQCB jurisdiction based on the Porter-Cologne Act.

Porter-Cologne Act

The RWQCB regulates activities that would involve “discharging waste, or proposing to discharge waste, within any region that could affect waters of the state” (California Water Code 13260[a]), pursuant to provisions of the state Porter-Cologne Act. Waters of the State (WoS) are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code 13050 [e]). Such waters may include waters not subject to regulation under Section 404 (i.e., isolated features).

California Department of Fish and Wildlife Regulated Activities

Under recently revised California Fish and Game Code, Sections 1600–1616, CDFW has the authority to regulate work that will substantially divert or obstruct the natural flow—or substantially change or use any material from the bed, channel, or bank—of any river, stream, or lake. CDFW also has the authority to regulate work that will deposit or dispose of debris, wastewater, or other material containing crumbled, flaked, or ground pavement

that may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all work involving state or local government discretionary approvals.

Section 1602 of the California Fish and Game Code

The California Fish and Game Code mandates that it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity. CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks and/or (2) existing fish or wildlife resources. Furthermore, CDFW jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function hydrologically as part of the riparian system. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but re-emerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdictional.

Applicable Resource Conservation Plans and Ordinances

In San Diego County guidelines and regulations have been adopted which define and provide protection to certain types of sensitive biological resources as follows:

Resource Protection Ordinance (RPO)

The purpose of the RPO is to protect sensitive resources and prevent their degradation and loss. The sensitive resources protected by the RPO include wetlands, wetland buffer areas, and sensitive habitat lands, which are defined as follows:

"Wetland" areas include lands which are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or where the land is covered by water. Lands having one or more of the following attributes are "wetlands:"

- (a). At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
- (b). The substratum is predominantly undrained hydric soil; or
- (c). An ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

"Wetland buffer" areas include lands which provide a buffer area of an appropriate size to protect the environmental and functional habitat values of the wetland, or which are integrally important in supporting the full range of the wetland and adjacent upland biological community.

"Sensitive habitat lands" include those which support unique vegetation communities, or the habitats of rare or endangered species or sub-species of animals or plants, including the area which is necessary to support a viable population of any of these species in perpetuity, or which is critical to the proper functioning of a balanced natural ecosystem or which serves as a functioning corridor. (County, 2012)

5.0 HABITATS/VEGETATION COMMUNITIES/WILDLIFE

The following discussion summarizes the existing and potentially present biological resources onsite and within the project footprint, as determined from the completed general biological survey, sensitive species presence/potential survey, protocol preliminary U.S. Army Corps of Engineers (USACE) wetland delineation, and the Resource Protection Ordinance.

Biological resources observed include four (4) habitat types: Jurisdictional unvegetated non-wetland waters, non-native grasslands, 'urban' Disturbed habitat (backyard and historic residential orchard; trees removed, irrigation present), and developed area.

A CDFW jurisdictional unvegetated non-wetland water (County RPO defined as a non-wetland drainage feature; i.e. does not qualify as RPO wetlands) was observed onsite. No state or federally listed, or locally identified Special Status plant species were observed onsite. No sensitive wildlife species was either observed or detected onsite. Due to the lack of appropriate soils, appropriate habitat and lack of observations; no additional endemic, sensitive or special status plants or animals are expected to occur.

5.1 Habitat/Vegetation Communities

Habitat descriptions are based on the County of San Diego's Biological Mapping Requirements (County 2010) and Terrestrial Vegetation Communities in San Diego County based in Holland's Descriptions (Oberbauer 1996). The habitat types observed include: Jurisdictional unvegetated non-wetland waters, Non-Native Grassland, Disturbed Habitat, and developed area. A complete list of plant species observed onsite is included in Appendix A.

TABLE 2
Vegetation Communities

Habitat Type	TIER	On-Site
CDFW Jurisdictional Unvegetated Non-Wetland Waters Channel*	IV	0.01
Non-Native Grassland*	III	1.48
Disturbed Habitat	IV	0.48
Developed		0.63
Total		2.6

* Denotes a Sensitive Habitat

Annual Non-Native Grassland

Annual non-native grassland (NNG) is a plant community dominated by annual, non-native grasses in an area that has been historically disturbed. Characteristic species in the grasslands on site include oats (*Avena* sp.), red brome (*Bromus madritensis ssp. rubens*), ripgut (*Bromus diandrus*), ryegrass (*Lolium* sp.), and mustard (*Brassica* sp.). Annual grassland occurs throughout the Property amongst the disturbed and developed areas.

Urban/Disturbed

Having been recreationally utilized, the study area is dominated by non-native/exotic vegetation, and disturbed habitats. The disturbed areas are typically located adjacent to urbanization and contain a mix of primarily weedy species, including non-native forbs, annuals, and grasses, usually found pioneering on recently disturbed soils.

Characteristic weedy species include prickly sow thistle (*Sonchus asper*), common sow thistle (*Sonchus oleraceus*), bristly ox-tongue (*Picris echioides*), Russian thistle (*Salsola tragus*), giant reed, hottentot-fig (*Carpobrotus edulis*), wild lettuce (*Lactuca serriola*), tree tobacco (*Nicotiana glauca*), castor-bean (*Ricinus communis*), pampas grass, smooth cat's-ear (*Hypochoeris glabra*), red-stem filaree (*Erodium cicutarium*), short-beak filaree (*Erodium brachycarpum*) and white-stem filaree (*Erodium moschatum*). These urban lands do not typically contain native vegetation or provide essential habitat connectivity; and therefore, tend to have reduced biological value.

The Disturbed habitat supports bare dirt, gravel and the following weed species: prickly sow thistle (*Sonchus asper*), bristly ox-tongue (*Picris echioides*), Russian thistle (*Salsola tragus*) and tree tobacco (*Nicotiana glauca*).

Developed

This designation is used for the portion of the site that includes the area within the paved portion of Fuerte Drive and the driveway for the houses adjacent to the northern PL.

Jurisdictional Unvegetated Non-Wetland Waters Channel

A preliminary protocol ACOE wetland delineation was completed onsite by BLUE senior biologist Michael Jefferson. As indicated on Figure 4, the observed soft bottom channel was delineated as a jurisdictional unvegetated non-wetland water (County RPO defined as a non-wetland drainage feature). The observed soft bottom channel is on average approximately 2.5 feet wide and runs the length of the property (adjacent to the western PL), both on and offsite. Storm water from the surrounding surfaces are being conveyed into the channel. The channel onsite is generally unvegetated or ornamental grass species lined. No hydrophytic species were observed. As no hydrophytic wetland plants or undrained hydric soils were observed, no County RPO wetlands were delineated onsite.

The channel is regarded as an ephemeral, unvegetated, non-wetland water of the U.S., water of the State, and state streambed, and is under the jurisdiction of the ACOE, RWQCB, and CDFW. Impacts to the channel would be potentially significant; the channel has been fully avoided.

5.2 Wildlife

A total of 3 wildlife species were identified onsite. A complete list of wildlife species observed onsite is included as Appendix B.

Invertebrates observed included butterflies and bees. The reptile species observed onsite include the western fence lizard (*Sceloporus occidentalis*). Bird species observed included a mourning dove (*Zenaida macroura*) and house finch (*Carpodacus mexicanus*). No mammals were observed or detected onsite.

6.0 SPECIAL STATUS SPECIES and SENSITIVE RESOURCES

Sensitive or special interest plant and wildlife species and habitats are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive habitats, as identified by these same groups, are those which generally support plant or wildlife species considered sensitive by these resource protection agencies or groups. Sensitive species and habitats are so called because of their limited distribution, restricted habitat requirements, particular susceptibility to human

disturbance, degradation due to development or invasion by non- native species, or a combination of all of these factors.

As listed in the County Scoping Letter (dated 4-21-18) and reviewed via email, a habitat assessment for all potentially occurring species was completed (attached). All of the species identified on the Scoping Letter list are associated with high quality habitat and/or vernal pools and their surrounding edges. None of the types of habitats required by the identified species occur onsite. Due to the highly denuded and maintained nature of the property, as well as the lack of appropriate/suitable upland and riparian habitats, there is no onsite potential to support any sensitive species. No additional or Protocol surveys are recommended.

In addition to RPO and the Guidelines for Determining Significance and Survey, Report Format, Content and Mapping Requirements (County 2010), the following were used in the determination of sensitive biological resources: U.S. Fish and Wildlife Service (USFWS); and California Department of Fish and Wildlife (CDFW). An explanation of the sensitivity codes used in this report is included in Appendix E.

6.1 Sensitive Habitats

Jurisdictional unvegetated non-wetland waters and Non-Native Grasslands were observed onsite and are considered sensitive habitats.

6.2 Sensitive Plants

Sensitive or special interest plant species are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive plant species are so called because of their limited distribution, restricted habitat requirements, or of particular susceptibility to human disturbance, or a combination of these factors. Sources used for the determination of sensitive plant species include: CDFW (2015), CNPS (2013), and CNDDB (2015).

No sensitive plant species were observed onsite. While the survey was completed in the first week of June, and many of the potentially occurring species may not have been blooming, the soil composition and cover of the non-native species throughout the denuded habitat that does persist, is an indicator that the appropriate soil conditions and hydrological conditions required by sensitive plant species is not present. At this level of disturbance and development onsite, none are expected to occur.

Sensitive Plant Species with the Potential to Occur Onsite

All sensitive plants identified in the County scoping letter were assessed for the potential to occur onsite and are discussed in Appendix C. In summary, none of the sensitive plants assessed, has greater than a 'no' potential to occur onsite due to lack of observations in the area and onsite, a lack of appropriate soils, hydrologic conditions and the disturbed and developed nature of the site.

6.3 Sensitive Animals

Sensitive or special interest wildlife species and habitats are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive species are so called because of their limited distribution, restricted habitat requirements, or particular

susceptibility to human disturbance, or a combination of these factors. Sources used for the determination of sensitive biological resources include: USFWS, CDFW. Additional species receive federal protection under the Bald Eagle Protection Act and the Migratory Bird Treaty Act and Convention for the Protection of Migratory Birds and Animals.

The CDFW also lists species as threatened or endangered, or candidates for listing as threatened or endangered. Lower sensitivity animals may be listed as "species of special concern" (CDFW). The CDFW further classifies some species under the following categories: "fully protected," "protected furbearer," "harvest species," "protected amphibian," and "protected reptile." The designation "protected" indicates that a species may not be taken or possessed except under special permit from the CDFW; "fully protected" indicates that a species can be taken only for scientific purposes. The designation "harvest species" indicates that take of the species is controlled by the state government.

All sensitive wildlife species identified in the County scoping letter were assessed for the potential to occur onsite and are discussed in Appendix D.

6.3.1 Sensitive Wildlife Observed

No sensitive animal species were observed while onsite. No appropriate roosting or rocky nesting sites were observed and a complete list and explanation as to the potential occurrence of all Sensitive Wildlife with the Potential to Occur is described in Appendix D.

6.3.2 Sensitive Wildlife Species with the Potential to Occur Onsite (not observed)

While numerous sensitive species have been historically observed in the general area, none has greater than a low potential to occur and/or utilize the site, not only fly overhead without landing. Due to lack of observations in the immediate area and onsite, a lack of appropriate soils, hydrologic conditions and a lack of appropriate habitat/nesting sites, no sensitive wildlife species are expected to occur onsite.

6.3.3 Raptors/Owls

Raptors are large predatory or scavenger birds that typically require tall trees for perching and nesting associated with adjacent open grasslands to forage. Due to declining habitat and the associated declining numbers of these species on the whole, many raptor species have been designated as California Species of Special Concern by the CDFW. These species are protected, especially during their critical nesting and wintering stages. Raptors are protected under the CDFW California Raptor Protection Act (Title 14, Section 670). No barn owls, or sign such as pellets, were observed onsite. No large and mature tree or stand is located onsite. No raptor nests were observed. Due to the presence of non-native grasslands, a potential foraging habitat, there is a potential for foraging raptors to utilize the property.

7.0 JURISDICTIONAL WETLANDS and WATERWAYS

A preliminary protocol ACOE wetland delineation and RPO survey was completed onsite by BLUE senior biologist Michael Jefferson. A summary of the results is below and graphically indicated in Figure 4.

Summary of Delineation Results

As indicated on Figure 4, a CDFW jurisdictional feature was observed and confirmed during the preliminary delineation. The channel does not qualify as ACOE jurisdictional or County RPO wetland.

Adjacent to the western property line and entering from the north, is the location of the Jurisdictional Unvegetated Non-Wetland Water channel (no RPO defined wetland habitat). The portion of the channel that is onsite totals less than 0.01 acres and averages approximately 2.5 feet wide. The observed natural channel is generally dirt with occasional upland species and is devoid of any hydrophytic species.

As a result, the channel is a CDFW jurisdictional protected topographic feature (that does not support protected habitat or species) and not an ACOE jurisdictional area/habitat or RPO wetland. Because there is no RPO Wetland onsite, a buffer is not required.

8.0 OTHER UNIQUE FEATURES/RESOURCES

Wildlife Corridors

Development within San Diego County has reduced the total available open space for wildlife populations, and in some instances, created isolated "islands" of habitat. In general, corridors and linkages are smaller constrained areas of habitat that connect larger areas of habitat which are otherwise separated by rugged terrain, changes in vegetation, or urban development. This allows for an exchange of gene pool between wildlife populations, which increases the genetic viability of otherwise isolated populations. Wildlife corridors are especially important for species with large habitat ranges or seasonal migrations. A corridor is a specific route that is used for the movement and migration of species, and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of wildlife and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are comprised of fragmented archipelago arrangement of habitat over a linear distance. In either case, corridors and linkages will be comprised of land features which accommodate the movement of all sizes of wildlife, including large animals on a regional scale. Their contributing areas will support adequate vegetation cover, providing visual continuity and long lines of sight, so as to encourage the use of the corridor by all types of wildlife. In San Diego County, important corridors/linkages have been identified on the local and regional scale in establishing a connection between the northern and southern regional populations of the coastal California gnatcatcher.

The property is developed and encircled by rural and moderate density development. There is a relatively undeveloped parcel just to the north of this site and located 1/4 mile north of a PAMA (it is predominantly undeveloped area between the site and the PAMA). The Property is not within or adjacent to an existing recognized habitat corridor. While there is an ephemeral drainage channel running through the area, it does not support quality habitat and is within the back yards of the surrounding developed neighborhood. No animals, or sign of animal movement through the property was observed; the area does not support a functioning corridor or linkage.

9.0 REGULATORY REQUIREMENTS

This section addresses potential direct, indirect, and cumulative impacts to biological resources that would result from implementation of the proposed project, and provides analyses of significance for each potential impact.

Direct Impacts are immediate impacts resulting from temporary and permanent removal of habitat through grading (no additional BMZ impacts are required).

Indirect Impacts result from changes in land use adjacent to natural habitat and primarily result from adverse "edge effects;" either short-term indirect impacts related to construction or long-term, chronic indirect impacts associated with urban development. During construction of the project, short-term indirect impacts include dust and noise which could temporarily disrupt habitat and species vitality or construction related soil erosion and runoff. Long-term indirect impacts may include intrusions by humans and domestic pets, noise, lighting, invasion by exotic plant and wildlife species, use of toxic chemicals (fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, litter, fire, and hydrological changes (e.g., groundwater level and quality).

Cumulative Impacts refer to incremental individual environmental effects of two or more projects when considered together. These impacts taken individually may be minor, but collectively significant as they occur over a period.

Thresholds of Significance refer to the evaluation of whether an impact to a biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to, or result in, permanent loss of an important resource, such as a population of a rare plant or animal. Impacts may be important locally because they result in an adverse alteration of existing site conditions, but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact is the primary determinant of whether that impact can be mitigated to a level below significant. Generally, there are three levels of adverse impacts associated with biological resources: significant, locally important, and not significant. The determination of significance follows the County of San Diego Guidelines For Determining Significance for Biological Resources (2010).

10.0 SIGNIFICANCE of PROJECT IMPACTS

Impacts to biological resources are assessed by County staff through the CEQA review process, and through review of the project's consistency with the County's MSCP Subarea Plan and Habitat Loss Permit (HLP) requirements. Sensitive biological resources are defined by the County as: Lands that contain Natural Vegetation and/or Wetlands; and/or habitat occupied by Covered Species, other Listed Non-Covered Species, and/or Narrow Endemic Species.

10.1 Avoidance and Minimization

The proposed project has been designed to avoid impacts to biological resources to minimize significant direct, indirect and cumulative impacts. The proposed development is clustered outside of the CDFW jurisdictional channel. The channel is 100% avoided.

Therefore, by avoiding impacts to the maximum extent practicable by project design, impacts to significant biological resources will be minimal as a result of the proposed project.

10.2 Proposed Project and Potential Impacts

Within the footprint of the existing 2.6-acre residential property, a total of 2.59 acres of area/habitat is proposed to be impacted (Table 5, Figure 5) for the development of the single-family residences. No impacts to the channel are proposed.

One potentially significant biological impact is proposed. Impacts to all 1.48 acres Non-Native Grassland onsite are considered a potentially significant biological impact and mitigation will be required. Utilizing the 0.5:1 ratio (mitigate within BRCA), a total of 0.74 acres of mitigating NNG habitat is required.

TABLE 5
Project Impacts and Mitigation

Habitat Type	On-Site	Impact	Preserved	Mitigation Ratio	Mitigation Acreage
Jurisdictional Unvegetated Non-Wetland Waters Channel*	0.01	0.0	0.01	N/A	N/A
Non-Native Grassland*	1.48	1.48	0.0	0.5:1	0.74
Disturbed Habitat	0.48	0.48	0.0	N/A	N/A
Developed	0.63	0.63	0.0	N/A	N/A
Total	2.6	2.34	0.01		0.74

* Denotes a Sensitive Habitat

No impacts to the CDFW jurisdictional channel are proposed (Figure 5, Project Impacts).

No RPO wetlands are onsite, therefore no buffer is required for the CDFW jurisdictional unvegetated non-wetland water channel.

10.3 Significance of Impacts

Generally, there are three levels of adverse impacts associated with biological resources: significant, less than significant, and no impact. These levels of impacts were applied to the project site and are used below in the discussion of specific potential impacts.

10.3.1 Sensitive Plant Community Impacts

A potentially significant impact to 1.48 acres of Non-Native Grassland, will be impacted as a result of the proposed project. This impact would be considered significant and mitigation would be required.

10.3.2 Sensitive Plant Species Impacts

No sensitive plant species were documented or are potentially expected to occur onsite.

No impacts to sensitive plant species are expected to occur and mitigation would not be required.

10.3.3 Sensitive Wildlife Species Impacts

No sensitive wildlife species were documented or are potentially expected to occur onsite.

No impacts to sensitive wildlife species are expected to occur and mitigation would not be required.

No nests or bird activity/presence was observed and as this area is currently and historically utilized by human activity, the loss of this area does not constitute a significant habitat impact or loss of significant raptor foraging area.

No impacts to Sensitive Wildlife species are expected to occur and mitigation (Pre-construction nesting birds surveys) would be required if the grading/ground disturbance is proposed to initiate between February 1 and August 31.

11.0 PROPOSED MITIGATION

Under CEQA, mitigation is required for all significant biological impacts (e.g. impacts within highly constrained areas). In addition, the CDFW 1600, RWQCB 401 Certificate and the ACOE 404 permit process generally require mitigation for the loss of wetland resources. The following mitigation measures are recommendations to locally important biological impacts. Although mitigation measures are not often required for locally important impacts, local jurisdictions often implement these measures to minimize cumulative impacts within the region.

11.1 Direct Impacts - Mitigation

Potentially significant impacts to 1.48 acres of NNG are proposed and mitigation is required. A mitigation ratio of 0.5:1 will be required. Note that the 0.5:1 mitigation ratio is only allowed when the non-native grassland being impacted is not a Biological Resource Conservation Area (BRCA; as is the case) and the mitigation site being provided is a BRCA (See Attachment M of the BMO). If not, a 1:1 mitigation ratio will be required. Utilizing the 0.5:1 ratio, a total of 0.74 acres of mitigating NNG habitat is required.

In order to preserve the avoided CDFW jurisdictional channel, the project will make a note that grading impacts to the CDFW jurisdictional channel are not permitted and that additional permitting/mitigation would be required.

12.0 CUMULATIVE IMPACTS

The proposed project will contribute to the cumulative loss of NNG within the local community of Valle De Oro and unincorporated San Diego County. However, this project's contribution to the cumulative habitat loss will be less than cumulatively significant considerable due to the following: the project will mitigate at a 0.5:1 ratio (within a BRCA) or 1:1 outside of a BRCA for the impacts to the 1.48 acres of NNG. In addition, the avoided onsite channel will convey storm flows to the biologically viable areas downstream that support multiple habitats and species.

Through these proposed design and mitigation measures, the project will not have a cumulatively considerable impact to biological resources.

13.0 REFERENCES

- AOU. American Ornithological Union. 1998, 2000. Forty-second Supplement to the American Ornithologists' Union Checklist of North American Birds.
- CDFW. California Department of Fish and Wildlife. 2012. List of CDFW Special Status Plants, Animals and Natural Communities of San Diego County, CDFW Natural Heritage Division, Sacramento.
- California Department of Fish and Wildlife. 2012. "Endangered, Threatened and Rare Plants of California." State of California Dept. of Fish and Wildlife, Natural Heritage Division, Plant Conservation Program, Sacramento. April.
- California Department of Fish and Wildlife. 2012. CDFW Natural Diversity Data Base. Special Animals. July 2012.
- CNPS. 2015. California Native Plant Society's Electronic Inventory of Rare and Endangered Vascular Plants of California, (6th Edition, Electronic Inventory).
- County of San Diego 2010. County of San Diego Guidelines for Determining Significance and Report Format Requirements, Biological Resources. Land Use and Environment Group.
- County of San Diego 2010. County of San Diego Guidelines for Determining Significance and Report Format Requirements, Biological Resources. Land Use and Environment Group.
- County of San Diego 2018. Project Scoping Letter. April 25, 2018.
- Hickman, J. C. 1993. The Jepson Manual of Higher Plants of California. University of California Press, Berkeley.
- Holland, R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Non-game Heritage Program, State of California Department of Fish and Game, Sacramento, CA. 157 pp.
- Jennings, M. R. 1983. An Annotated Checklist of the Amphibians and Reptiles of Southern California. California Department of Fish and Game 69(3):151-171.
- Jones, J.K., *ET AL.* 1992. Revised Checklist of North American Mammals North of Mexico, 1991.
- Oberbauer, T. 1996. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions.

Powell, J.A., C.L. Hogue. 1979. California Insects. University of California Press, Berkeley.

Stebbins, R. C. 2003. Field Guide to Western Reptiles and Amphibians Houghton Mifflin Co., Boston.

Unitt, P. A. 1984. Birds of San Diego County. Memoir 13, San Diego Society of Natural History. 276 pp.

USFWS. U.S. Fish and Wildlife Service. 2015. U.S. Endangered, Threatened and Candidate Plant and Animal Species by State and Lead Region. U.S. Department of the Interior. United States Fish and Wildlife Service Threatened and Endangered Species System,

Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White. 1990. California's Wildlife, Volume III, Mammals. State of California Department of Fish and Game, Sacramento. 168 pp.

14.0 PREPARER and PERSONS/ORGANIZATIONS CONTACTED

The following County of San Diego qualified Biologist completed the stated field survey(s) and preparation of this report: Michael Jefferson

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present 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.

Organizations Contacted:

San Diego County – staff

Signed:



Michael K. Jefferson
BLUE Consulting Group
Senior Biologist

Appendix A Plant Species Observed (Table 3)

**ATTACHMENT 1
PLANT SPECIES OBSERVED**

Scientific Name	Common Name	Habitat	Origin
<i>Atriplex semibaccata</i> R.Br.	Australian saltbush	DEV,DIS	I
<i>Brassica nigra</i> (L.) Koch.	Black mustard	DEV,DIS, CHAP	I
<i>Bromus diandrus</i> Roth.	Ripgut grass	DEV,DIS, CHAP	I
<i>Bromus madritensis</i> L. ssp. <i>rubens</i> (L.) Husnot	Foxtail chess	DEV,DIS, CHAP	I
<i>Carpobrotus edulis</i>	Hottentot fig	DEV,DIS, CHAP	I
<i>Centaurea melitensis</i> L.	Tocolote, star-thistle	DEV,DIS, CHAP	I
<i>Chrysanthemum</i> sp.	Chrysanthemum	DEV, DIS	I
<i>Eucalyptus</i> spp.	Eucalyptus	DEV,DIS, CHAP	I
<i>Melilotus</i> sp.	Sweet clover	DEV,DIS	I
<i>Nicotiana glauca</i> Grah.	Tree tobacco	DEV, DIS, CHAP	I
<i>Salsola tragus</i> L.	Russian thistle, tumbleweed	DEV,DIS	I
<i>Sisymbrium</i> sp.	Mustard	DEV,DIS, CHAP	I

HABITATS OTHER TERMS

DEV = Developed
DIS = Euc/Urban/Disturbed
CHAP = Mixed Chaparral

N = Native to locality
I = Introduced species from outside locality

Appendix B Wildlife Species Observed (Table 4)

ATTACHMENT 2
WILDLIFE SPECIES OBSERVED/DETECTED ONSITE

Common Name	Scientific Name	Occupied Habitat	Status	Evidence of Occurrence
<u>Invertebrates</u> (Nomenclature from Brown, Real, and Faulkner 1992)				
Cabbage white	<i>Pieris rapae</i>	DIST		O
<u>Amphibians</u> (Nomenclature from Collins 1997)				
N/A				
<u>Reptiles</u> (Nomenclature from Collins 1997)				
Western fence lizard	<i>Sceloporus occidentalis</i>	DIST		O
<u>Birds</u> (Nomenclature from American Ornithologists' Union)				
Mourning dove	<i>Zenaida macroura marginella</i>	all		O
Western scrub-jay	<i>Aphelocoma californica</i>	all		O
Common raven	<i>Corvus corax clarionensis</i>	all		O
House finch	<i>Carpodacus mexicanus frontalis</i>	all		O
<u>Mammals</u> (Nomenclature from Jones et al. 1982)				
N/A				

Habitats

MC = Mixed chaparral
DIS = Euc/Disturbed
DEV = Developed

Status

CSC = California Department of Fish and Wildlife species
of special concern
FT = Listed as threatened by the federal government

Appendix C Sensitive Plant Species with the Potential to Occur

**SENSITIVE PLANT SPECIES
OBSERVED (†) OR WITH THE POTENTIAL FOR OCCURRENCE
AND ONSITE STATUS**

Species (Latin)	Species (common)	Status Fed/State/CNPS	Habitat / Onsite Status
<i>Acanthomintha ilicifolia</i>	San Diego Thornmint	FT/CE/CRPR 1B.1	Openings within coastal sage scrub, chaparral, and native grassland No suitable habitat. No potential to occur.
<i>Achnatherum diegoensis</i>	San Diego needlegrass	--/--/CRPR 4.2	Chaparral, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Adolphia californica</i>	San Diego adolphia	--/--/CRPR 2B.1	Chaparral, Valley Grassland, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Ambrosia pumila</i>	San Diego Ambrosia	FE/--/ CRPR 1B.1	Vernal-pools, disturbed, Chaparral, Valley Grassland, Coastal Sage Scrub, Freshwater Wetlands No suitable habitat. No potential to occur.
<i>Astragalus deanei</i>	Dean's Milkvetch	--/--/CRPR 1B.1	Riparian, Chaparral, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Brodiaea filifolia</i>	Thread leaved brodiaea	FT/CE/CRPR 1B.1	Valley Grassland, Foothill Woodland, Coastal Sage Scrub, Freshwater Wetlands, wetland-riparian No suitable habitat. No potential to occur.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	--/--/CRPR 1B.1	Meadows, vernal-pool, wetland-riparian No suitable habitat. No potential to occur.
<i>Calochortus catalinae</i>	Catalina mariposa lily	--/--/CRPR 4.2	Chaparral, Valley Grassland, Foothill Woodland, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Camissonia lewisii</i>	Lewis sun cup	--/--/CRPR 3	Dunes, Coastal Strand, Foothill Woodland, Coastal Sage Scrub, Valley Grassland No suitable habitat. No potential to occur.
<i>Centromadia parryi australis</i>	Southern tarplant	--/--/CRPR 1B.1	Salt-marsh, vernal-pools, Valley Grassland, Freshwater Wetlands No suitable habitat. No potential to occur.
<i>Centromadia pungens laevis</i>	Smooth tarplant	--/--/CRPR 1B.1	Valley Grassland, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Convolvulus simulans</i>	Small flowered morning glory	--/--/CRPR 4.2	Seeps, Valley Grassland, Northern Coastal Scrub, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Deinandra (Hemizonia) conjugens</i>	Otay tarplant	FT/CE/CRPR 1B.1	Valley Grassland, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Eryngium aristulatum parishii</i>	San Diego button celery	FE/CE/CRPR 1B.1	Vernal-pools, Valley Grassland, Coastal Sage Scrub, Freshwater Wetlands, wetland-riparian No suitable habitat. No potential to occur.

<i>Gilia caruifolia</i>	Caraway leaved gilia	--/--/CRPR 4.3	Chaparral, Yellow Pine Forest No suitable habitat. No potential to occur.
<i>Harpagonella palmeri</i>	Palmer's grappling hook	--/--/CRPR 4.2	Chaparral, Valley Grassland, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Hemizonia floribunda</i>	Tecate tarplant	--/--/CRPR 1B.2	Chaparral, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Holocarpha virgata elongata</i>	Graceful tarplant	--/--/CRPR 4.2	Chaparral, Valley Grassland, Foothill Woodland, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Hordeum intercedens</i>	Vernal barley	--/--/CRPR 3.2	Vernal-pools, Valley Grassland, Freshwater Wetlands, wetland-riparian No suitable habitat. No potential to occur.
<i>Lepidium virginicum robinsonii</i>	Robinson pepper grass	--/--/CRPR 4.3	Chaparral, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Microseris douglasii platycarpha</i>	Small flowered microseris	--/--/CRPR 4.2	Valley Grassland, Foothill Woodland, Coastal Sage Scrub No suitable habitat. No potential to occur.
<i>Muilla clevelandii</i>	San Diego goldenstar	--/--/CRPR 1B.1	Vernal-pools, Coastal Sage Scrub, Chaparral, Valley Grassland, Freshwater Wetlands No suitable habitat. No potential to occur.
<i>Myosurus minimus apus</i>	Little mousetail	--/--/CRPR 3.1	Vernal-pools, Valley Grassland, Coastal Sage Scrub, Freshwater Wetlands, wetland-riparian No suitable habitat. No potential to occur.
<i>Navarretia fossalis</i>	Spreading navarretia	--/--/CRPR 1B.1	Freshwater-marsh, vernal-pools, Shadscale Scrub, Freshwater Wetlands, wetland-riparian No suitable habitat. No potential to occur.
<i>Ophioglossum californicum</i>	California adder's tongue fern	--/--/CRPR 4.2	Vernal-pools, edges, Chaparral, Valley Grassland, Freshwater Wetlands, wetland-riparian No suitable habitat. No potential to occur.
<i>Pogogyne nudiuscula</i>	Otay mesa mint	FE/CE/CRPR 1B.1	Vernal-pools, Chaparral, Coastal Sage Scrub, Freshwater Wetlands, wetland-riparian No suitable habitat. No potential to occur.
<i>Senecio aphanactis</i>	Rayless ragwort	--/--/CRPR 2B.2	Foothill Woodland, Northern Coastal Scrub, Coastal Sage Scrub No suitable habitat. No potential to occur.

Appendix D Sensitive Wildlife Species with the Potential to Occur

**SENSITIVE WILDLIFE SPECIES
OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE**

Species	Status	Habitat	Occurrence/Comments*
<u>Invertebrates</u> (Nomenclature from Collins 1997)			
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	CSC, MSCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush and <i>plantago</i> sp.	Outside of USFWS potential habitat area. No appropriate habitat. No potential to occur onsite.
Monarch <i>Danaus plexippus</i>	CSC, MSCP	Open fields and meadows with milkweed.	No appropriate habitat. No potential to occur onsite.
<u>Reptiles</u> (Nomenclature from Collins 1997)			
Southwestern pond turtle <i>Clemmys marmorata pallida</i>	CSC, FSS, MSCP	Ponds, small lakes, marshes, slow-moving, sometimes brackish water.	No appropriate habitat. No potential to occur onsite.
San Diego horned lizard <i>Phrynosoma coronatum blainvillii</i>	CSC, MSCP, !	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage.	No appropriate habitat. No potential to occur onsite.
Coastal rosy boa <i>Charina trivirgata roseofusca</i>	CSC, MSCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	No appropriate habitat. No potential to occur onsite.
San Diego banded gecko <i>Coleonyx variegates abbottii</i>	CSC, MSCP	Rocky areas in coastal sage and chaparral.	No appropriate habitat. No potential to occur onsite.
Coastal whiptail <i>Cnemidophorus tigris stejnegeri</i>	CSC, MSCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	No appropriate habitat. No potential to occur onsite.
Belding's orangethroat whiptail <i>Cnemidophorus hyperythrus beldingi</i>	CSC, MSCP	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	No appropriate habitat. No potential to occur onsite.
Silvery legless lizard <i>Anniella pulchra pulchra</i>	CSC	Herbaceous layers with loose soil in coastal scrub, chaparral, and open riparian habitats. Prefers dunes and sandy washes near moist soil.	No appropriate habitat. No potential to occur onsite.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
Red diamond rattlesnake <i>Crotalus exsul</i> (<i>C. ruber ruber</i>)	CSC	Desert scrub and riparian habitats, coastal sage scrub, open chaparral, grassland, and agricultural fields.	No appropriate habitat. No potential to occur onsite.
San Diego ring neck snake <i>Diadophis punctatus similis</i>	CSC	Moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, woodlands.	No appropriate habitat. No potential to occur onsite.
Coast patch-nosed snake <i>Salvadora hexalepis virgulata</i>	CSC	Grasslands, chaparral, sagebrush, desert scrub. Found in sandy and rocky areas.	No appropriate habitat. No potential to occur onsite. Not historically observed in the area.
<u>Birds</u> (Nomenclature from American Ornithologists' Union)			
Great blue heron (rookery site) <i>Ardea herodias</i>	!	Bays, lagoons, ponds, lakes. Non-breeding year-round visitor, some localized breeding.	No appropriate habitat. No potential to occur onsite.
Great egret (rookery site) <i>Ardea alba</i>	!	Lagoons, bays, estuaries. Ponds and lakes in the coastal lowland. Winter visitor, uncommon in summer.	No appropriate habitat. No potential to occur onsite.
White-tailed kite (nesting) <i>Elanus leucurus</i>	CFP, !	Nest in riparian woodland, oaks, sycamores. Forage in open, grassy areas. Year-round resident.	No appropriate habitat. No potential to occur onsite.
Northern harrier (nesting) <i>Circus cyaneus</i>	CSC, MSCP	Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident.	No appropriate habitat. No potential to occur onsite.
Sharp-shinned hawk (nesting) <i>Accipiter striatus</i>	CSC	Open deciduous woodlands, forests, edges, parks, residential areas. Migrant and winter visitor.	No appropriate habitat. No potential to occur onsite.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
Cooper's hawk (nesting) <i>Accipiter cooperii</i>	CSC, MSCP	Mature forest, open woodlands, wood edges, river groves. Parks and residential areas. Migrant and winter visitor.	No appropriate habitat. No potential to occur onsite.
Ferruginous hawk (wintering) <i>Buteo regalis</i>	CSC	Require large foraging areas. Grasslands, agricultural fields. Uncommon winter resident.	No appropriate habitat. No potential to occur onsite.
Golden eagle (nesting and wintering) <i>Aquila chrysaetos</i>	CSC, CFP, BEPA, MSCP	Require vast foraging areas in grassland, broken chaparral, or sage scrub. Nest in cliffs and boulders. Uncommon resident.	No appropriate habitat. No potential to occur onsite.
Merlin <i>Falco columbarius</i>	CSC	Rare winter visitor. Grasslands, agricultural fields, occasionally mud flats.	No appropriate habitat. No potential to occur onsite.
Prairie falcon (nesting) <i>Falco mexicanus</i>	CSC	Grassland, agricultural fields, desert scrub. Uncommon winter resident. Rare breeding resident. Breeds on cliffs.	No appropriate habitat. No potential to occur onsite.
Western yellow-billed cuckoo (breeding) <i>Coccyzus americanus occidentalis</i>	SE	Large riparian woodlands. Summer resident. Very localized breeding.	No appropriate habitat. No potential to occur onsite.
Western burrowing owl (burrow sites) <i>Speotyto cunicularia hypugaea</i>	CSC, MSCP	Grassland, agricultural land, coastal dunes. Require rodent burrows. Declining resident.	No potential to occur onsite due to small, loud, busy location surrounded by development. No sign/burrows observed onsite.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	SE, FE, FSS, MSCP	Nesting restricted to willow thickets. Also occupies other woodlands. Rare spring and fall migrant, rare summer resident. Extremely localized breeding.	No appropriate habitat. No potential to occur onsite.
Turkey Vulture <i>Cathartes aura</i>	CSC, MSCP	Grassland, agricultural land, coastal sage, chaparral. Declining resident.	No potential nesting onsite. No appropriate habitat. No potential to occur onsite.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
California horned lark <i>Eremophila alpestris actia</i>	CSC	Sandy shores, mesas, disturbed areas, grasslands, agricultural lands, sparse creosote bush scrub.	No appropriate habitat. No potential to occur onsite.
Coastal cactus wren <i>Campylorhynchus brunneicapillus couesi</i>	CSC, MSCP, !	Maritime succulent scrub, coastal sage scrub with <i>Opuntia</i> thickets. Rare localized resident.	No appropriate habitat. No potential to occur onsite.
Coastal California gnatcatcher <i>Poliophtila californica californica</i>	FT, CSC, MSCP	Coastal sage scrub, maritime succulent scrub. Resident.	No appropriate habitat. No potential to occur onsite.
Loggerhead shrike <i>Lanius ludovicianus</i>	CSC	Open foraging areas near scattered bushes and low trees.	No appropriate habitat. No potential to occur onsite.
Least Bell's vireo (nesting) <i>Vireo bellii pusillus</i>	SE, FE, MSCP	Willow riparian woodlands. Summer resident.	No appropriate habitat. No potential to occur onsite.
Yellow warbler (nesting) <i>Dendroica petechia brewsteri</i>	CSC	Breeding restricted to riparian woodland. Spring and fall migrant, localized summer resident, rare winter visitor.	No appropriate habitat. No potential to occur onsite.
Yellow-breasted chat (nesting) <i>Icteria virens</i>	CSC, MSCP	Dense riparian woodland. Localized summer resident.	No appropriate habitat. No potential to occur onsite.
Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	CSC, MSCP	Coastal sage scrub, grassland. Resident.	No appropriate habitat. No potential to occur onsite.
Bell's sage sparrow <i>Amphispiza belli belli</i>	CSC, MSCP	Chaparral, coastal sage scrub. Localized resident.	No appropriate habitat. No potential to occur onsite.
Tricolored blackbird <i>Agelaius tricolor</i>	CSC, MSCP	Freshwater marshes, agricultural areas, lakeshores, parks. Localized resident.	No appropriate habitat. No potential to occur onsite.
Blue grosbeak (nesting) <i>Guiraca caerulea</i>	!	Riparian woodland edges, mule fat thickets. Summer resident, spring and fall migrant, winter visitor.	No appropriate habitat. No potential to occur onsite.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
<u>Mammals</u> (Nomenclature from Jones et al. 1982)			
Pallid bat <i>Antrozous pallidus</i>	CSC	Caves, mines, buildings. Found in a variety of habitats, arid and mesic.	No appropriate habitat. No potential to occur onsite. Not historically observed in the area.
Ringtail cat <i>Bassariscus astutus</i>	CSC	Desert dune, rock outcrops, chaparral, forest (scrub) and mountains.	No appropriate habitat. No potential to occur onsite.
Pale big-eared bat <i>Corynorhinus townsendii pallescens</i>	CSC	Caves, mines, buildings. Found in a variety of habitats, arid and mesic.	No appropriate habitat. No potential to occur onsite.
Townsend's western big-eared bat <i>Corynorhinus townsendii townsendii</i>	CSC, MSCP	Caves, mines, buildings. Found in a variety of habitats, arid and mesic.	No appropriate habitat. No potential to occur onsite.
Californai leaf nosed bat <i>Macrotus californicus</i>	CSC, MSCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	No appropriate habitat. No potential to occur onsite.
Western mastiff bat <i>Eumops perotis californicus</i>	CSC, MSCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	No appropriate habitat. No potential to occur onsite.
Western small-footed myotis <i>Myotis ciliolabrum</i>	CSC, MSCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	No appropriate habitat. No potential to occur onsite.
Long-eared myotis <i>Myotis evotis</i>	CSC, MSCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	No appropriate habitat. No potential to occur onsite.
Yuma myotis <i>Myotis yumanensis</i>	CSC, MSCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	No appropriate habitat. No potential to occur onsite.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
Friged myotis <i>Eumops perotis californicus</i>	CSC, MSCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	No appropriate habitat. No potential to occur onsite.
Long legged myotis <i>Myotis volans</i>	CSC, MSCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	No appropriate habitat. No potential to occur onsite.
Big free-tailed bat <i>Nyctinomops macrotis</i>	CSC, MSCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	No appropriate habitat. No potential to occur onsite.
Pocketed free-tailed bat <i>Nyctinomops femorosacca</i>	CSC, MSCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	No appropriate habitat. No potential to occur onsite.
Californai leaf nosed bat <i>Macrotus californicus</i>	CSC, MSCP	Woodlands, rocky habitat, arid and semiarid lowlands, cliffs, crevices, buildings, tree hollows.	No appropriate habitat. No potential to occur onsite.
Mountain lion <i>Felis concolor</i>	CSC, MSCP	Grassland, agricultural land, coastal sage, chaparral. Declining resident.	No appropriate habitat. No potential to occur onsite.
Southern Mule Deer <i>Odocoileus hemionus</i>	CSC, MSCP	Grassland, agricultural land, coastal sage, chaparral. Declining resident.	No appropriate habitat. No potential to occur onsite.
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	CSC, MSCP	Open areas of scrub, grasslands, agricultural fields.	No appropriate habitat. No potential to occur onsite.
Dulzura California pocket mouse <i>Chaetodipus californicus femoralis</i>	CSC, MSCP	San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils.	No appropriate habitat, out of range, no potential to occur onsite.
Northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	CSC, MSCP	San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils.	No appropriate habitat, out of range, no potential to occur onsite.

**SENSITIVE WILDLIFE SPECIES
OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)**

Species	Status	Habitat	Occurrence/Comments*
Stephen's kangaroo rat <i>Dipodomys stephensi</i>	CSC, MSCP	Sparse perennial plant cover is preferred (Thomas 1975). Burrows may be excavated in firm soil that is "neither extremely hard nor sandy" (Lackey 1967a)	No appropriate habitat, out of range, no potential to occur onsite.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	CSC	Coastal sage scrub and chaparral.	No appropriate habitat. No potential to occur onsite.
Southern grasshopper mouse <i>Onychomys torridus ramona</i>	FE, CSC, MSCP	Grasslands and sparse coastal sage scrub.	No appropriate habitat, out of range, no potential to occur onsite.
Los Angeles little pocket mouse <i>Perognathus longimembris brevinasus</i>	FE, CSC, MSCP	Fine, sandy soils, typically in arid grassland or coastal sage scrub habitats.	No appropriate habitat, out of range, no potential to occur onsite.
Pacific little pocket mouse <i>Perognathus longimembris pacificus</i>	FE, CSC, MSCP	Open coastal sage scrub; fine, alluvial sands near ocean.	No appropriate habitat, out of range, no potential to occur onsite.
American badger <i>Taxidea taxus</i>	MSCP	Dry, open grasslands, fields, and pastures.	No appropriate habitat, no potential to occur onsite.

Status Codes

Listed/Proposed

- FE = Listed as endangered by the federal government
 FT = Listed as threatened by the federal government
 SE = Listed as endangered by the state of California

Other

- BEPA = Bald and Golden Eagle Protection Act
 CFP = California fully protected species
 CSC = California Department of Fish and Game species of special concern
 FC = Federal candidate for listing (taxa for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support proposals to list as endangered or threatened; development and publication of proposed rules for these taxa are anticipated)
 FSS = Federal (Bureau of Land Management and U.S. Forest Service) sensitive species
 MSCP = Multiple Species Conservation Program target species list

SENSITIVE WILDLIFE SPECIES
OBSERVED (*) OR WITH THE POTENTIAL FOR OCCURRENCE
(continued)

- ! = Taxa listed with an asterisk fall into one or more of the following categories:
- Taxa considered endangered or rare under Section 15380(d) of CEQA guidelines
 - Taxa that are biologically rare, very restricted in distribution, or declining throughout their range
 - Population(s) in California that may be peripheral to the major portion of a taxon's range, but which are threatened with extirpation within California
 - Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands)

Appendix E Sensitivity Codes

**APPENDIX E
SENSITIVITY CODES**

FEDERAL CANDIDATES AND LISTED PLANTS

- FE = Federally listed, endangered
FT = Federally listed, threatened
FPE = Federally proposed endangered
FPT = Federally proposed threatened

STATE LISTED PLANTS

- CE = State listed, endangered
CR = State listed, rare
CT = State listed, threatened

COUNTY OF SAN DIEGO MSCP STATUS

- NE = Narrow endemic species
CS = MSCP Covered Species List

CALIFORNIA NATIVE PLANT SOCIETY

LISTS

- 1A = Species presumed extinct.
- 1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
- 2 = Species rare, threatened, or endangered in California but which are more common elsewhere. These species are eligible for state listing.
- 3 = Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed.
- 4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.

R-E-D CODES

R (Rarity)

- 1 = Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time.
- 2 = Occurrence confined to several populations or to one extended population.
- 3 = Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

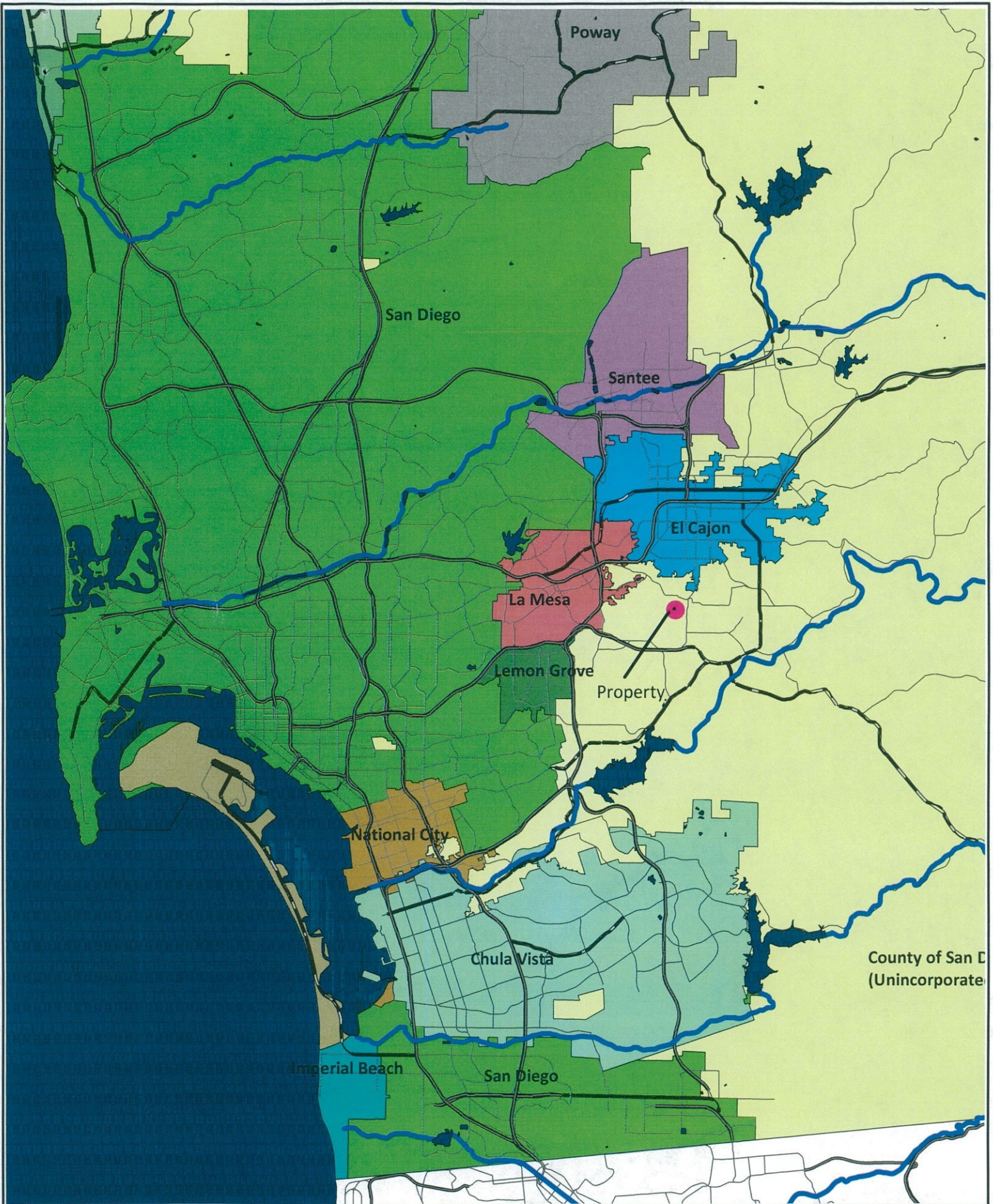
E (Endangerment)

- 1 = Not endangered
2 = Endangered in a portion of its range
3 = Endangered throughout its range

D (Distribution)

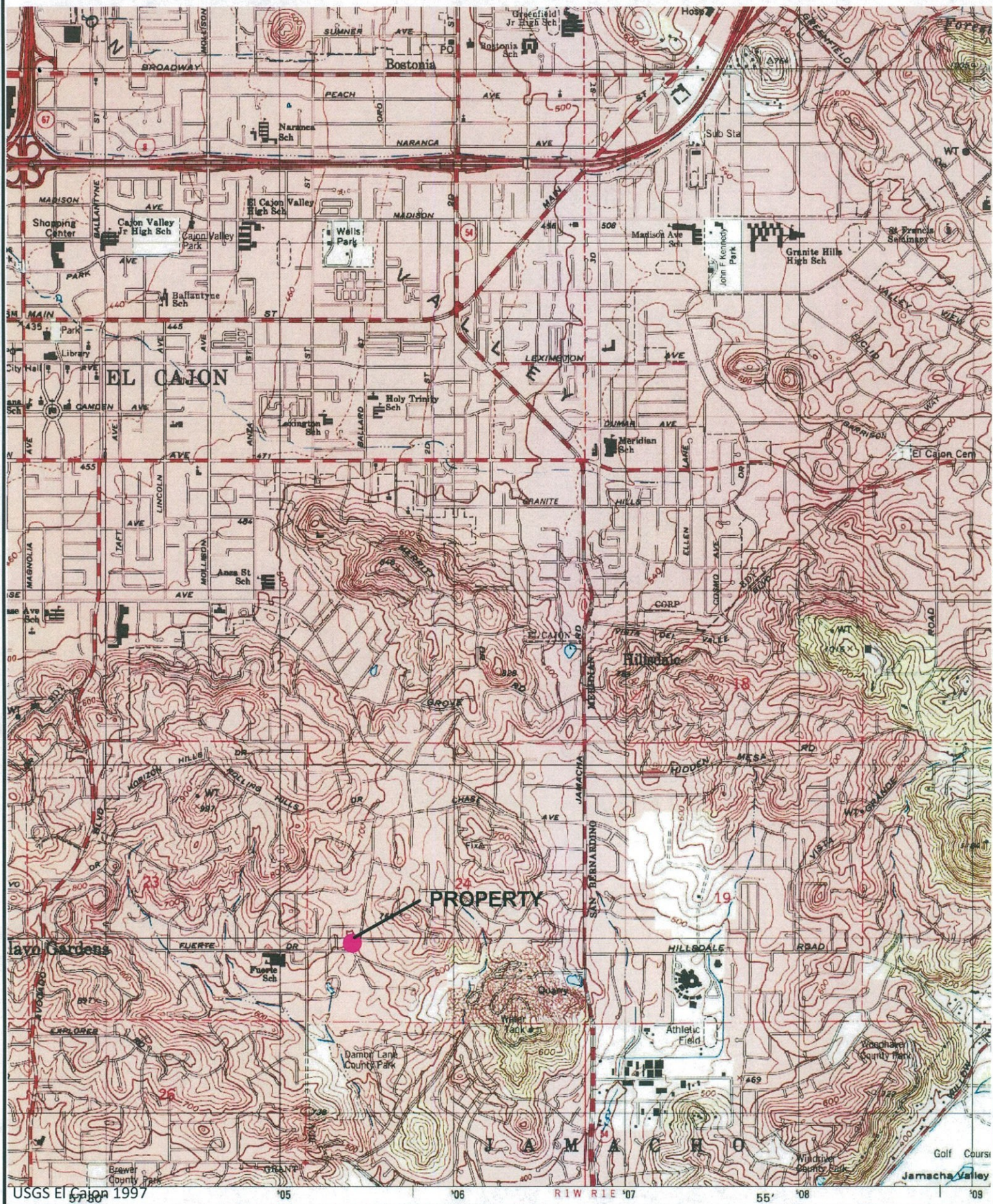
- 1 = More or less widespread outside California
2 = Rare outside California
3 = Endemic to California

Appendix F Figures 1-5



Property

FIGURE 1
Regional Project
Location



USGS El Cajon 1997



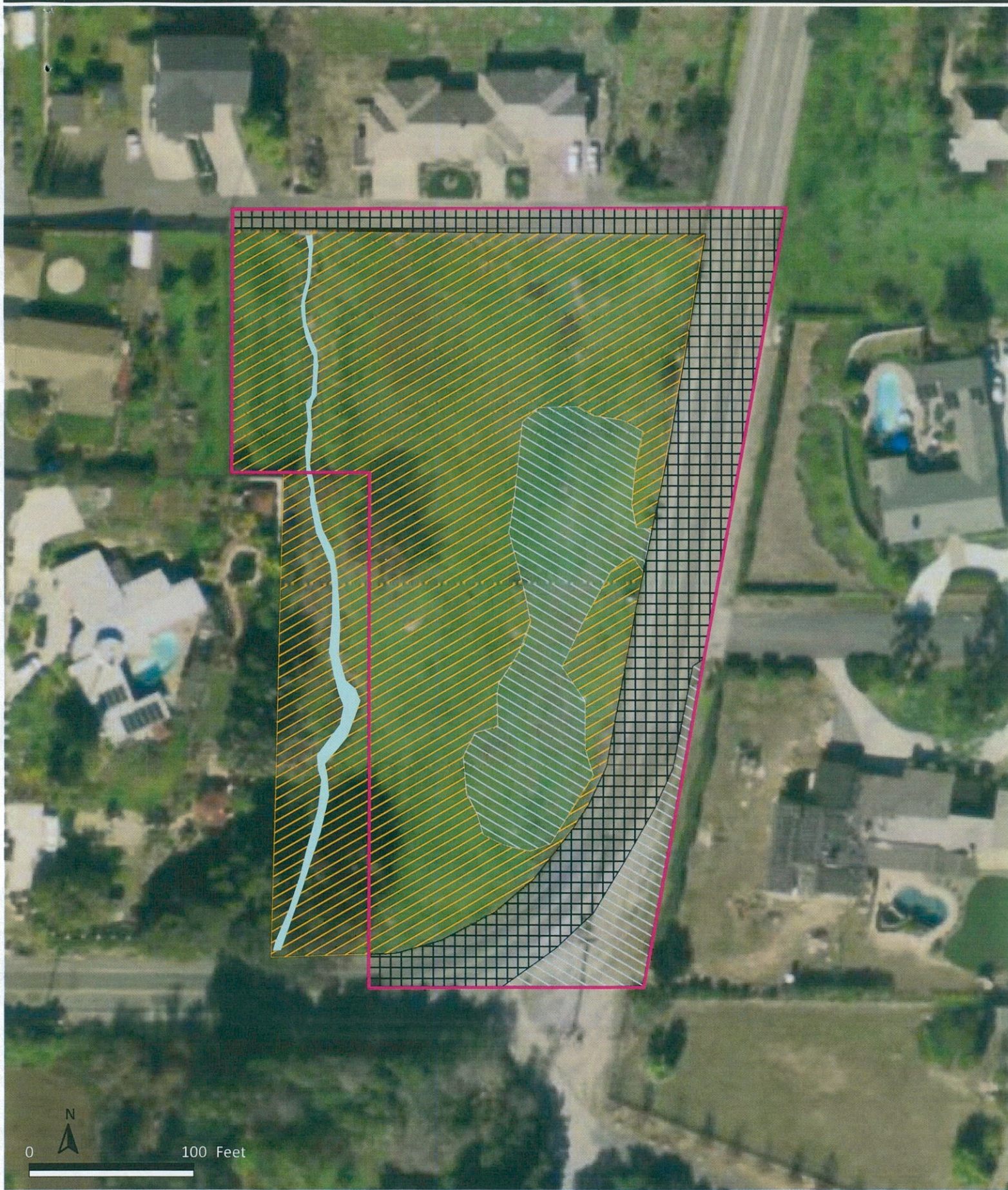
Property

FIGURE 2
USGS Topo -
Property Location



 Property

FIGURE 3
Project Aerial



Property

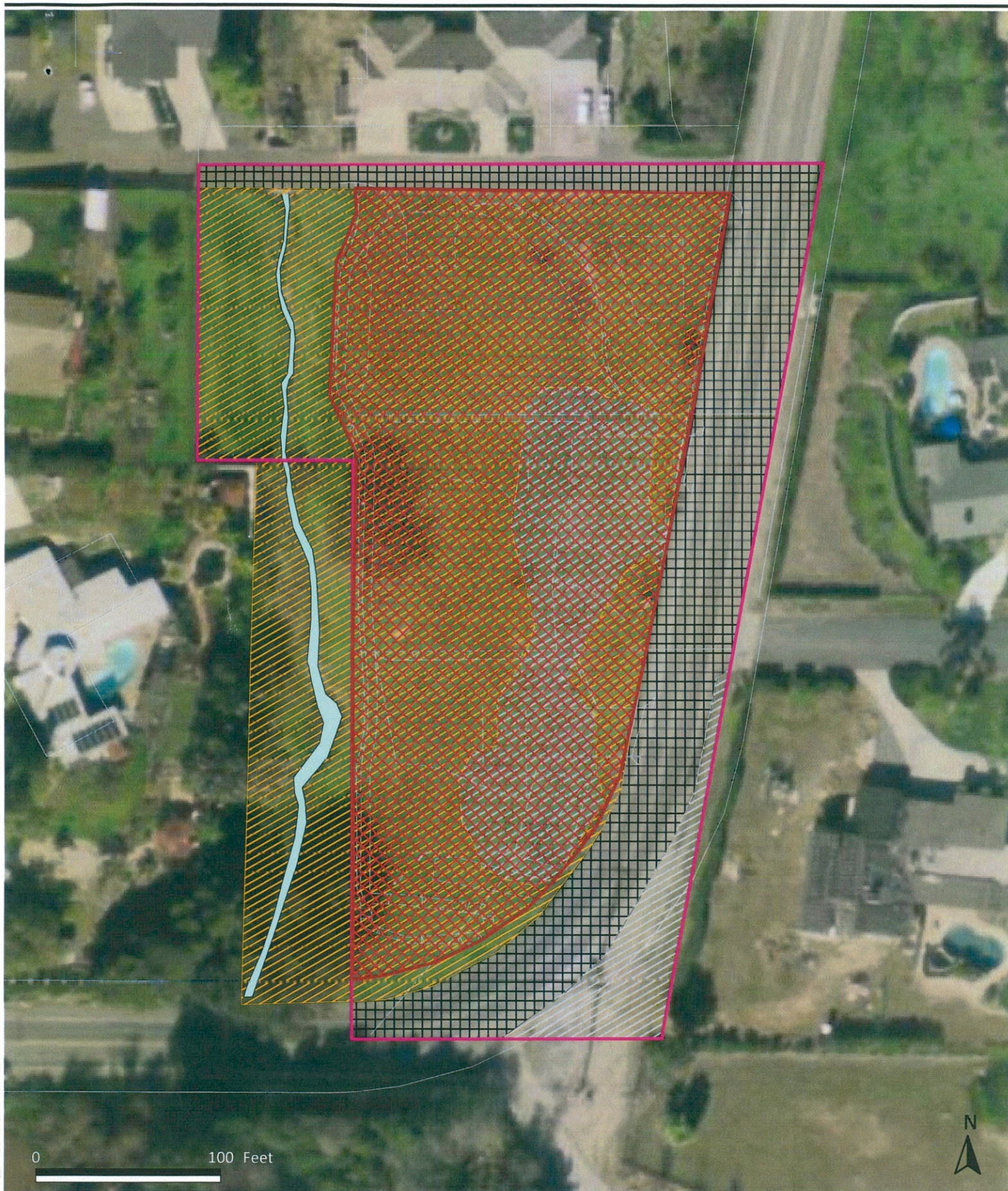
Non-Native Grassland

Channel

Disturbed

Developed

FIGURE 4
Vegetation Map



Property



Grading Footprint



Disturbed



Non-Native Grassland



CDFW Channel (Non-RPO)

Developed

FIGURE 5
Impact Map



Photograph 1 NNG and Disturbed Habitat - Fuerte in the background



Photograph 2 Ephemeral Channel - Non-Wetlands Water