Common Name	Species Name	State/Federal Status	County NE	County Group	Habitat	Potential to Occur Onsite
Silvery legless lizard	*Anniella pulchra pulchra*	SSC/-		2	Loose soil and leaf litter with plant cover in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks; often under surface objects such as rocks, boards, driftwood, and logs; sometimes found in suburban gardens in southern California; lives mostly underground.	Low; marginally suitable habitat occurs on-site, but not observed, and site is probably too small, isolated within development, and disturbed.
South coast garter snake	*Thamnophis sirtalis* subsp. *novum*	SSC/-		2	Marsh and upland habitats near permanent fresh water with good strips of riparian vegetation; currently only known in San Pasqual Valley in SD County.	Low; site lacks permanent fresh water and good strips of riparian vegetation.
Two-striped garter snake	*Thamnophis hammondii*	SSC/BLM-S. USFS-S		1	Around pools, creeks, cattle tanks, and other water sources, often in rocky areas, in oak woodland, chaparral, brushland, and coniferous forest; 0-6,988 ft.	Low; marginally suitable habitat occurs on-site, but not observed, and site is probably too small, isolated within development, and disturbed.
Western pond turtle (southwestern pond turtle)	*Emys marmorata (Clemmys marmorata pallida)*	SSC/BLM-S, USFS-S	X	1	Aquatic; ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland; basking areas required; may enter brackish water and even seawater; 0-5,900 ft.	Low; not observed, no suitable aquatic habitat on-site.
BIRDS						
Barn owl	*Tyto alba*	-/-		2	Nests in buildings, among bases of palm leaves, cavities in native trees or cliff ledges, and nest boxes; SD owl most adapted to suburban and urban environments.	Moderate; mapped in SD Bird Atlas squares on all sides of project's square, could roost in palms or other tree on-site and/or hunt over the
Bell's sage sparrow	*Artemisiospiza belli belli (Amphispiza b. b.)*	WL/BCC		1	Year-round resident in open chaparral and sage scrub, especially recently where burned areas or on gabbro substrate; most common in central southern SD County; very sensitive to habitat fragmentation.	Low; not observed, no suitable habitat on-site, site is too isolated within development.
Burrowing owl (burrow sites and some wintering sites)	*Athene cunicularia*	SSC/BCC, BLM-S	X	1	Open, dry grasslands, agricultural and range lands, shrub and desert habitats of low-growing open vegetation (associated with burrowing animals).	Low; no burrowing owls or their burrows or sign observed on-site.
California horned lark	*Eremophila alpestris actia*	WL/-		2	Open patches of bare land alternating with low vegetation in grasslands, montane meadows, and sagebrush plains.	Low; not observed on-site, site is probably too isolated within development.
Canada goose	*Branta canadensis*	-/-		2	Areas with fresh or brackish water and low grass or succulent leaves for forage.	Low; not observed, disturbed wetland on-site is covered by shrubs and trees and is not suitable.
Coastal cactus wren, San Diego cactus wren	*Campylorhynchus brunneicapillus sandiegensis*	SSC/BSS, USFS-S	X	1	Open coastal sage scrub with thickets of cholla (*Cylindropuntia* sp.), south- and west-facing slopes below 1,500 ft, usually within quarter mile of river valleys.	Low; no cholla observed on-site.

Common Name	Species Name	State/Federal Status	County NE	County Group	Habitat	Potential to Occur Onsite
Coastal California gnatcatcher	*Polioptila californica californica*	SSC/**FT**		1	Resident in southern California coastal sage scrub, especially where dominated by coastal sagebrush (*Artemisia californica)* and CA buckwheat *(Eriogonum fasciculatum)* ; may also use open chaparral next to sage scrub; usually in coastal lowland below 1,000 ft.	Low; never seen or heard on-site, area of coastal sage scrub on-site is much too small and isolated.
Cooper's hawk (nesting)	*Accipiter cooperii*	WL/-		1	Oak woodlands, mature riparian woodlands, eucalyptus groves in urban and suburban settings, most common on coastal slope.	Moderate; not observed, but fairly widespread and could nest in and hunt from trees on-site and next to site, and hunt over site.
Ferruginous hawk (wintering)	*Buteo regalis*	WL/BCC		1	Uncommon winter visitor to SD County, forages over larger tracts of grassland, especially those >12 miles inland.	Low; non-native grassland on-site is probably too small and isolated within development to attract this species.
Golden eagle (nesting and wintering)	*Aquila chrysaetos*	FP, WL, CDF-S/ BLM-S, BCC	X	1	Hunts in grasslands, sage scrub and broken chaparral, mostly in foothills; most nest on cliff ledges, the rest in trees on steep slopes.	Low; nesting documented on El Cajon Mtn. ~4 miles NE, but little likelihood of hunting on this site, which is small and isolated within development.
Grasshopper sparrow	*Ammodramus savannarum*	SSC/-		1	Short- to middle-height, moderately open grasslands with scattered shrubs, native bunchgrasses preferred; hard to identify except when singing (Mar-Jul).	Low; not observed, Bird Atlas shows no records near project square, site is probably too disturbed and isolated within development.
Gray vireo	*Vireo vicinior*	SSC/BLM-S, BCC		1	South-facing slopes in dense dry chaparral, 3,000-5,000 ft.	Low; no suitable habitat on-site.
Great blue heron	*Ardea herodias*	CDF-S/-		2	Year-round in wetlands of all kinds, also forages in uplands for gophers and rats, nests in tall trees.	Low; not observed, disturbed wetland on-site likely has too little water to attract it.
Least Bell's vireo	*Vireo bellii pusillus*	**SE/FE**	X	1	Riparian woodland with dense canopy for foraging and dense understory for nesting; also forages in upland scrub, and sometimes even nests in non-riparian habitat; more common in coastal lowlands; migratory, usually arrives in SD County third week in March and leaves between mid-August and mid-September.	Low; never seen or heard on-site, site lacks true riparian habitat, and the disturbed wetland is small and isolated.
Least bittern	*Ixobrychus exilis*	SSC/BCC		2	Nests in marshes at borders of ponds or reservoirs.	Low; no suitable habitat on-site.
Loggerhead shrike	*Lanius ludovicianus*	SSC/BCC		1	Uncommon year-round resident in grassland, open sage scrub and chaparral, and desert scrub; eastern Otay Mesa is best remaining site on the coastal slope; known to retreat from urbanization.	Low; not observed, site is too urbanized.
Northern harrier (nesting)	*Circus cyaneus*	SSC/-		1	Year-round resident but more common in winter; nests on ground in marsh or other dense vegetation, forages over grasslands.	Low, not observed, site is probably too small and surrounded by development.
Prairie falcon	*Falco mexicanus*	WL/BCC		1	Nests inland and forages in open desert or grassland, may move west toward coast for winter foraging.	Low, not observed, site is probably too small and surrounded by development.

Common Name	Species Name	State/Federal Status	County NE	County Group	Habitat	Potential to Occur Onsite
Red-shouldered hawk	*Buteo lineatus*	-/-		1	Widespread over coastal slope, absent only in areas without tall trees; nests in riparian habitat, oaks, eucalyptus, and palms.	Moderate; not observed, but common, and site supports suitable trees and hunting/foraging
Sharp-shinned hawk	*Accipiter striatus*	WL/-		1	Widespread but uncommon winter visitor in SD County, especially coastal slope; variety of habitats, preferably with trees or tall shrubs; attracted to any place that concentrates small prey birds.	Moderate; not observed, but site has trees and a variety of small birds that could attract it.
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL/-		1	Sparse, mixed chaparral and coastal scrub habitats (especially coastal sage). Frequents relatively steep, often rocky hillsides with grass and forb patches.	Low; site supports only a very small area of coastal sage scrub and is too isolated within development.
Southwestern willow flycatcher (nesting)	*Empidonax traillii extimus*	**SE/FE**	X	1	Riparian wooded/shrubby habitat that is dense in all strata.	Low; no streams of rivers on-site, disturbed wetland is too small and isolated to attract this species.
Tricolored blackbird (nesting colony)	*Agelaius tricolor*	SSC/BCC, BLM-S		1	Fresh water, preferably emergent wetland with tall, dense cattails or tules, also in thickets of willow, blackberry, wild rose, tall herbs; feeds in grassland and cropland habitats.	Low; no suitable emergent wetlands on-site, disturbed wetland is too small and isolated by development.
Turkey vulture	*Cathartes aura*	-/-		1	Dry open country or along roadsides; coastal sage scrub, mixed and chamise chaparral, grassland, riparian, mixed conifer and closed cone forest; has retracted from heavily developed areas and is virtually eliminated along southwestern coast of SD; 0 to over 3000 ft.	Low; not observed, site is probably too surrounded by development to attract turkey vultures.
Western bluebird	*Sialia mexicana*	-/-		2	Habitat with pines and oaks next to meadows, and urban areas with mature trees and wide lawns, from near the coast to the mountains.	Moderate; not observed, but western bluebirds are fairly widespread and could be attracted to the oaks and non-native grassland on-site.
Western yellow-billed cuckoo (nesting)	*Coccyzus americanus occidentalis*	**SE**/FC, BCC, BLM-S, USFS-S	X	1	Extensive stands of mature riparian woodland.	Low; no suitable habitat on-site.
White-tailed kite	*Elanus leucurus*	FP/-		1	Widespread over coastal slope, prefers riparian woodlands, oak groves, or sycamore groves adjacent to grassland; feeds almost exclusively on California vole.	Low; not observed, on-site oaks and willows next to non-native grassland are somewhat suitable but likely too small and isolated to support adequate prey.
Yellow warbler (nesting)	*Setophaga petechia (Dendroica p.)*	SSC/BCC		2	Mature riparian woodland.	Low; not observed, no suitable habitat on-site.
Yellow-breasted chat (nesting)	*Icteria virens*	SSC/-		1	Summer visitor in dense riparian woodland, most common in coastal lowland, strongly concentrated in NW corner of County; usually return to SD second week in April and start to leave by early August.	Low; not observed, no dense riparian woodland on-site, disturbed wetland is too small and isolated.
MAMMALS						
American badger	*Taxidea taxus*	SSC/-		2	Most common in drier open stages of most shrub, forest, and herbaceous habitats with friable soils.	Low; site is too small and isolated within development, no suitable burrows or badger

Common Name	Species Name	State/Federal Status	County NE	County Group	Habitat	Potential to Occur Onsite
Big free-tailed bat	*Nyctinomops macrotis*	SSC/-		2	Rocky arid habitat, roosts in crevices in rock faces, although two early 20th century San Diego specimens were found in buildings; migrates to Mexico for winter.	Low; no suitable habitat on-site.
California leaf-nosed bat	*Macrotus californicus*	SSC/BLM-S, USFS-S		2	Desert scrub, formerly occurred in coastal basins from LA to SD, one colony known to persist in tunnel at "inland valley site in southern San Diego County"; roosts in caves and abandoned buildings and mines; doesn't hibernate; some are resident and some migrate to Mexico for winter.	Low; no suitable habitat on-site, site doesn't match known San Diego location.
Dulzura pocket mouse	*Chaetodipus californicus femoralis*	SSC/-		2	Variety of habitat including coastal sage scrub, chaparral, and grassland, attracted to grass-chaparral edges.	Low; no preferred grassland-chaparral edges on-site, site is too small, disturbed, and isolated within development.
Hoary bat	*Lasiurus cinereus*	-/-			Roosts in trees and fencerows, migrates to southern California for winter, seldom found in urban settings.	Low; site is too urbanized to attract this bat.
Mountain lion	*Puma concolor*	-/-		2	Needs large areas of habitat in forested or brushy regions, or rugged terrain with woods or rocks; avoids open areas.	Low; site is too small and surrounded by development to attract or support mountain
Mule deer, southern mule deer	*Odocoileus hemionus fuliginata*	-/-		2	Woodlands, riparian areas, margins of meadows and grasslands, and open shrublands.	Low; site is too small and surrounded by development to attract or support deer.
Northwestern San Diego pocket mouse	*Chaetodipus fallax fallax*	SSC/-		2	Sandy, herbaceous areas, usually associated with rocks or coarse gravel, in coastal scrub, chaparral, grasslands, sagebrush in western San Diego County; nocturnal.	Low, although there is small area of coastal sage scrub on-site, this location is too small, disturbed, and surrounded by development.
Pallid bat	*Antrozous pallidus*	SSC/BLM-S, USFS-S		2	Once common in SD County west of the mountains in riparian, chaparral, oak savannah, and cultivated areas but now known at only a few inland valley sites in southern San Diego County; intolerant of human development; roosts in crevices.	Low; intolerant of human development, and site is surrounded by development and has been disturbed for decades.
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SSC/-		2	Chaparral and creosote scrub, associated with prominent rock features such as large boulder piles or rocky canyons; roosts in rock crevices, will use abandoned rock quarries.	Low; no suitable habitat on-site.
Ringtail	*Bassariscus astutus*	FP		2	Brushy and wooded areas at lower and middle elevations, especially foothill canyons; prefers to live along watercourses; avoids urban regions; nocturnal.	Low; avoids urban areas, and site is too disturbed and surrounded by development.
San Diego black-tailed jackrabbit	*Lepus californicus bennettii*	SSC/-		2	Grasslands, agricultural fields, sparse shrublands, edges of citrus groves on coastal side of mountains, sea level to over 6,000 ft, mostly west of National Forest lands in SD County.	Low; not observed, site is likely too small and surrounded by development to support this species.
San Diego desert woodrat	*Neotoma lepida intermedia*	SSC/-		2	Coastal sage scrub, oak woodlands and chaparral with rock outcroppings, boulders, and cacti; middens are typically smaller than those of *N. fuscipes* and built in rock and rock crevices rather than in shrubs; nocturnal.	Low; no woodrat middens observed on-site.

Common Name	Species Name	State/Federal Status	County NE	County Group	Habitat	Potential to Occur Onsite
Southern grasshopper mouse	*Onychomys torridus ramona*	SSC/-		2	Originally in low, open and semi-arid scrub habitat including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs, in mesas and valleys from coast to as far inland as Boulevard; nocturnal; no recent records from western SD County.	Low; no recent records from western SD County, and site is likely too disturbed and isolated by development.
Spotted bat	*Euderma maculatum*	SSC/BLM-S		2	Primarily cave dwelling but also found in mixed chaparral and oak woodlands; very rare in SD County.	Low; no suitable habitat on-site, site is too disturbed and surrounded by development.
Stephens' kangaroo rat	*Dipodomys stephensi*	**ST/FE**		1	Grasslands with strong forb component and limited shrubs such as *Artemisia californica* and *Eriogonum fasciculatum.*	Low; no CNDDB records in project or surrounding quads, on-site habitat is somewhat suitable, but too disturbed and isolated within development.
Townsend's big-eared bat	*Corynorhinus townsendii (Plecotus t.)*	SSC/BLM-S, USFS-S		2	Pine forest, desert scrub, and a variety of habitats; requires caves, mines, or tunnels for roosts; highly sensitive to human disturbance.	Low; no known roosts nearby, and site is too disturbed and isolated within development for this species.
Western mastiff bat	*Eumops perotis californicus*	SSC/BLM-S		2	Open semi-arid to arid habitats; crevices in cliff faces, high buildings, trees, and tunnels are required for roosting; typically forages over wide-open spaces in various habitats.	Low; site lacks suitable roosts and is probably too small and isolated to attract this species for foraging.
Western red bat	*Lasiurus blossevillii*	SSC/-		2	Prefers riparian areas, where they roost in broad-leaf trees; migratory, most likely to be in western SD in winter.	Low; no riparian habitat on-site; broad-leaf riparian trees are present in low numbers but are likely too sparse and isolated within development to attract this species.
Western small-footed myotis	*Myotis ciliolabrum*	-/BLM-S		2	Primarily found in relatively arid wooded and brushy uplands near water; roosts in caves, buildings, mines, crevices, and occasionally under bridges and under bark.	Low; on-site intermittent water supply from a culvert is probably inadequate to attract this species.
Western yellow bat	*Lasiurus xanthinus*	SSC/-			Desert areas with palms and, increasingly, year-round in urban areas in planted palms; roosts in hanging palm fronds.	Moderate; palms that could be used as roosts are found on and near site, and this species can tolerate suburban conditions.
Yuma myotis	*Myotis yumanensis*	-/BLM-S		2	Forages primarily over open water; optimal habitat is open forest or woodland near open water; roosts in caves, mines, buildings, bridges, and tree cavities; relatively urban-adapted and relative common in southwestern CA.	Low; no open water on or close to site.

Listing Designations

Federal Listing (USFWS 2013, CDFW 2011)

FE - Federal-listed Endangered

FT - Federal-listed Threatened

FC - Federal Candidate for listing

State Listing (CDFW 2011, 2013)

SE - State-listed Endangered

ST - State-listed Threatened

SEC - State Endangered Candidate

Common Name	Species Name	State/Federal Status	County NE	County Group	Habitat	Potential to Occur Onsite

BCC - US Fish and Wildlife Service Bird of Conservation Concern
BLM-S - Bureau of Land Management Sensitive
USFS-S - US Forest Service Sensitive
FP - CA Dept. of Fish and Wildlife Fully Protected
SSC - State Species of Special Concern
WL - CA Dept. of Fish and Wildlife Watch List
CDF-S - CA Dept. of Forestry Sensitive

Cnty NE - an X in this column indicates the species is considered a Narrow Endemic by the County of San Diego (MSCP County of San Diego Subarea Plan 1997)

County Group (County of San Diego 2010)
1 - County of SD Sensitive Animal List Group 1
2 - County of SD Sensitive Animal List Group 2

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 04 06 2007

For Office Use Only

Source Code _____ Quad Code _____

Elm Code _____ Occ. No. _____

EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Aspidoscelis tigris stejnegeri*

Common Name: coastal whiptail

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals ___|___ Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ ☐ no ☑ unk.
Yes, Occ. #

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: C. MacGregor for M. Meng, C. Weber

Address: 2442 Second Avenue, San Diego, CA 92101

E-mail Address: catherine@rec-consultants.com

Phone: (619) 326-6008

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

# adults	# juveniles	# larvae	# egg masses	# unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

***Location Description* (please attach map AND/OR fill out your choice of coordinates, below)**

Northeast of intersection of Lake Jennings Park Road and Blossom Valley Road, in disturbed wetland on undeveloped parcel.

County: San Diego Landowner / Mgr.: Private

Quad Name: El Cajon Elevation: approx. 740 ft

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): _____

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model from GIS

DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ *OR* Geographic (Latitude & Longitude) ☑

Coordinates: 32°50'49.759"N 116°52'52.872"W
Using NAD83 California State Plane VI

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*

Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

One coastal whiptail reported in disturbed wetland area, consisting of an eroded channel downstream of a culvert, surrounded by non-native trees and shrubs and a few natives such as Salix spp. and Malosma laurina; disturbed wetland is located within non-native grassland dominated by annual non-native grasses, shortpod mustard, radish, and other weedy non-natives; a small strip of coastal sage scrub is located just south of the parcel, north of Blossom Valley Road.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☐ Fair ☑ Poor

Immediate AND surrounding land use: Roads, residential development

Visible disturbances: Repeated mowing of surrounding grassland for fuel management, use by bicyclists and trespassers

Threats: Possible development

Comments:

Determination: *(check one or more, and fill in blanks)*

- ☐ Keyed (cite reference): _____
- ☐ Compared with specimen housed at: _____
- ☐ Compared with photo / drawing in: _____
- ☐ By another person (name): _____
- ☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☐
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes☐ no☐

APPENDIX E

2007 QUINO CHECKERSPOT BUTTERFLY REPORT

R·E·C Consultants, Inc.
Civil Engineering · Environmental

2442 Second Avenue
San Diego, CA 92101
Phone: 619.232.9200
Fax: 619.232.9210

July 6, 2007

Ms. Sandra Marquez
U.S. Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, CA 92011

Quino Checkerspot Butterfly Survey Report for the Lake Jennings Park Road Project (USFWS TE786714-1)

1.0 Introduction

The U.S. Fish and Wildlife Service officially listed the Quino checkerspot butterfly (*Euphydryas editha quino*) as "endangered" on January 16, 1997 (U.S. Fish and Wildlife Service 1997). For this reason, the Quino checkerspot is protected under the provisions of the Endangered Species Act of 1973, as amended. As such, "take" of this species, either directly or indirectly, is prohibited by law. In order to help land owners in preventing an unknowing "take" of this species, the U.S. Fish and Wildlife Service (USFWS) has required that land owners conduct a protocol survey on their land prior to project implementation in order to determine the presence or absence of this species.

The Quino checkerspot butterfly (QCB) is one of several subspecies of *Euphydryas editha*. It is a member of the brush-footed butterfly family (*Nymphalidae*). The Quino checkerspot is associated with a variety of habitats, which include clay soil meadows, grassland, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland and semi-desert (Ballmer *et al.* 2000). Despite association with a wide range of habitat, distribution of this species is restricted to areas which support the larval host plants. The Quino's primary host plant is dwarf plantain (*Plantago erecta*). The USFWS listed the following species as new primary host plants based on documentation during the 2000 and 2001 season: desert plantain (*Plantago patagonica*), Coulter's snapdragon (*Antirrhinum coulterianum*), and bird's beak (*Cordylanthus rigidus*) (USFWS 2002). Other possible larval host plant species include owl's clover (*Castilleja exserta*) (USFWS 2000) as well as *Collinsia* sp. and possibly other Scrophulariaceae (Ballmer *et al.* 2000). During the flight season, Quino checkerspot males exhibit "hill-topping" behavior, in which male butterflies fly to the highest hilltop, searching for receptive females. Generally the flight season for the Quino checkerspot occurs from mid-January to late April, peaking in March or April.

In keeping with the format for the past few years, the USFWS did not announce the opening or closing of a specific "survey season." Instead, the USFWS provided information on habitat

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conditions and butterfly population phenology at their monitored reference sites, and allowed permittees to determine which monitored reference site was most representative of their survey site based on habitat characteristics and geographic proximity to initiate site specific surveys. On March 16, 2007, the first Quino checkerspot butterfly of the season was observed in San Diego County in Jamul, at Proctor Valley Road. Due to late rains and cool weather along with sunny warm days the flight season was delayed. The Lake Jennings Park Road site is located in the Lakeside, County of San Diego.

The project site lies within Survey Area 2, as designated on the Year 2005 Recommended Quino Survey Areas Map (U.S. Fish and Wildlife Service 2005). This report documents the findings of a protocol survey conducted on the Lake Jennings Park Road site during spring 2007.

2.0 Site Characteristics

The Lake Jennings Park Road site is approximately 5.17 acres in Lakeside (Figure 1). The entire site was surveyed for the Quino checkerspot butterfly to assess the presence or absence of the species on the site. The site is located on the El Cajon USGS 7.5' quadrangle map, Range 1 east and Township 15 south (Figure 2). The site is bordered on all sides by residential and commercial development. Major roadways border the south (Blossom Valley Road) and west (Lake Jennings Park Road) sides of the site.

The project site ranges from approximately 215-250 meters above mean sea level and slopes upward toward the south-eastern tip of the site. The area receives approximately 12-inches of rain annually and enjoys a temperate climate. According to the *Soil Survey of San Diego Area, California* (Bowman 1973), two soil types occur onsite: Escondido very fine sandy loam 9-15 percent slopes, eroded (EsD2) and Escondido very fine sandy loam 15-30 percent slopes, eroded (EsE2). The Escondido series consists of moderately deep to deep, well-drained very fine sandy loams that formed in material weathered in place from metamorphosed sandstone. These soils are on uplands.

3.0 Vegetation Communities

The site contains a drainage and five habitat types including southern willow scrub, disturbed Diegan coastal sage scrub, non-native grasslands, non-native vegetation and disturbed habitat.

Southern Willow Scrub (Holland Code 63320), 0.32 acre

Southern willow scrub is a dense riparian community characterized by broad-leafed and winter deciduous shrub and tree species. This community is found in sandy and fine gravel streambeds. It requires frequent flooding to prevent succession to southern cottonwood-sycamore riparian forest. Predominant species include willow species (*Salix* sp.), western cottonwood (*Populus fremontii)* and western sycamore (*Platanus racemosa).* The canopy is usually too dense to allow much understory growth.

The southern willow scrub at the Lake Jennings Park Road site extends from the eastern boundary of the site north, ending approximately in the middle of the site. The habitat contains the above listed species. Two coast live oaks (*Quercus agrifolia*) were also found within the southern willow scrub along with several non-native tree and shrub species.

Diegan Coastal Sage Scrub (Holland Code 32500), 0.32 acre

Diegan coastal sage scrub is a low, soft-woody sub-shrub community that's most active in winter and early spring. Many taxa in the community are drought deciduous. The community is dominated by coastal sagebrush (*Artemisia californica*), coast California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), and white sage (*Salvia apiana*).

The Diegan coastal sage scrub onsite is found surrounding the boundary of the southern willow scrub and on the sloped southern tip of the site. The coastal sage scrub contains some of the species listed above, but is disturbed. The native vegetation is less than 18-inches tall and portions of the habitat appear to have been mowed within the last year or two.

Non-Native Grassland (Holland Code 42200), 3.82 acres

Non-native grassland is a mixture of annual grasses and broad-leafed, herbaceous species forming a dense to sparse cover. It is often associated with numerous species of native wildflowers in years of favorable rainfall. Germination occurs with the onset of the late fall rains, while growth and flowering occur from winter through spring. The plants are usually dead through the summer dry season, persisting as seeds. Dominant species onsite include non-native grasses (Family Poaceae), filaree (*Erodium sp.*), mustard (*Brassica sp.*), and peppergrass (*Lepidium sp.*).

The non-native grassland onsite is found on the majority of the west, north and east portions of the site. It surrounds the disturbed Diegan coastal sage scrub and southern willow scrub. It contains various non-native grasses and forbs including the ones listed above. There are small populations of native grasses onsite including needlegrass (*Nassella* sp.), beardgrass (*Bothriochloa barbinodis*) and blue-eyed grass (*Sisirynchium bellum*).

Non-Native Vegetation (Holland Code 11000) 0.15 acre

Non-native vegetation can include a variety of non-native vegetation types including trees, forbs and shrubs. This vegetation category is not considered high quality habitat, because the species are usually considered ornamental landscaping species or invasive weeds.

The Lake Jennings Park Road site contains a mixture of ornamental trees, non-native forbs and non-native shrubs. The non-native vegetation onsite is found in the central portion of the site. It is adjacent to the southern willow scrub and is located to the west of the delineated wetland.

Disturbed Land (Holland Code 11300) 0.46 acre

According to the "Biological Resource Mapping Requirements" (County of San Diego 2002), land must meet the following criteria to be classified as "disturbed": 1) Land that has been permanently altered by previous legal human activity including grading and/or repeated clearing for fuel management purposes or shows evidence of being built upon; 2) The land must show evidence that the previous disturbance has eliminated all future biological value of the land for most species. Some species will persist in an urban environment (i.e. house sparrow, etc.) and should not be included in this analysis; 3) No natural vegetation remains; 4) The land does not exhibit moderate to high value for sensitive animals, including foraging for raptors.

The Lake Jennings Park Road site has several dirt roads and trails traversing the site. These are areas where no vegetation, native or non-native, was found. The trails are not paved, but the soil is compacted and in some areas, signs of erosion from natural precipitation are evident.

Black Willow Tree 0.06 acre

There is a large black willow in the northwest corner of the site. It is not linked to the wetland or southern willow scrub onsite, but because it is native and of considerable size, the acreage that it occupies has been noted.

4.0 Quino Checkerspot Survey Methods

Survey methods followed those outlined in the Year 2002 Survey Protocol for the Quino checkerspot butterfly (U.S. Fish and Wildlife Service 2002).

- Surveys were conducted on non-consecutive days once per week throughout the five-week survey season. All non-excluded areas were visited during each survey.

- Surveys were conducted only during acceptable weather conditions (i.e., no fog, drizzle, rain; no sustained winds greater than 15 miles per hour measured four to six feet above ground level; temperature in the shade at ground level was not less than 60°F on a clear, sunny day; or temperature in the shade at ground level was not less than 70°F on an overcast, cloudy, or partly cloudy day).

- Site was surveyed at an average rate of 10 to 15 acres per hour.

A focused survey for the federally listed Quino checkerspot butterfly was conducted by USFWS permitted biologists Elyssa Robertson (TE069534) and Victor Novik (TE069534), on the Lake Jennings Park Road site. The focused survey area lies within Survey Area 2, as designated on the Year 2005 Recommended Quino Survey Areas Map (U.S. Fish and Wildlife Service 2005). Table 1 outlines the series of surveys performed in 2007.

TABLE 1 QUINO SURVEYS CONDUCTED on the LAKE JENNINGS PARK ROAD SITE					
Date	**Time**	**Temperature (°F)**	**Sky**	**Wind (Mph)**	**Personnel**
04/06/07	1224 to 1321	Begin: 68° End: 67°	5% cover	Begin: 0-5 End: 0-5	Victor Novik
04/11/07	1151 to 1255	Begin: 64° End: 64°	Clear	Begin: 2-5 End: 2-5	Victor Novik
4/19/07	0900 to 0930	Begin: 65° End: 65°	Clear	Begin: 0-1 End: 0-1	Elyssa Robertson
04/26/07	1330 to 1400	Begin: 73° End: 73°	Clear	Begin: 1-3 End: 1-3	Elyssa Robertson
05/04/07	1200 to 1230	Begin: 75° End: 75°	Clear	Begin: 1-3 End: 1-3	Elyssa Robertson

Non-Excluded Areas (Approximately 5.17 Acres)

The entire survey area was considered a non-excluded area. This area consisted of a disturbed coastal sage scrub habitat including a small riparian wetland. There were many foot trails that crisscrossed the site, and several dirt roads which were used for unknown purposes.

The survey route was determined by habitat type and topography. Straight line transects were surveyed on foot throughout the site.

Excluded Areas

There were no measurable excluded areas onsite.

5.0 Host Plants and Nectar Sources

The Quino's primary host plant is dwarf plantain (*Plantago erecta*). The USFWS listed the following species as new primary host plants based on documentation during the 2000 and 2001 season: desert plantain (*Plantago patagonica*), Coulter's snapdragon (*Antirrhinum coulterianum*), and bird's beak (*Cordylanthus rigidus*) (USFWS 2002). Other possible larval host plant species include owl's clover (*Castilleja exserta*) (USFWS 2000). No host plants were observed onsite.

Quino checkerspot butterfly nectar sources include, but are not necessarily limited to, members of the Asteraceae family (*Lasthenia* spp., *Layia* spp., *and Ericameria* spp.), *Cryptantha* spp. and *Allium* spp. (USFWS 2000). Ballmer *et al.* (2000) also include fiddleneck (*Amsinkia intermedia*), chia (*Salvia columbariae*), blue dicks (*Dichelostemma capitatum*) and various mustards as potential nectar sources. Mustards (*Brassica sp.*) were the only potential Quino checkerspot butterfly nectar sources observed onsite.

6.0 Butterflies Observed

A total of five butterfly species were identified onsite. On April 6, 2007, six funeral dusky-wings (*Erynnis funeralis*), two Behr's metalmarks (*Apodemia mormo virgulti*) and one pygmy blue (*Brephidium exile*) were observed. On April 11, 2007, one pale swallowtail (*Papilio eurymedon*) and one western tiger swallowtail (*Papilio rutulus*) were observed. On April 26, 2007, one Behr's metalmark was observed. No butterflies were seen during the other two surveys. No checkerspot species were observed onsite.

7.0 Conclusion

No Quino checkerspot butterflies were observed onsite during this series of surveys. Additionally, no host plants were observed onsite. It is unlikely that this area harbors any Quino butterflies. Because the site is surrounded by commercial and residential development, it is also unlikely that the site is used as a corridor for the Quino checkerspot butterfly.

This concludes the report of findings for a focused Quino checkerspot butterfly survey conducted on the Lake Jennings Park Road site. The signature below confirms that all data was accurately incorporated into this report.

Elyssa Robertson
Principal Biologist

7-10-07
Date

References Cited

Ballmer, G., Hawks, D., Osborne, K., and Pratt, G., 2000. *The Quino Checkerspot Butterfly; Euphydryas editha quino*. Unpublished manuscript distributed at the Quino Workshop, January 2000, Riverside, California.

Bowman, R.H., Bishop, R.E., Griffen, R.W. and Jones, M.L. ,1973. *Soil Survey of the San Diego Area, California*. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

U.S. Fish and Wildlife Service, 2005. Quino checkerspot butterfly 2005 monitored reference site information: http://www.fws.gov/pacific/carlsbad/Quino_Monitor.htm

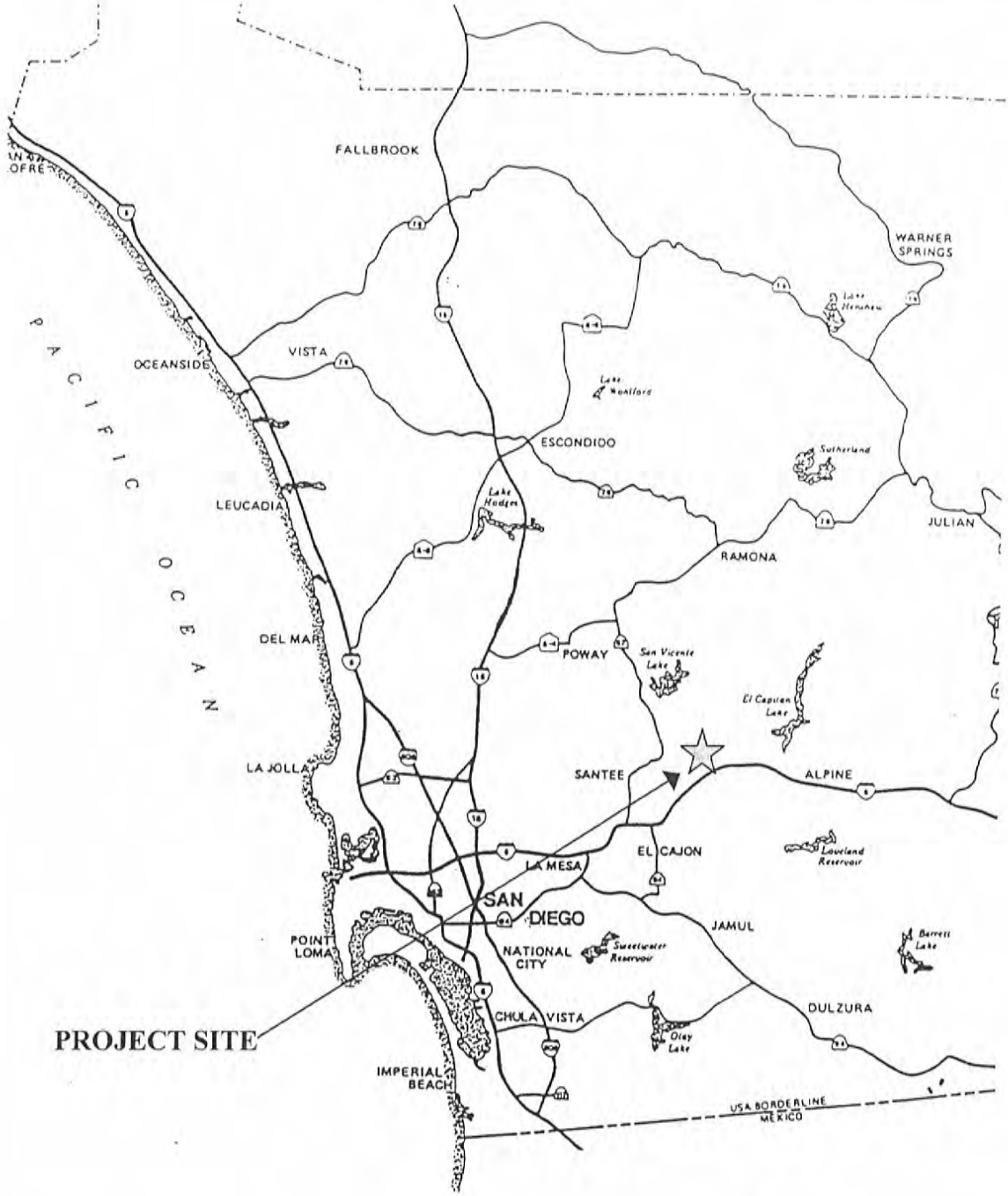
U.S. Fish and Wildlife Service, 2002. *Year 2002 Survey Protocol: Quino Checkerspot Butterfly (Euphydryas editha quino)*. Unpublished manuscript, available from the Carlsbad Field Office, Carlsbad, California.

U.S. Fish and Wildlife Service, 2002. Quino Permit Holder Letter – dated February 12, 2002. Available from the Carlsbad Field Office, Carlsbad, California.

U.S. Fish and Wildlife Service, 2000. *Year 2000 Survey Protocol: Quino Checkerspot Butterfly (Euphydryas editha quino)*. Unpublished manuscript, available from the Carlsbad Field Office, Carlsbad, California.

U.S. Fish and Wildlife Service, 2000. *Information on the Quino Checkerspot Butterfly Year 2000 Survey Protocol*. Unpublished manuscript, available from the Carlsbad Field Office, Carlsbad, California.

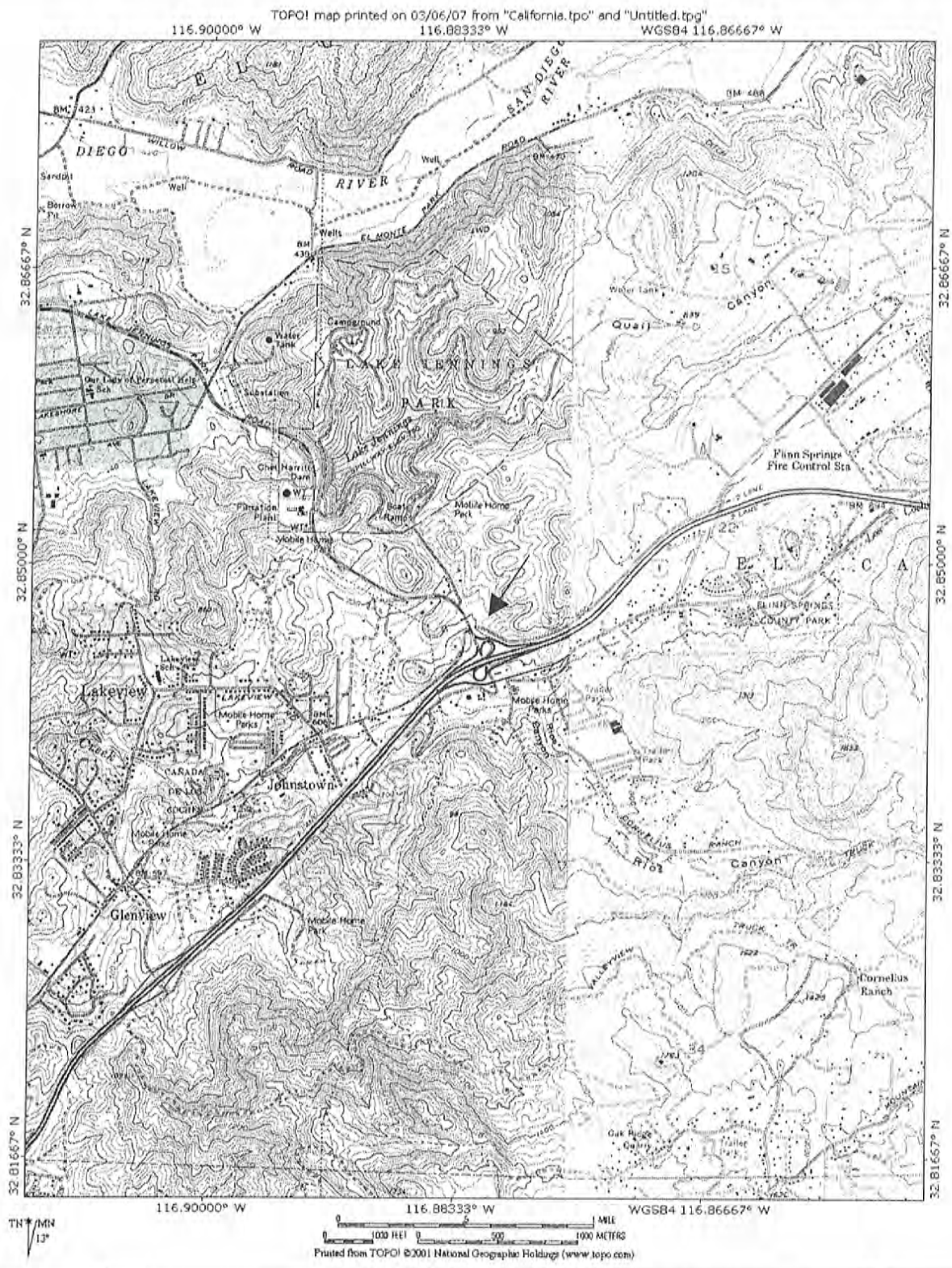
U.S. Fish and Wildlife Service, 1997. *Endangered and Threatened Wildlife and Plants: Determination of Endangered Status for the Laguna Mountains Skipper and Quino Checkerspot Butterfly*. Federal Register 62(11):2313-2322.



R·E·C Consultants, Inc.

REGIONAL LOCATION MAP
Lake Jennings

Figure 1



R·E·C Consultants, Inc.

SITE LOCATION
Lake Jennings

Figure 2

APPENDIX F

2013 JURISDICTIONAL DELINEATION REPORT

LAKE JENNINGS PARK ROAD
WETLANDS & WATERS JURISDICTIONAL DELINEATION REPORT

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EXECUTIVE SUMMARY

REC Consultants Inc. conducted a jurisdictional assessment of a drainage feature on the 5.2-acre Lake Jennings Park Road project site in the community of Lakeside in unincorporated San Diego County, California. The site is located east of State Route 67 and just north of Interstate 8, between Lake Jennings Park Road, Blossom Valley Road, and Jennings Vista Drive. Proposed development of the project will impact the entire site, including non-native grassland and very small amounts of disturbed wetland and coastal sage scrub habitat.

One potentially jurisdictional drainage feature was identified on-site during REC's biological surveys and was the focus of the jurisdictional assessment. This feature consists of a small depression and short channel below a culvert that carries water onto the site from the subdivision located to the east of the site. The depression and channel are surrounded by trees and shrubs. The channel starts at the culvert on the eastern edge of the site and continues westward before ending approximately halfway across the site.

The drainage feature was evaluated as a potential wetlands or other waters of the U.S. according to U.S. Army Corps of Engineers (USACE) guidelines, as a waters of the State or State wetland according to State Water Quality Control Board guidelines, as a stream according to the California Department of Fish and Wildlife (CDFW), and as a wetland according to the County of San Diego Resource Protection Ordinance (RPO). Investigation of federal jurisdiction included creation of three soil pits in and along the drainage feature and documentation of vegetation, hydrology, and soil conditions at each pit location, as well as evaluation of the channel according to regional Arid West delineation supplements. Results of the USACE investigation were also used in determining whether the feature qualified as a Waters of the State or state wetland, and County wetland. Evaluation of CDFW jurisdiction included assessment of presence or absence of bed and bank and connection to any other waters. Review of historical aerial photographs was also used in determining jurisdictional status.

The results of the jurisdictional assessment indicate that the drainage feature does not qualify as a USACE wetlands or waters, waters of the State or State wetlands, CDFW stream, or County RPO wetland. Therefore, no state or federal permits will be required prior to impacting the drainage feature. Mitigation requirements for impacts to habitat classified as Disturbed Wetland according to County habitat mapping guidelines are discussed in the project's biological resources letter report.

1.0 INTRODUCTION

1.1 Purpose and Scope of Report

REC Consultants, Inc. conducted an assessment of potentially jurisdictional water bodies on the 5.2-acre Lake Jennings Park Road project site, located in the community of Lakeside, San Diego County, California. The purpose of the assessment was to determine which portions of the property qualify as jurisdictional wetlands and/or waters under federal, State, and County regulations. The delineation was conducted in accordance with the U.S. Army Corps of Engineers (USACE) guidelines, as well as California Department of Fish and Wildlife (CDFW) Fish and Game Code, California Water Code, and County of San Diego Resource Protection Ordinance (RPO). This report presents the results of the Lake Jennings Park Road wetlands and waters jurisdictional delineation.

1.2 Project Location

The project site (APN 395-220-11) is located in the San Diego County community of Lakeside, east of State Route 67 and just north of Interstate 8, between Lake Jennings Park Road, Blossom Valley Road, and Jennings Vista Drive. A map of the regional location is provided in **Figure 1**, and the site location and vicinity are illustrated on the United States Geological Survey (USGS) 7.5' El Cajon topographic quadrangle map in **Figure 2**. The site can be accessed on foot from Jennings Vista Drive or Lake Jennings Park Road, just north of the Lake Jennings Park Road exit off Interstate 8

1.3 Project Description

The project consists of developing the entire 5.2-acre site with 21 lots, including 18 residential lots, two private streets, and one lot dedicated to a bioretention basin. Access will be provided by a new cul-de-sac and shared driveways off Jennings Vista Drive. No off-site impacts are proposed.

1.4 Environmental Setting

The site is bordered by Jennings Vista Drive and a mobile home park to the north; residential development to the east; Blossom Valley Road, a park-and-ride lot, and Interstate 8 ramps to the south; and Lake Jennings Park Road, and residential development to the west. A commercial area with a gas station and market and a fast-food facility is located to the southwest of the site. An aerial photograph showing the site within the regional context is provided in **Figure 3**.

The site lies on gently sloping terrain, with a high point of approximately 782 feet above mean sea level (AMSL) near the southeastern corner and a low of approximately 700 feet AMSL in the southwestern corner. According to the *Soil Survey, San Diego Area, California* (Bowman 1973), the following soil types are present on-site: Escondido very fine sandy loam, 9 to 15 percent slopes, eroded; and Escondido very fine sandy loam, 15 to 30 percent slopes, eroded. The Escondido series consists of well-drained very fine sandy loams that have formed in place from

metamorphosed sandstone, in gently rolling to hilly uplands within elevational ranges of 400 to 2,800 feet. Possible inclusions in these map units are also sandy loams.

This parcel has never been developed, but has been impacted over the years by channeling of water through a culvert onto the site from the subdivision to the east, invasion of non-native vegetation, and disturbance by off-road cyclists and other trespassers. Annual fuel management occurs on-site in compliance with fire protection measures required by the local fire authority.

1.4.1 Vegetation

As part of the environmental review process for the project, multiple biological resource field surveys were performed for the project site between 2006 and 2013, including general surveys, focused spring botanical surveys, and focused surveys for the Quino Checkerspot Butterfly. Five vegetation communities or land cover types, classified according to Oberbauer et al. (2008), occur on-site: Non-Native Grassland (3.9 acres), Disturbed Wetland (0.06 acres), Diegan Coastal Sage Scrub (coastal form), (0.1 acres), Disturbed Land (0.7 acres) and Ornamental vegetation (a subcategory of Disturbed) (0.4 acres). Vegetation is shown in **Figure 4**, attached. Plants observed and/or collected in these vegetation types during all field surveys of the project area are listed in **Attachment A** to this report. A list of wildlife observed in these vegetation communities is provided in **Attachment B**.

The area that was evaluated for jurisdictional status occurs within three vegetation types: Non-Native Grassland, Disturbed Wetland, and Ornamental. These habitats are discussed further below.

Non-Native Grassland (County Habitat Code 42200) covers approximately 3.9 acres on-site, and is dominated by annual non-native grasses such as ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* subsp. *rubens*), oats (*Avena* sp.), soft chess (*Bromus hordeaceus*), and rat-tail fescue (*Festuca myuros*), as well as broad-leaf non-native species such as short-pod mustard (*Hirschfeldia incana*), long-beak filaree (*Erodium botrys*), bristly ox-tongue (*Helminthotheca echioides*), and wild radish (*Raphanus sativus*), and limited native species such as doveweed (*Croton setiger*), blue-eyed grass (*Sisyrinchium bellum*), and sand-aster (*Corethrogyne filaginifolia*) and occasional native shrubs such as California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*). Grass and forb cover ranges from sparse at the edges of disturbed areas to dense and tall close to the disturbed wetland. Included within the non-native grassland are two mature coast live oaks trees growing on either side of a short channel downstream of the culvert that brings water onto the site from the subdivision to the east; the understory below these oaks contains predominantly non-native weedy plants like those in the rest of the non-native grassland. A black willow in the northwestern corner of the site is also included in the non-native grassland because it is not associated with a wetland and has an understory of predominantly non-native weedy species like the surrounding grassland. All plants observed in non-native grassland on-site are included in **Appendix A**.

Disturbed Wetland (County Habitat Code 11200) occupies approximately 0.06 acre from the culvert at the central eastern edge of the site, into the center of the site. The County habitat

category of disturbed wetland applies to areas that are permanently or periodically inundated by water, which have been significantly modified by human activity (Oberbauer et al. 2008). The disturbed wetland on-site consists of a small depression below the culvert and a short channel leading out of the depression, surrounded by trees and shrubs. This area, including the surrounding shrubs and trees, was initially classified as southern willow scrub, but the few willows (*Salix laevigata, S. lasiolepis*) and other native species growing along the depression and channel are outnumbered by non-native ornamental trees and shrubs such eucalyptus (*Eucalyptus* sp.), Shamel ash (*Fraxinus uhdei*), Chinese elm (*Ulmus parvifolia*), Mexican fan palm (*Washingtonia robusta*), and acacias (*Acacia* sp.) that are not wetland-associated species, and were therefore removed from the wetland habitat polygon. The refined wetland polygon includes the small depression and channel below the culvert and the adjacent riparian trees and shrubs such as willows and mule-fat (*Baccharis salicifolia*). The sparse understory in the upper (eastern) end of the channel consisted primarily of non-native annual weeds such as four-leaf allseed (*Polycarpon tetraphyllum*) and annual bluegrass (*Poa annua*) during the April 2013 site visit, although more hydrophytic species such as cattails (*Typha* sp.) and iris-leaf rush (*Juncus xiphioides*) have been observed in the channel in the past. The depression below the culvert does not hold water all year. Based on the anthropogenic water source and dominance of non-natives within the channel, this area is best classified as disturbed wetland and is of low quality. The County habitat category of disturbed wetland is based on the permanent or periodic presence of water, but this habitat category does not necessarily have jurisdictional status.

Ornamental (County Habitat Code 11300) is a subtype of disturbed land that is vegetated by escaped or planted ornamental species. The site supports many ornamental trees and shrubs, especially along the northern and eastern edges, and along the channel from the culvert at the east edge of the site (see description of disturbed wetland). Ornamental species observed on-site include eucalyptus, Shamel ash, ornamental pine (*Pinus* sp.), Peruvian pepper (*Schinus molle*), Chinese elm, Mexican fan palm, and acacias. Ornamental vegetation covers 0.4 acre on-site.

1.4.2 Hydrology

The project site is located in the San Diego River watershed. Based on site surveys and a review of aerial photographs, the site is not connected to any tributary of the San Diego River by any channel. No visible channel connects the on-site feature to any off-site drainage.

2.0 REGULATORY SETTING

2.1 U.S. Army Corps of Engineers (USACE)

Pursuant to Section 404 of the CWA, the USACE regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in USACE regulations at 33 CFR Part 328.3(a) as:

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters, which are subject to the ebb and flow of the tide;

(2) All interstate waters including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purpose by industries in interstate commerce...

(4) All impoundments of waters otherwise defined as waters of the United States under the definition;

(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;

(6) The territorial seas;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.

(8) Waters of the United States do not include prior converted cropland.[1] *Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the U.S. Environmental Protection Agency (EPA).*

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark (OHWM) which is defined at 33 CFR 328.3(e) as:

> *...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as 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.*

The term "wetlands," a subset of "waters of the United States," is defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the USACE published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 *Wetland Delineation Manual* and the 2008 *Regional*

[1] The term "prior converted cropland" is defined in the USACE Regulatory Guidance Letter 90-7 (dated September 26, 1990) as "wetlands which were both manipulated (drained or otherwise physically altered to remove excess water from the land) and cropped before 23 December 1985, to the extent that they no longer exhibit important wetland values. Specifically, prior converted cropland is inundated for no more than 14 consecutive days during the growing season...."

Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally satisfy each of the following three parameters:

- More than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands);
- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criterion with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the USACE interpreted the interstate commerce requirement in a manner that restricted USACE jurisdiction on isolated (intrastate) waters. On September 12, 1985, EPA asserted that USACE jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of "waters of the United States" in USACE regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the CWA. The written opinion notes that the court's previous support of the USACE's expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that abutted a navigable water and that the court did not express any opinion on the question of the authority of the USACE to regulate wetlands that are not adjacent to bodies of open water. The current opinion statet:

> *In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.*

The court's opinion appears to go beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the CWA (regardless of any interstate commerce connection). However, the USACE and EPA have issued a joint memorandum, which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

Rapanos v. United States and Carabell v. United States

In 2006, the Supreme Court again addressed the scope of jurisdiction under the CWA in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* ("Rapanos"). While the court did not provide a single majority opinion, the five opinions did result in two new analytical standards for determining whether water bodies that are not traditionally navigable waters (TNWs) are subject to CWA jurisdiction: (1) if the water body is relatively permanent, or if the water body is a wetland that directly abuts a relatively permanent water body (RPW); or (2) if a water body, in combination with all wetlands adjacent to that water body, has a significant nexus with TNWs. Subsequent guidance established new procedures for project sites that include waters other than TNWs and/or their adjacent wetlands, or RPWs tributary to TNWs and/or their adjacent wetlands, as summarized in the USACE *Jurisdictional Determination Form Instructional Guidebook* (USACE & EPA 2007). Updated guidelines for jurisdiction under the CWA, as summarized in the instructional guidebook, are provided in the box below.

The agencies will assert jurisdiction over the following waters:

- TNWs and wetlands adjacent to TNWs
- Non-navigable tributaries of TNWs that are relatively permanent (i.e. the tributaries typically flow year-round or have continuous flow at least seasonally) and wetlands that directly abut such tributaries

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary

In accordance with the Rapanos Guidance:

- Certain ephemeral waters in the arid west are distinguishable from the geographic features described below where such ephemeral waters are tributaries and may have a significant nexus to TNWs
- Certain geographical features (e.g. ditches and canals) that transport relatively permanent (continuous at least seasonally) flow directly or indirectly into TNWs or between two (or more) waters of the U.S., including wetlands, are jurisdictional waters regulated under the CWA.
- Certain geographic features (e.g. swales, ditches, pipes) may contribute to surface hydrologic connection where the features replace or relocate a water of the U.S., or connect a water of the U.S. to another water of the U.S., or provide relatively permanent flow to a water of the U.S.
- Certain geographic features generally are <u>not</u> jurisdictional waters:
  - swales, erosional features (e.g., gullies) and small washes characterized by low volume, infrequent or short duration flow

- ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water
- uplands transporting overland flow generated from precipitation (i.e. rain events and snowmelt)

The significant nexus evaluation must include an assessment of flow characteristics and functions of the tributary and functions of any adjacent wetlands to determine if they have more than an insubstantial or speculative effect on the chemical, physical and/or biological integrity of the traditionally navigable waters, and a consideration of hydrologic and ecologic factors. This evaluation requires completion of the Approved Jurisdictional Determination Form according to the guidelines provided in the *Jurisdictional Determination Form Instructional Guidebook.*

Impacts to USACE wetlands and waters of the U.S. may be permitted under pre-approved nationwide permits, but individual permits may be required when projects propose impacts greater than what is covered by individual permits. Compensatory mitigation is required to achieve the USACE goal of "no net loss."

2.2 State of California

2.2.1 Waters of the State

Wetlands and waters are also protected by the State of California under the Porter-Cologne Water Quality Control Act (CWC 2013) as "waters of the state," which is defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." The Porter-Cologne Act designated the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) as the principal state agencies with primary responsibility for the coordination and control of water quality. Within Porter-Cologne, Water Code section 13260 requires "a person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system" to file a report of discharge (an application for waste discharge requirements)." (Water Code § 13260(a)(1)) Waste has a specific definition in Porter-Cologne:

> *"Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.*

Waste discharge, as originally described in Porter-Cologne, did NOT include fill material, dredge material, dirt, earth, or other similar terms. However, the State has made a number of changes in policy pertaining to waters of the State, as summarized below

Prior to the SWANCC and Rapanos decisions, the State of California relied primarily on the Clean Water Act to protect wetlands and riparian areas for water quality goals. Soon after the SWANCC decision, the Chief Counsel for the State Water Resources Control Board issued a

2001 memorandum stating that "The SWANCC decision does not affect the Porter-Cologne authorities to regulate discharges to isolated, non-navigable waters of the state." In light of the newly limited powers of the Clean Water Act, the SWRCB, in its 2008 Resolution 2008-0026, declared that the SWANCC and Rapanos rulings "necessitate the use of California's independent authorities under the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) to protect these vital resources" (SWRCB 2008) and resolved that "The State Water Board will take action to ensure the protection of the vital beneficial services provided by wetlands and riparian areas through the development of a statewide policy to protect wetlands and riparian areas (Policy) that is watershed-based." The 2008 Resolution requires that the statewide policy to protect wetlands and riparian areas be developed in phases, and requires that Phase 1 be establishment of a policy to protect wetlands from dredge and fill activities. The Phase 1 policy is called the "Wetland Area Protection and Dredge and Fill Permitting Policy," and currently exists in draft form (SWQCB 2013). This policy "establishes standardized procedures for use by the Water Boards in the review and approval of applications for "any activity which may result in a discharge of dredged or fill material into waters of the state, including wetlands.

State Resolution 2008-0026 effectively extended the applied jurisdiction of the SWQCB by (a) mandating protection of wetlands and riparian areas, and (b) extending regulation from just waste discharge to also include dredge and fill activities. The State of California takes the position that when wetlands are defined in accordance with the federal definition for the Clean Water Act, the wetlands themselves are waters of the state, and therefore under jurisdiction of the Water Boards (SWRCB 2013). In addition, the RWQCB's California Wetland and Riparian Area Protection Policy (CWRAPP) Technical Advisory Team has prepared a recommended wetland definition:

> *An area is a wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater or shallow surface water or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate and; (3) the area either lacks vegetation or the vegetation is dominated by hydrophytes.* (CWRAPP 2012)

This definition uses the same three parameters or criteria as the USACE wetland definition, but also addresses the problem that all three may not be present or evident at some times of year or in some areas that provide wetland functions, beneficial uses, or ecological services; this definition can include non-vegetated areas that satisfy the hydrology and substrate criteria, such as tidal flats, that would be excluded under the USACE definition.

As with the CWA definition of wetlands, certain exemptions exist: exemptions from CWA section 404 permits are also excluded from the new state dredge and fill procedures. These exemptions are prior converted cropland, constructed treatment wetlands, and certain aquatic areas determined not to be waters of the state, such as treatment wetlands and sedimentation/storm water detention basins.

Impacts to waters of the State and State wetlands require notification/permitting through the RWQCB and usually also require compensatory mitigation, although this mitigation is typically handled through USACE and/or CDFW.

2.2.2 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Section 1602 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. The CDFW Legal Advisor has prepared the following opinion:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...
- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFW] as natural waterways...
- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

CDFW does not typically claim jurisdiction over small isolated waters such as vernal pools or detention basins.

Impacts to CDFW-jurisdictional streams may be permitted with a Streambed Alteration Agreement and habitat mitigation after consultation with the agency and project approval.

2.3 County of San Diego

The County of San Diego, through its Resource Protection Ordinance (RPO), controls impacts to sensitive habitats including wetlands and floodplains. For the RPO, "wetland" is defined as "land having one or more of the following attributes: (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 predominantly non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system."

The RPO definition of a wetland is qualified to exclude lands that have those wetland attributes solely due to man-made structures such as culverts, ditches, road crossings, or agricultural ponds, provided that the Director of Planning and Development Services determines that they (i) have negligible biological function or value as wetlands; (ii) are small and geographically isolated from other wetland systems; (iii) are not vernal pools; and, (iv) do not have substantial or locally important populations of wetland dependent sensitive species. and providing supporting evidence for items (i) through (iv). Also excluded are lands that have been degraded by past legal land disturbance activities, to the point that they meet the following criteria, as determined by the Director of Planning and Development Services: (i) have negligible biological function or value

as wetlands even if restored to the extent feasible; and (ii) do not have substantial or locally important populations of wetland dependent sensitive species.

Impacts to RPO wetlands are not permitted, and only limited types of uses may occur within the required RPO wetland buffer. Activities on lands not constituting wetlands according to the RPO definitions may still be subject to mitigation, avoidance, and permitting requirements pursuant to the California Environmental Quality Act or other applicable County, state and federal regulations.

3.0 METHODOLOGY

REC first conducted a jurisdictional delineation on the project site in April 2007 to determine the extent of jurisdictional wetlands and/or other waters on the property. The 2007 delineation was updated in 2013 based on an April 2013 site assessment and changes in regulatory guidance since the original delineation. The purpose of the delineation is to 1) identify any and all water and wetland features that are subject to federal, State, or County jurisdiction within the project area, 2) if jurisdictional wetlands/waters are present, to determine the federal, State, and County boundary for each jurisdictional water feature. The methodologies used during the 2007 jurisdictional delineation and 2013 update are described below.

3.1 2007 Jurisdictional Delineation

The 2007 jurisdictional delineation was conducted by REC biologist Victor Novik according to the procedures found in the USACE *Wetlands Delineation Manual* (1987), as well as California Fish and Game Code and RPO guidelines. 2007 field survey conditions are presented in Table 1.

Table 1. 2007 Jurisdictional Assessment Conditions

Field Survey Date	Temperature (F)	Wind Speed (miles per hour)	Conditions	Personnel
4/6/2007	Cool to warm	0-5	Overcast to foggy	V. Novik

As described above, the USACE wetland delineation procedure requires that a site must have wetland indicators for three parameters: vegetation, soils, and hydrology. If any one parameter does not contain a positive wetland indicator, the location is not within a USACE jurisdictional wetland. In 2007, USACE data forms were created for three on-site locations. Completion of USACE data sheets involved digging a soil pit and documenting soil conditions, dominant vegetation, and hydrologic indicators at the soil pit location. Dominant plant species in each stratum were recorded, and the wetland indicator status of each species was obtained from the *Region 0 List of Plant Species that Occur in Wetlands* (Reed 1988), which was the current reference at that time. If greater than 50 percent of the dominant species from all strata were Obligate, Facultative-Wetland, or Facultative species (excluding Facultative minus species), the parameter for wetland vegetation was met. Soil was excavated at each sampling point to investigate whether the profile description of the mapped soil unit matched the sampled soil and to record any indicators of hydric soils, such as buried organic matter, organic streaking, reduced soil conditions, gleyed or low-chroma soils with redox concentrations, or sulfidic odor. At each

soil pit, the soil texture, depth of pit, and presence/absence of hydric indicators were recorded. If the soil consisted of a substrate other than sand, soil color was compared with a Munsell soil color chart and recorded. The presence of wetland hydrology was also evaluated at each observation point by recording the extent of surface flows, depth of inundation, depth to saturated soils, or depth to free water in the soil pits. In addition, indicators of wetland or riverine hydrology were recorded, including watermarks, drift lines, debris accumulation, surface scour, oxidized root channels, and sediment deposits.

Potentially jurisdictional non-wetland waters on-site were delineated according to the USACE's definition of Ordinary High Water Mark and guidelines provided in the USACE *Jurisdictional Determination Form Instructional Guidebook.* The Ordinary High Water Mark is a defining element used to identify the lateral limits of non-wetland waters under Section 404 of the Clean Water Act (33 U.S.C. 1344). Ordinary High Water Marks were identified in the field using indicators such as a clear natural scour line impressed on the bank, recent bank erosion, destruction of native terrestrial vegetation, the presence of litter and debris, and vegetation characteristics.

CDFW jurisdiction was evaluated based on the presence of riparian vegetation, a stream channel with bed and banks, and correspondence with the categories described by the CDFW legal advisor, as described in Section 2.2.2. Delineation of the outer limits of CDFW jurisdiction is typically based on top-of-bank, or the outer edge of riparian vegetation if such vegetation extends further outward than top-of-bank.

RPO jurisdiction was evaluated based on the presence of "predominantly hydrophytic vegetation" or undrained soil or a channel. RPO jurisdiction typically extends to the outer edge of hydrophytic vegetation or of undrained hydric soil, or from top-of-bank to top-of-bank, whichever is greatest.

3.2 2013 Jurisdictional Assessment

On April 16, 2013, REC biologists Catherine MacGregor and Hedy Levine conducted an assessment of the on-site features to address changes to jurisdictional guidance from the 2007 Rapanos decision, the 2008 USACE *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region,* and the 2010 *Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the United States,* as well as to review potential CDFW and RPO jurisdiction. 2013 field survey conditions are identified in Table 2.

Table 2. 2013 Jurisdictional Assessment Conditions

Field Survey Date	Temperature (F)	Wind Speed (miles per hour)	Conditions	Personnel
4/16/2013	50 to 52°	0-5	Partly cloudy to overcast	C. MacGregor, H. Levine

In conjunction with this site assessment, REC biologists reviewed historical aerial photographs of the project site dating back to 1953 (NETR 2009). These aerial photographs showed that as far back as 1981, a strip of trees and/or shrubs with visibly greater biomass than the surrounding

vegetation was present in the same location as the current culvert channel, and the adjacent subdivision was already constructed. In aerial photographs from 1971 and 1968, the adjacent subdivision was not yet built, and the site already has trails and other disturbance but there is no sign of the drainage - the area appears to contain shrubs surrounded by grassland, with no visual signature of a channel or wetland. Even earlier photographs from 1964 and 1953 show that there may have been a topographic change near the current wetland location, but it does not appear to have been a drainage channel and curved toward the north, which is uphill, rather than heading to the west/southwest as topography would currently direct flow. These aerials indicate that the on-site drainage only developed because the adjacent subdivision's culvert began channeling flow onto the site.

Data from the out-of-date USACE "Routine On-Site Determination Method" Data Forms completed in 2007 were transferred to the current "Wetland Determination Data Form – Arid West Region," plant wetland indicator status categories were updated the latest version (Lichvar 2013), and percentages of dominant species that were Obligate, Facultative-Wetland, or Facultative were recalculated. An error in the soil section of one form was corrected.

4.0 JURISDICTIONAL DELINEATION RESULTS

The following section provides the results of the updated jurisdictional delineation for the Lake Jennings Park Road project site.

One on-site feature was evaluated for potential jurisdictional status: the channel between the central eastern culvert where water flows onto the site from the adjacent subdivision, and the center of the site, where the channel ends.

4.1 USACE Jurisdiction

The three soil pits in and along the culvert channel indicated that this area does not qualify as a USACE wetland, because none of the three soil pits had all three wetland parameters (predominantly hydrophytic vegetation, hydric soil, and wetland hydrology). Locations of the soil pits are shown on **Figure 4** (attached). Copies of the "Wetland Determination Data Form – Arid West Region" for each soil pit are provided in **Attachment C**.

Pit 1 was located approximately 200 feet west of the culvert that carries water onto the site from the adjacent subdivision. The pit was dug close to but outside the channel, near coast live oak (*Quercus agrifolia*), black willow (*Salix gooddingii*), laurel sumac (*Malosma laurina*), mule-fat (*Baccharis salicifolia*), sedges (*Cyperus eragrostis* and/or *C. involucratus*), and non-native grasses (*Festuca perennis* [formerly *Lolium perenne*] and *Bromus hordeaceus*). Soil was saturated at 13 inches below ground surface and the drainage pattern indicated wetland hydrology. This location satisfied the hydrophytic vegetation and hydrology parameters, but did not contain hydric soil; therefore, pit 1 was not within a USACE wetland.

Pit 2 was located near the culvert that carries water onto the site, within the channel and next to standing water just below the culvert. The banks at this location were five to six feet apart, much

wider than any other location. Vegetation consisted of Mexican fan palm, willow, and cattail. Soil was saturated at six inches and standing water was present at eight inches below ground surface. This location satisfied the hydrophytic vegetation and hydrology parameters, and contained a layer of low-chroma soil, but the soil did not have the necessary indicators (such as redoximorphic features) to qualify as a hydric soil[2]; therefore, pit 2 was not within a USACE wetland.

Pit 3 was located between pits 1 and 2, within the channel. Vegetation at this location consisted of willow, sedge, and a non-native grass (*Poa annua*). The channel here was broader than at pit 1 but only about three inches deep. Soil was saturated at 10.5 inches below ground surface. This location satisfied the hydrophytic vegetation and hydrology parameters, but did not have hydric soil; therefore, pit 3 was not within a USACE wetland.

An ordinary high water mark is present between the culvert that brings water onto the site and the end of the visible channel near the center of the site, but the channel and ordinary high water mark fade away near the middle of the site and there is no channel connecting the culvert channel to off-site waters.

In conclusion, according to guidance related to isolated waters, the culvert channel would qualify as an erosional feature (caused by the culvert) isolated within uplands, and therefore does not fall under jurisdiction of USACE (see page 7).

4.2 State Jurisdiction

Because the disturbed wetland area on-site support a limited amount of riparian and wetland vegetation and includes a short channel, it was evaluated for CDFW jurisdiction. However, the lack of connection to any stream or creek by a channel with bed and bank indicates that this is an isolated feature and would therefore not fall under jurisdiction of CDFW.

The disturbed wetland area would not qualify as a wetland of the State because the State definition, like the USACE definition, requires all three wetland criteria and this feature did not have hydric soil. It would also be exempt from jurisdiction as a waters of the State because it is a de facto storm water detention basin, temporary holding water that flows onto the site from the culvert from the subdivision to the east (see pages 8-9).

4.3 County Jurisdiction

The culvert channel and disturbed wetland habitat on-site periodically support a predominance of hydrophytes; however, this area qualifies for exemption from RPO because it has wetland attributes solely due to man-made structures (in this case, the culvert). As described in Section 2.4 above, the Director of Planning and Development Services must determine that such man-made wetlands (i) have negligible biological function or value as wetlands; (ii) are small and geographically isolated from other wetland systems; (iii) are not vernal pools; and, (iv) do not

[2] The original data form for this pit incorrectly identified the soil as hydric, and this was corrected when the pit data were transferred to the new Arid West data form.

have substantial or locally important populations of wetland dependent sensitive species. In May 2013, REC prepared a letter to the County of San Diego providing evidence that the culvert channel is the result of water channeled onto the site from the development upslope to the east, and providing supporting evidence for items (i) through (iv). This letter was accepted by the County, and the culvert channel was determined to NOT be RPO wetlands. Copies of REC's letter and the County's correspondence accepting the letter are provided in **Attachment D**.

5.0 IMPACT ANALYSIS

The proposed project will impact all habitat and land on-site, including the disturbed wetland and culvert channel. However, the results of the jurisdictional delineation show that no USACE wetlands or other waters, state wetlands or waters, CDFW stream or lake, or RPO jurisdictional wetlands are present on-site; therefore, the project will not impact any jurisdictional wetlands.

The project will impact 0.06 acre of land that qualifies as Disturbed Wetland habitat according to the County of San Diego habitat mapping guidelines, and this habitat impact will require mitigation, as described in the project's biological resources letter report; however, this impact will not require permitting by USACE or CDFW and will not require a RWQCB permit.

6.0 REFERENCES

Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition. Berkeley and Los Angeles: University of California Press.

CDFW (California Department of Fish and Wildlife). 2013. Lake and Streambed Alteration Program, and California Fish and Game Code 1600-1616. Accessed online: http://www.dfg.ca.gov/habcon/1600/.

CFR (Code of Federal Regulations). 1986. Title 33, Part 328.3 – Definition of Waters of the United States, based on 51 FR 41250, Nov. 13, 1986. Accessed online at http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rgn=div5&view=text&node=33:3.0.1.1.35&idno=33.

County of San Diego. 2011. Resource Protection Ordinance. San Diego County Code, Zoning and Land Use Regulations.

CWC (California Water Code). 2013. California Water Code Division 7, Water quality: Porter-Cologne Water Quality Control Act, with Additions and Amendment Effective January 1, 2013. Sacramento, CA: http://www.waterboards.ca.gov/laws_regulations/docs/portercologne.pdf

CWRAPP (California Wetland and Riparian Area Protection Policy). 2012. Technical Memorandum No. 2: Wetland Definition. Richmond, CA: San Francisco Estuary Institute and Aquatic Science Center. June 25, 2009, revised September 1, 2012.

Curtis, K.E. and R.W. Lichvar. 2010. Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. US Army Corps of Engineers Wetlands Regulatory Assistance Program. July 2010.

Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Technical Report Y-87-1. Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station. (http://el.erdc.usace.army.mil/wetlands/pdfs/wlman87.pdf)

Environmental Protection Agency (EPA). 2011. Draft Guidance on Identifying Waters Protected by the Clean Water Act. Accessed online: http://www.epa.gov/tp/pdf/wous_guidance_4-2011.pdf.

Lichvar, R.W. 2013. The National Wetland Plant List: 2013 wetland ratings. Phytoneuron 2013-49: 1-241. (http://rsgisias.crrel.usace.army.mil/NWPL/static/cfg/doc/pdl_2013_pub/National/National_2013v1.pdf)

Lichvar, R.W. and S.M. McColley. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. US Army Corps of Engineers. August 2008.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California", Robert F. Holland, Ph.D., October 1986.

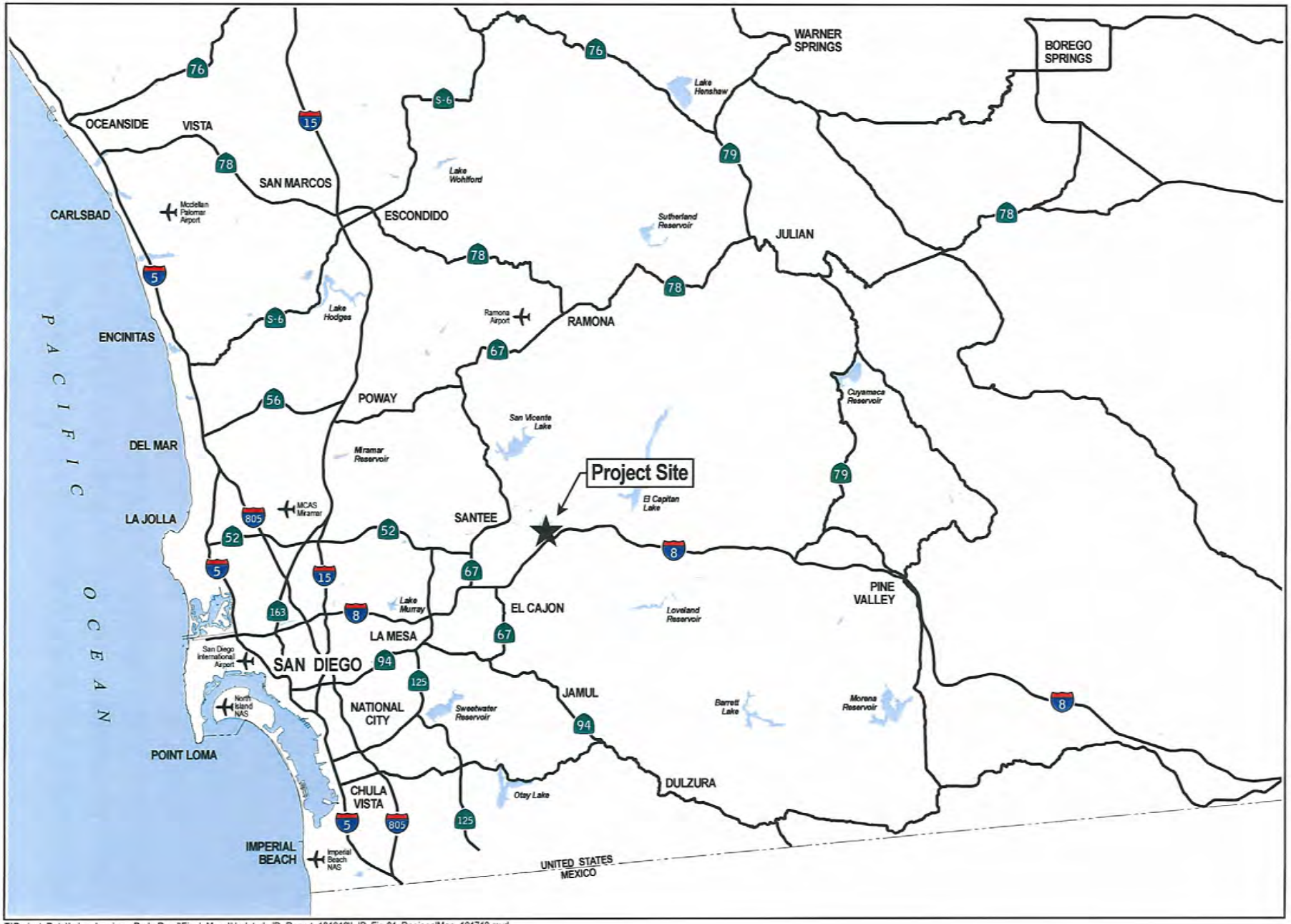
SWRCB (State Water Resources Control Board). 2008. State Water Resources Control Board Resolution No. 2008-0026: Development of a Policy to Protect Wetlands and Riparian Areas in Order to Restore and Maintain the Water Quality and Beneficial Uses of the Waters of the State. Sacramento, CA: SWRCB, April 15, 2008.

SWRCB. 2013. Preliminary Draft Water Quality Control Policy for Wetland Area Protection and Dredge or Fill Permitting, version 6.5. Sacramento, CA: SWRCB, January 28, 2013.

U.S. Army Corps of Engineers (USACE). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). US Army Corps of Engineers Wetlands Regulatory Assistance Program. September 2008.

USACE & EPA. 2007. U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook. June 30, 2007. Accessed on-line: http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/cwa_guide/jd_guidebook_051207final.pdf

Wilson, C. M., chief counsel, California State Water Resources Control Board. 2001. "Effect of SWANCC v. United States on the 401 Certification Program." Memorandum, January 25, 2001. 5 p.



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Regional Location Map

R·E·C Consultants, Inc.

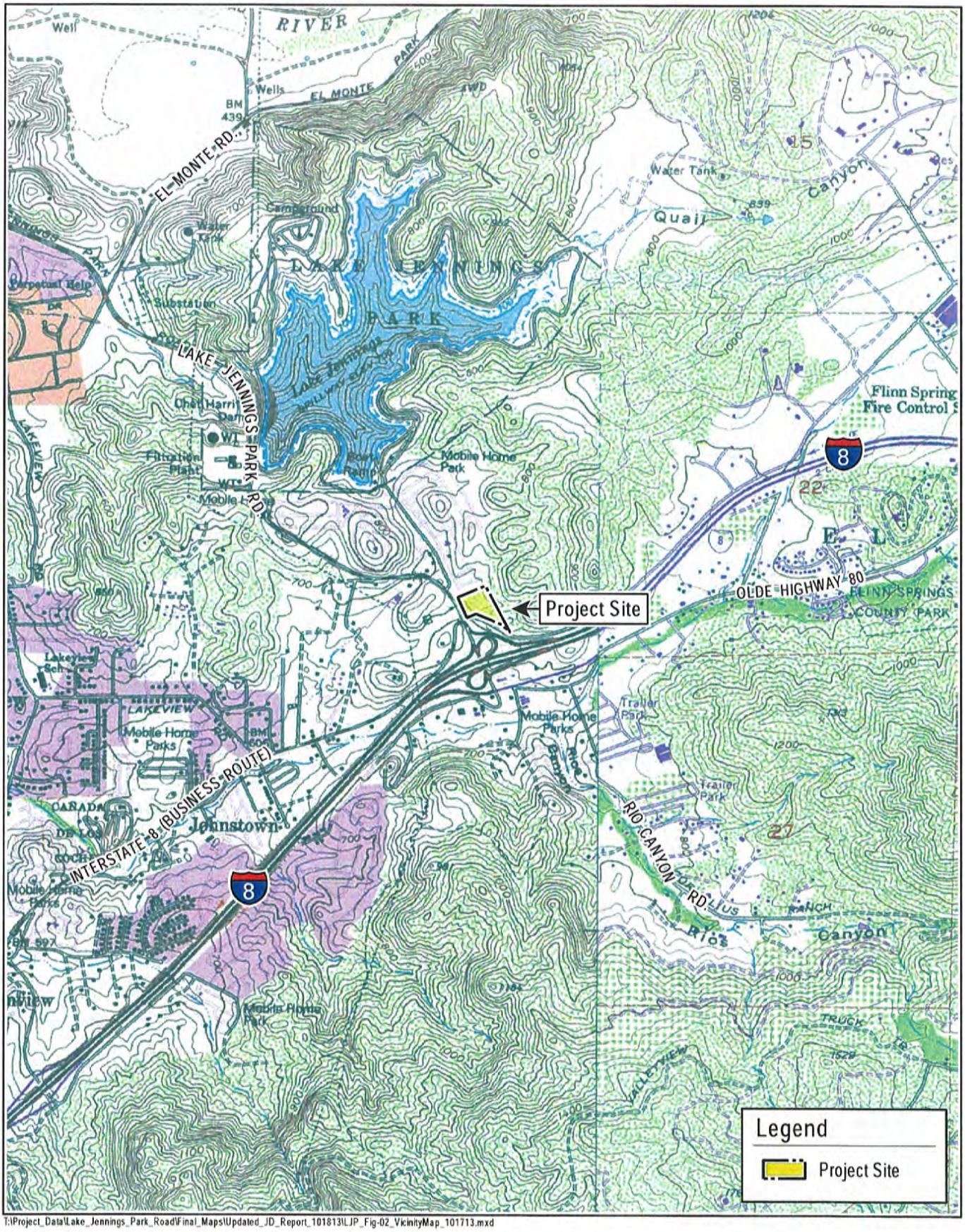
LAKE JENNINGS PARK ROAD

Miles 0 4 8

Source: SANGIS Land Use GIS Database, 2011.

FIGURE 1

October 2013



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R·E·C Consultants, Inc.

Vicinity Map

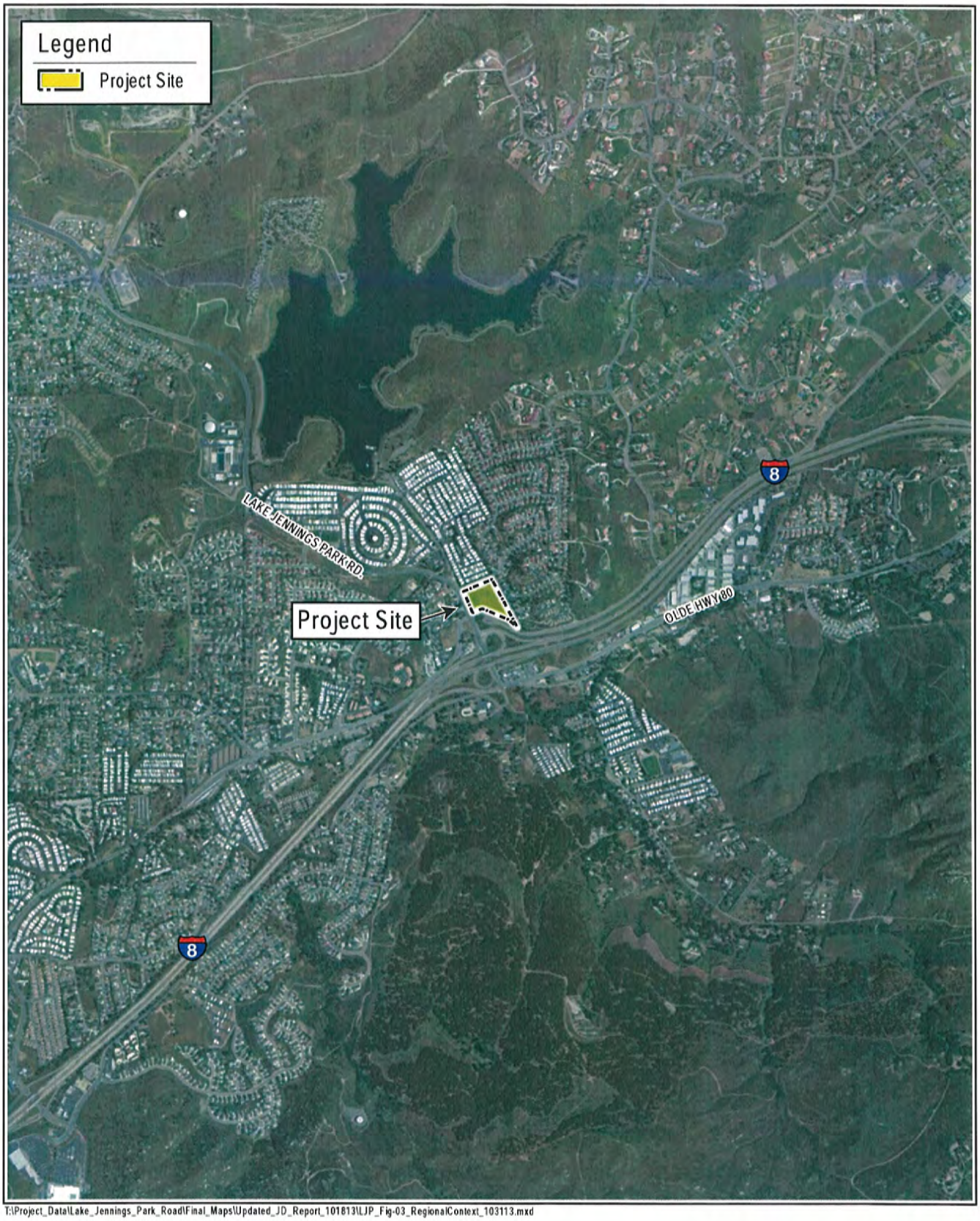
LAKE JENNINGS PARK ROAD

0 990 1,980 Feet

Source: CaSIL, USGS 7.5 Minute Quadrangle Mosaic o_se0508.sid.

FIGURE 2

October 2013



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R·E·C Consultants, Inc.

Regional Context

LAKE JENNINGS PARK ROAD

0 1,000 2,000 Feet

Source: CASIL Quadrangle Mosaics, 2013.

FIGURE 3

October 2013

T:\Project_Data\Lake_Jennings_Park_Road\Final_Maps\Updated_JD_Report_101813\LJP_Fig-04_BioResourcesDrainage_101813.mxd

R·E·C Consultants, Inc.

Biological Resources and Drainage Feature

LAKE JENNINGS PARK ROAD

0 50 100 Feet

Source: Google, 2010.

FIGURE 4

October 2013