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APPENDIX G
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TABLES

Table G-1 Vegetation Communities and Other Land Cover Types within the BSA

Holland Vegetation Community or Land Cover	Description	Segment A	Segment B	Segment C	Segment D	Other Work Areas[1]	TOTAL
Coastal Sage Scrub							
Diegan Coastal Sage Scrub	Diegan coastal sage scrub is a wide-spread vegetation community ranging from coastal Los Angeles County into northern Baja California, Mexico. It consists mainly of low, soft-woody sub-shrubs (approximately 3 feet high) that are most actively growing in winter and early spring. Many taxa are facultative drought-deciduous. Stem- and leaf-succulents are also often present, but are usually not conspicuously dominant species. This association is typically found on dry sites, such as steep, south-facing slopes or clay-rich soils that are slow to release stored water. Dominant shrub species in this vegetation type may vary, depending on local site factors and levels of disturbance. Within the BSA, this vegetation community is characterized by a variable mix of California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), black sage (*Salvia mellifera*), laurel sumac (*Malosma laurina*), deerweed (*Acmispon glaber*), broom baccharis (*Baccharis sarothroides*), coyote brush (*Baccharis pilularis*), California sunflower (*Encelia californica*), and occasionally live-forevers (*Dudleya* spp.), coast barrel cactus (*Ferocactus viridescens*), and needlegrass (*Stipa* spp.).	89.22	10.29	6.24	75.76	5.83	**187.33**
Diegan Coastal Sage Scrub – Disturbed	Disturbed Diegan coastal sage scrub is similar to Diegan coastal sage scrub, described above, but it was classified as disturbed where mechanical or natural disturbance has reduced the overall cover of the community resulting in large areas colonized by herbaceous weedy species and/or bare ground. Some disturbance types include clearing, off-road vehicle damage, or illegal trash disposal.	24.49	0.64	0.07	3.38	8.89	**37.46**

Holland Vegetation Community or Land Cover	Description	Segment A	Segment B	Segment C	Segment D	Other Work Areas[1]	TOTAL
Baccharis Scrub-Disturbed (BS-D)	Disturbed baccharis scrub is similar to disturbed Diegan coastal sage scrub, described above, except that disturbed baccharis scrub is dominated by *Baccharis* species.	-	-	-	-	2.57	**2.57**
Coastal Sage Scrub – Revegetated	Revegetated coastal sage scrub is a subtype of coastal sage scrub that represents a restored coastal sage scrub vegetation community. It is not specifically recognized by Holland (1986) because it is not a naturally occurring vegetation community. This community often results after an area was disturbed or recontoured to mitigate for impacts associated with the implementation of a project. Container plants and/or a seed mix are planted to restore the area to a natural condition based on the local topography. Evidence of restored or revegetated sites often includes irrigation distribution equipment, evenly spaced container plantings, straw waddles for interim erosion control, stakes, hydromulch, evenly graded or plowed soil substrate, among others. On occasion, species that are not necessarily native to the immediate area are also planted, including brittlebush (*Encelia farinosa*) and cultivars of sage (*Salvia spp*.).	29.15	12.54	3.22	17.08	0.51	**62.50**
Coastal Sage/Chaparral Mix							
Coastal Sage – Chaparral Scrub	Coastal sage-chaparral scrub is a mixed community including both drought-deciduous sage scrub species and woody chaparral species. This vegetation community is apparently a post-fire successional community containing vegetative cover that includes roughly equal amounts of both sage scrub and chaparral species. Characteristic dominant species often include chamise, California sagebrush, lilacs (*Ceanothus* spp.), black sage, broom baccharis, laurel sumac, lemonadeberry (*Rhus integrifolia*), and poison oak (*Toxicodendron diversilobum*). Within the BSA, this vegetation community includes the following plant species: chamise, California sagebrush, California buckwheat, black sage, laurel sumac, lemonadeberry,	1.43	-	3.59	6.15	0.02	**11.19**

Holland Vegetation Community or Land Cover	Description	Segment A	Segment B	Segment C	Segment D	Other Work Areas[1]	TOTAL
	and mission manzanita (*Xylococcus bicolor*). Coastal sage-chaparral scrub is generally considered sensitive and is regulated similar to coastal sage scrub as described above.						
Chaparral							
Chamise Chaparral	Chamise chaparral is widely distributed throughout California on dry slopes and ridges at low and medium elevations where it occupies thin, rocky, or heavy soils. It is typically composed of broad-leaved, sclerophyllous shrubs (e.g., bearing stiff, leathery leaves), although species composition varies considerably with location. The plants of this community have developed the ability to survive recurrent fires by producing seeds that require a fire-related cue to stimulate germination and/or by stump sprouting after being burned. Within the BSA, this vegetation community is characterized by nearly monotypic stands of chamise ranging from 3 to 9 feet in height. Occasionally, other shrub species, such as mission manzanita or coast spice bush (*Cneoridium dumosum*) are present, but contribute little to the overall cover.	28.25	-	25.00	26.18	-	**79.43**
Chamise Chaparral – Disturbed	Disturbed chamise chaparral is similar to chamise chaparral, described above, but it was classified as disturbed where this community has been altered by mechanical disturbance or where it has poorly recovered from fire. These areas are generally characterized by a highly reduced and fragmented vegetative cover and may support a high percentage of nonnative grasses or ruderal species, particularly in the understory.	4.09	-	1.14	0.51	-	**5.74**

Holland Vegetation Community or Land Cover	Description	Segment A	Segment B	Segment C	Segment D	Other Work Areas[1]	TOTAL
Southern Mixed Chaparral	Southern mixed chaparral tends to occur on steeper, more mesic north-facing slopes than chamise chaparral. This vegetation community type is characterized by relatively high species diversity. Within the BSA, this vegetation community includes the following plant species: mission manzanita, coast spice bush, Nuttall's scrub oak (*Quercus dumosa*), Ramona-lilac (*Ceanothus tomentosus*), summer-holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), lemonadeberry, and toyon (*Heteromeles arbutifolia*). The understory component is generally better-developed in this association than in chamise chaparral, and may include species such as mariposa-lily (*Calochortus* spp.), soap plant (*Chlorogalum* spp.), and bedstraw (*Galium* spp.), among others.	76.71	-	7.46	16.27	0.40	**100.84**
Southern Mixed Chaparral – Disturbed	Disturbed southern mixed chaparral is similar to southern mixed chaparral, described above, but it was classified as disturbed where this community has been altered by disturbance, such as clearing, off-road vehicle damage, or illegal trash disposal. These areas are generally characterized by a highly reduced and fragmented vegetative cover and may support a high percentage of nonnative grasses or ruderal species, particularly in the understory.	13.54	-	-	-	0.09	**13.63**
Scrub Oak Chaparral	Scrub oak chaparral is a dense, evergreen chaparral association that approaches 20 feet in height and is dominated by Nuttall's scrub oak and/or oak hybrids such as *Quercus xacutidens*. This habitat occurs on more mesic sites (such as east and north facing slopes and ravines) than the other chaparral associations and often at slightly higher elevations. These more favorable sites often allow scrub oak chaparral to recover from fire more quickly than other chaparral types. Additional shrub species found in scrub oak chaparral include chamise, mission manzanita, and coast spice bush.	13.09	-	43.33	25.12	-	**81.54**

Holland Vegetation Community or Land Cover	Description	Segment A	Segment B	Segment C	Segment D	Other Work Areas[1]	TOTAL
Grassland							
Native Grassland	Native grassland is characterized by a relatively low (greater than 10 percent) to dense herbaceous cover of the perennial, tussock-forming needlegrass species and most closely corresponds to Holland's (1986) valley needlegrass grassland. Native and introduced annuals occur between the needlegrass, often actually exceeding the bunchgrass in cover (Holland 1986). This association generally occurs on fine-textured clay soils that are moist or wet in winter, but very dry in summer. Shrubs are infrequent, probably due to the unstable clay soils. The degree of habitat quality in native grasslands varies greatly, depending on the history of grazing, cultivation, or other disturbance factors. Within the BSA, this association generally occurs as small stands interspersed within scrub habitats. It is dominated by needlegrass species (*Stipa* spp.); other indicator species include blue-eyed grass (*Sisyrinchium bellum*), mariposa-lily, and clarkia (*Clarkia* spp.).	8.67	0.34	-	1.86	0.09	**10.97**
Nonnative Grassland	Nonnative grassland generally occurs on fine-textured loam or clay soils that are moist or even waterlogged during the winter rainy season and very dry during the summer and fall. It is characterized by a dense to sparse cover of annual grasses, often with native and nonnative annual forbs (Holland 1986). This habitat is a disturbance-related community most often found in old agricultural fields or openings in native scrub habitats. This association has replaced native grassland and coastal sage scrub at many localities throughout southern California. Typical nonnative grasses found within the BSA include red brome (*Bromus rubens*), ripgut grass (*Bromus diandrus*), wild oat (*Avena barbata*), and soft chess (*Bromus hordeaceus*). Characteristic forbs include red-stem filaree (*Erodium cicutarium*), mustard (*Brassica* spp.), tar plant (*Deinandra* spp.), California goldfields (*Lasthenia* spp.), and purple owl's clover (*Castilleja exserta* ssp. *exserta*).	6.66	35.35	29.01	8.89	34.66	**114.56**

Holland Vegetation Community or Land Cover	Description	Segment A	Segment B	Segment C	Segment D	Other Work Areas[1]	TOTAL
Alkali Marsh							
Alkali Marsh – revegetated	This community occurs in an area that was disturbed or recontoured, likely to mitigate for impacts associated with the implementation of a project. Within the BSA, the revegetated alkali marsh consists of spiny rush (*Juncus acutus* ssp. *leopoldi*) and San Diego marsh-elder (*Iva hayesiana*) along an ephemeral drainage.	-	0.29	-	-	-	**0.29**
Freshwater Marsh							
Freshwater Marsh	Freshwater marsh is dominated by perennial, emergent monocots measuring about 4.3 to 6.6 feet in height. Freshwater marsh occurs in wetlands that are permanently flooded by standing fresh water (Holland 1986). Within the BSA, freshwater marsh is comprised of uniform stands of cattails (*Typha domingensis*).	0.24	-	0.07	0.17	-	**0.49**
Inland Water							
San Diego Mesa Vernal Pool	San Diego mesa vernal pools are a highly specialized vegetation community occurring on undeveloped mesa tops. Vernal pools are depressions that fill with rainwater that does not drain off or percolate because of the mesa top topography and underlying soil conditions (i.e., a claypan or hardpan layer that prevents or impedes subsurface drainage). These pools support a unique plant community dominated by annual herbs and grasses. Many special-status plant and wildlife species have a potential to occur in these pools, including the endangered San Diego button-celery (*Eryngium aristulatum*) and San Diego fairy shrimp (*Branchinecta sandiegonensis*). San Diego button-celery and woolly marbles (*Psilocarphus brevissimus*) were observed in vernal pools within the BSA during the late summer/fall 2013 special-status plant species surveys.	-	-	-	0.09	-	**0.09**

Holland Vegetation Community or Land Cover	Description	Segment A	Segment B	Segment C	Segment D	Other Work Areas[1]	TOTAL
Open Water[2]	Open water includes reservoirs, lakes, ponds, and relatively large sloughs, channels, and rivers or streambeds that contain water throughout the year. Within the BSA, open water habitat occurs in the form of a stock pond in the western portion of the BSA.	-	-	-	0.92	-	**0.92**
Riparian Scrub							
Southern Riparian Scrub	Southern riparian scrub represents a combination of both the southern willow scrub and mulefat scrub communities of Holland's (1986) classification system (see below). It varies from a dense, broad-leafed, winter-deciduous association dominated by several species of willow (*Salix* spp.) to an herbaceous scrub dominated by mulefat (*Baccharis salicifolia*). Understory vegetation is usually composed of nonnative, weedy species or is lacking altogether. This association may represent a successional stage leading to riparian woodland or forest, or it may be a stable vegetation community. Southern riparian scrub species observed within the BSA include black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), and mulefat.	0.23	-	1.37	-	0.12	**1.72**
Mulefat Scrub	Mulefat scrub is characterized as a depauperate, tall, herbaceous riparian scrub strongly dominated by mulefat. Within the BSA, this community was present in small patches along ephemeral stream channels with coarse substrate.	1.10	0.22	0.21	-	0.08	**1.61**
Southern Willow Scrub	Southern willow scrub is found on loose, sandy, or fine gravelly alluvium deposited near stream channels during floods, and most stands are too dense to allow much understory to develop (Holland 1986). Within the BSA, this community was comprised of black willow and arroyo willow and was present along ephemeral stream channels with coarse substrate, often adjacent to mulefat scrub.	0.89	1.07	-	1.21	0.24	**3.41**

Holland Vegetation Community or Land Cover	Description	Segment A	Segment B	Segment C	Segment D	Other Work Areas[1]	TOTAL
Tamarisk Scrub	Tamarisk scrub is a disturbed wetland community dominated by the nonnative, invasive Tamarisk (*Tamarix* spp.). This species can be a dominant along ephemeral and perennial drainages with alkaline soils where native riparian vegetation has been removed or disturbed. Within the BSA, tamarisk scrub is present along two disturbed drainages adjacent to native riparian vegetation, such as freshwater marsh and mulefat scrub.	-	0.12	0.27	-	-	**0.40**
Coast Live Oak Riparian Forest							
Southern Coast Live Oak Riparian Forest	Southern coast live oak riparian forest is characterized by an open to locally dense evergreen plant community dominated by coast live oak trees (*Quercus agrifolia*), which can reach from 30 feet to over 80 feet in height. This community typically has a poorly developed understory of shrubs, which can include toyon, Mexican elderberry (*Sambucus mexicana*), lemonadeberry, and poison oak, among others. The herb layer by contrast is well developed and relatively continuous. It often includes bedstraw, nettles (*Urtica* spp.), and various native and nonnative grasses. This habitat can be found on well-drained bottomlands and outer floodplains on fine-grained, rich alluvium (Holland 1986). Within the BSA, dominant species observed besides coast live oaks include toyon, poison oak, wild oats, and bedstraw.	2.86	-	-	-	-	**2.86**

Holland Vegetation Community or Land Cover	Description	Segment A	Segment B	Segment C	Segment D	Other Work Areas[1]	TOTAL
Eucalyptus Forest							
Eucalyptus Woodland[2]	Eucalyptus woodland is not a native plant community in California and is not described in Holland. It is typically characterized by dense stands of gum trees (*Eucalyptus* spp.). Plants in this genus, imported primarily from Australia, were originally planted in groves throughout many regions of coastal California as a potential source of lumber and building materials, for their use as windbreaks, and for their horticultural novelty. They have increased their cover through natural regeneration, particularly in moist areas sheltered from strong coastal winds. Gum trees naturalize readily in the state and, where they form dense, monotypic stands, tend to completely supplant native vegetation, greatly altering community structure and dynamics. Very few native plants are compatible with eucalyptus.	0.16	4.40	0.55	-	1.46	**6.57**
Disturbed Habitat							
Disturbed Habitat[2]	Disturbed habitat refers to any land on which the native vegetation has been significantly altered by agriculture, construction, or other land-clearing activities, and the species composition and site conditions are not characteristic of the disturbed phase of a particular vegetation community (e.g., disturbed chaparral). Disturbed habitat is typically found in vacant lots, roadsides, construction staging areas, or abandoned fields, and is dominated by nonnative annual species and perennial broadleaf species. Within the BSA, disturbed habitat consisted of widely spaced Russian-thistle (*Salsola tragus*), horseweed (*Conyza* spp.), mustard (*Hirschfeldia incana*), and nonnative grasses.	19.78	-	0.19	3.41	25.79	**49.17**

Holland Vegetation Community or Land Cover	Description	Segment A	Segment B	Segment C	Segment D	Other Work Areas[1]	TOTAL
N/A							
Developed Lands (DEV)[2]	Developed lands are not recognized by Holland (1986) because they support no naturally occurring native vegetation and are characterized by the presence of human-made structures, such as buildings or roads. The level of soil disturbance is such that only the most ruderal plant species would be expected. In many areas, ornamental plantings are included in developed lands where they are immediately adjacent and part of the residential and/or commercial development.	169.98	73.16	4.78	29.05	42.11	**319.09**
Ornamental (ORN)[2]	Ornamental vegetation is not recognized by Holland (1986) and typically consists of nonnative landscape and/or garden plantings that have been planted in association with buildings, roads, or other development. San Diego County supports more than 250 different types of ornamental trees and numerous other shrubs and herbs that decorate urban areas. Occasionally ornamental species such as rock rose (*Cistus* spp.) were found growing within the BSA away from urban areas, and may be naturalizing.	62.95	11.87	3.91	8.28	4.25	**91.26**
Bare Ground (BG)[2]	Bare ground lacks vegetation, typically because of recent and/or continuous clearing of vegetation. Not recognized by Holland (1986), these areas differ from "developed" because they do not support buildings, paved roads, parking lots, or ornamental plantings and typically the soil is exposed. Within the BSA, bare ground includes dirt roads and recently graded areas.	30.22	0.92	14.79	12.56	6.96	**65.45**

[1] Other work areas refers to the staging yards (Stonebridge, Stowe, Evergreen Nursery, SR-56, Camino del Sur, and Carmel Valley Road) and the work areas (Encina Hub and the Mission – San Luis Rey Phase Transposition site)

[2] These classifications do not have a Holland Code

Table G-2 Special-status Plant Species Known or with Potential to Occur in the Biological Study Area

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Red sand-verbena *Abronia maritima*	4.2	Coastal dunes.	Not observed in Segments A-D or any other work areas to date; however, suitable habitat is not present.	A	A	A	A	A
Chaparral sand-verbena *Abronia villosa var. aurita*	1B.1	Sandy chaparral, coastal scrub, desert dunes.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments A-C and at the Encina Hub due to the presence of chaparral and/or coastal scrub habitats with some sandy soils. Low potential to occur in Segment D, Stonebridge staging yard, and Evergreen Nursery staging yard due to very limited potential habitat with sandy soils. Likely absent from all other work areas due to lack of sandy soils in coastal scrub/chaparral habitats.	M	M	M	L	M (EH) L (SB,EV) A (all other work areas)
San Diego thorn-mint *Acanthomintha ilicifolia*	FT, SE, 1B.1, NCCP NE	Chaparral, coastal sage scrub, grassland vernal pools, heavy clay soils/ annual herb/ April – June	Not observed in Segments A-D or any other work areas to date. Known from Los Peñasquitos Canyon Preserve. Moderate potential to occur in Segments A, B, C, D, and Encina Hub where clay soil is present but somewhat limited. Likely absent from all other work areas due to lack of habitat, or lack of habitat with clay soils.	M	M	M	M	M (EH) A (all other work areas)
Nuttall's acmispon *Acmispon (Lotus nuttallianus) prostratus*	1B.1, NCCP	Coastal dunes, coastal sage scrub at elevations of approximately 0 to 35 feet amsl / annual herb/ March – June	Absent. Not observed in Segments A-D or any other work areas to date. Restricted to coast. BSA and all other work areas are outside of elevation range for this species.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Spineshrub *Adolphia californica*	2B.1	Dry slopes, chaparral, coastal sage scrub, grassland/ deciduous shrub/ December - May	Approximately 7,500 individuals were observed in Segments A, B, C, and D in open grassland and Diegan coastal sage scrub. Observed as scattered individuals and groups of hundreds of individuals. Absent in all other work areas as this is a shrub that likely would have been observed during surveys to date in the remaining work areas, if it was present.	P	P	P	P	A
Shaw's agave *Agave shawii* var. *shawii*	2B.1, NCCP NE	Coastal bluff scrub, coastal sage scrub/ leaf succulent/ September - May	Absent. Not observed in Segments A-D or any other work areas to date. This species is restricted to immediate coast, so BSA is largely outside the range of the species. A perennial leaf succulent that likely would have been observed if present.	A	A	A	A	A
San Diego bur-sage *Ambrosia chenopodiifolia*	2B.1	Coastal scrub.	Absent. Not observed in Segments A-D or any other work areas to date. Known in California from fewer than 15 occurrences. A perennial shrub that likely would have been observed if present.	A	A	A	A	A
Singlewhorl burrobrush *Ambrosia monogyra*	2B.2	Sandy chaparral and Sonoran desert scrub habitat.	Absent. Not observed in Segments A-D or any other work areas to date. Low potential to occur at Mission San Luis Rey Phase Transposition (species was reported to the CNDDB near the site), but this perennial shrub would have been observed there if present.	A	A	A	A	A
San Diego ambrosia *Ambrosia pumila*	FE, NCCP NE, 1B.1	Disturbed areas along historic floodplains, sandy loam or clay soils, sometimes in alkaline areas, chaparral, coastal sage scrub, grassland, vernal pools/ rhizomatous herb/ April - October	Not observed in Segments A-D or any other work areas to date. Low potential to occur within the BSA and at the other work areas (likely absent at the Evergreen Nursery staging yard). Few known recent occurrences in the vicinity. There is one known colony near Segment D (CDFW 2013). Potential habitat is very limited.	L	L	L	L	L (all work areas except EV) A (EV)

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Aphanisma *Aphanisma blitoides*	1B.2, NCCP NE	Coastal bluff scrub, coastal dunes, coastal sage scrub/ annual herb/ March - June	Not observed in Segments A-D or any other work areas to date. Restricted to immediate coast. Low potential to occur at the Encina Hub. Remainder of BSA is outside the range of the species.	A	A	A	A	L (EH) A (all other work areas)
Del Mar manzanita *Arctostaphylos glandulosa* ssp. *crassifolia*	FE, NCCP, 1B.1	Maritime chaparral, sandstone soil formations/ evergreen shrub/ December – June	A total of 10 individuals have been observed in Segments C and D to date. Low potential to occur in Segments A and B because of very limited potential habitat. Likely absent in the other work areas, as the survey areas are small, and this species is an evergreen shrub that would have been observed if present.	L	L	P	P	A
Schreiber's manzanita *Arctostaphylos glutinosa*	1B.2	Closed-cone coniferous forest and chaparral with diatomaceous shale.	Absent. Suitable habitat is not present in the BSA.	A	A	A	A	A
Otay manzanita *Arctostaphylos otayensis*	1B.2, NCCP	Chaparral, cismontane woodland/ evergreen shrub/ January - April	Absent. Restricted to Otay Mountain area in southern San Diego County, which is outside the range of the BSA.	A	A	A	A	A
San Diego sagewort *Artemisia palmeri*	4.2	Drainages in chaparral, coastal sage scrub, riparian, mesic and sandy soils/ deciduous shrub/ May - September	Approximately 200 individuals have been observed to date in Segments A, C, and D along drainages associated with Los Peñasquitos Canyon and McGonigle Canyon. Low potential to occur in Segment B and at the Encina Hub because potential habitat, while present, is very limited. Potential habitat does not occur at the other work areas.	P	L	P	P	L (EH) A (all other work areas)

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Western spleenwort *Asplenium vespertinum*	4.2	Rocky chaparral, cismontane woodland, and coastal scrub at elevations from approximately 590 to 3,280 feet amsl.	Not observed in Segments A-D or any other work areas to date. Reported to CNDDB near the Mission San Luis Rey Phase Transposition site. Low potential to occur there because rocky habitat is lacking, and site elevation may be too low. Segments C and D may be too low in elevation for this species. Segments A and B contain limited rocky habitats, so the species' potential to occur there is low. Likely absent at the other work areas due to low elevation or lack of habitat.	L	L	A	A	L (MSL) A (all other work areas)
Dean's milk-vetch *Astralagus deanei*	1B.1	Chaparral, cismontane woodland, coastal scrub, and riparian forest.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments A, C, and D due to the presence of potential habitat. Low potential to occur in Segment B because potential habitat is very limited and fragmented. Reported to the CNDDB near the Mission San Luis Rey Phase Transposition site. Low potential to occur there because, while chaparral and coastal scrub are present, the species is presently known from fewer than 15 occurrences in California. Absent at all other work areas due to lack of habitat.	M	L	M	M	L (MSL) A (all other work areas)
Coastal dunes milk-vetch *Astragalus tener* var. *titi*	FE, SE, 1B.1, NCCP NE	Vernally mesic areas in coastal dunes, coastal bluff scrub, coastal prairie at elevations of approximately 3 to 165 feet amsl / annual herb/ March – May	Absent. There is no potential habitat for this species in the BSA.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Coulter's saltbush *Atriplex coulteri*	1B.2	Alkaline or clay soils in coastal dunes, coastal bluff shrub, coastal sage scrub, grassland/ perennial herb/ March – October	Not observed in Segments A-D or any other work areas to date. Low potential to occur in Segments A and D, and at the Encina Hub where clay soils and coastal scrub and/or grassland are present. Likely absent at other work areas due to lack of appropriate soils and/or previous disturbance.	L	A	A	L	L (EH) A (all other work areas)
South coast saltscale *Atriplex pacifica*	1B.2	Playas, coastal dunes, coastal bluff scrub, coastal sage scrub/ annual herb/ March – October	Not observed in Segments A-D or any other work areas to date. Low potential to occur in sage scrub in Segments A-D and all other work areas except Encina Hub. Moderate potential to occur at the Encina Hub as the species was reported to the CNDDB near it.	L	L	L	L	M (EH) A (all other work areas)
Parish's brittlescale *Atriplex parishii*	1B.1	Alkaline soils in chenopod scrub, playas, and vernal pools.	Absent. Suitable habitat is not present in the BSA.	A	A	A	A	A
Encinitas baccharis *Baccharis vanessae*	FT, SE, 1B.1, NCCP NE	Maritime chaparral, cismontane woodland, sandstone/ deciduous shrub/ August – November	Not observed in Segments A-D or any other work areas to date. Low potential to occur in the BSA because while it is known historically from within 5 miles of the BSA (SDNHM 2013, CDFW 2013), and there is potentially suitable habitat within Segments C and D of the BSA, it is extremely rare. Potential habitat is not present in Segments A and B or in any of the other work areas.	A	A	L	L	A
Nevin's barberry *Berberis nevinii*	FE, SE, 1B.1, NCCP NE	Sandy or gravelly soils in chaparral, coastal sage scrub, cismontane woodland, riparian scrub/ evergreen shrub/ March – June	Absent. Not observed in Segments A-D or any other work areas to date. Occurs at a minimum elevation of approximately 900 feet. Therefore, most of the BSA does not contain potentially suitable habitat, and the other work areas are not within the elevation range of the species, either. It is likely that this evergreen shrub would have been observed if present.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Golden-spined cereus *Bergerocactus emoryi*	2B.2	Sandy soils in chaparral, coastal sage scrub, closed-cone coniferous forests/ stem succulent/ May - June	Absent. Suitable habitat is not present in Segments A-D or at the other work areas with the possible exception of the Encina Hub where sandy soils and coastal sage scrub are present. However, It is likely that this perennial stem succulent would have been observed there if present.	A	A	A	A	A
San Diego goldenstar *Bloomeria clevelandii*	1B.1, NCCP	Grassland, chaparral, coastal sage scrub, vernal pools, clay soils/ bulbiferous herb/ April - May	Not observed in Segments A-C or any other work areas to date. Observed in grassland at one location in Segment D. High potential to occur within Segment C due to known presence in adjacent areas and suitable habitat. Moderate potential to occur in Segments A, B, ~~C,~~ and Encina Hub due to the presence of potentially suitable habitat. Low potential to occur in all other work areas due to lack of clay soils.	M	M	~~M~~H	P	M (EH) A (all other work areas)
Thread-leaved brodiaea *Brodiaea filifolia*	FT, SE, 1B.1	Grassland, ephemeral wetlands, vernal pools, meadows in montane habitats/ perennial herb/March-June	A total of 62 flowering individuals have been observed to date in deep clay soils within a mix of native and non-native grassland in Segment A. Moderate potential to occur in Segments C and D due to the presence of some grasslands and/or ephemeral wetlands. Likely absent from the remaining work areas due to very limited or lacking habitat.	P	L	M	M	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Orcutt's brodiaea *Brodiaea orcuttii*	1B.1, NCCP	Vernal pools associated with chaparral, cismontane woodland, closed-cone coniferous forest, meadows and seeps, and grassland, mesic, clay, and sometimes serpentine soils/ bulbiferous herb/ April - July	Not observed in Segments A-D or any other work areas to date. Known historically from within 5 miles of the BSA (SDNHM 2013, CDFW 2013). Likely absent in Segments A and B and in other work areas because of lack of suitable habitat (vernal pools). High potential to occur within Segment C due to known presence in adjacent areas and suitable habitat. Moderate potential to occur in Segments C and D because of presence of suitable habitat (vernal pools).	A	A	~~M~~H	M	A
Brewer's calandrinia *Calandrinia breweri*	4.2	Chaparral, coastal sage scrub, disturbed and/or burned areas, sandy, loamy soils / annual herb/ March - June	Not observed in Segments A-D or any other work areas to date. Known to occur within Los Peñasquitos Canyon Preserve (SDNHM 2013, CDFW 2013). High potential to occur within Segments A, C, and D because of presence of suitable habitat/soils. Low potential to occur in Segment B because potentially suitable habitat is very limited. Likely absent from the Camino del Sur, Carmel Valley Road, and SR-56 staging yards due to lack of habitat/soils. Low potential to occur in all other work areas due to limited habitat/soils.	H	L	H	H	L (EH, MSL, EV, SB, ST) A (CDS, CVR, SR-56)
Round-leaved filaree *California macrophylla*	1B.1	Cismontane woodland and valley and foothill grassland/ clay soils.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments A and D and at the Encina Hub staging yard where clay soils and grassland habitat occurs. Low potential to occur in Segments B and C due to limited habitat/soils. Likely absent from all other work areas due to lack of clay soils, habitat, or both.	M	L	L	M	M (EH) A (all other work areas)

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Dunn's mariposa lily *Calochortus dunnii*	SR, 1B.2, NCCP	Rocky, gabboric, or metavolcanic areas in chaparral, closed-cone coniferous forests, grassland/ bulbiferous herb/ April – June	Absent. Suitable habitat is not present in the BSA.	A	A	A	A	A
Lewis' evening primrose *Camissoniopsis lewisii*	3	Scrub, woodland, and grassland habitat/ sandy or clay soils.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segment A and at the Encina Hub staging yard where clay and/or sandy soils and scrub and/or grassland habitats occur. Low potential to occur in Segments B, C, D, and all other work areas (except the Evergreen Nursery staging yard) due to limited suitable habitat. Absent at the Evergreen Nursery staging yard due to lack of habitat.	M	L	L	L	M (EH) L (MSL, SB, ST, CDS, CVR, SR-56) A (EV)
Payson's jewelflower *Caulanthus simulans*	4.2, NCCP	Sandy, granitic areas in chaparral and coastal sage scrub/ annual herb/ March - May	Absent. The BSA is outside the known range of the species.	A	A	A	A	A
Lakeside ceanothus *Ceanothus cyaneus*	1B.2, NCCP	Chaparral, closed-coned coniferous forest/ evergreen shrub/ April – June	Absent. The BSA is outside the known range of the species.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Wart-stemmed ceanothus *Ceanothus verrucosus*	2B.2, NCCP	Chaparral, coastal sage scrub, near the coast/ evergreen shrub/ December – May	Approximately 80 individuals have been observed to date in Segment D in small patches of 1 to 3 plants with one larger area of 30 individuals. One individual was observed at Mission San Luis Rey Phase Transposition. High potential to occur in Segment C because of proximity to the observed population and presence of suitable habitat. Moderate potential to occur in Segments A and B because of increasing distance from the coast. Likely absent in other work areas, as the survey areas are small, and this is an evergreen shrub that would have been observed if present.	M	M	H	P	P (MSL) A (all other work areas)
Southern tarplant *Centromadia parryi* ssp. *australis*	1B.1	Clay soils near vernal pools, along the margins of marshes and swamps, vernally mesic areas with grassland / annual herb/ May – November	Not observed in Segments A-D or any other work areas to date. Known historically from within 5 miles of the BSA (SDNHM 2013, CDFW 2013). Low potential to occur within the BSA for Segments A-D and at the Encina Hub due to presence of very limited, potential habitat. Absent in the other work areas as suitable habitat is not present.	L	L	L	L	L (EH) A (all other work areas)
Southern mountain misery *Chamaebatia australis*	4.2	Gabbroic and metavolcanic soils.	Absent. Suitable habitat is not present in the BSA.	A	A	A	A	A
Orcutt's pincushion *Chaenactis glabriuscula* var. *orcuttiana*	1B.1	Sandy soils in coastal dunes and coastal bluff scrub/ annual herb/ January - August	Absent. There is no habitat for this species in the BSA.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	FE	Coastal dunes, coastal salt marsh/ hemiparasitic, annual herb/ March-October	Absent. There is no habitat for this species in the BSA	A	A	A	A	A
Orcutt's spineflower *Chorizanthe orcuttiana*	FE, SE, 1B.1, NCCP NE	Sandy openings in chaparral, coastal sage scrub, closed-cone coniferous forests at elevations of approximately 10 to 410 feet amsl / annual herb/ March-May	Not observed in Segments A-D or any other work areas to date. Likely absent in Segments A-D and at all other work areas (except Encina Hub) due to lack of habitat and/or improper elevation. Moderate potential to occur at Encina Hub due to presence of sandy soils and coastal sage scrub.	A	A	A	A	M (EH) A (all other work areas)
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	1B.2	Clay soils in vernal pools on mesas with chaparral, coastal sage scrub, meadows and seeps, and grassland / annual herb/ April – July	Not observed in Segments A-D or any other work areas to date. Known historically from within 5 miles of the BSA (SDNHM 2013, CDFW 2013). Absent in Segments A and B and the other work areas because of lack of vernal pools. High potential to occur in Segments C and D because of presence of vernal pools.	A	A	H	H	A
Seaside cistanthe *Cistanthe maritima*	4.2	Sandy soil opening in coastal scrubs or on sea bluffs/ succulent annual or perennial herb/February-August	Approximately 500 individuals were observed in and around a disturbed opening within Diegan coastal sage scrub in Segment D. One individual was observed at the Encina Hub. Low potential to occur in Segment C and at Mission San Luis Phase Transposition due to presence of potential habitat and relative nearness to the coast. Likely absent in Segments A and B and at all other work areas due to lack of habitat and/or distance from the coast.	A	A	L	P	P (EH) L (MSL) A (all other work areas)

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Delicate clarkia *Clarkia delicata*	1B.2	Chaparral and cismontane woodland at elevations of approximately 770 to 3,280 feet amsl / gabbroic soils.	Absent. Gabbroic soils are not present in the BSA, and most of the elevations are too low.	A	A	A	A	A
San Miguel savory *Clinopodium chandleri*	1B.2, NCCP	Rocky, gabbroic, or metavolcanic areas in chaparral, coastal, sage scrub, cismontane woodland, riparian woodland, and grassland/ perennial shrub/ March-July	Absent. The BSA is outside of the known range of the species.	A	A	A	A	A
Summer holly *Comarostaphylis diversifolia* ssp. *diversifolia*	1B.2	Chaparral, cismontane woodland/ evergreen shrub/ April - June	Approximately 700 individuals have been observed to date in chaparral and Diegan coastal sage scrub in Segments C and D. High potential to occur in Segment A because of presence of suitable habitat; however, this large evergreen shrub likely would have been observed if present. Three individuals were observed in the Mission San Luis Rey Phase Transposition site and four individuals were observed in the Evergreen Nursery staging yard. Absent in Segment B and the remaining other work areas because of lack of suitable habitat.	H	A	P	P	P (MSL, EV) A (all other work areas)
Small-flowered morning-glory *Convolvulus simulans*	4.2	Clay soils in annual grasslands, coastal sage scrub, and chaparral/ annual herb/March-July	Approximately 15 individuals have been observed to date in groups of two to three in Segments A, B, and D. High potential to occur in Segment C because of presence of suitable habitat. Moderate potential to occur at Encina Hub due to presence of clay soils, grassland, and coastal sage scrub. Likely absent in all other work areas due to lack of clay soils.	P	P	H	P	M (EH) A (all other work areas)

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
San Diego sand aster *Corethrogyne filaginifolia* var. *incana*	1B.1	Coastal bluff scrub, chaparral, and coastal sage scrub/ perennial herb/ June - September	Not observed in Segments A-D or any other work areas to date. Known in California from fewer than 10 occurrences. Reported to the CNDDB in 1995 approximately 1 mile north of the western portion of Segment D. Therefore, moderate potential to occur in suitable habitat in Segments D and C. Low potential to occur in Segments B and A and at the Encina Hub due to very limited habitat and/or distance from the coast. Likely absent from all other work areas due to lack of habitat and/or distance from the coast.	L	L	M	M	L (EH) A (all other work areas)
Del mar mesa sand aster *Corethrogyne filaginifolia* var. *linifolia*	1B.1, NCCP	Sandy soils associated with coastal bluff scrub, openings in maritime chaparral, and coastal sage scrub/ perennial herb/ May - September	Approximately 35 individuals have been observed to date along the edge of dirt roads and in openings in Segment C. Reported to the CNDDB in the 1980s and 1990s less than 1 mile north and south of Segment D. High potential to occur in Segment D. Low potential to occur in Segments B and A and at the Encina Hub due to very limited habitat and/or distance from the coast. Likely absent from all other work areas due to lack of habitat and/or distance from the coast.	L	L	P	H	L (EH) A (all other work areas)
Wiggins' cryptantha *Cryptantha wigginsii*	1B.2	Coastal scrub often with clay soil.	Not observed in Segments A-D or any other work areas to date. Wiggins' cryptantha was reported to the CNDDB near the Encina Hub, and potential habitat occurs there, and in Segments A and D where clay soils are present. Low potential to occur in these areas, however, as suitable habitat and/or soils is limited. Likely absent in Segments B and C and at the other work areas due to lack of potential habitat, particularly clay soils.	L	A	A	L	L (EH) A (all other work areas)

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Snake cholla *Cylindropuntia californica* var. *californica*	1B.1, NCCP NE	Chaparral, coastal sage scrub/ stem succulent/ April - May	Not observed in Segments A-D or any other work areas to date. Reports to the CNDDB for the species are primarily south of the BSA. Low potential to occur (except at Camino del Sur, Carmel Valley Road, and SR-56 staging yards where there is no potential habitat), although it is likely that this perennial stem succulent would have been observed if present.	L	L	L	L	L (EH, MSL, EV, SB, ST) A (CDS, CVR, SR-56)
Otay tarplant *Deinandra conjugens*	FT, SE, 1B.1, NCCP	Clay soils in coastal sage scrub, grassland/ annual herb/May-June	Absent. The BSA is outside the known range of the species.	A	A	A	A	A
Paniculate tarplant *Deinandra paniculata*	4.2	Vernally mesic, sometimes sandy, coastal scrub, valley and foothill grassland, and vernal pools.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments C and D due to the presence of scrub, grassland, and vernal pool habitats. Low potential to occur in Segments A and B and the other work areas (except Evergreen Nursery staging yard) due to limited extent of potential habitat. Absent from Evergreen Nursery staging yard due to lack of habitat.	L	L	M	M	L (all areas except EV) A (EV)
Orcutt's bird's beak *Dicranostegia orcuttiana*	2B.1, NCCP	Coastal sage scrub/ hemiparasitic annual herb/ April – June	Absent. The BSA is outside the known range of the species.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Western dichondra *Dichondra occidentalis*	4.2	Coastal sage scrub, chaparral, oak woodland, grows amongst rocks, shrubs, and in areas following a fire/ matted, stoloniferous, perennial herb.	Observed in five locations in Segments A and D to date, and two locations in Encina Hub. Low potential to occur in Segment B because potential habitat is very limited. High potential to occur in Segment C because of presence of suitable habitat and proximity to Segment D. Five patches of western dichondra have been observed at the Encina Hub to date. Absent from all other work areas due to lack of suitable habitat.	P	L	H	P	P (EH) A (all other work areas)
Blochman's dudleya *Dudleya blochmaniae ssp. blochmaniae*	1B.1	Scrub, chaparral, valley and foothill grassland/ rocky, clay, or serpentine soils.	Not observed in Segments A-D or any other work areas to date. Restricted to the coast in San Diego County. Low potential to occur in Segments C and D and the Encina Hub due to very limited potential habitat. Suitable habitat is not present in Segments A, B, or any of the other work areas.	A	A	L	L	L (EH) A (all other work areas)
Short-leaved dudleya *Dudleya brevifolia*	SE, 1B.1, NCCP NE	Sandstone associated with openings in maritime chaparral and coastal sage scrub/ perennial herb/ April – May	Not observed in Segments A-D or any other work areas to date. Known to occur in Carmel Mountain Preserve west of Segment C (SDNHM 2013, CDFW 2013), but it has not been documented within or adjacent to the BSA. Low potential to occur in Segments C and D and at the Encina Hub because this species is very rare. Segments A and B and the other work areas either do not contain suitable habitat and/or are too far inland.	A	A	L	L	L (EH) A (all other work areas)
Many-stemmed dudleya *Dudleya multicaulis*	1B.2, NCCP	Clay soils in chaparral, coastal sage scrub, grassland/ perennial herb/ April – June	Absent. The BSA is outside the known range of the species.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Variegated dudleya *Dudleya variegata*	1B.2, NCCP	Clay soils associated with vernal pools in chaparral, cismontane woodland, coastal sage scrub, and grassland/ perennial herb/ April – June	Not observed in Segments A-D or any other work areas to date. Known historically from within 5 miles of the BSA (SDNHM 2013, CDFW 2013). Likely absent in Segments A and B and in the other work areas because of lack of suitable habitat (vernal pools). High potential to occur within Segment A due to known presence in adjacent areas and suitable habitat. Moderate potential to occur in Segments C and D because suitable habitat is present but limited.	~~A~~H	A	M	M	A
Sticky dudleya *Dudleya viscida*	1B.2, NCCP	Rocky areas in coastal bluff scrub, chaparral, coastal sage scrub, and cismontane woodland/ perennial herb/ May – June	Not observed in Segments A-D or any other work areas to date. Known to occur north of the BSA (SDNHM 2013, CDFW 2013). Low potential to occur within Segments A, C, and D because suitable habitat is very limited. Likely absent from Segment B and the other work areas because of a lack of suitable habitat.	L	A	L	L	A
Palmer's goldenbush *Ericameria palmeri* ssp. *palmeri*	1B.1, NCCP NE	Mesic areas in chaparral, coastal sage scrub/ perennial, evergreen shrub/ July – November	Not observed in Segments A-D or any other work areas to date. Low potential to occur in all segments and in all other work areas (except Camino del Sur, Carmel Valley Road, and SR-56 staging yards) as potential habitat is very limited. Likely absent from the Camino del Sur, Carmel Valley Road, and SR-56 staging yards due to lack of habitat.	L	L	L	L	L (EH, MSL, EV, SB, ST) A (CDS, CVR, SR-56)
San Diego button celery *Eryngium aristulatum* var. *parishii*	FE, SE, 1B.1, NCCP	Mesic soils within and around vernal pools in coastal sage scrub and grassland/ annual/perennial herb/ April – June	Approximately 125 individuals have been observed to date in the vernal pools of Segments C and D. Low potential to occur in Segments A and B because of very limited potential habitat. Likely absent in the other work areas due to lack of habitat.	L	L	P	P	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Coast wallflower *Erysimum ammophilum*	1B.2, NCCP NE	Sandy openings in costal dunes, chaparral, coastal sage scrub/ perennial herb/ February – June	Absent. The BSA is outside the known range of the species.	A	A	A	A	A
Cliff spurge *Euphorbia misera*	2B.2	Rocky areas in coastal bluff scrub and coastal scrub near the coast in San Diego County /perennial shrub/ December-October	Not observed in Segments A-D or any other work areas to date. Low potential to occur in Segment D and at the Encina Hub in coastal sage scrub. Likely absent in other segments and work areas as they are more distant from the coast.	A	A	A	L	L (EH) A (all other work areas)
Coast barrel cactus *Ferocactus viridescens*	4.2, NCCP	Dry, west and south-facing slopes in chaparral, coastal sage scrub, grassland, and adjacent to vernal pools / stem succulent/ May – June	Approximately 1,000 individuals have been observed to date on rocky slopes and within chamise chaparral in all segments of the BSA. This species is likely absent from the Camino del Sur, Carmel Valley Road, and SR-56 staging yards (due to lack of habitat). It has low potential to occur at the Encina Hub and Mission San Luis Rey Phase Transposition, as well as at the Evergreen Nursery, Stowe, and Stonebridge staging yards due to limited or disturbed habitat, although it is likely that it would have been observed if present.	P	P	P	P	L (EH, MSL, EV, ST, SB) A (CDS, CVR, SR-56)
Palmer's frankenia *Frankenia palmeri*	2B.1	Coastal dunes, coastal salt marsh, and playas.	Absent. Suitable habitat does not occur in the BSA.	A	A	A	A	A
Mission canyon bluecup *Githopsis diffusa ssp. filicaulis*	3.1	Chaparral.	Absent. The elevations of the BSA are too low for this species.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
San Diego gumplant *Grindelia hallii*	1B.2	Chaparral, lower montane coniferous forest, meadows and seeps, and valley and foothill grassland.	Not observed in Segments A-D or any other work areas to date. Low potential to occur in Segments A and B due to limited habitat. Likely absent in Segments C and D and at all other work areas due to low elevation and/or lack of potential habitat.	L	L	A	A	A
Palmer's grapplinghook *Harpagonella palmeri*	4.2, NCCP	Clay soils, occasionally granitic soils in chaparral, coastal sage scrub, and grassland/ annual herb/ March – May	Observed to date on clay soils in openings and grasslands in Segments A, B, and D of the BSA. High potential to occur in Segment C because of proximity to Segments B and D and presence of potentially suitable habitat. Moderate potential to occur at the Encina Hub as the species was reported to the CNDDB nearby. Low potential to occur in the Mission San Luis Rey Phase Transposition and at the Evergreen Nursery, Stowe, and Stonebridge staging yards due to limited and/or disturbed habitat. Likely absent from the Camino del Sur, Carmel Valley Road, and SR-56 staging yards due to lack of habitat.	P	P	H	P	M (EH) L (EV, MSL, ST, SB) A (CDS, CVR, SR-56)
Orcutt's hazardia *Hazardia orcutti*	1B.1	Maritime chaparral and coastal scrub often with clay soils.	Not observed in Segments A-D or any other work areas to date. Low potential to occur in Segment D and at the Encina Hub, which are in the elevation range of the species and contain potentially suitable habitat. Segments A, B, and C, and all of the other work areas are out of the elevation range of the species and/or do not contain potential habitat.	A	A	A	L	L (EH) A (all other work areas)
Tecate cypress *Hesperocyparis (Cupressus) forbesii*	1B.1, NCCP	Chaparral, closed-cone coniferous forest/evergreen tree.	Absent. The BSA is outside the known range of this species.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Beach goldenaster *Heterotheca sessiliflora* ssp. *sessiliflora*	1B.1	Coastal dunes, chaparral, coastal sage scrub/ perennial herb/ March – December	Not observed in Segments A-D or any other work areas to date. Known from fewer than 20 extant occurrences in California. Low potential to occur in Segments C and D and at the Encina Hub and Mission San Luis Rey Phase Transposition. Likely absent from Segments A and B and the other work areas due to limited or lacking habitat and increased distance from the coast.	A	A	L	L	L (EH, MSL) A (all other work areas)
Graceful tarplant *Holocarpha virgata* ssp. *elongata*	4.2	Clay soils in chaparral, cismontane woodland, coastal sage scrub, grassland, and disturbed areas/ annual herb/ May – November	Observed in grassland and disturbed edges, such as dirt roads and trails in five areas within all segments of the BSA, to date. Moderate potential to occur at the Encina Hub work area due to presence of potential habitat and suitable soils. Low potential to occur at all other work areas as potential habitat is limited and/or suitable soils are not present.	P	P	P	P	M (EH) L (all other work areas)
Vernal barley *Hordeum intercedens*	3.2	Coastal dunes, coastal scrub, valley and foothill grasslands, and vernal pools.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments A-D. Low potential to occur in all other work areas due to limited potential habitat except the Evergreen Nursery staging yard, which does not contain potential habitat.	M	M	M	M	L (all work areas except EV) A (EV)
Ramona horkelia *Horkelia truncata*	1B.3	Occurs in clay and gabbroic soils in chaparral and cismontane woodland at elevations from approximately 1,310 to 4,265 feet amsl.	Absent. The BSA is outside the elevation range of the species.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Decumbent goldenbush *Isocoma menziesii* var. *decumbens*	1B.2	Sandy, typically disturbed areas in chaparral and coastal sage scrub/ perennial shrub/ April – November	Approximately 2,500 individuals have been observed to date in openings in coastal sage scrub and chaparral and in grasslands with clay soils in all segments of the BSA. 3 individuals were observed in the SR-56 staging yard. Low potential to occur in all other work areas except Evergreen Nursery, Camino del Sur, and Carmel Valley Road staging yards that lack potential habitat.	P	P	P	P	P (SR-56) L (EH, MSL, SB, ST) A (EV, CDS, CVR)
San Diego marsh-elder *Iva hayesiana*	2B.2	Ephemeral drainages, alkali marshes, playas/ perennial herb/ April – October	To date, observed in drainages and revegetated areas in Segments A, B, and C. High potential to occur in Segment D because of proximity to Segment C and presence of suitable habitat. Low potential to occur at the Encina Hub where limited potential habitat occurs. Absent in all other work areas due to lack of habitat.	P	P	P	H	L (EH) A (all other work areas)
Southwestern spiny rush *Juncus acutus* ssp. *leopoldii*	4.2	Ephemeral drainages, alkaline marshes and seeps, mesic areas of coastal dunes, coastal salt marsh / rhizomatous herb/ May – June	Observed in two locations to date in Segments A and B. One individual was observed in Segment A, and several individuals were observed in Segment B. Moderate potential to occur in Segments C and D because of somewhat limited potentially suitable habitat. Low potential to occur at the Encina Hub where very limited potential habitat occurs. Absent in all other work areas due to lack of habitat.	P	P	M	M	L (EH) A (all other work areas)
Southern California black walnut *Juglans californica*	4.2	Alluvial chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Suitable habitat is limited, and this species has not been observed in Segments A-D or in any other work areas. This tree species is considered absent as it would have been observed if present.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	1B.1	Coastal salt marsh, playas, vernal pools/ annual herb/ February - June	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments C and D due to presence of vernal pools. Low potential to occur in Segment B due to very limited habitat (revegetated alkali marsh). Absent in Segment A and other work areas due to a lack of potential habitat.	A	L	M	M	A
Heart-leaved pitcher sage *Lepechinia cardiophylla*	1B.2, NCCP	Chaparral, cismontane woodland, closed-cone coniferous forest/ perennial shrub/ April-July	Absent. The BSA is outside of the elevation range for this species (approximately 1,705 feet to 4,495 feet).	A	A	A	A	A
Gander's pitcher sage *Lepechinia ganderi*	1B.3, NCCP	Gabbroic or metavolcanic areas in chaparral, coastal sage scrub, grassland, closed-cone coniferous forest/ perennial shrub/ June-July	Absent. The BSA is outside the known range of this species.	A	A	A	A	A
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	4.3	Chaparral, coastal sage scrub/ annual herb/ January – July	To date, observed in clay soils in open coastal sage scrub or along the edges of dirt roads in Segment D. Moderate potential to occur in Segments A, B, and C as potentially suitable habitat is present. Moderate potential to occur at the Mission San Luis Rey Phase Transposition and in the Stowe staging yard due to nearby CNDDB reports of the species and presence of potentially suitable, but limited, habitat. Likely absent in the Camino del Sur, Carmel Valley Road, and SR-56 staging yards due to lack of habitat. Low potential to occur in all other work areas as potentially suitable habitat is present but limited.	M	M	M	P	M (MSL, ST) L (EH, EV, SB) A (CDS, CVR, SR-56)

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Sea dahlia *Leptosyne maritima*	2B.2	Coastal bluff scrub, coastal sage scrub at elevations from approximately 15 to 490 feet amsl / perennial herb/ March - May	Not observed in Segments A-D or any other work areas to date. Low potential to occur in Segments C and D and at Encina Hub due to the presence of limited habitat. Likely absent in Segments A and B and all other work areas as suitable habitat is not present and/or the locations are too high in elevation and/or they are too far from the coast.	A	A	L	L	L (EH) A (all other work areas)
California box-thorn *Lycium californicum*	4.2	Coastal bluff scrub and coastal scrub habitats from approximately 15 to 490 feet amsl.	Not observed in Segments A-D or any other work areas to date. A perennial shrub that likely would be observed if present. Low potential to occur in Segments C and D and the Encina Hub and Mission San Luis Rey Transposition due to the presence of potential habitat within the elevation range of the species. Likely absent from Segments A and B and all other work areas are since they are outside the elevation range of the species.	A	A	L	L	L (MSL, EH) A (all other work areas)
Felt-leaved monardella *Monardella hypoleuca* ssp. *lanata*	1B.2, NCCP	Chaparral, cismontane woodland/ perennial rhizomatous herb/ June-August	Absent. The BSA is outside the known range of this species.	A	A	A	A	A
Willowy monardella *Monardella viminea*	FE, SE, 1B.1, NCCP NE	Alluvial, ephemeral washes in chaparral, coastal sage scrub, and riparian habitats/ perennial herb/ June - August	Not observed in Segments A-D or any other work areas to date. Known historically from within 5 miles of the BSA (SDNHM 2013, CDFW 2013). Low potential to occur within all segments of the BSA because potential habitat is very limited. Likely absent in all other work areas due to lack of habitat.	L	L	L	L	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Small-flowered microseris *Microseris douglasii ssp. platycarpha*	4.2	Cismontane woodland, coastal scrub, grassland, and vernal pools/ clay soils.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments A, C and D, and the Encina Hub due to the presence of potential habitats and clay soils. Likely absent in Segments B and all other work areas due to a lack of habitat.	M	A	M	M	M (EH) A (all other work areas)
Low bush monkeyflower *Mimulus aurantiacus var. aridus*	4.3	Rocky chaparral and Sonoran desert scrub at elevations of approximately 2,460 to 3,940 feet amsl.	Absent. The BSA is outside the elevation range of this species.	A	A	A	A	A
Palomar monkeyflower *Mimulus diffusus*	4.3	Sandy or gravelly chaparral and lower montane coniferous forest at elevations of approximately 3,675 – 6,005 feet amsl.	Absent. The BSA is outside the elevation range of this species.	A	A	A	A	A
California spineflower *Mucronea californica*	4.2	Variety of chaparral, woodland, dune, scrub, and grassland habitats/ sandy soils.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur at the Encina Hub where sandy soils are present. Low potential to occur in Segments A-D and all other work areas due to limited potential habitat.	L	L	L	L	M (EH) L (all other work areas)
Little mousetail *Myosurus minimus* ssp. *apus*	3.1, NCCP	Alkaline soils in vernal pools and grassland/ annual herb/ March – June	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments C and D because vernal pool habitat is present. Likely absent in Segments A and B and in all other work areas because of lack of potential habitat.	A	A	M	M	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Mud nama *Nama stenocarpum*	2B.2	Riverbanks, lake margins, and the margins of marshes and swamps.	Not observed in Segments A-D or any other work areas to date. Low potential to occur in Segment D as open water is present. Likely absent in Segments A-C and in all of the other work areas due to lack of habitat.	A	A	A	L	A
Spreading navarretia *Navarretia fossalis*	FT, 1B.1, NCCP	Shallow freshwater associated with marshes, playas, vernal pools, chenopod scrub / annual herb/ April-June	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments C and D due to presence of potentially suitable habitat. Low potential to occur in Segment A because of very limited potential habitat. Likely absent in Segment B and other work areas due to a lack of habitat.	L	A	M	M	A
~~Spreading~~ Prostrate vernal pool navarretia *Navarretia prostrata*	1B.1	Mesic coastal scrub, meadows and seeps, grasslands, and vernal pools.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments C and D due to presence of potentially suitable habitat. Low potential to occur in Segment A because of very limited potential habitat. Likely absent in Segment B and other work areas due to a lack of habitat.	L	A	M	M	A
Coast woolly-heads *Nemacaulis denudata* var. *denudata*	1B.2	Coastal dunes/ annual herb/ April – September	Absent. There is no potential habitat for this species in the BSA.	A	A	A	A	A
Slender cottonheads *Nemacaulis denudata* var. *gracilis*	2B.2	Coastal dunes, desert dunes, and Sonoran desert scrub.	Absent. There is no potential habitat for this species in the BSA.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Chaparral nolina *Nolina cismontana*	1B.2	Sandstone or gabbro soils in chaparral and coastal scrub at elevations from approximately 460 to 4,180 feet amsl.	Not observed in Segments A-D or any other work areas to date. Likely absent from Segments C and D and the Encina Hub as those sites are too low in elevation. Moderate potential to occur in chaparral and coastal scrub in Segments A and B, although soils may not be suitable. Low potential to occur in the other work areas (except Camino del Sur, Carmel Valley Road, and SR-56 staging yards) due to limited or marginally suitable habitat and/or too low in elevation. Likely absent from Camino del Sur, Carmel Valley Road, and SR-56 staging yards due to lack of habitat.	M	M	A	A	L (MSL, EV, SB, ST,) A (EH, CDS, CVR, SR-56)
Dehesa beargrass *Nolina interrata*	SE, 1B.1, NCCP	Gabbroic, metavolcanic, or serpentine areas in chaparral/ perennial herb/ June - July	Absent. The BSA is outside of the known range of this species.	A	A	A	A	A
California adder's tongue *Ophioglossum californicum*	4.2	Occurs in mesic chaparral, grasslands, and vernal pools.	Not observed in Segments A-D or any other work areas to date. High potential to occur in Segments C and D due to the presence of potential habitats including vernal pools. Moderate potential to occur in Segments A and B as vernal pools are not present. Likely absent in the Stowe staging yards due to lack of habitat. Low potential to occur in all other work areas due to limited potential habitat.	M	M	H	H	L (MSL, EH, EV, SB, CDS, CVR, SR-56) A (ST)
California Orcutt grass *Orcuttia californica*	1B.1, NCCP	Vernal pools/ annual herb/ April – August	Absent. The BSA is outside the known range of this species (SDNHM 2013).	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Short-lobed broomrape *Orobanche parishii* ssp. *brachyloba*	4.2	Sandy soils associated with coastal bluff scrub, coastal dunes, coastal scrub at elevations from approximately 10 to 1,000 feet amsl/ parasitic, perennial herb/ April - October	Not observed in Segments A-D or any other work areas to date. Low potential to occur in Segments C and D, Encina Hub, and the Mission San Luis Rey Transposition site due to limited habitat. Likely absent in Segment B where potential habitat is very limited and perhaps too far from the coast. Considered absent in Segment A and at all other work areas as potential habitat is not present, the elevation is too high, and/or the sites are too far from the coast.	A	A	L	L	L (EH, MSL) A (all other work areas)
Gander's ragwort *Packera ganderi*	SR, 1B.2, NCCP	Gabbroic outcrops and burned areas in chaparral at elevations from approximately 1,310 to 3,935 feet amsl/ perennial herb/ April - June	Absent. The BSA is outside of the elevation range of this species.	A	A	A	A	A
Golden-rayed pentachaeta *Pentachaeta aurea* ssp. *aurea*	4.2	Variety of chaparral, scrub, woodland, forest, and grassland habitats.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments A-D where potentially suitable habitat occurs. Low potential to occur in the other work areas due to limited potential habitat.	M	M	M	M	L
Brand's star phacelia *Phacelia stellaris*	1B.1	Coastal dunes and scrub.	Only known from 10 occurrences in California. Not observed in Segments A-D or any other work areas to date. Low potential to occur in the Encina Hub work area and Segments C and D due to limited coastal scrub habitat. Likely absent in Segments A and B and the remaining work areas due to lack of habitat and/or distance from the coast.	A	A	L	L	L (EH) A (all other work areas)

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Torrey pine *Pinus torreyana* ssp. *torreyana*	1B.2, NCCP	Sandstone in chaparral and closed-cone coniferous forests/ evergreen tree.	Observed in Segment D around the Peñasquitos Substation and at the SR-56 staging yard, all as planted individuals. No natural occurrences of this species have been observed. This species was not observed in Segments A, B, or C, or in other work areas and is considered absent there because this tree species would have been observed if present.	A	A	A	P	P (SR-56) A (all other work areas)
Chaparral rein orchid *Piperia cooperi*	4.2	Chaparral, cismontane woodland, and valley and foothill grassland.	Not observed in Segments A-D or any other work areas to date. Moderate potential to occur in Segments A, C, and D due to the presence of potential habitats. Likely absent in the Stonebridge and Stowe staging yards due to lack of habitat. Low potential to occur in Segment B and the other work areas due to presence of limited potential habitat.	M	L	M	M	L (EH, MSL, EV, SR-56, CDS, CVR) A (ST, SB)
San Diego mesa mint *Pogogyne abramsii*	FE, SE, 1B.1, NCCP	Vernal pools/ annual herb/ March – July	Not observed in Segments A-D or any other work areas to date. Known to occur within the vernal pools in the Del Mar Mesa Preserve (SDNHM 2013, CDFW 2013). High potential to occur in Segments C and D because suitable habitat is present. Likely absent in Segments A and B and the other work areas because suitable habitat is not present.	A	A	H	H	A
Otay mesa mint *Pogogyne nudiuscula*	FE, SE, 1B.1, NCCP NE	Vernal pools/ annual herb/ May – July	Absent. The BSA is outside the known range of this species.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Fish's milkwort *Polygala cornuta var. fishiae*	4.3	Occurs in chaparral, cismontane woodland, and riparian woodland.	Not observed in Segments A-D or any other work areas to date. This species has moderate potential to occur in Segments A, C, and D due to the presence of potential habitat. It has low potential to occur in the Evergreen Nursery and Stonebridge staging yards and at the Mission San Luis Rey Phase Transposition site where limited chaparral is present. It is likely absent from Segment B and the other work areas as potential habitat is not present.	M	A	M	M	L (EV, SB, MSL) A (all other work areas)
Delta woolly-marbles *Psilocarphus brevissimus var. multiflorus*	4.2	Vernal pools.	Not observed in Segments A-D or any other work areas to date. High potential to occur in Segments C and D because suitable habitat is present. Likely absent in Segments A and B and the other work areas because suitable habitat is not present.	A	A	H	H	A
Nuttall's scrub oak *Quercus dumosa*	1B.1	Sandy or clay soils in chaparral, coastal sage scrub, and closed-cone coniferous forests/ evergreen shrub/ February – April	Approximately 1,500 individuals have been observed to date as individual shrubs or small patches in chaparral and on some north- and east-facing slopes in Segments A, C, and D. Low potential to occur in Segment B due to very limited potential habitat. Five individuals were observed in the Mission San Luis Rey Phase Transposition work area, and 2 individuals were observed in the Evergreen Nursery staging yard. This is an evergreen shrub that likely would have been observed, as well, if present, in any other remaining work area.	P	L	P	P	P (MSL, EV) A (all other work areas)
Engelmann oak *Quercus engelmannii*	4.2	Chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland.	Not observed in Segments A-D or any other work areas to date. This is a tree species that would have been observed if present in any segment or work area.	A	A	A	A	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Small leaved-rose *Rosa minutifolia*	SE, 2B.1, NCCP	Chaparral, coastal sage scrub/ perennial, deciduous shrub/ January-June	Absent. Known in California from only one occurrence on Otay Mesa, which is outside the BSA.	A	A	A	A	A
Ashy spike-moss *Selaginella cinerascens*	4.1	Occurs in chaparral and coastal sage scrub.	Not observed in Segments A-D to date. High potential to occur in Segments A-D. Five patches of ashy spike-moss were observed at the Encina Hub. Likely absent from the Camino del Sur, Carmel Valley Road, and SR-56 staging yards due to lack of habitat. Low potential to occur in the remaining work areas due to limited extent of potential habitat and/or level of habitat disturbance.	H	H	H	H	P (EH) L (MSL, EV, SB, ST) A (CDS, CVR, SR-56)
Chaparral ragwort *Senecio aphanactis*	2B.2	Dry, rocky openings in chaparral, coastal sage scrub, cismontane woodland, alkaline flats/ annual herb/ January – April	Not observed in Segments A-D or any other work areas to date. Chaparral ragwort has high potential to occur within Segments C and D as it is known to occur within the Del Mar Mesa Preserve (SDNHM 2013, CDFW 2013). Moderate potential to occur in Segment A due to presence of limited potential habitat. Low potential to occur in Segment B and the other work areas, except the Camino del Sur, Carmel Valley Road, and SR-56 staging yards, because potential habitat is very limited. Likely absent from the Camino del Sur, Carmel Valley Road, and SR-56 staging yards due to lack of habitat.	M	L	H	H	L (EH, MSL, EV, SB, ST) A (CDS, CVR, SR-56)
San Diego County needle grass *Stipa diegoensis*	4.2	Occurs in rocky, mesic chaparral and coastal scrub.	Not observed in Segments A-D or any other work areas to date. Low potential to occur in Segments A, C, and D due to very limited potential habitat. Likely absent from Segment B and the other work areas due to lack of habitat.	L	A	L	L	A

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
Purple stemodia *Stemodia durantifolia*	2B.1	Rock crevices in mesic, sandy areas, along drainages and within Sonoran desert scrub / perennial herb/ January-December	Absent. Potential habitat is not present in the BSA.	A	A	A	A	A
Laguna mountains jewelflower *Streptanthus bernardinus*	4.3	Chaparral and coniferous forest at elevations of approximately 2,200 to 8,200 feet amsl.	Absent. The BSA is outside the elevation range of this species.	A	A	A	A	A
Oil nestraw *Stylocline citroleum*	1B.1	Occurs in chenopod scrub, coastal scrub, and valley and foothill grassland/ clay soils.	Not observed in Segments A-D or any other work areas to date. Low potential to occur in Segments A and D, at Encina Hub where coastal scrub, and/or grassland with clay soils are present. Likely absent in Segments B and C and at the remaining other work areas due to lack of appropriate soils and/or previous disturbance.	L	A	A	L	L (EH) A (all other work areas)
Estuary seablite *Suaeda esteroa*	1B.2	Coastal salt marsh/ perennial herb/ May-October	Absent. There is no potential habitat in the BSA for this species.	A	A	A	A	A
Woolly seablite Suaeda taxifolia	4.2	Coastal bluff scrub, coastal dunes, and coastal salt marsh margins.	Absent. There is no potential habitat in the BSA for this species.	A	A	A	A	A
Parry's tetracoccus *Tetracoccus dioicus*	1B.2, NCCP	Chaparral, coastal sage scrub at elevations from approximately 540 to 3,280 feet amsl; Las Posas soils preferred (Reiser 2001)/ perennial, deciduous shrub/April-May	Not observed in Segments A-D or any other work areas to date. Likely absent from Segments C and D and the Encina Hub as the elevations are too low. Low potential to occur in Segments A and B and all other work areas (except Evergreen Nursery, Camino del Sur, Carmel Valley Road and SR-56 staging yards) due to very limited potential habitat. Likely absent from the Evergreen Nursery, Camino del Sur, Carmel Valley Road, and SR-56 staging yards due to lack of habitat. This is an evergreen	L	L	A	A	L (MSL, SB, ST) A (EH, EV, SR-56, CDS, CVR)

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]
			shrub that likely would have been observed, if present. Los Posas soils are not present in the BSA.					
San Diego County viguiera *Viguiera laciniata*	4.2	Chaparral and coastal scrub.	Several hundred individuals have been observed to date naturally occurring across Segments A-D in patches ranging from 5 individuals to large populations with up to 100 individuals. Two individuals were observed in the Stonebridge staging yard. High potential to occur in all other work areas except the Camino del Sur, Carmel Valley Road, and SR-56 staging yards that lack potential habitat. This perennial shrub would likely have been observed if it was present.	P	P	P	P	P (SB) H (EH, MSL, ST, EV) A (CDS, CVR, SR-56)
Rush like bristelweed *Xanthisma junceum*	4.3	Chaparral and coastal scrub.	Not observed in Segments A-D or any other work areas to date. Segments B, C, D, approximately one-half of Segment A, and all other work areas except the Stowe and Stonebridge staging yards are too low in elevation for this species. Moderate potential to occur in the higher elevation areas (i.e., from approximately I-15 to the east) of Segment A where potential habitat occurs. Low potential to occur at the Stowe and Stonebridge staging yards due to the limited extent of potential habitat.	M	A	A	A	L (ST, SB) A (all other work areas)

Species	Status	Primary Habitat Associations/ Life Form/Blooming Period	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas[1]

Status:

SDG&E Natural Community Conservation Plan Covered Species (NCCP)
NE = SDG&E Narrow Endemic Species

Federal/State Listed:

- FE: Federally listed as endangered
- FT: Federally listed as threatened
- SE: State-listed as endangered
- SR: State rare

California Rare Plant Ranks:

- 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
- 2B: Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
- 3: Plants About Which We Need More Information – A Review List
- 4: Plants of Limited Distribution – A Watch List
- 0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- 0.2 – Fairly threatened in California (20–80% occurrences threatened/moderate degree and immediacy of threat)
- 0.3 – Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Notes:

General Findings:

P (present) – Species detected during project surveys.

A (absent) – Not detected during project surveys, and suitable habitat not present.

L (low potential) – Not detected during project surveys, and extent of potentially suitable habitat is very limited.

M (moderate potential) – Not detected during project surveys. Potentially suitable habitat is present (and may be limited), and species is not known to occur within the vicinity.

H (high potential) – Not detected during project survey. Suitable habitat present and species known to occur within the vicinity.

Other work areas includes Encina Hub (EH), Mission San Luis Rey Phase Transposition (MSL), Evergreen Nursery staging yard (EV), SR-56 staging yard (SR-56), Stonebridge staging yard (SB), Stowe staging yard (ST), Camino del Sur (CDS) staging yard, and Carmel Valley Road (CVR) staging yard. Note that the work area is specified when the potential for a species to occur is different than other work areas. If no work area is specified, the potential to occur is the same in all work areas.

Table G-3 Special-status Wildlife Species Known or with Potential to Occur in the Biological Study Area

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Invertebrates								
Vernal pool fairy shrimp *Branchinecta lynchi*	FT	Vernal pools.	Likely absent from Segments A, B, and all other work areas because there is no suitable habitat (i.e., no vernal pools) within the vicinity. There is high potential for this species to occur in Segments C and D because vernal pools are present.	A	A	~~H~~ A	~~H~~ A	A
San Diego fairy shrimp *Branchinecta sandiegonensis*	FE, NCCP	Vernal pools, swales, ditches, road ruts. Prefer cool water temperatures.	Known to occur in critical habitat within Segment C. Unidentified fairy shrimp were observed in Segment C in December 2014. High potential to occur in Segments C and D because of presence of suitable habitat. Likely absent in Segments A and B and all other work areas because of lack of suitable habitat.	A	A	H	H	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Quino checkerspot butterfly *Euphydras editha quino*	FE, QCB HCP	Open, dry areas in foothills, mesas, lake margins where principal larval host plant is dot-seed plantain; secondary host plants include woolly plantain, white snapdragon, thread-leaved bird's beak and purple owl's clover occurs. Adult emergence mid-January to April.	The eastern portion of the BSA is in the vicinity of observation locations in central San Diego County since 2002 (Fanita Ranch, Sycamore Canyon, and Mission Trails Regional Park; USFWS 2009). Moderate potential to occur in Segment A east of Pomerado Road and at the Stonebridge staging yard because they are in the vicinity of the recent observation locations, within the current range of the species (USFWS 2014), and suitable habitat and/or host plants are present. Low potential to occur west of Pomerado Road in Segment A and in Segments B, C, and D, as well as all of the other work areas, because they are not considered within the potential range of the species by the USFWS (2014).	M	L	L	L	M (SB) A (all other work areas)
Hermes copper butterfly *Lycaena hermes*	FC	Restricted to coastal scrub and chaparral with its larval host plant, spiny redberry (*Rhamus crocea*).	Low potential to occur in Segment A as one Hermes copper was reported in Black Mountain Open Space Park in 2004. Other reports in the vicinity (from Poway and Miramar, for example) are also near Segment A (Center for Biological Diversity and David Hogan 2004). Likely absent in all other segments and other work areas as the current distribution of the species is well outside the BSA coverage for these areas or they do not support the species' habitat and host plant.	L	A	A	A	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Thorne's hairstreak butterfly *Mitoura thornei*	NCCP	Southern interior cypress forest where larval host plant Tecate cypress occurs. Species is only known from Otay Mountain Tecate cypress stands.	Absent. The BSA is outside the known range of this species.	A	A	A	A	A
Wandering skipper *Panoquina errans*	NE	Coastal salt marshes along river mouths and brackish waters where larval host plant salt grass occurs. Adult emergence July to September.	Absent. The BSA lacks suitable habitat for this species.	A	A	A	A	A
Riverside fairy shrimp *Streptocephalus woottoni*	FE, NCCP	Vernal pools, swales, ditches, road ruts that remain inundated for long periods (i.e., several months).	Known to occur within 3 miles of the BSA on MCAS Miramar. Absent in Segments A and B and at the other work areas because of lack of suitable habitat. Low potential to occur in Segments C and D because of presence of marginally suitable habitat.	A	A	L	L	A
Fishes								
Arroyo chub *Gila orcutti*	SSC	Occurs along the San Luis Rey River.	Absent. There is no suitable habitat for this species in the BSA.	A	A	A	A	A
Southern steelhead *Oncorhynchus mykiss irideus*	FE, SSC	Marine waters; seasonally accessible rivers and streams with sufficient flows for spawning. Typically migrate to marine waters after spending two years in fresh water. Enter river systems to spawn between early November and June.	Absent. There is no suitable habitat for this species in the BSA.	A	A	A	A	A
Tidewater goby *Eucyclogobius newberryi*	FE, SSC	Restricted to slow-moving, coastal brackish waters, such as lagoons and upper reaches of bays at mouth of freshwater streams. In San Diego, known only from Agua Hedionda Lagoon.	Absent. There is no suitable habitat for this species in the BSA.	A	A	A	A	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Amphibians								
Arroyo toad *Anaxyrus californicus*	FE, SSC, NCCP	Breeds in shallow pools along stream edges with sand/gravel flats between March and June. Adults use sage scrub, mixed chaparral, oak woodland habitats up to within one mile of breeding sites.	Absent. There is no suitable breeding habitat for this species in the BSA.	A	A	A	A	A
Large-blotched ensatina *Ensatina eschscholtzii klauberi*	SSC	Deciduous forest, evergreen forest, and chaparral with rotting logs, rocks, and bark up to 10,000 ft amsl. Breeds when surface moisture is sufficient and does not require return to water by the parent.	Absent. The BSA is outside the known range of this species.	A	A	A	A	A
California red-legged-frog *Rana draytonii*	FT, SSC, NE	Slow-moving streams and ponds with dense vegetation cover providing shade over water surface. Non-breeding estivation sites in small mammal burrows and beneath leaf litter up to 2 miles from the stream. Breeds November through April.	Absent. There are no recent records for this species in the region. Species is likely extirpated from San Diego County.	A	A	A	A	A
Southern mountain yellow-legged frog *Rana muscosa*	FT, SSC, NE	Breeds in high mountain lakes, ponds, and streams. San Diego County's only known population (in 1985) was at Mt. Palomar.	Absent. The BSA is outside the known range of this species.	A	A	A	A	A
Western spadefoot *Spea hammondii*	SSC, NCCP	Washes, river floodplains, alluvial fans, playas, alkali flats, temporary ponds, vernal pools in mixed woodlands, grasslands, coastal sage scrub, and chaparral. Surface activity October to April. Oviposition late February to May in temporal pools and slow-moving sections of streams.	Known to occur within 3 miles of the BSA. High potential to occur in Segments C and D because of presence of suitable upland and breeding habitat. Low potential to occur in Segments A and B and at the Encina Hub because suitable habitat is very limited. Likely absent in the remaining work areas due to a lack of breeding habitat.	L	L	H	H	L (EH) A (all other work areas)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Coast range newt *Taricha torosa torosa*	SSC	Valley-foothill hardwood and hardwood conifer forests, coastal scrub, mixed chaparral, non-native grassland, and mixed conifer habitat at elevations from sea level to 5,900 ft amsl. Breeding occurs from December to May in ponds and streams.	Low potential to occur in Segment D in/near open water. Likely absent in Segments A-C and other work areas because breeding habitat is not present.	A	A	A	L	A
Reptiles								
Western pond turtle *Actinemys marmorata*	SSC, NCCP	Western pond turtle is found in a variety of aquatic habitats including ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland habitats. This species prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. The western pond turtle may enter brackish water and even seawater (CAHerps 2013; Stebbins 2003).	The BSA is within the known range of this species. Low potential to occur in Segment D because of presence of an open water pond. Likely absent in Segments A-C and the other work areas due to lack of suitable aquatic habitat.	A	A	A	L	A
Silvery legless lizard *Anniella pulchra pulchra*	SSC	Occurs in areas with loose soil, particularly in sand dunes and or otherwise sandy soil. Generally found in leaf litter, under rocks, logs, or driftwood in oak woodland, chaparral, and desert scrub.	Moderate potential to occur in Segments A-D and at the Encina Hub where sandy soils occur but likely absent from the other work areas due to lack of habitat.	M	M	M	M	M (EH) A (all other work areas)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Belding's orange-throated whiptail *Aspidoscelis hyperythra beldingi*	SSC, NCCP	Open coastal sage scrub, chaparral, including chamise chaparral, and streamside growth with loose sandy soils, and revegetation sites.	Species was observed in Segment A. High potential to occur in Segments B, C, D, and the Encina Hub because of presence of suitable habitat. Low potential to occur at the remaining work areas due to marginal habitat quality.	P	H	H	H	H (EH) L (all other work areas)
Rosy boa *Charina trivirgata*	NCCP	Coastal sage scrub, chaparral, rocky areas.	The BSA is within the known range of this species, and species is known to occur within 1 mile of the BSA. Moderate potential to occur within Segments A, C and D because of presence of suitable habitat. Low potential to occur in Segment B because suitable habitat is fragmented and limited. Likely absent from the other work areas due to a lack of habitat.	M	L	M	M	A
Green turtle *Chelonia mydas*	FT	Beach, open ocean, coastal areas.	Absent. There is no potential habitat for this species in the BSA.	A	A	A	A	A
Red diamond rattlesnake *Crotalus ruber*	SSC, NCCP	Coastal sage scrub, desert scrub, open chaparral, woodland, grassland, and cultivated areas.	Known to occur within 3 miles of the BSA, and range of this species is within the BSA. High potential to occur in Segments A, C, and D because of presence of suitable habitat. Moderate potential to occur in Segment B, and the Encina Hub because suitable habitat is fragmented and/or limited. Likely absent at all other work areas due to lack of suitable habitat.	H	M	H	H	M (EH) A (all other work areas)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
San Diego banded gecko *Coleonyx variegatus abbotti*	NCCP	Coastal sage scrub, chaparral, rocky areas.	The BSA is within the known range of this species. Moderate potential to occur within all segments of the BSA because of presence of suitable habitat, but species more commonly found at higher elevations outside of the BSA. Likely absent from the other work areas due to a lack of rocky habitat.	M	M	M	M	A
San Diego ringneck snake *Diadophis punctatus similis*	NCCP	Associated with moist habitats including meadows, rocky hillsides, farmland, woodlands, grassland, chaparral, mixed conifer forest, and riparian areas.	The BSA is within the known range of this species, and species is known to occur within 1 mile of the BSA. High potential to occur within all segments of the BSA because of presence of suitable habitat. Low potential to occur at the Encina Hub due to limited potential habitat. Likely absent from all other work areas due to lack of moist habitat.	H	H	H	H	L (EH) A (all other work areas)
Coast horned lizard *Phrynosoma blainvillii*	SSC, NCCP	Scrubland, grassland, coniferous forest, and broadleaf woodland with areas for basking and loose soils.	The BSA is within the known range of this species, and species is known to occur within 1 mile of the BSA. High potential to occur within all Segments of the BSA and at the Encina Hub because of presence of suitable habitat. Low potential to occur in all other work areas due to marginal habitat quality.	H	H	H	H	H (EH) L (all other work areas)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Coronado skink *Plestiodon skiltonianus interparietalis*	SSC, NCCP	Grassland, open woodland, forest, and broken chaparral habitats, often associated with mesic areas.	The BSA is within the known range of this species, and species is known to occur within 3 miles of the BSA. High potential to occur within all segments of the BSA because of presence of suitable habitat. Low potential to occur at the Encina Hub due to limited habitat. Likely absent from all other work areas due to very limited or absent habitat.	H	H	H	H	L (EH) A (all other work areas)
Coast patch-nosed snake *Salvadora hexalepis virgultea*	SSC, NCCP	Found in chaparral and semi-arid areas with brushy or shrubby vegetation in canyons, plains and rocky hillsides.	The BSA is within the known range of this species. High potential to occur within all segments of the BSA because of presence of suitable habitat. Likely absent from the other work areas due to lack of habitat.	H	H	H	H	A
Two-striped garter snake *Thamnophis hammondii*	SSC, NCCP	Permanent fresh water, inhabiting streams, ponds, and lakes throughout their range (Stebbins 1985) and can even be found in temporary bodies of water such as vernal pools. The two-striped garter snake inhabits riparian areas during summer months and occupies adjacent coastal sage scrub and grasslands during the winter (Jennings and Hayes 1994).	The BSA is within the known range of this species, and species is known to occur within 5 miles of the BSA. High potential to occur within Segments C and D because of presence of suitable habitat. Moderate potential to occur in Segments A and B, and the Encina Hub site because suitable habitat is fragmented and of lower quality. Likely absent at all other work areas due to a lack of habitat.	M	M	H	H	M (EH) A (all other work areas)
California red-sided gartersnake *Thamnophis sirtalis infernalis*	SSC	Marsh and upland habitats near permanent water.	Moderate potential to occur in Segment D where there is an open water pond with freshwater marsh. Likely absent from the remainder of the BSA due to lack of suitable habitat.	A	A	A	M	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Birds								
Cooper's hawk *Accipiter cooperii*	WL, NCCP	Semi-dense woodlands, urban landscapes.	Species was observed in Segments A, C, and D. High potential to occur in Segment B and at all other work areas because of presence of suitable habitat.	P	H	P	P	H
Sharp-shinned hawk *Accipiter striatus*	WL	Open deciduous woodlands, forests, edges, parks, residential areas. Migrant and winter visitor.	There is no potential for this species to nest in the BSA as it is a migrant and winter visitor only. Moderate potential to forage in the BSA during migration and in winter.	M	M	M	M	M
Tricolored blackbird *Agelaius tricolor*	SSC, NCCP	Require cattail and bulrush marsh for breeding. Forage in pastures and croplands.	Not expected to nest or forage within the BSA because BSA and surrounding area are outside of known colony locations in San Diego County (Unitt 2004), and no CNDDB records were found within vicinity of BSA.	A	A	A	A	A
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	WL, NCCP	Prefer steep, grassy hillsides with moderate shrub cover, rock outcrops, and canyons. Also found nesting in coastal bluff scrub, low-growing serpentine chaparral, and sage scrub on rolling hillsides.	Species was observed in all segments and has high potential to occur in the Encina Hub due to the presence of suitable habitat. Likely absent from all other work areas due to lack of suitable habitat.	P	P	P	P	H (EH) A (all other work areas)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Grasshopper sparrow *Ammodramus savannarum*	SSC, NCCP	Prairie grasslands, pastures, old weedy fields, palmetto scrub, grain fields, and hayfields that have not been over-grazed and do not have dense scrub cover.	The BSA is within the known range of this species, and species is known to occur within 5 miles of the BSA. Moderate potential to occur in Segments A, B, and C due to the presence of potentially suitable habitat. Low potential to occur in Segment D and at the Encina Hub, Mission San Luis Rey Phase Transposition, Camino del Sur staging yard, Carmel Valley Road, and SR-56 staging yard because potential habitat is limited and/or fragmented. Likely absent from the remaining other work areas due to lack of habitat.	M	M	M	L	L (EH, MSL, CDS, CVR, SR-56) A (EV, SB, ST)
Bell's sage sparrow *Amphispiza belli belli*	WL, NCCP	Chaparral and coastal sage scrub along coastal lowlands, inland valleys, and in lower foothills of local mountains. Prefer partially burned areas or habitat that is not too dense or cluttered with leaf litter.	The BSA is within the known range of this species, and species is known to occur within 1 mile of the BSA. High potential to occur within all segments because of presence of suitable habitat. Low potential to occur at the Encina Hub due to limited habitat. Likely absent from all other work areas due to very limited/fragmented habitat or a lack of habitat.	H	H	H	H	L (EH) A (all other work areas)
Golden eagle *Aquila chrysaetos*	CFP, WL, BGEPA, NCCP	Require vast foraging areas in grassland, broken chaparral, or sage scrub. Nest in cliffs and boulders. In the County, wintering range does not differ greatly from breeding distribution. Uncommon resident.	Absent. No suitable habitat present within BSA or vicinity; no CNDDB records from BSA vicinity.	A	A	A	A	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Short-eared owl *Asio flammeus*	SSC	Coastal wetlands and grasslands. Primarily a winter visitor to the San Diego Bay and Tijuana River estuary (Unitt 2004).	Considered absent from the BSA as the species is primarily a winter visitor to San Diego County that only occurs at locations outside the BSA.	A	A	A	A	A
Long-eared owl *Asio otus*	SSC	Open forest and riparian woodland adjacent to grasslands or shrublands.	The BSA is within the known range of this species, but no CNDDB records found within vicinity of the BSA. Low potential to occur in Segments A, C, and D because of very limited habitat. Likely absent in Segment B and the other work areas because of a lack of suitable habitat.	L	A	L	L	A
Burrowing owl *Athene cunicularia*	SSC, NCCP	Open, well-drained grasslands, deserts, prairies, and agricultural areas.	The BSA is within the known range of this species, and species is known to occur within 1 mile of the BSA. Moderate potential to occur in Segments A, B, and D due to the presence of potentially suitable habitat. Low potential to occur in Segment C; at the Mission San Luis Rey Phase Transposition and Encina Hub; and at the Camino del Sur, Carmel Valley Road, and SR-56 staging yards because potential habitat is limited. Likely absent from the remaining other work areas due to lack of suitable habitat.	M	M	L	M	L (MSL, EH, CDS, CVR, SR-56) A (EV, SB, ST)
Redhead *Aythya americana*	SSC	Marshes and lakes.	Absent. There is no potential habitat for this species in the BSA.	A	A	A	A	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Brant *Branta bernicla*	SSC	Winters primarily in well-protected, shallow marine bays and estuaries with eel grass beds. Can use inland lakes and freshwater marshes as staging areas during spring and fall migration.	Low potential to stage at the open water pond in Segment D during spring and fall migration. Absent in all other segments and at the other work areas due to lack of habitat. There is some potential for this species to be observed in flight, however, during migration and winter.	A	A	A	L	A
Cackling goose *Branta hutchinsii leucopareia*	NCCP	Large lakes or bodies of fresh water.	Absent. There is no potential habitat for this species There is some potential for this species to be observed in flight, however, during migration and winter.	A	A	A	A	A
Ferruginous hawk *Buteo regalis*	WL, NCCP	Grasslands, agricultural fields, large foraging areas. Winter visitor.	Rare to uncommon winter visitor. Low potential to occur in all segments of the BSA and at all other work areas (except Evergreen Nursery staging yard) because of very limited or absent foraging habitat. Considered absent from the Evergreen Nursery staging yard due to lack of habitat.	L	L	L	L	A (EV) L (all other work areas)
Swainson's hawk *Buteo swainsoni*	ST, NCCP	Plains, range, open hills, sparse trees.	Absent. This species is a rare migrant in San Diego County with spring staging in the Borrego Valley. There is no potential for this species to occur in the BSA.	A	A	A	A	A
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	SSC, NCCP	Ranges from saguaro desert to coastal pacific slopes. Highly dependent on stands of cholla and prickly pear cactus for nesting.	The BSA is within the known range of this species, and species is known to occur within 3 miles of the BSA. Moderate potential to occur in all segments because of presence of suitable, but limited, habitat. Likely absent in the other work areas due to a lack of habitat.	M	M	M	M	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Northern cardinal *Cardinalis cardinalis*	WL	A species escaped from captivity in Mexico. An uncommon resident in Tijuana River Valley.	Likely absent from the BSA since it is so uncommon and occurs well outside the BSA.	A	A	A	A	A
Western snowy plover *Charadrius alexandrinus nivosus*	FT, SSC, NCCP	Sandy beaches, lagoon margins, tidal mud flats. Migrant and winter resident. Localized breeding.	Absent. There is no suitable habitat in the BSA for this species.	A	A	A	A	A
Mountain plover *Charadrius montanus*	SSC, NCCP	Grasslands, fields, valleys.	Absent. Species is extirpated from San Diego County (Unitt 2004).	A	A	A	A	A
Vaux's swift *Chateura vauxi*	SSC	Primarily the coastal lowland of San Diego County during migration where they may roost in chimneys or other man-made structures. Nests in old growth forests of the Pacific Northwest.	Species was observed in Segments C and D. High potential to occur in Segments A and B and at the other work areas because they are along the migration route.	H	H	P	P	H
Black tern *Chlidonias niger*	SSC	Nests on lakeshores and in marshes. In California, breeds in scattered areas in the Central Valley and northeastern portion of the State.	Absent. There is no potential for this species to nest within the BSA, although it may be observed in flight during migration.	A	A	A	A	A
Northern harrier *Circus cyaneus*	SSC, NCCP	Lowland habitats: wetlands, marshy meadows, boglands, pasturelands, wet grasslands, old fields, tundra, open riparian woodlands, freshwater marshes, brackish marshes. Dry uplands: upland prairies, mesic grassland, drained marshland, croplands, cold desert shrub-steppe.	High potential to occur in all segments and at all other work areas (except the Evergreen Nursery staging yard) because of presence of patches of suitable foraging and/or nesting habitat. Considered absent from the Evergreen Nursery staging yard due to lack of habitat.	H	H	H	H	H (all work areas except EV) A (EV)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Clark's marsh wren *Cistothorus palustris clarkae*	SSC	Restricted to freshwater and brackish marshes along and near the coast of San Diego County.	Occurs in Los Peñasquitos Canyon (Shuford and Gardali 2008). Moderate potential to occur in freshwater marsh in Segment D. Likely absent from all other segments and work areas due to lack of suitable habitat.	A	A	A	M	P (EH) A (all work areas except EH)
Olive-sided flycatcher *Contopus cooperi*	SSC	Uncommon summer visitor to coniferous woodlands in San Diego county. Uncommon in migration at lower elevations seeking out tall trees.	Absent in the BSA due to lack of habitat, although it could be observed in migration.	A	A	A	A	A
Black swift *Cypseloides niger*	SSC	Nests around waterfalls and sea cliffs; migrant only in San Diego County.	Absent. There is no potential habitat for this species in the BSA, although it may be observed in flight during migration.	A	A	A	A	A
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FC, SE	Extensive riparian woodlands. Summer resident. Very localized breeding.	Absent. There is no suitable nesting habitat for this species in the BSA.	A	A	A	A	A
Yellow warbler *Dendroica petechial brewsteri*	SSC	Riparian habitats usually in close proximity to water along streams and in wet meadows.	The BSA is within known range of this species. Low potential to occur in Segments A and B and at the Encina Hub because potentially suitable habitat is very limited and fragmented. Moderate potential to occur in Segments C and D due to the presence of suitably sized areas of potential habitat. Absent in all other work areas due to lack of habitat.	P~~L~~	L	P~~A~~	M	P~~L~~ (EH) A (all other work areas)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Reddish egret *Egretta rufescens*	NCCP	A non-breeding visitor to San Diego County in shallow water within mud tidal flats, salt ponds, lagoons, and occasionally within coastal beaches, sparsely vegetated freshwater marshes, and the shores of lake and reservoirs.	There is low potential for this species to occur in association with the open water pond and freshwater marsh in Segment D. Likely absent from all other segments and work areas due to lack of habitat. There is some potential for this species to be observed in flight during migration and winter.	A	A	A	L	A
White-tailed kite *Elanus leucurus*	CFP	Prefers riparian woodlands, oak groves, or sycamore groves adjacent to grassland.	Species is known to occur within 5 miles of the BSA. High potential to occur in Segments B and C due to the presence of preferred habitat. Moderate potential in Segments A and D due to more limited preferred habitat. Low potential to occur at the Encina Hub where riparian habitat occurs on and off-site along with grassland. Likely absent in the other work areas due to lack of potential habitat.	M	H	H	M	L (EH) A (all other work areas)
Southwestern willow flycatcher *Empidonax traillii extimus*	FE, SE, NCCP	Nests in extensive willow-dominated riparian forests and woodlands, occasionally oak woodlands. Rare spring and fall migrant, rare summer resident.	Absent. There is no suitable nesting habitat for this species in the BSA. There are no CNDDB records or other known occurrences from BSA vicinity. There is some potential for this species to be observed during migration.	A	A	A	A	A
California horned lark *Eremophila alpestris actia*	WL	Flat arid grasslands, open areas with short grass or plowed fields, grazed pastures, sandy desert floors, and coastal strands.	Species was observed in Segment D. High potential to occur in Segments A, B, and C, and at the other work areas (except Evergreen Nursery staging yard) because of presence of suitable habitat. Considered absent at the Evergreen Nursery staging yard due to lack of habitat.	H	H	H	P	H (all work areas except EV) A (EV)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Merlin *Falco columbarius*	WL	Seacoasts, tidal estuaries, grassland edges, weedy agricultural fields, and other semi-open habitats. Uncommon fall transient and rare winter visitor to California (Small 1994; Unitt 2004).	The BSA is within the known wintering range of this species. Moderate potential to occur in winter in all segments and at all other work areas (except Evergreen Nursery staging yard) because of the presence of suitable foraging habitat. Considered absent at the Evergreen Nursery staging yard due to lack of habitat.	M	M	M	M	M (all work areas except EV) A (EV)
Prairie falcon *Falco mexicanus*	WL	Nests inland on ledges, cliff faces, caves, earthen bluffs in badlands. Forages in grassland, agricultural fields, desert scrub. Uncommon winter resident and rare breeding resident in eastern San Diego County.	There is no potential for this species to occur in the BSA because it is outside the species' range in San Diego County. There is some potential for this species to be observed in flight, however, during migration and winter.	A	A	A	A	A
American peregrine falcon *Falco peregrinus anatum*	CFP, NCCP	Nests on cliff ledges, old raptor or raven nests, and man-made structures. Forages in open coastal areas, mud flats. Rare inland. Rare fall and winter resident, casual in late spring and early summer.	Low potential for this species to occur in the more coastal areas of the BSA in Segments C and D and at the Encina Hub. There are no CNDDB records or other known occurrences from BSA vicinity. Likely absent from Segments A and B and all other work areas due to distance from the coast and lack of habitat. There is some potential for this species to be observed in flight during migration and winter, however.	A	A	L	L	L (EH) A (all other work areas)
Gull-billed tern *Gelochelidon nilotica*	SSC	Nests in salt marshes and on beaches. Breeds on dikes of the salt works in southern San Diego Bay.	Absent. There is no suitable habitat for this species in the BSA. There is some potential for this species to be observed in flight, however, during migration and winter.	A	A	A	A	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
California Condor *Gymnogyps californicus*	FE, SE, FP	Forages, roosts, and nests in remote country. Nests in shallow caves and rock crevices on cliffs. Open grassland, oak savanna foothills.	Absent. Extirpated from San Diego County.	A	A	A	A	A
Bald eagle *Haliaeetus leucocephalus*	SE, BGEPA, CFP, NCCP	Rivers, lakes. Rare winter visitor in San Diego County to lakes in the foothills and mountains. Rare, fall migrant. Feed mainly on fish.	Absent. There is no potential for this species to occur in the BSA because it is too near the coast. There are no CNDDB records or other known occurrences from the BSA vicinity.	A	A	A	A	A
Yellow-breasted chat *Icteria virens*	SSC	Dense riparian habitat with well-developed shrub layer and an open canopy. Nesting habitat usually restricted to narrow border of streams, sloughs, and rivers.	The BSA is within known range of this species, and species is known to occur within 5 miles of the BSA. Low potential to occur in Segments A and B and at the Encina Hub because potentially suitable habitat is very limited and fragmented. Moderate potential to occur in Segments C and D due to the presence of suitably sized areas of potential habitat. Absent in all other work areas due to lack of habitat.	PL	L	M	M	PL (EH) A (all other work areas)
Least bittern *Ixobrychus exilis*	SSC	Brackish and freshwater marshes in the coastal lowland. Rare summer resident, rare in winter.	There is low potential for this species to occur in freshwater marsh in Segment D. There is no potential for this species to occur in the remainder of the BSA because potential habitat is extremely limited.	A	A	A	L	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Loggerhead shrike *Lanius ludovicianus*	SSC	Grasslands, open shrublands, and desert scrub.	Species was observed in Segment A at the Sycamore Substation. Moderate potential to occur in Segments B, C, and D and at the Encina Hub because the species is uncommon and occurs in low densities even in good habitat (Unitt 2004). Likely absent from the Evergreen Nursery staging yard due to lack of habitat. Low potential to occur in the remaining work areas due to very limited potential habitat.	P	M	M	M	M (EH) L (MSL, SB, ST, CDS, CVR, SR-56) A (EV)
California gull *Larus californicus*	WL	Common in San Diego County in winter. Occurs in coastal waters, lakes, ponds, and garbage dumps.	There is very low potential for this species to occur at the open water pond in Segment D. There is no potential for it to occur elsewhere in the BSA due to lack of habitat. There is some potential for this species to be observed in flight, however, in migration and in winter.	A	A	A	L	A
California black rail *Laterallus jamaicensis coturniculus*	ST, CFP	Tidal marshes, grassy marshes.	Absent. Extirpated from San Diego County; the latest CNDDB record from the vicinity is from 1952.	A	A	A	A	A
Wood stork *Mycteria americana*	SSC	Occurs in freshwater and estuarine wetlands, primarily nesting in cypress or mangrove swamps. Feeds in freshwater marshes, narrow tidal creeks, or flooded tidal pools.	Absent. No suitable habitat present in the BSA.	A	A	A	A	A
Long-billed curlew *Numenius americanus*	WL, NCCP	Tidal mud flats, salt marshes, bays. Breeds in grasslands. Fall and spring migrant, winter resident, rare in summer.	Absent. There is no potential habitat for this species in the BSA; however, there is some potential for this species to be observed in flight during migration and winter.	A	A	A	A	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Ashy storm-petrel *Oceanodroma homochroa*	SSC	Off-shore water habitat.	Absent from the BSA because its habitat is not present.	A	A	A	A	A
Osprey *Pandion haliaetus*	WL	Coast, lowland lakes, rarely foothills and mountain lakes. Uncommon fall/winter resident, rare in spring and summer. Fish are the primary prey item.	Low potential for this species to forage the open water pond in Segment D and nest nearby (nests are generally placed near water). Likely absent from the rest of the BSA due to lack of habitat. There are no CNDDB records or other known occurrences from the BSA vicinity. There is also low potential for this species to be observed in flight year-round.	A	A	A	L	A
Harris' hawk *Parabuteo unicinctus*	WL	Semi-open desert scrub, desert wash, and desert riparian habitats doe nesting and foraging.	Absent. Extirpated from San Diego County.	A	A	A	A	A
Bryant's savannah sparrow *Passerculus sandwichensis alaudinus*	SSC	Endemic species, restricted to a narrow coastal strip from Humboldt Bay south to the Morro Bay area.	Absent. San Diego County is outside the range of this species.	A	A	A	A	A
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	SE, NCCP	Salt marshes, lagoons dominated by *Salicornia*. Resident.	Absent. There is no suitable nesting or foraging habitat for this species in the BSA. There are no known nesting occurrences within BSA or vicinity, and CNDDB records are from immediate coast.	A	A	A	A	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Large billed savannah Sparrow *Passerculus sandwichensis rostratus*	SSC, NCCP	Winters in coastal areas and marshes.	Absent. There is no suitable nesting habitat for this species in the BSA. There are no CNDDB records or other known occurrences from the BSA vicinity, and this species is very rare in San Diego County.	A	A	A	A	A
American white pelican *Pelecanus erythrorhynchos*	SSC	Lagoons, bays, estuaries, freshwater ponds, and inland lakes during spring migration. Migrant and winter visitor in San Diego.	There is very low potential for this species to occur in the open water pond in Segment D. There is no potential for it to occur in the rest of the BSA due to lack of habitat. There is some potential for this species to be observed in flight during migration and winter, however.	A	A	A	L	A
California brown pelican *Pelecanus occidentalis californicus*	CFP NCCP	Coastal salt water, open ocean; rare vagrant inland. Non-breeding, year-round visitor.	Absent. There is no potential habitat for this species in the BSA. There are no CNDDB records or other known occurrences of the species from BSA vicinity. There is some potential for this species to be observed in flight, however.	A	A	A	A	A
Double-crested cormorant *Phalacrocorax auritus*	WL	Bays, lagoons, estuaries. Non-breeding year-round visitor.	There is low potential for this species to occur in the open water pond in Segment D. There is no potential for this species to occur in the remainder of the BSA because no suitable habitat is present. There are no CNDDB records or other known occurrences from the BSA vicinity. There is some potential, however, for this species to be observed in flight.	A	A	A	L	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Short-tailed albatross Phoebastria albatrus	FE, SSC	Off-shore habitat.	Absent. Off-shore habitat not present in the BSA.	A	A	A	A	A
White-faced ibis *Plegadis chihi*	WL, NCCP	Freshwater ponds, irrigated fields, brackish lagoons. Migrant and winter visitor, rare in summer. Very localized breeding.	There is low potential for this species to occur in freshwater marsh/open water in Segment D. There is no potential for this species to occur in the remainder of the BSA because no suitable habitat is present. There are no CNDDB records or other known occurrences from the BSA vicinity. There is some potential, however, for this species to be observed in flight.	A	A	A	L	A
Coastal California gnatcatcher *Polioptila californica californica*	FT, SSC, NCCP	Coastal sage scrub, maritime succulent scrub. Resident.	Species is present in the BSA and was observed in Segments A, B, C, and D. High potential to occur at the Encina Hub due to presence of suitable habitat. Very low potential to occur at Mission San Luis Rey Transposition and the Stonebridge and Stowe staging yards due to very limited habitat. Absent from the Evergreen Nursery, Camino del Sur, Carmel Valley Road, and SR-56 staging yards due to lack of habitat.	P	P	P	P	P ~~H~~ (EH, SR-56) L (MSL, SB, ST) A (EV, CDS, CVR ~~SR-56~~)
Oregon vesper sparrow *Pooecetes gramineus affinis*	SSC	Generally uncommon winter visitor on open ground with little vegetation. Favored places in San Diego County include Warner and San Felipe valleys (Unitt 2004).	Low potential to occur in the BSA due to species being uncommon. Considered absent at the Evergreen Nursery staging yard due to lack of habitat.	L	L	L	L	L (all work areas except EV) A (EV)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Purple martin *Progne subis*	SSC	Rare and declining summer visitor that breeds in montane coniferous woodland in San Diego County.	Absent. There is no potential habitat for this species in the BSA.	A	A	A	A	A
Cassin's auklet Ptychoramphus aleuticus	SSC	Off-shore habitat.	Absent. Off-shore habitat not present in the BSA.	A	A	A	A	A
Vermilion flycatcher *Pyrocephalus rubinus*	SSC	Agricultural areas, parks, ponds, rivers, ranchlands, open riparian areas, savannahs and arid scrub, often associated with surface water. Rare fall and spring migrant, winter visitor, summer resident. Breeding rare, typically inland sites within San Diego County.	Absent. The BSA is outside the known breeding range of this species. There are no CNDDB records from the BSA vicinity.	A	A	A	A	A
Light-footed Ridgeway's (clapper) rail *Rallus obsoletus (longirostris) levipes*	FE, SE, CFP, NCCP	Salt marshes primarily dominated marshes by cordgrass.	Absent. There is no suitable nesting habitat for this species in the BSA. The nearest CNDDB records are from the immediate coast outside the BSA.	A	A	A	A	A
Bank swallow *Riparia riparia*	ST	Steep riverbanks, gravel pits. Nesting colonies extirpated from San Diego County. Rare migrant.	Absent from the BSA because it does not nest within San Diego County. There is some potential for this species to be observed in flight during migration, however.	A	A	A	A	A
Black skimmer *Rynchops niger*	SSC	Mud flats, dikes. Resident. Common in south San Diego Bay. Localized breeding.	Absent. There is no suitable nesting habitat for this species in the BSA. There are no CNDDB records or other known nesting occurrences from the BSA vicinity. There is some potential, however, for this species to be observed in flight during migration and winter.	A	A	A	A	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Western bluebird *Sialia mexicana*	NCCP	Open coniferous and deciduous woodlands; wooded riparian areas; grasslands; farmlands; and burned, moderately logged, and edge areas with scattered trees, snags, or other suitable perch/nest sites.	Species observed in Segment A. Moderate potential to occur in Segments, B, C, and D and at the other work areas (except Evergreen Nursery) because of presence of some suitable habitat. Considered absent from the Evergreen Nursery staging yard due to a lack of habitat.	P	M	M	M	M (all work areas except EV) A (EV)
California least tern *Sternula antillarum browni*	FE, SE, CFP, NCCP	Bays, estuaries, lagoons, shoreline. Resident. Localized breeding.	Absent. There is no suitable habitat for this species in the BSA. There are no known nesting occurrences within BSA or vicinity, and the nearest CNDDB records are from the immediate coast outside the BSA. There is some potential, however, for this species to be observed in flight during migration and winter.	A	A	A	A	A
California spotted owl *Strix occidentalis occidentalis*	SSC	Dense oak and/or coniferous woodland. Localized resident. Known from elevations above 2,500 ft amsl.	Absent. There is no suitable habitat for this species in the BSA.	A	A	A	A	A
Elegant tern *Thalasseus elegans*	WL, NCCP	Mud flats, sandbars, dunes, bays, lagoons. Summer resident. Localized breeding. Breeds at the salt works in southern San Diego Bay.	Absent. There is no suitable habitat for this species in the BSA. There is, however, some potential for this species to be observed in flight during migration and winter.	A	A	A	A	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Least bell's vireo *Vireo bellii pusillus*	FE, SE, NCCP	Riparian habitat with a preference for willow-dominated woodland or scrub, *Baccharis* scrub, mixed oak/willow woodland, mesquite woodland, and elderberry scrub.	The BSA is within known range of this species, and species is known to occur within 1 mile of the BSA. High potential to occur in, or in proximity to, the Encina Hub because of presence of suitable habitat and CNDDB records for the species. Moderate potential to occur in, or within proximity to, Segments C and D because of presence of moderately suitable nesting habitat. Low potential to occur in Segments A and B due to limited potential habitat. Absent from all other work areas because suitable habitat is not present.	L	L	M	M	H (EH) A (all other work areas)
Mammals								
Pallid bat *Antrozous pallidus*	SSC	Grassland, shrubland, woodlands, forests, including mixed conifer forests, open and dry habitats. Prefer rocky areas for roosting, caves, crevices, and mines.	The BSA is within known range of this species. Moderate potential to occur in all segments and in all other work areas (except the Evergreen Nursery site) as potentially suitable habitat for foraging is present. Considered absent from the Evergreen Nursery staging yard due to lack of habitat.	M	M	M	M	M (all work areas except EV) A (EV)
Ringtail *Bassariscus astutus*	CFP	Steep rocky slopes adjacent to streams, woodland, riparian, arid scrubland habitat with rocky terrain.	The BSA is within the known range of this species. However, there is low potential for it to occur in all segments because of presence of very limited or marginally suitable habitat. Absent at the other work areas due to lack of habitat.	L	L	L	L	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Dulzura pocket mouse *Chaetodipus californicus femoralis*	SSC, NCCP	Primarily associated with mature chaparral. Has been trapped in mule fat scrub and is known to occur in coastal sage scrub.	The BSA is within the known range of this species. High potential to occur in Segments A, C, and D because of presence of potentially suitable habitats. Moderate potential to occur in Segment B and at the Encina Hub because potential habitats are limited. Low potential to occur at all other work areas due to very limited and/or marginal quality habitat.	H	L	H	H	M (EH) L (all other work areas)
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	SSC, NCCP	Coastal sage scrub, grassland, sage scrub grassland ecotones, sparse chaparral, rocky substrates, loams, and sandy loams.	Known range is within the BSA, and species is known to occur within 5 miles of the BSA. High potential to occur in all segments and at the Encina Hub because of presence of suitable habitats. Low potential to occur at all other work areas due to very limited and/or marginal quality habitat.	H	H	H	H	H (EH) L (all other work areas)
Mexican long-tongued bat *Choeronycteris mexicana*	SSC	Known only from San Diego County in California. Most records in urban habitat (CDFG 1990). Rare visitor that likes desert canyons, arid mountain ranges. Roosts by day in caves, mines or buildings (Bats of San Diego County, 2006).	The BSA is within the known migratory range of this species, and species is known to occur within 5 miles of the BSA. However, the species is considered to have low potential to occur in the BSA because it is a rare visitor.	L	L	L	L	L
Townsend's big-eared bat *Corynorhinus townsendii*	SCT, SSC	Reported in a wide variety of habitats from sea level to more than 10,000 ft amsl. Distribution is strongly correlated with the availability of caves and cave-like roosting habitat, including abandoned mines (Western Bat Working Group 2005b).	The BSA is within the known range of this species. Low potential to occur in all segments and at all other work areas because potential roost sites are limited.	L	L	L	L	L

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Stephens' kangaroo rat *Dipodomys stephensi*	FE, ST, NCCP	Grassland, open areas.	Absent. The BSA is outside the known range of species.	A	A	A	A	A
Spotted bat *Euderma maculatum*	SSC	Rare bat in arid desert, scrub, open forest habitats with vertical cliffs or canyons near water.	The BSA is within the known range of this species, and species is known to occur within 5 miles of the BSA. Low potential to occur or absent throughout the BSA due to very limited habitat or lack of habitat.	L	L	L	L	L (EH, MSL, SB, ST) A (EV, CDS, CVR, SR-56)
Western mastiff bat *Eumops perotis*	SSC	Conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban areas. Roost in rugged, rocky areas with crevices and in buildings.	The BSA is within the known range of this species, and species is known to occur within 3 miles of the BSA. Moderate potential to occur because of presence of moderately suitable habitat.	M	M	M	M	M
Western red bat *Lasiurus blossevillii*	SSC	Locally common in some areas of California. Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Not found in desert areas. Forages from high above treetops to nearly ground level (CDFG 1990).	The BSA is within the known range of this species, and species is known to occur within 1 mile of the BSA (Los Peñasquitos Canyon Preserve). Moderate potential to occur in all segments and in all work areas (except Evergreen Nursery staging yard) because of presence of potentially suitable habitat. Considered absent from the Evergreen Nursery staging yard due to lack of habitat.	M	M	M	M	M (all work areas except EV) A (EV)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Western yellow bat *Lasiurus xanthinus*	SSC	Rare visitor to San Diego County (Bats of San Diego County 2014). Occurs in desert palms and desert riparian habitats. Believed to be expanding its range with the increased usage of ornamental palms in landscaping (Western Bat Working Group 2005a).	Likely absent from the BSA due to lack of habitat and rarity of occurrence.	A	A	A	A	A
Lesser long-nosed bat *Leptonycteris yerbabuenae*	FE	Sonoran desert scrub, semi-desert grassland,s and lower oak woodlands.	Absent. The BSA is outside the range of this species.	A	A	A	A	A
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	SSC, NCCP	Open and semi-open habitats including coastal sage scrub and open chaparral areas.	The BSA is within the known range of this species, and species is known to occur within 1 mile of the BSA. High potential to occur in all segments and at the Encina Hub because of presence of suitable habitat. Absent at the Evergreen Nursery staging yard due to lack of habitat. Low potential to occur at other work areas due to limited or marginally suitable habitat.	H	PH	H	H	H (EH) L (MSL, SB, ST, CDS, CVR, SR-56) A (EV)
San Diego desert woodrat *Neotoma lepida intermedia*	SSC, NCCP	Coastal sage scrub, chaparral, and piñon-juniper woodland with rock outcrops, cactus thickets, and dense undergrowth.	The BSA is within the known range of this species, and species is known to occur within 5 miles of the BSA. High potential to occur in Segments A, C, and D because of presence of potentially suitable habitat. Low potential to occur in Segment B and the Encina Hub because potential habitat is limited. Likely absent in all other work areas due to lack of habitat.	H	L	H	H	L (EH) A (all other work areas)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Pocketed free-tailed bat *Nyctinomops femorosaccus*	SSC	A colonial species that roosts primarily in crevices of rugged cliffs, high rocky outcrops, and slopes. It has been found in a variety of plant associations, including desert shrub and pine-oak forests. May also roost in buildings, caves, and under roof tiles. Prefers rocky desert areas.	Low potential to occur in Segments A-D. Likely absent in all other work areas due to lack of habitat.	L	L	L	L	A
Big free-tailed bat *Nyctinomops macrotis*	SSC	Rare in California; confirmed records are from urban San Diego County California. Feeds primarily over water sources; roosts in buildings, caves, tree holes, high cliff crevices, and rock outcrops. Prefers rugged, rocky canyons (CDFG 1990).	The BSA is within the known range of this species, and species is known to occur within 5 miles of the BSA. Moderate potential to occur in Segment D because of presence of open water. Low potential to occur in remainder of the segments due to limited potential habitat. Likely absent from the other work areas due to lack of habitat.	L	L	L	M	A
Southern mule deer *Odocoileus hemionus*	NCCP	Large, undisturbed tracts of chaparral, coastal sage scrub, and mixed grassland/habitats.	Species was observed in Segment A. High potential to occur in Segments C and D because of presence of suitable habitat. Moderate potential to occur in Segment B because of presence of marginal habitat. Likely absent from the other work areas due to isolation from undisturbed tracts of land and previous disturbance.	P	M	H	H	A

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas
Southern grasshopper mouse *Onychomys torridus ramona*	SSC, NCCP	Grassland, sparse coastal sage scrub, low arid scrub, and semi-scrub vegetation.	The BSA is within the known range of this species. High potential to occur in all segments and at the Encina Hub because of presence of suitable habitat. Considered absent from the Evergreen Nursery staging yard due to lack of habitat. Low potential to occur at the remaining other work areas due to very limited habitat and/or its level of disturbance.	H	PH	H	H	H (EH) L (MSL, SB, ST, CDS, CVR, SR-56) A (EV)
Pacific pocket mouse *Perognathus longimembris pacificus*	FE, SSC, NE	Open coastal sage scrub; fine, alluvial sands within approximately 2.5 miles of the ocean (USFWS 1998). Currently known from Dana Point Headlands in Orange County, California and 3 locations on Marine Corps Base Camp Pendleton in San Diego County (Spencer 2005).	Absent in Segments A-D and all other work areas because they either are outside the range of the species or they do not contain potential habitat.	A	A	A	A	A
Mountain lion *Puma concolor*	NCCP	Remote and hilly mountain areas, occasionally found in urban/wild land interface. Require streams or rock pools, large foraging areas, rocky shelters or caves for denning.	The BSA is within the known range of this species. Moderate potential to occur in all segments because of presence of moderately suitable habitat. Likely absent from all other work areas due to their locations near development and/or general disturbed nature.	M	M	M	M	A
American badger *Taxidea taxus*	SSC, NCCP	Uncommon resident in shrub steppes, agricultural fields, open woodland forests, large grass and sagebrush meadows and valleys, grasslands, savannas, montane meadows, sparse scrublands, and deserts. Prefer areas with friable soils for burrowing.	The BSA is within the known range of this species. Low potential to occur in all segments and at the Encina Hub because, while suitable habitat and soils are present, the species is uncommon. Likely absent in all other work areas due to lack of habitat or marginally suitable habitat.	L	L	L	L	L (EH) A (all other work areas)

Species	Status	Primary Habitat Association	Potential to Occur/Comments	Potential to Occur				
				Seg. A	Seg. B	Seg. C	Seg. D	Other Work Areas

[1] Status:

NCCP = Covered Species in the SDG&E Natural Community Conservation Plan (NCCP)

NE = SDG&E Narrow Endemic Species

QCB HCP = Covered under the SDG&E Low-Effect Habitat Conservation Plan (HCP) for the Quino Checkerspot Butterfly (QCB)

Federal/State Listed:

- FE: Federally listed endangered
- FT: Federally listed threatened
- FC: Candidate for federal endangered species list
- SE: State listed endangered
- ST: State listed threatened
- SCT: Candidate for State listed threatened

Other:

- BGEPA = Bald and Golden Eagle Protection Act Covered Species
- CFP = California Department of Fish and Wildlife Fully Protected Species
- SSC = California Department of Fish and Wildlife Species of Special Concern
- WL = California Department of Fish and Wildlife Watch List

[2] Potential to occur:

P (present) – Species detected during Project surveys

A (absent) – Suitable habitat not present

L (low potential) – Suitable habitat present, highly disturbed

M (moderate potential) – Suitable habitat present, moderately disturbed

H (high potential) – Suitable habitat present, and species known to occur within the vicinity

[3] Other work areas includes Encina Hub (EH), Mission San Luis Rey Phase Transposition (MSL), Evergreen Nursery staging yard (EV), SR-56 staging yard (SR-56), Stonebridge staging yard (SB), Stowe staging yard (ST), Camino del Sur (CDS) staging yard, and Carmel Valley Road (CVR) staging yard. Note that the work area is specified when the potential for a species to occur is different than other work areas. If no work area is specified, the potential to occur is the same in all work areas.

References

Bats of San Diego County. 2006. Mexican Long-tongued bat (*Choeronycteris mexicana*). http://home.earthlink.net/~cmsquare/mexlngtg.html

_____. 2014. Southern Yellow Bat (*Lasiurus xanthinus*) http://home.earthlink.net/~cmsquare/yellobat.html

CDFG (California Department of Fish and Game). 1990. California's Wildlife. Volumes II (Birds) and III (Mammals). Edited by David C. Zeiner, William F. Laudenslayer, Jr., Kenneth Mayer, and Marshall White. State of California, Resources Agency, Sacramento, CA.

CDFW (California Department of Fish and Wildlife). 2013. California Natural Diversity Database. http://www.dfg.ca.gov/biogeodata/cnddb/

Center for Biological Diversity and David Hogan. 2004. Petition to List the Hermes Copper Butterfly (*Hermelycaena [Lycaena] hermes*) as Endangered Under the Endangered Species Act. http://ecos.fws.gov/docs/petitions/11620/161.pdf

Holland, R. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game. The Resource Agency. October 1986.

Reiser, Craig H. 2001. Rare Plants of San Diego County. Aquafir Press.

SDNHM (San Diego Natural History Museum). 2013. http://www.sdnhm.org/

Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Spencer, Wayne D. 2005. Recovery Research for the Endangered Pacific Pocket Mouse: An Overview of Collaborative Studies. USDA Forest Service Gen. Tech. Rep. PSW-GTR-195. http://www.fs.fed.us/psw/publications/documents/psw_gtr195/psw_gtr195_2_107_Spencer.pdf

Unitt, Philip. 2004. *San Diego County Bird Atlas*. No. 39. Proceedings of the San Diego Society of Natural History. October 31.

USFWS (U.S. Fish and Wildlife Service). 1998. Recovery Plan for the Pacific Pocket Mouse (*Perognathus longimembris pacificus*). September 28.

_____. 2009. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for the Quino Checkerspot Butterfly (*Euphydryas editha quino*). Federal Register / Vol. 74, No. 115 / Wednesday, June 17. Available at http://www.gpo.gov/fdsys/pkg/FR-2009-06-17/pdf/E9-13800.pdf#page=1.

_____. 2014. Quino Checkerspot Butterfly Survey Guidelines. December 15. http://www.fws.gov/carlsbad/TEspecies/Documents/QuinoDocs/Quino%20Survey%20Guidelines_version%2015DEC2014.pdf

Western Bat Working Group. 2005a. *Lasiurus xanthinus*/western yellow bat species account. Available at http://wbwg.org/western-bat-species/.

_____. 2005b. Species Accounts, *Corynorhinus townsendii*, Townsend's Big-eared Bat. Available at http://www.wbwg.org/speciesinfo/species_accounts/vespertilonidae/coto.pdf.

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Table G-4 Impacts to Individual Special-status Plants from the Project Alternatives

Holland Vegetation Community	Status[1]	Alt. 1	Alt. 2a	Alt. 2b	Alt. 3	Alt. 4a	Alt. 4b	Alt. 5
Coast Barrel Cactus	2B.1	-	-	-	2	-	-	-
Decumbent Goldenbush	1B.2	35	67 ~~55~~	52	-	20	20	-
Graceful Tarplant	4.2	-	4	-	-	-	-	-
Palmer's grapplinghook	4.2	-	270	-	-	-	-	-
San Diego Sunflower	4.2	-	-	-	-	1	1	1
Small-flowered Morning-glory	4.2	-	1	1	-	-	-	-
Spineshrub	2B.1	11	64 ~~63~~	27	100	-	-	-
Threadleaf Brodiaea[2]	FT, SE, 1B.1	0.003 (acres)	0.1 (acres)	0.06 (acres)	-	-	-	-

Notes:

[1] Status:

Federal/State Listed:

FT: Federally listed as threatened

SE: State-listed as endangered

California Rare Plant Ranks:

1B: Plants Rare, Threatened, or Endangered in California and Elsewhere

2B: Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere

4: Plants of Limited Distribution – A Watch List

0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

0.2 – Fairly threatened in California (20–80% occurrences threatened/moderate degree and immediacy of threat)

[2] A habitat assessment for thread-leaved brodiaea was conducted to determine the area of potential suitable habitat (Busby 2014e). The effect to this species is in acreage and not in number of individuals because no species were observed in Proposed Project work areas; however, highly suitable potential habitat was observed.

Table G-5 Impacts to Vegetation Communities for Project Alternatives

NCCP Vegetation Community	Holland Vegetation Community	Alt. 1	Alt. 2a	Alt. 2b	Alt. 3	Alt. 4a	Alt. 4b	Alt. 5
Permanent Impacts (acres)								
Coastal Sage Scrub	Diegan Coastal Sage Scrub	0.02	0.05	0.13	-	-	-	-
	Diegan Coastal Sage Scrub - Disturbed	-	-	-	-	0.01	0.01	-
	Coastal Sage Scrub – Revegetated	0.09	0.03	-	-	-	-	0.03
Chaparral	Chamise Chaparral	-	-	-	0.01	0.06	0.06	-
	Chamise Chaparral - Disturbed	-	-	-	0.02	-	-	-
	Southern Mixed Chaparral	-	-	-	0.10	-	-	0.07
	Southern Mixed Chaparral - Disturbed	-	-	-	-	-	-	-
	Scrub Oak Chaparral	-	-	-	0.02	-	-	-
	Southern Maritime Chaparral	-	-	-	-	<0.01	<0.01	-
Grassland	Native Grassland	0.10	0.13	0.13	-	-	-	-
	Nonnative Grassland	-	0.09	-	-	-	-	-
Total		**0.21**	**0.30**	**0.26**	**0.15**	**0.07**	**0.07**	**0.10**

NCCP Vegetation Community	Holland Vegetation Community	Alt. 1	Alt. 2a	Alt. 2b	Alt. 3	Alt. 4a	Alt. 4b	Alt. 5
Temporary Impacts (acres)								
Coastal Sage Scrub	Diegan Coastal Sage Scrub	0.19	0.19	0.22	-	0.09	0.09	~~0.38~~ 0.18
	Diegan Coastal Sage Scrub - Disturbed	-	-	<0.01	-	0.01	0.01	~~0.27~~ 0.47
	Diegan Coastal Sage Scrub - Restored	-	-	-	-	-	-	0.15
	Coastal Sage Scrub – Revegetated	0.03	0.13	0.08	-	0.26	0.26	0.41
	Baccharis Scrub	-	-	-	-	-	-	<0.01
Chaparral	Chamise Chaparral	-	-	-	0.08	0.26	0.26	0.02
	Chamise Chaparral - Disturbed	-	-	-	0.15	-	-	-
	Southern Mixed Chaparral	-	-	-	0.13	<0.01	<0.01	0.12
	Southern Mixed Chaparral - Disturbed	-	-	-	-	-	-	<0.01
	Scrub Oak Chaparral	-	-	-	0.20	<0.01	<0.01	-
	Southern Maritime Chaparral	-	-	-	-	<0.01	<0.01	-
	Chaparral - Mixed	-	-	-	-	-	-	0.58
Grassland	Native Grassland	0.15	0.26	0.22	-	-	-	~~-~~0.01
	Nonnative Grassland	-	0.09	-	0.12	-	-	~~0.84~~ 0.63

NCCP Vegetation Community	Holland Vegetation Community	Alt. 1	Alt. 2a	Alt. 2b	Alt. 3	Alt. 4a	Alt. 4b	Alt. 5
~~Freshwater Marsh~~	~~Coastal and Valley Freshwater Marsh~~	-	-	-	-	-		~~0.01~~
~~Riparian Forest~~	~~Southern Riparian Forest~~	-	-	-	-	-		~~0.02~~
Riparian Scrub	Mulefat Scrub	-	-	-	-	-	-	<0.01
	Southern Willow Scrub	-	-	-	-	-	-	0.03
Riparian Woodland	Southern Riparian Woodland	-	-	-	0.34	-	-	~~0.07~~ 0.04
Eucalyptus Forest	Eucalyptus Woodland	-	-	-	-	-	-	0.91
Maritime Succulent Scrub	Maritime Succulent Scrub	-	-	-	-	0.01	0.01	0.02
Total		**0.37**	**0.67**	**0.52**	**1.02**	**0.63**	**0.63**	**0.63**
Access Road Impacts (acres)								
Coastal Sage Scrub	Diegan Coastal Sage Scrub	-	-	-	-	-	-	~~0.02~~ 0.23
	Diegan Coastal Sage Scrub - Disturbed	-	-	-	-	-	-	~~0.76~~ 0.19
	Coastal Sage Scrub – Revegetated	-	-	-	-	-	-	0.07
	Baccharis Scrub	-	-	-	-	-	-	<0.01
Chaparral	Chamise Chaparral	-	-	-	-	-	-	<0.01
	Southern Mixed Chaparral	-	-	-	-	-	-	0.07
	Southern Mixed Chaparral - Disturbed	-	-	-	-	-	-	<0.01
Grassland	Nonnative Grassland	-	-	-	-	-	-	~~1.96~~ 0.27

NCCP Vegetation Community	Holland Vegetation Community	Alt. 1	Alt. 2a	Alt. 2b	Alt. 3	Alt. 4a	Alt. 4b	Alt. 5
Riparian Scrub	Mulefat Scrub	-	-	-	-	-	-	0.01
	Southern Willow Scrub	-	-	-	-	-	-	<0.01
Total		-	-	-	-	-	-	**0.85**

APPENDIX G
BIOLOGICAL RESOURCES SUPPORT INFORMATION

FIGURES

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Overview Map)

Legend

- Map Frame
- Substation
- Staging Yard
- City Boundary
- Unincorporated County Boundary

Proposed Project Alignment

- Segment A
- Segment B
- Segment C
- Segment D

San Luis Rey Substation
Encina Substation
Encina Hub
Carmel Valley Staging Yard
Evergreen Nursery Staging Yard
SR-56 Staging Yard
Camino Del Sur Staging Yard
Chicarita Substation
Stowe Staging Yard
Stonebridge Staging Yard
Peñasquitos Substation
Sycamore Canyon Substation
Mission - San Luis Rey Phase Transposition
Mission Substation

Pacific Ocean

City of Oceanside
City of Vista
City of Carlsbad
City of San Marcos
City of Escondido
City of Encinitas
City of Solana Beach
City of Del Mar
City of San Diego
City of Poway
City of Santee
City of El Cajon
City of La Mesa

Map Extent Indicator

United States
Mexico

Scale = 1:200,000
0 1 2 Miles
Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 1 of 45)

Legend

Work Area Impacts

- Existing/Permanent (Access Roads)

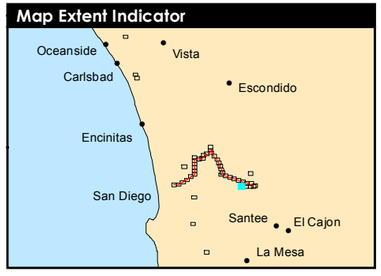
Rare and Special-Status Plants

- Western Dichondra

Vegetation Communities

- Southern Mixed Chaparral - Disturbed (SMC-D)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 2 of 45)

Legend

Work Area Impacts

- Existing/Permanent (Access Roads)

Rare and Special-Status Plants

- Coast Barrel Cactus
- Western Dichondra

Vegetation Communities

- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Southern Mixed Chaparral - Disturbed (SMC-D)
- Bare Ground (BG)
- Developed Lands (DEV)

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 3 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

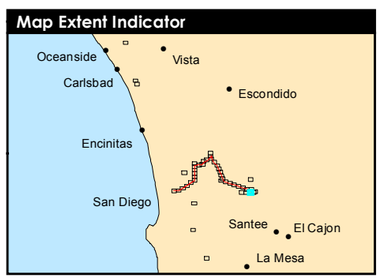
Rare and Special-Status Plants

- Western Dichondra

Vegetation Communities

- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Southern Mixed Chaparral (SMC)
- Southern Mixed Chaparral - Disturbed (SMC-D)
- Nonnative Grassland (NNG)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 4 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Top)
- Existing Structures (To Remove)

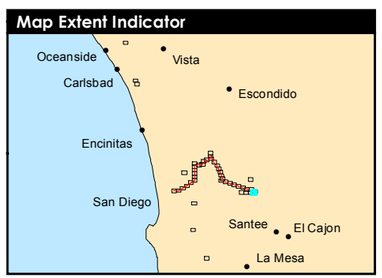
Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)
- Substation

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Southern Mixed Chaparral (SMC)
- Southern Mixed Chaparral - Disturbed (SMC-D)
- Nonnative Grassland (NNG)
- Southern Willow Scrub (SWS)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 5 of 45)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend

- Proposed Structures
- Existing Structures (To Remain)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)
- Substation

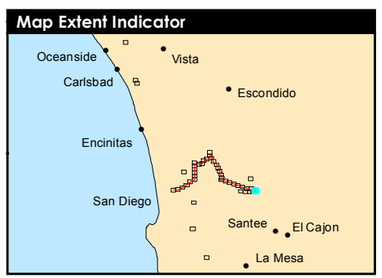
Rare and Special-Status Plants

- San Diego Sunflower

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Baccharis Scrub - Disturbed (BS-D)
- Southern Mixed Chaparral (SMC)
- Southern Mixed Chaparral - Disturbed (SMC-D)
- Southern Willow Scrub (SWS)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 6 of 45)

Legend

- Proposed Structures
- Existing Structures (To Top)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

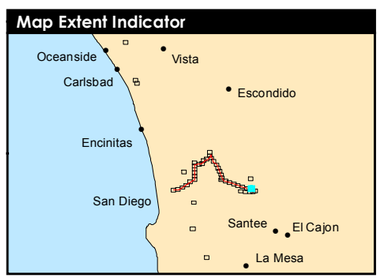
Rare and Special-Status Plants

- San Diego Sunflower
- Western Dichondra

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Baccharis Scrub - Disturbed (BS-D)
- Southern Mixed Chaparral (SMC)
- Nonnative Grassland (NNG)
- Southern Willow Scrub (SWS)
- Ornamental (ORN)
- Bare Ground (BG)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 7 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

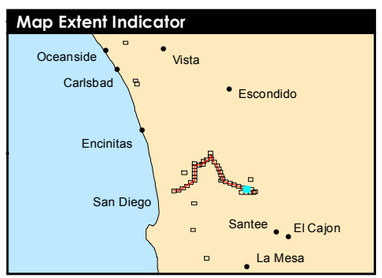
Rare and Special-Status

- Coast Barrel Cactus
- San Diego Marsh-elder
- Western Dichondra

Vegetation

- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Coastal Sage - Chaparral Scrub (CSCS)
- Southern Mixed Chaparral (SMC)
- Southern Mixed Chaparral - Disturbed (SMC-D)
- Mulefat Scrub (MFS)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 8 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

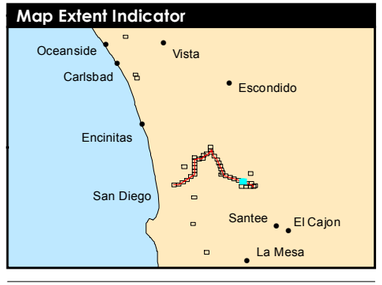
Rare and Special-Status Plants

- Coast Barrel Cactus
- San Diego Marsh-elder
- San Diego Sunflower

Vegetation Communities

- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Chamise Chaparral - Disturbed (CC-D)
- Southern Mixed Chaparral (SMC)
- Southern Mixed Chaparral - Disturbed (SMC-D)
- Mulefat Scrub (MFS)
- Southern Willow Scrub (SWS)
- Southern Coast Live Oak Riparian Forest (SCLORF)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 9 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

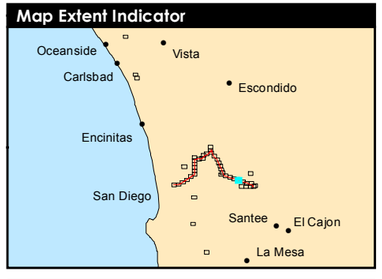
Rare and Special-Status Plants

- Coast Barrel Cactus
- San Diego Sunflower

Vegetation Communities

- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Coastal Sage - Chaparral Scrub (CSCS)
- Chamise Chaparral (CC)
- Chamise Chaparral - Disturbed (CC-D)
- Southern Mixed Chaparral (SMC)
- Southern Mixed Chaparral - Disturbed (SMC-D)
- Scrub Oak Chaparral (SOC)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 10 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

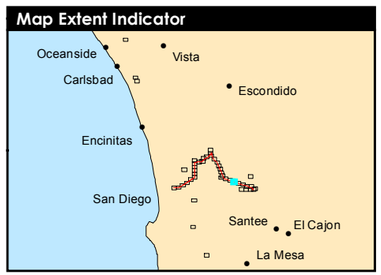
Rare and Special-Status

- Coast Barrel Cactus
- Nuttall's Scrub Oak
- San Diego Marsh-elder

Vegetation

- Diegan Coastal Sage Scrub (DCSS)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Chamise Chaparral (CC)
- Chamise Chaparral - Disturbed (CC-D)
- Southern Mixed Chaparral (SMC)
- Southern Mixed Chaparral - Disturbed (SMC-D)
- Scrub Oak Chaparral (SOC)
- Southern Willow Scrub (SWS)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 11 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

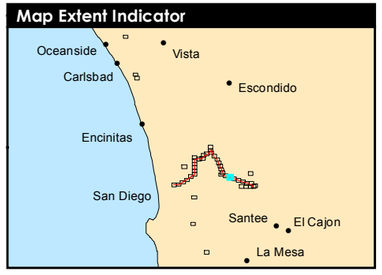
Rare and Special-Status

- Nuttall's Scrub Oak
- San Diego Marsh-elder

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Chamise Chaparral (CC)
- Scrub Oak Chaparral (SOC)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 12 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

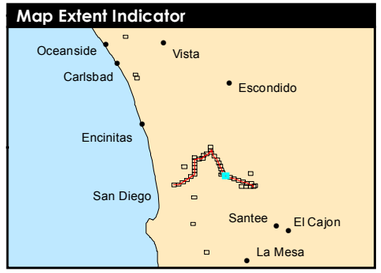
Rare and Special-Status

- Graceful Tarplant
- Nuttall's Scrub Oak

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Chamise Chaparral (CC)
- Chamise Chaparral - Disturbed (CC-D)
- Scrub Oak Chaparral (SOC)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 13 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

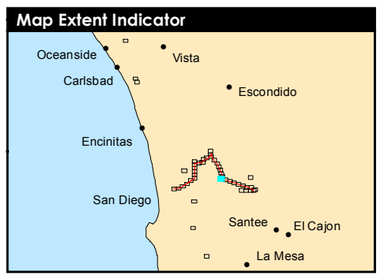
Rare and Special-Status

- Palmer's Sagewort
- San Diego Marsh-elder
- San Diego Sunflower
- Wart-stemmed Ceanothus

Vegetation

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Southern Mixed Chaparral (SMC)
- Scrub Oak Chaparral (SOC)
- Southern Riparian Scrub (SRS)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 14 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

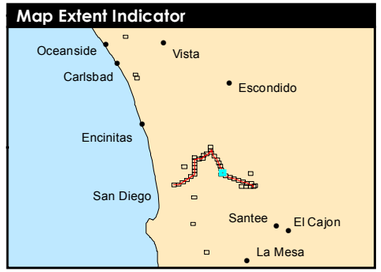
Rare and Special-Status

- Graceful Tarplant
- Nuttall's Scrub Oak
- Palmer's Sagewort
- San Diego Marsh-elder
- San Diego Sunflower
- Spineshrub

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Southern Mixed Chaparral (SMC)
- Scrub Oak Chaparral (SOC)
- Southern Riparian Scrub (SRS)
- Southern Coast Live Oak Riparian Forest (SCLORF)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 15 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

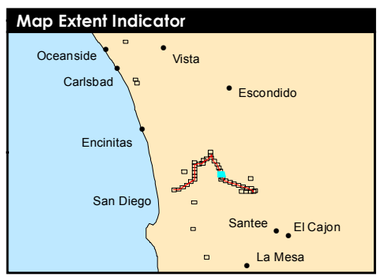
Rare and Special-Status Plants

- Coast Barrel Cactus
- Graceful Tarplant
- Palmer's grapplinghook
- San Diego Sunflower
- Spineshrub

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Nonnative Grassland (NNG)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 16 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)
- Substation

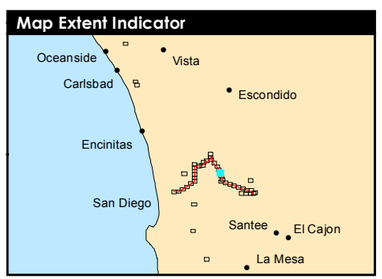
Rare and Special-Status

- Coast Barrel Cactus
- Decumbent Goldenbush
- Spineshrub

Vegetation

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Nonnative Grassland (NNG)
- Southern Willow Scrub (SWS)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 17 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

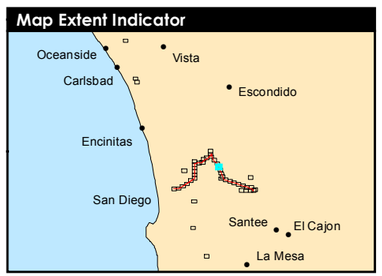
Rare and Special-Status Plants

- Coast Barrel Cactus
- Decumbent Goldenbush
- Southwestern Spiny Rush

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Nonnative Grassland (NNG)
- Freshwater Marsh (FWM)
- Southern Willow Scrub (SWS)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 18 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Rare and Special-Status Plants

- Coast Barrel Cactus
- Decumbent Goldenbush
- Palmer's grapplinghook
- Small-flowered Morning-glory
- Spineshrub
- Threadleaf brodiaea (Point)
- Threadleaf Brodiaea (Polygon)

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Native Grassland (NG)
- Nonnative Grassland (NNG)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator

Scale = 1:3,000

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Aerial Imagery: 5/30/2014

Date Created: 1/7/2016

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 19 of 45)

Legend

- Proposed Structures
- Existing Structures (To Top)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Rare and Special-Status Plants

- Coast Barrel Cactus
- Decumbent Goldenbush
- Palmer's grapplinghook
- Spineshrub
- Western Dichondra

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Native Grassland (NG)
- Nonnative Grassland (NNG)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator

Scale = 1:3,000

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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalBoulder, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 20 of 45)

Legend

- Proposed Structures
- Splice Vault
- Existing Structures (To Top)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

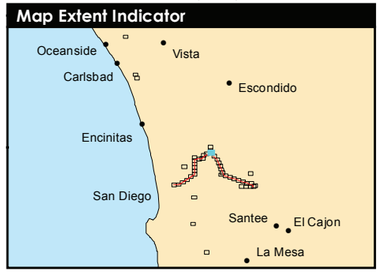
Rare and Special-Status

- Coast Barrel Cactus
- Decumbent Goldenbush
- Graceful Tarplant
- Palmer's grapplinghook
- San Diego Marsh-elder
- San Diego Sunflower
- Small-flowered Morning-glory
- Spineshrub
- Threadleaf Brodiaea

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Coastal Sage - Chaparral Scrub (CSCS)
- Native Grassland (NG)
- Nonnative Grassland (NNG)
- Mulefat Scrub (MFS)
- Southern Willow Scrub (SWS)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 1/7/2016

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 21 of 45)

Legend

- Proposed Structures
- Splice Vault
- Existing Structures (To Top)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Rare and Special-Status Plants

- Coast Barrel Cactus
- Decumbent Goldenbush
- Graceful Tarplant
- Palmer's grapplinghook
- Small-flowered Morning-glory
- Spineshrub
- Threadleaf Brodiaea

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Native Grassland (NG)
- Nonnative Grassland (NNG)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator

Scale = 1:3,000

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Aerial Imagery: 5/30/2014

Date Created: 1/7/2016

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 22 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Vegetation Communities

- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

DIST
DIST
DCSS-D
P41A
R44
DIST
DEV
DEV
DIST
Run Of The Knolls
Entrada De Luz E

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Extent Indicator

Scale = 1:3,000
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Aerial Imagery: 5/30/2014
Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 23 of 45)

Legend

- Splice Vault

Work Area Impacts

- Temporary (All Other Work Areas)

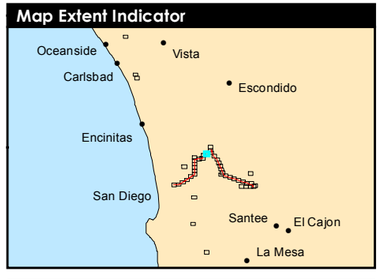
Rare and Special-Status Plants

- Decumbent Goldenbush
- Palmer's grapplinghook
- San Diego Sunflower
- Spineshrub

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Native Grassland (NG)
- Nonnative Grassland (NNG)
- Southern Willow Scrub (SWS)
- Ornamental (ORN)
- Bare Ground (BG)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 24 of 45)

Legend

- Splice Vault

Work Area Impacts

- Temporary (All Other Work Areas)

Rare and Special-Status Plants

- Decumbent Goldenbush
- Small-flowered Morning-glory

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Nonnative Grassland (NNG)
- Southern Willow Scrub (SWS)
- Tamarisk Scrub (TAM)
- Ornamental (ORN)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Note: Only a 2.3 acre portion of the Camino Del Sur site would be used as a staging yard.

Carmel Valley Staging Yard

Camino Del Sur Staging Yard

V5

V6

Camino Del Sur

Carmel Valley

Claymore Ct

Celtic Ct

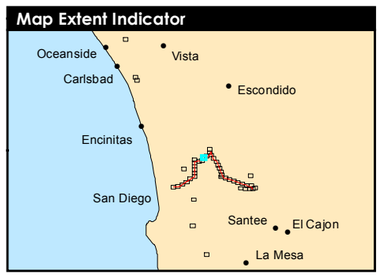
Donaker St

Adobe Bluffs Dr

DIST DEV NNG SWS DCSS-D ORN CSS-R DCSS TAM

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 25 of 45)

Legend

- Splice Vault

Work Area Impacts

- Temporary (All Other Work Areas)

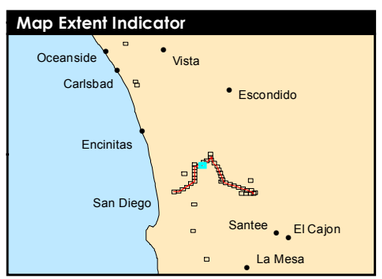
Rare and Special-Status Plants

- Decumbent Goldenbush
- San Diego Marsh-elder
- Small-flowered Morning-glory
- Southwestern Spiny Rush
- Spineshrub

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Nonnative Grassland (NNG)
- Alkali Marsh - Revegetated (AM-R)
- Southern Willow Scrub (SWS)
- Tamarisk Scrub (TAM)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Bare Ground (BG)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 26 of 45)

Legend

- Splice Vault

Work Area Impacts

- Temporary (All Other Work Areas)

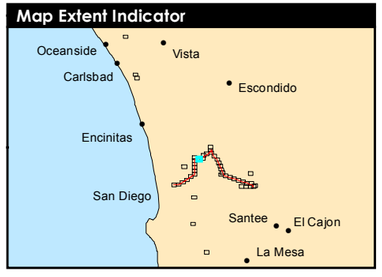
Rare and Special-Status Plants

- Decumbent Goldenbush
- San Diego Marsh-elder
- Spineshrub

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Nonnative Grassland (NNG)
- Southern Willow Scrub (SWS)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Bare Ground (BG)
- Developed Lands (DEV)

Map Extent Indicator



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Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 27 of 45)

Note: Only a 3.5 acre portion of the Evergreen Nursery would be used as a staging yard.

Evergreen Nursery Staging Yard

Farms View Ct
Mira Zanja Corte
Va Abertura
Clarkview Ln
Rancho Santa Fe Lakes Dr
Carmel Valley Rd
Collins Ranch Ter
Collins Ranch Pl
Collins Ranch Ct
Caminito Vi

V10
P42
P45

Legend

- Proposed Structures
- Splice Vault
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Rare and Special-Status

- Nuttall's Scrub Oak
- Summer Holly

Vegetation

- Southern Mixed Chaparral (SMC)
- Nonnative Grassland (NNG)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator

Scale = 1:3,000
0 100 200 Feet
Aerial Imagery: 5/30/2014
Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 28 of 45)

Legend

- Proposed Structures
- Splice Vault
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

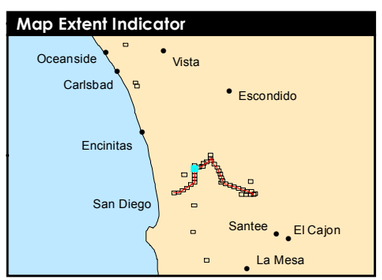
Rare and Special-Status

- San Diego Marsh-elder

Vegetation

- Coastal Sage Scrub - Revegetated (CSS-R)
- Nonnative Grassland (NNG)
- Freshwater Marsh (FWM)
- Tamarisk Scrub (TAM)
- Ornamental (ORN)
- Bare Ground (BG)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 29 of 45)

Legend

- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

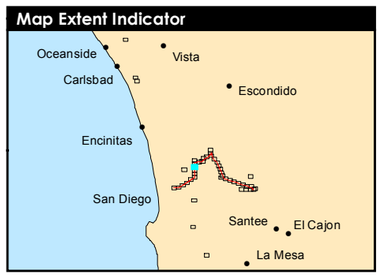
Rare and Special-Status

- Coast Barrel Cactus
- Decumbent Goldenbush
- Del Mar Mesa Sand Aster
- Nuttall's Scrub Oak
- Palmer's Sagewort
- San Diego Marsh-elder
- San Diego Sunflower
- Spineshrub

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Coastal Sage - Chaparral Scrub (CSCS)
- Chamise Chaparral (CC)
- Chamise Chaparral - Disturbed (CC-D)
- Scrub Oak Chaparral (SOC)
- Nonnative Grassland (NNG)
- Southern Riparian Scrub (SRS)
- Mulefat Scrub (MFS)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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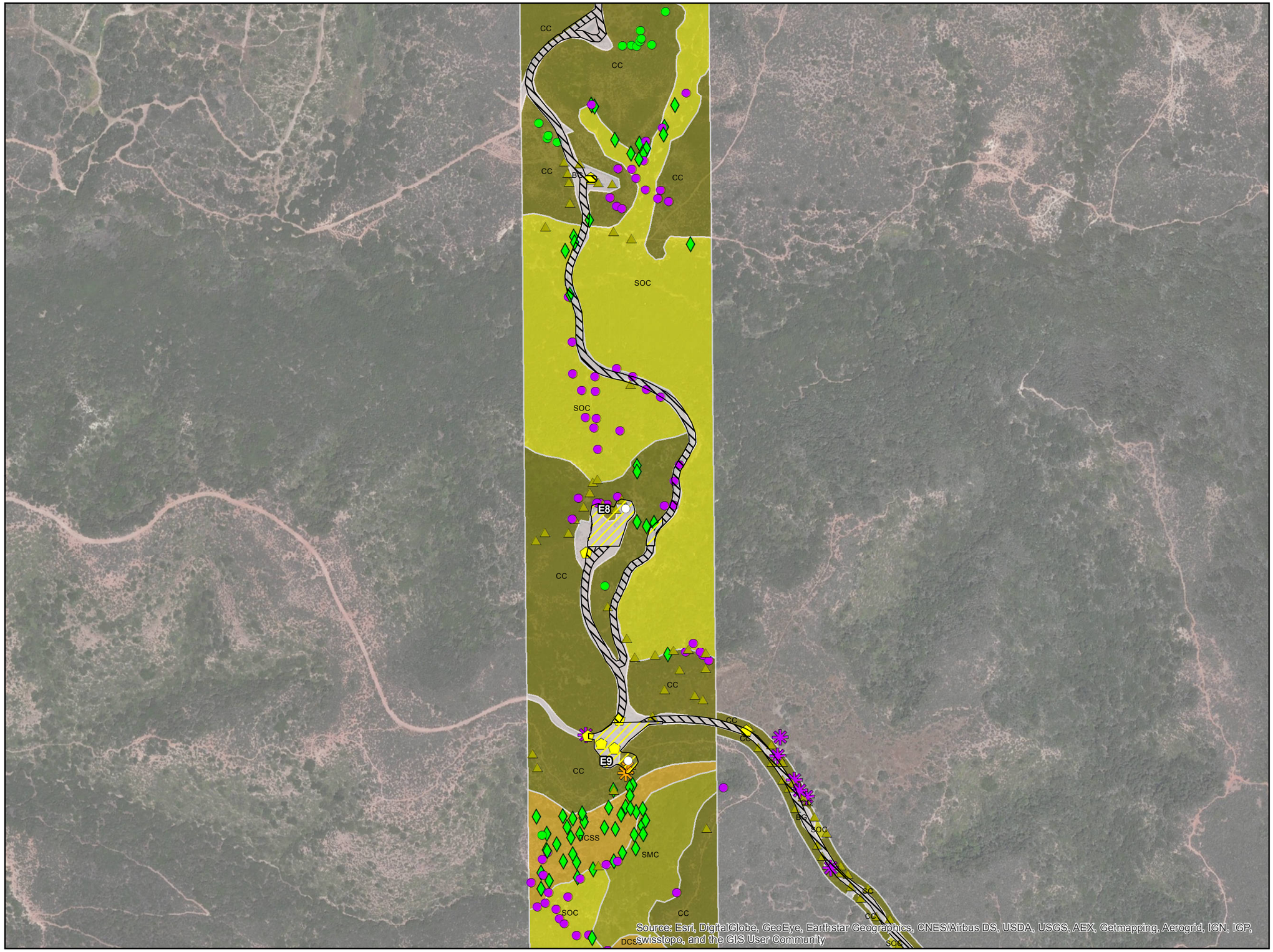
Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 30 of 45)

Legend

- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Rare and Special-Status

- Coast Barrel Cactus
- Decumbent Goldenbush
- Graceful Tarplant
- Nuttall's Scrub Oak
- San Diego Button-celery
- Spineshrub
- Summer Holly

Vegetation

- Diegan Coastal Sage Scrub (DCSS)
- Chamise Chaparral (CC)
- Southern Mixed Chaparral (SMC)
- Scrub Oak Chaparral (SOC)
- Bare Ground (BG)

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 31 of 45)

Legend

- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Rare and Special-Status

- Ashy Spikemoss
- Coast Barrel Cactus
- Decumbent Goldenbush
- Del Mar Manzanita
- Del Mar Mesa Sand Aster
- Long-spined Spineflower
- Nuttall's Scrub Oak
- Spineshrub
- Summer Holly

Vegetation

- Diegan Coastal Sage Scrub (DCSS)
- Chamise Chaparral (CC)
- Southern Mixed Chaparral (SMC)
- Scrub Oak Chaparral (SOC)
- Bare Ground (BG)
- Disturbed Habitat (DIST)

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 32 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

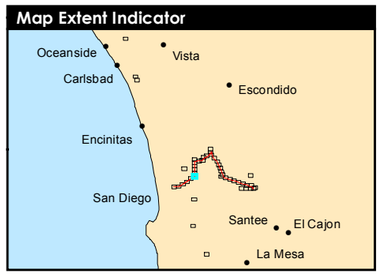
Rare and Special-Status Plants

- Ashy Spikemoss
- Coast Barrel Cactus
- Del Mar Manzanita
- Nuttall's Scrub Oak
- Palmer's grapplinghook
- San Diego Marsh-elder
- Spineshrub
- Summer Holly

Vegetation Communities

- Chamise Chaparral (CC)
- Chamise Chaparral - Disturbed (CC-D)
- Southern Mixed Chaparral (SMC)
- Scrub Oak Chaparral (SOC)
- San Diego Mesa Vernal Pool (SDMVP)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 33 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Rare and Special-Status Plants

- Coast Barrel Cactus
- Decumbent Goldenbush
- Del Mar Manzanita
- Nuttall's Scrub Oak
- Palmer's grapplinghook
- Spineshrub
- Summer Holly
- Western Dichondra

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Chamise Chaparral (CC)
- Chamise Chaparral - Disturbed (CC-D)
- Southern Mixed Chaparral (SMC)
- Scrub Oak Chaparral (SOC)
- Native Grassland (NG)
- Freshwater Marsh (FWM)
- Open Water (OW)
- Southern Willow Scrub (SWS)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 34 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

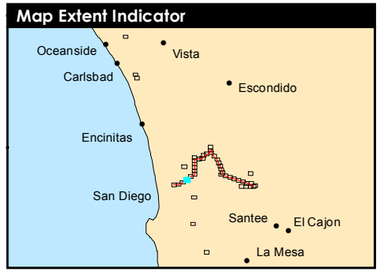
Rare and Special-Status Plants

- Ashy Spikemoss
- Coast Barrel Cactus
- Nuttall's Scrub Oak
- Palmer's grapplinghook
- Robinson's pepper-grass
- San Diego Sunflower
- Seaside Cistanthe
- Spineshrub
- Summer Holly

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Coastal Sage - Chaparral Scrub (CSCS)
- Chamise Chaparral (CC)
- Southern Mixed Chaparral (SMC)
- Scrub Oak Chaparral (SOC)
- Nonnative Grassland (NNG)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

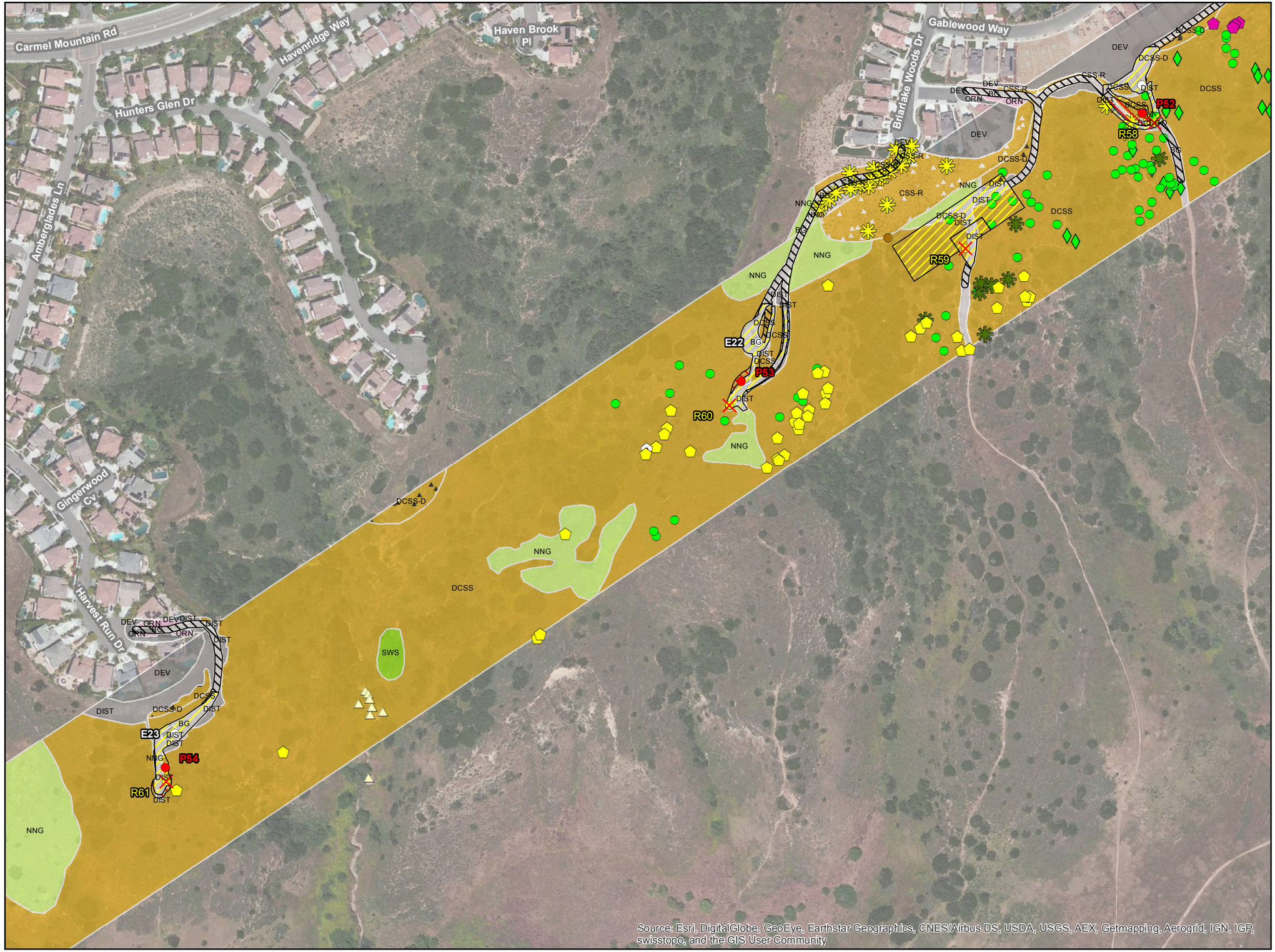
0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 35 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

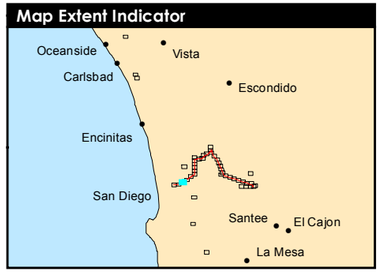
Rare and Special-Status Plants

- Coast Barrel Cactus
- Decumbent Goldenbush
- Palmer's Sagewort
- Palmer's grapplinghook
- San Diego Sunflower
- Seaside Cistanthe
- Small-flowered Morning-glory
- Spineshrub
- Wart-stemmed Ceanothus

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Nonnative Grassland (NNG)
- Southern Willow Scrub (SWS)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 36 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

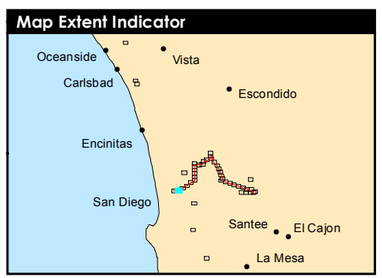
Rare and Special-Status

- Coast Barrel Cactus
- Decumbent Goldenbush
- Graceful Tarplant
- Palmer's grapplinghook
- Wart-stemmed Ceanothus

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Coastal Sage - Chaparral Scrub (CSCS)
- Native Grassland (NG)
- Nonnative Grassland (NNG)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 37 of 45)

Legend

- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)
- Substation

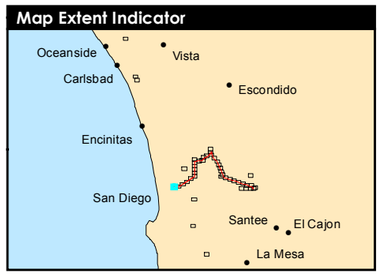
Rare and Special-Status

- Ashy Spikemoss
- Coast Barrel Cactus
- Nuttall's Scrub Oak
- San Diego Button-celery
- San Diego Sunflower
- Torrey Pine
- Western Dichondra

Vegetation

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- San Diego Mesa Vernal Pool (SDMVP)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 38 of 45)

Legend

- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Rare and Special-Status

- Ashy Spikemoss
- Seaside Cistanthe
- Western Dichondra

Vegetation

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Native Grassland (NG)
- Nonnative Grassland (NNG)
- Southern Riparian Scrub (SRS)
- Mulefat Scrub (MFS)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

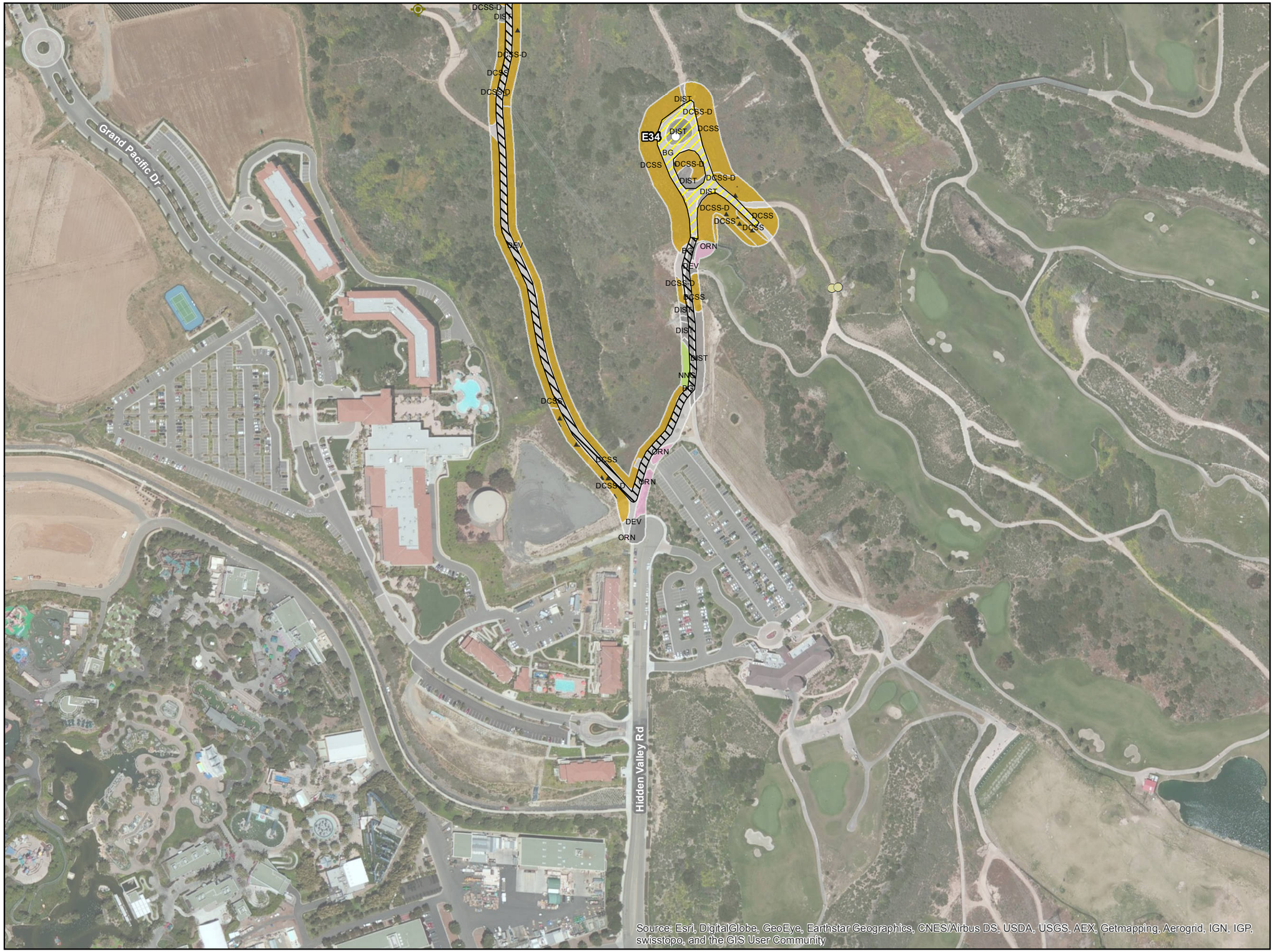
Cannon Rd
Whitman Way
Faraday Ave
Grand Pacific Dr
E38
E35

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Extent Indicator

Scale = 1:3,000
0 100 200 Feet
Aerial Imagery: 5/30/2014
Date Created: 9/4/2015

PANORAMA



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 39 of 45)

Legend

- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

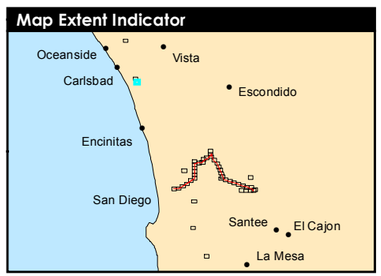
Rare and Special-Status

- Ashy Spikemoss
- Western Dichondra

Vegetation

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Nonnative Grassland (NNG)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 40 of 45)

Legend

- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Native Grassland (NG)
- Nonnative Grassland (NNG)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 41 of 45)

Legend

- Existing Structures (To Remain)

Work Area Impacts

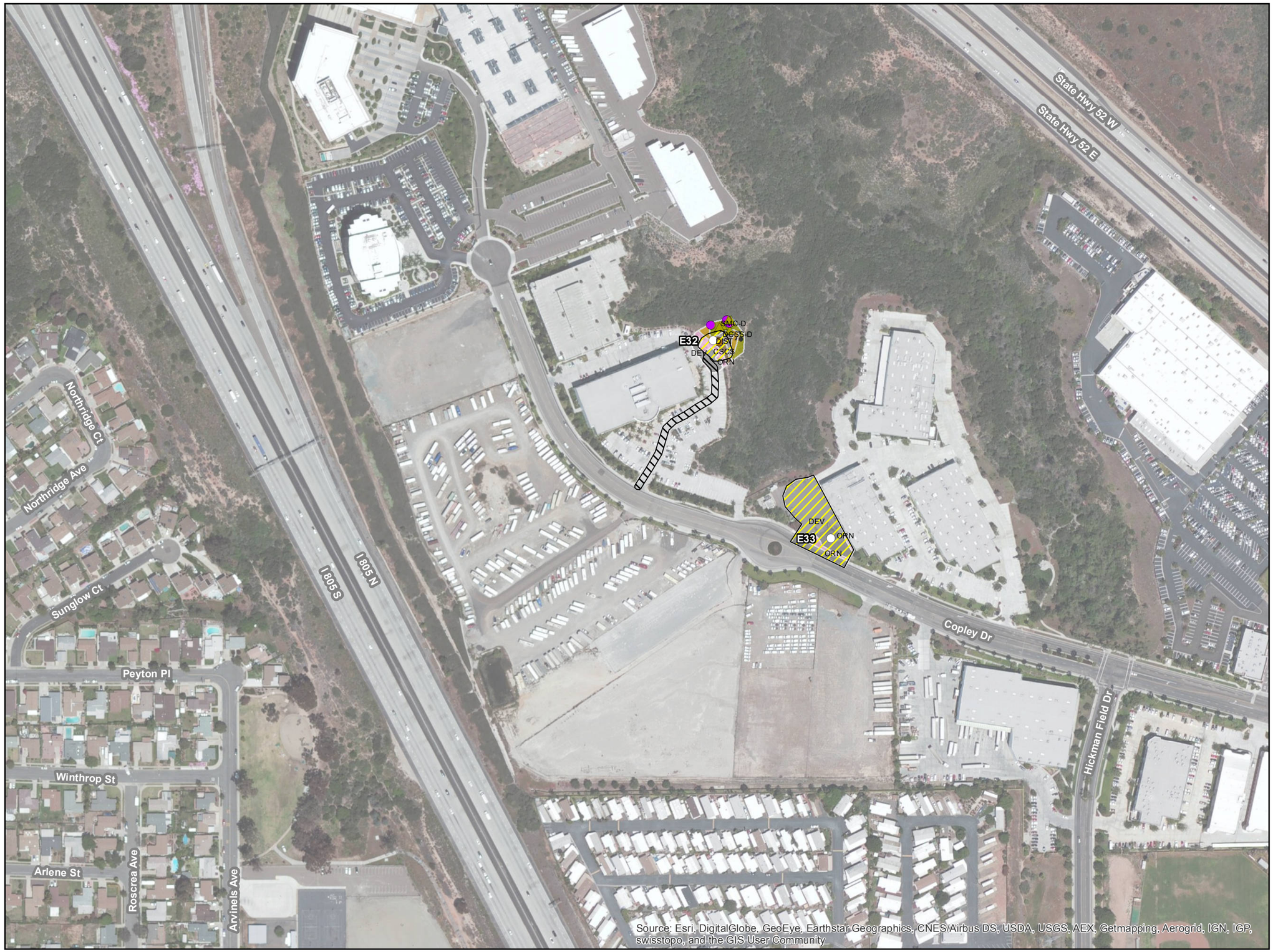
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Rare and Special-Status Plants

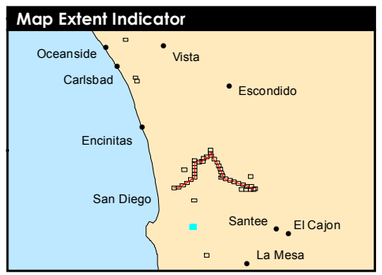
- Nuttall's Scrub Oak
- Summer Holly
- Wart-stemmed Ceanothus

Vegetation Communities

- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage - Chaparral Scrub (CSCS)
- Southern Mixed Chaparral - Disturbed (SMC-D)
- Ornamental (ORN)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)



Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 42 of 45)

Legend

Work Area Impacts

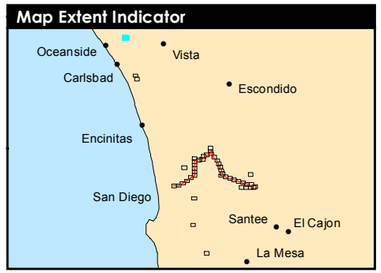
- Temporary (All Other Work Areas)
- Substation

San Luis Rey Substation

Tonopah St
Ely St
A St
Jibsail St
Starboard Cir
Sea Ridge Rd
Mesa Dr
Buffum Dr
Boussock Ln
Pear Tree Ln
Bartlett Ave
Pear Blossom Ave
Pear Blossom Pl
Pear Blossom Dr
Pear Blossom Cir
County Hwy S11
Leeward Ct
Compass Rd
Mainsail Rd
Bowsprit Dr
Harrison St

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 43 of 45)

Legend

Work Area Impacts

- Temporary (All Other Work Areas)
- Substation

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

N

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 44 of 45)

Legend

Work Area Impacts

- Temporary (All Other Work Areas)

Rare and Special-Status Plants

- Decumbent Goldenbush
- Torrey Pine

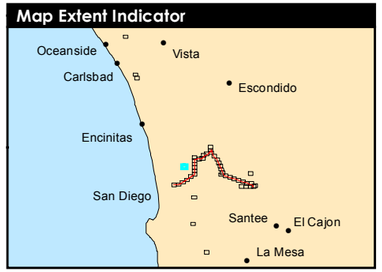
Vegetation Communities

- Nonnative Grassland (NNG)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Porter Creek Rd
Deer Park Way
Rabbit Ridge Rd
Flintwood Way
Edgewood Bend Ct
Carmel Valley Rd
SR-56 Staging Yard
Exit 3
State Hwy 56 W
State Hwy 56 E
ORN
DEV
DIST
BG
NNG

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Extent Indicator



Scale = 1:3,000
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Aerial Imagery: 5/30/2014
Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-1: Proposed Project Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 45 of 45)

Legend

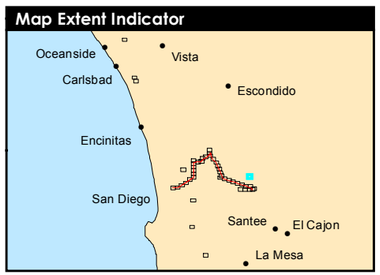
Work Area Impacts

- Temporary (All Other Work Areas)

Vegetation Communities

- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Disturbed Habitat (DIST)

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Aquatic Habitat and Jurisdictional Waters within the Biological Survey Area (Overview Map)

Legend

- Map Frame

Proposed Project Alignment

- Segment A
- Segment B
- Segment C
- Segment D
- Substation
- Staging Yard

San Luis Rey Substation
41
Encina Substation
Encina Hub
37
38
Camino Del Sur Staging Yard
22
21
20
23
24
25
26
27
28
29
30
31
32
33
34
35
36
SR-56 Staging Yard
42
43
Torrey Sante Fe Staging Yard
Chicarita Substation
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
Chicarita South Staging Yard
Stowe Staging Yard
44
Stonebridge Staging Yard
Sycamore Canyon Substation
Peñasquitos Substation
39
Mission - San Luis Rey Phase Transposition
40
Mission Substation
45

Scale = 1:200,000
Miles
0 1 2
Aerial Imagery: 2014
Date Created: 6/11/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 1 of 45)

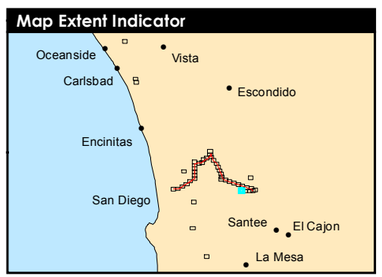
Legend

Biological Survey Area

Work Area Impacts

Existing/Permanent (Access Roads)

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 2 of 45)

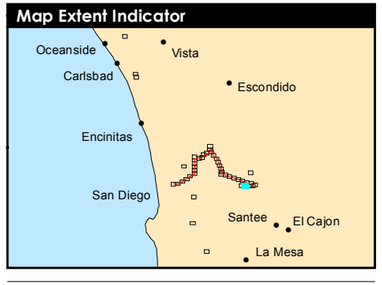
Legend

Biological Survey Area

Work Area Impacts

Existing/Permanent (Access Roads)

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

N

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 3 of 45)

Legend

- Biological Survey Area

Basin Assessment Points (Busby 2015)

- Identified Basin

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Unvegetated Streambed

RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

P3

R3

Spring Canyon Rd

Map Extent Indicator

Scale = 1:3,000

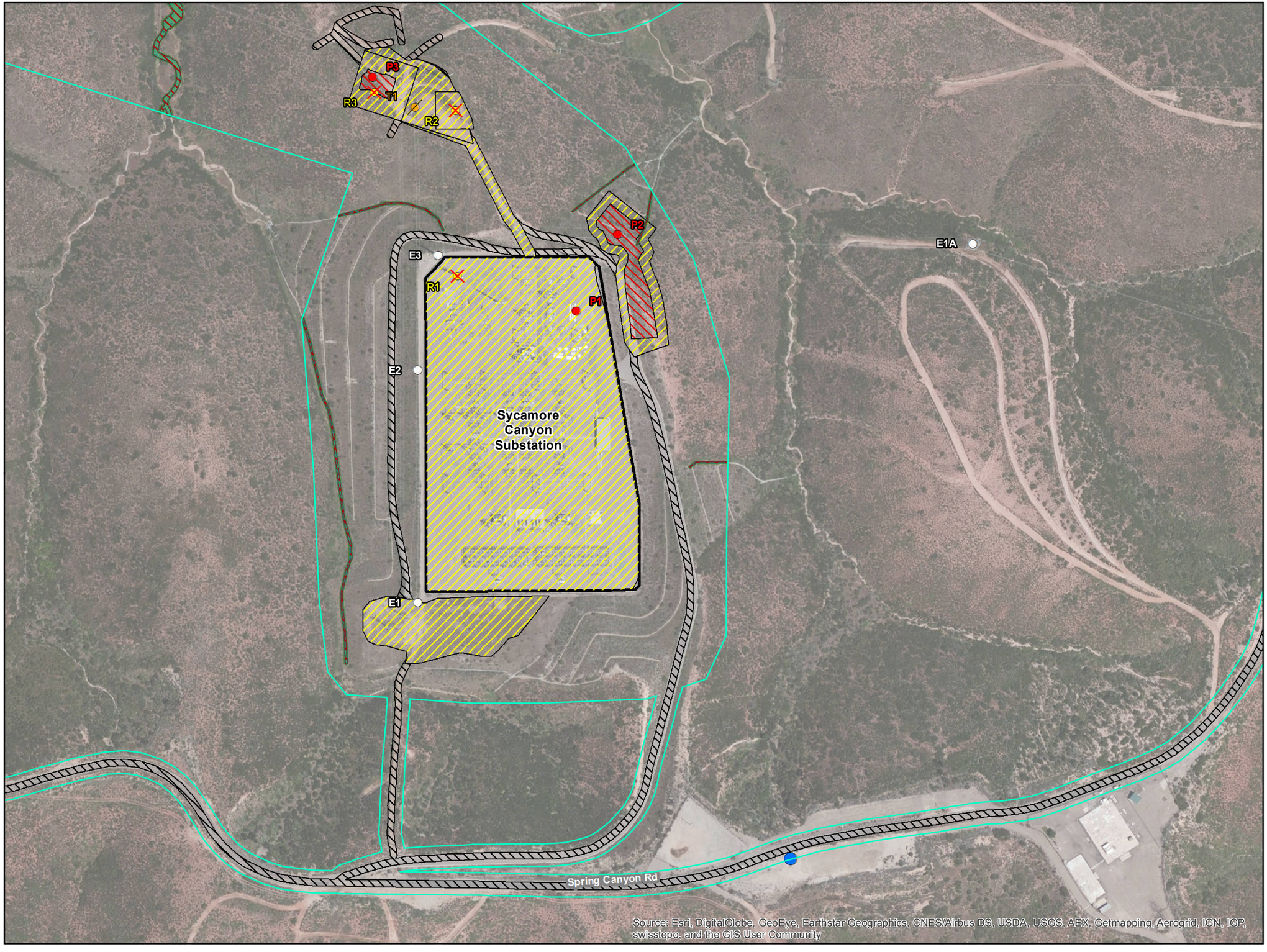
0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 4 of 45)

Legend

- Biological Survey Area

Basin Assessment Points (Busby

- Identified Basin

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby

- Unvegetated Streambed

RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Top)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)
- Substation

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 5 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby

- Unvegetated Streambed

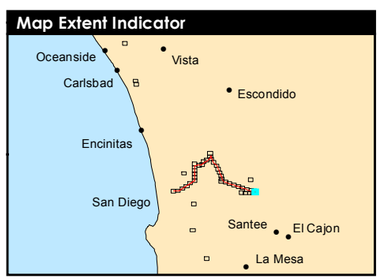
RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remain)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)
- Substation

Map Extent Indicator



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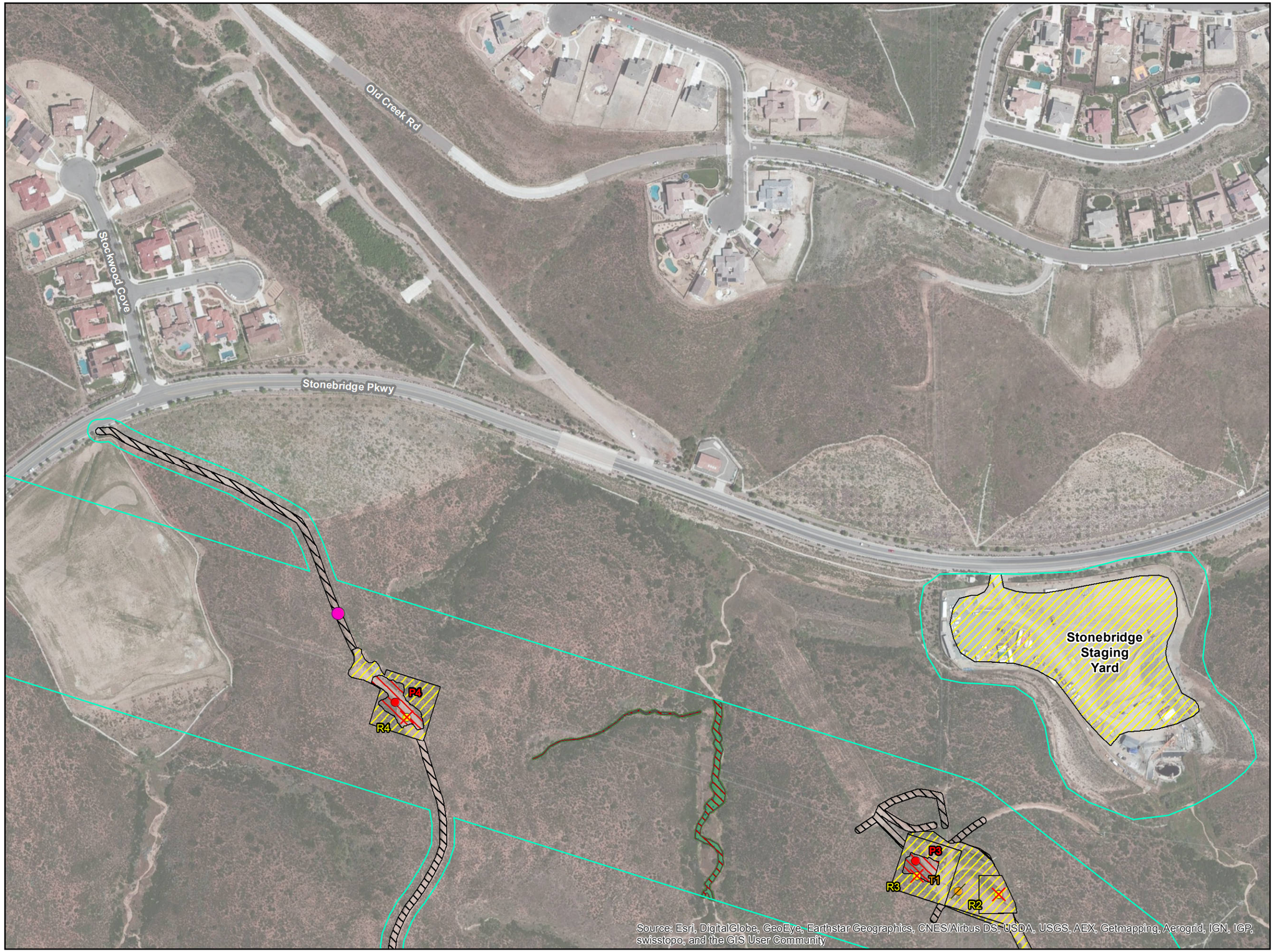
Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

N

PANORAMA



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 6 of 45)

Legend

- Biological Survey Area

Vernal Pool Survey Points (Environmental Inteligence 2014)

- Identified Road Pool

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Unvegetated Streambed

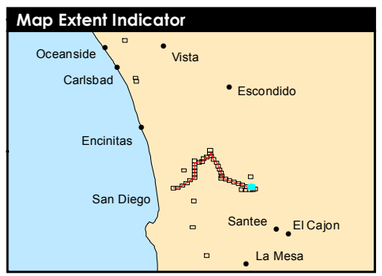
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Top)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

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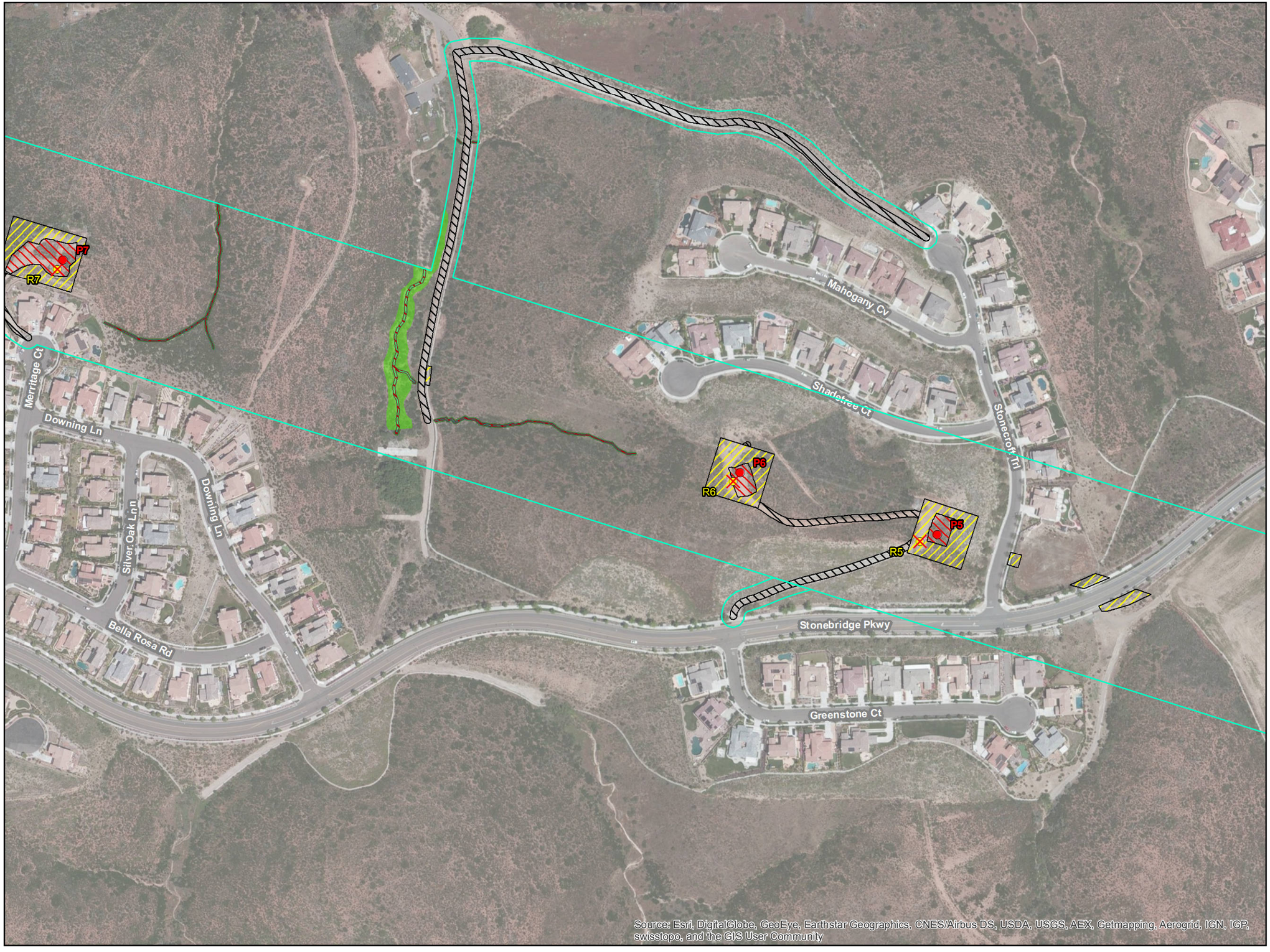


Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 7 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby

- Riparian
- Unvegetated Streambed

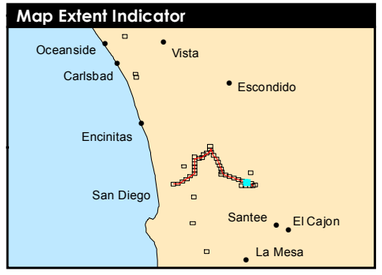
RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

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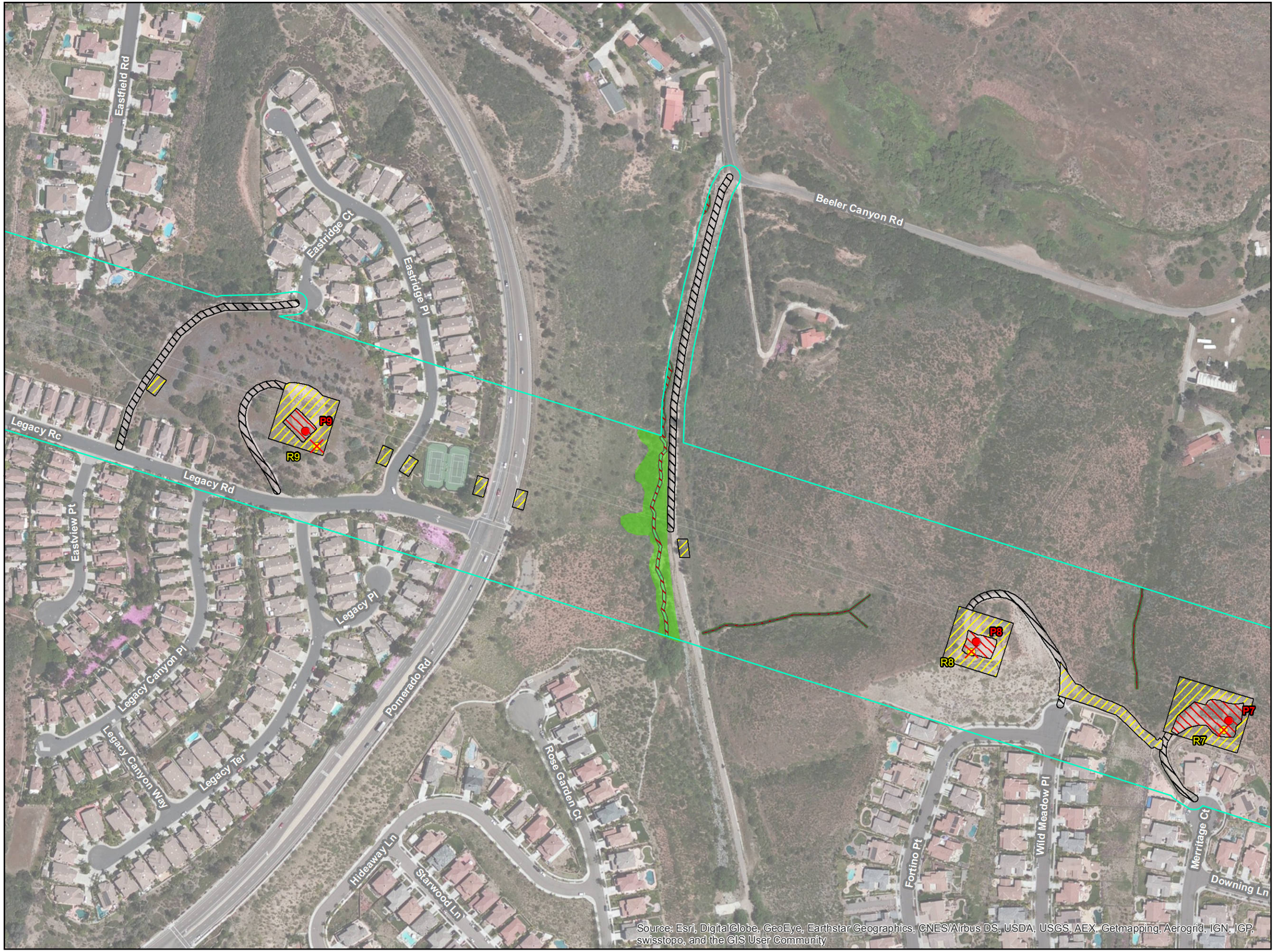


Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 8 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

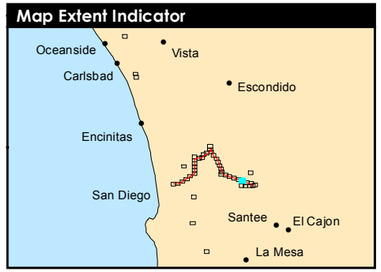
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 9 of 45)

Legend

- Biological Survey Area

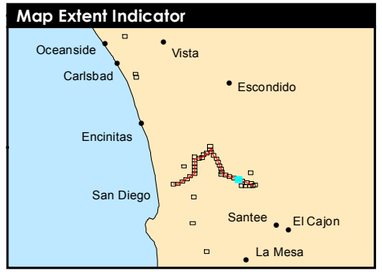
Vernal Pool Survey Points (Environmental Inteligence 2014)

- Identified Road Pool
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 10 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

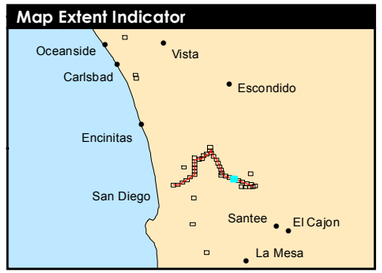
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



Scale = 1:3,000

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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 11 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Unvegetated Streambed

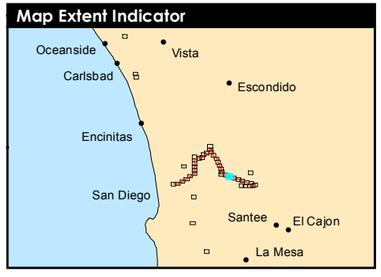
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 12 of 45)

Legend

- Biological Survey Area

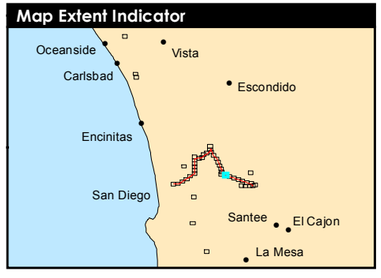
Vernal Pool Survey Points (Environmental Inteligence 2014)

- Identified Road Pool
- Proposed Structures
- Existing Structures (To Remove)

Work Area

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 13 of 45)

Legend

- Biological Survey Area

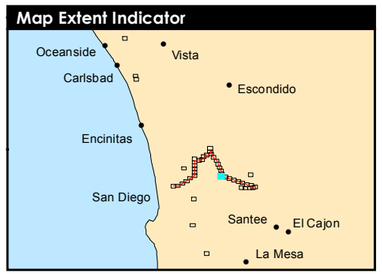
CDFW Jurisdiction (Busby

- Riparian
- Proposed Structures
- Existing Structures (To Remove)

Work Area

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 14 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the

CDFW Jurisdiction (Busby

- Riparian
- Unvegetated Streambed

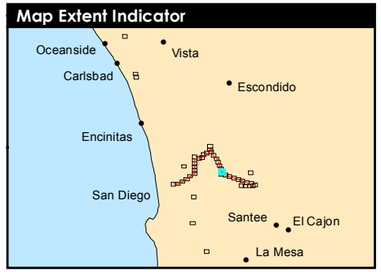
RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the
- Proposed Structures
- Existing Structures (To Remove)

Work Area

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 15 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Unvegetated Streambed

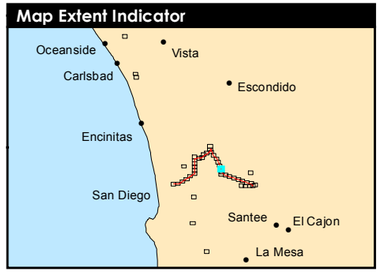
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



Scale = 1:3,000

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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 16 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

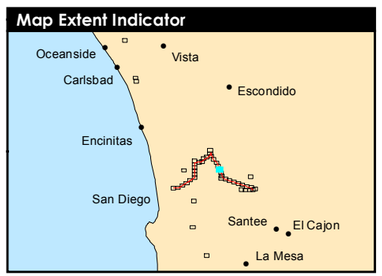
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)
- Substation

Map Extent Indicator



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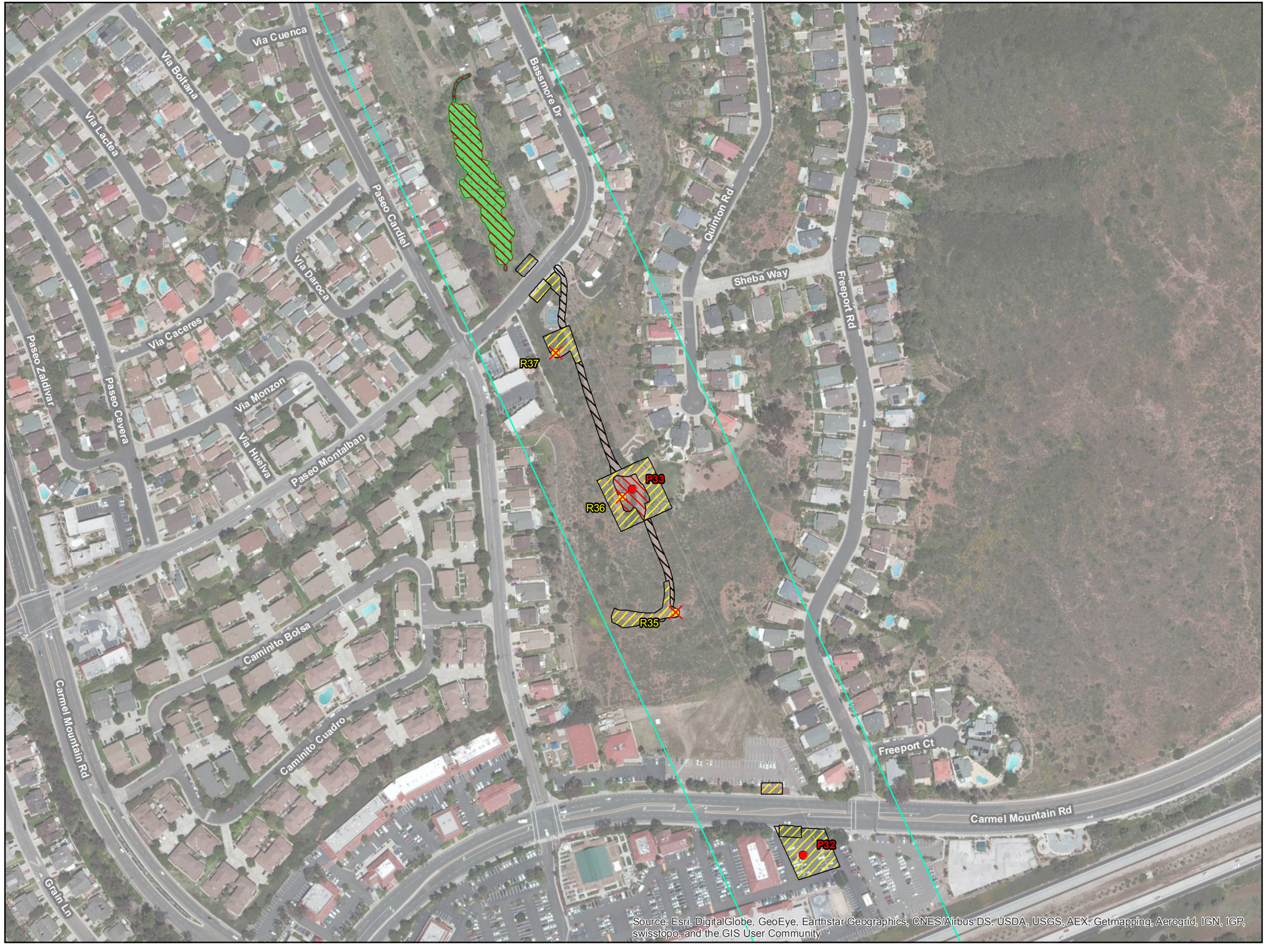
Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 17 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 18 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Unvegetated Streambed

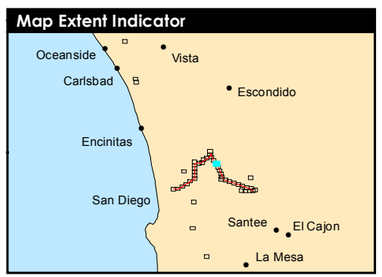
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 19 of 45)

Legend

- Biological Survey Area

Basin Assessment Points (Busby 2015)

- Identified Basin

Vernal Pool Survey Points (Environmental Inteligence 2014)

- Identified Road Pool

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Unvegetated Streambed

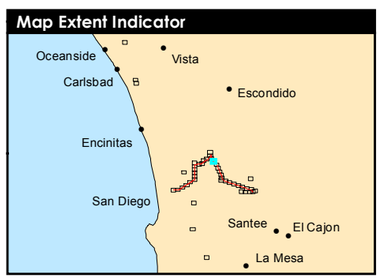
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Top)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



Scale = 1:3,000

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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 20 of 45)

Legend

- Biological Survey Area

Basin Assessment Points (Busby 2015)

- Identified Basin

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

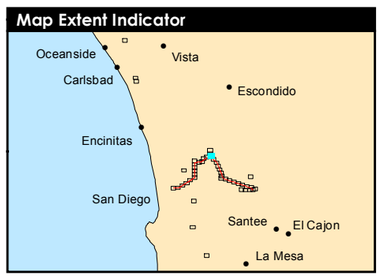
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Splice Vault
- Existing Structures (To Top)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 21 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

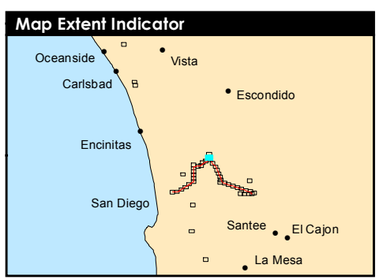
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Splice Vault
- Existing Structures (To Top)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 22 of 45)

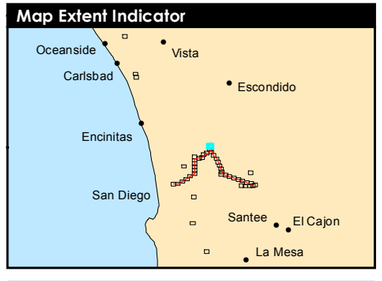
Legend

- Biological Survey Area
- Proposed Structures
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



Scale = 1:3,000

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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

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PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 23 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

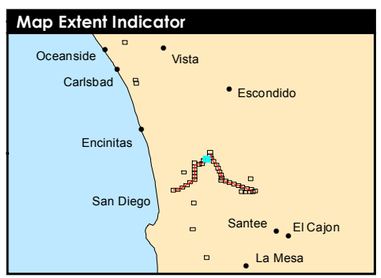
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Splice Vault

Work Area Impacts

- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 24 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Splice Vault

Work Area Impacts

- Temporary (All Other Work Areas)

Carmel Valley Staging Yard

Camino Del Sur Staging Yard

Note: Only a 2.3 acre portion of the Camino Del Sur site would be used as a staging yard.

V5

V6

Camino Del Sur

Carmel Valley

Claymore Ct

Donak

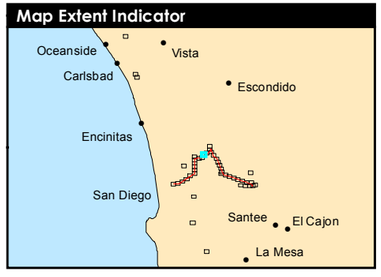
Celtic Ct

Donaker St

Adobe Bluffs Dr

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 25 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

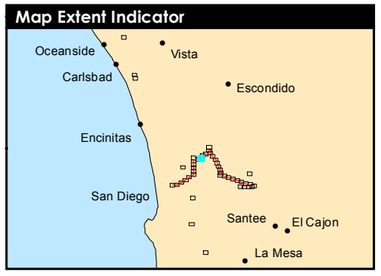
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Splice Vault

Work Area Impacts

- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 26 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

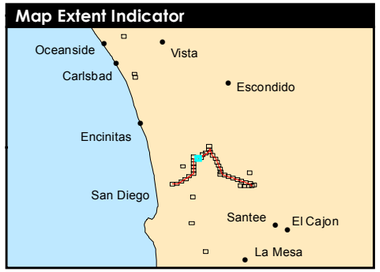
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Splice Vault

Work Area Impacts

- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 27 of 45)

Legend

- Biological Survey Area
- Proposed Structures
- Splice Vault
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Note: Only a 3.5 acre portion of the Evergreen Nursery would be used as a staging yard.

Evergreen Nursery Staging Yard

Farms View Ct

Mira Zanja Corte

Collins Ranch Ter

Collins Ranch Pl

Collins Ranch Ct

Caminito Vi

Va Abertura

Clarkview Ln

Rancho Santa Fe Lakes Dr

Carmel Valley Rd

V10

P45

P42

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Extent Indicator

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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

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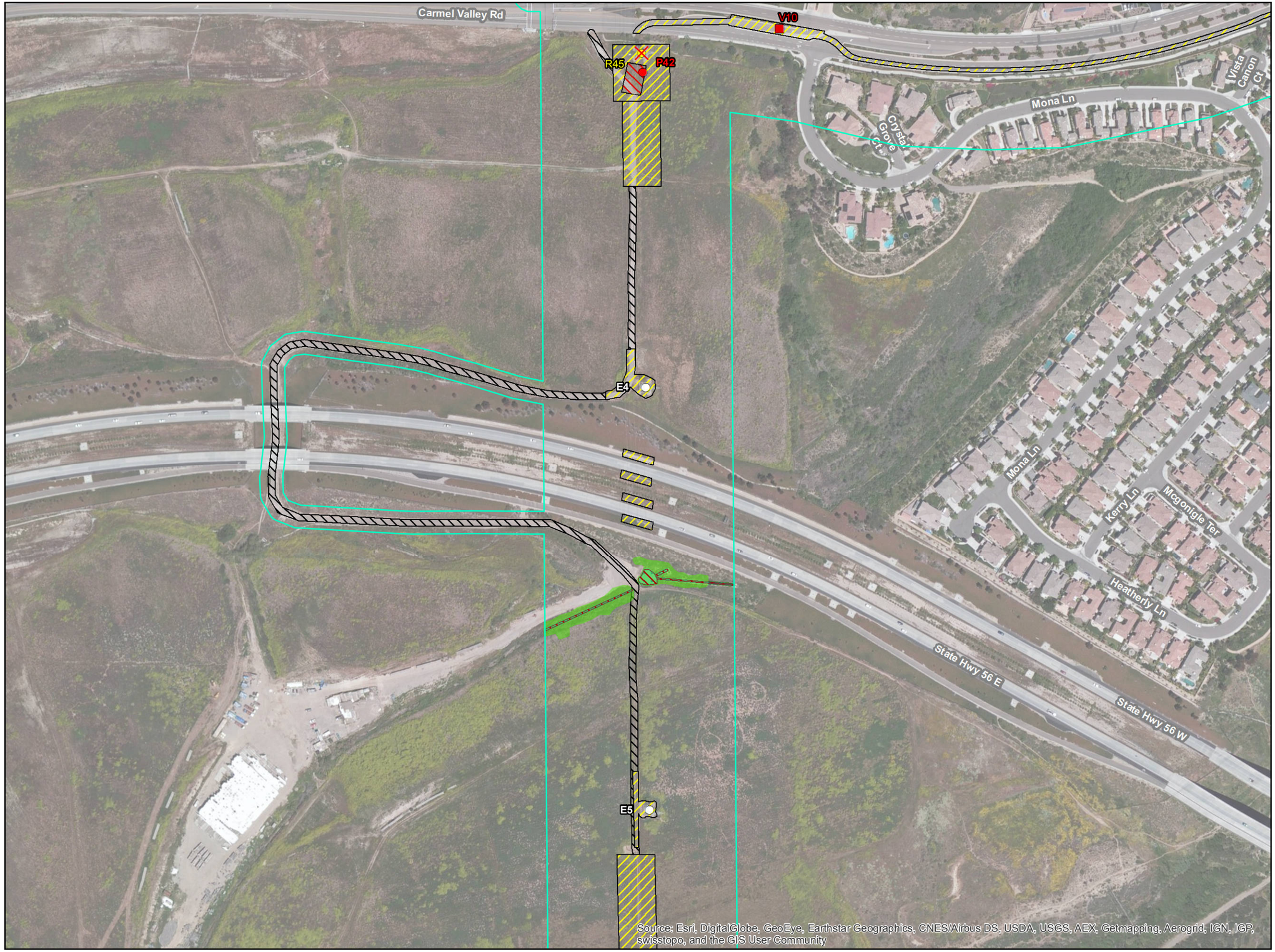


Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 28 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby

- Riparian
- Unvegetated Streambed

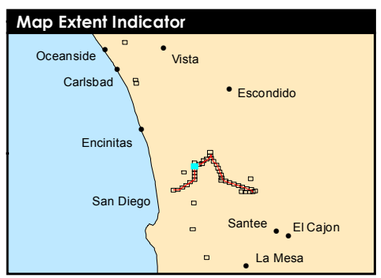
RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the State
- Proposed Structures
- Splice Vault
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 29 of 45)

Legend

- Biological Survey Area
- Identified Basin Boundaries (Busby 2015, Environmental Intelligence 2014, and McMillan 2009, 2010, and 2011)

Vernal Pool Survey Points (Helix

- Identified Road Pool

Basin Assessment Points (Busby

- Identified Basin

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby

- Riparian
- Unvegetated Streambed

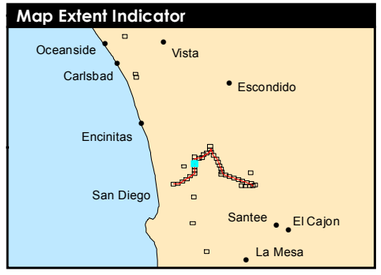
RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the State
- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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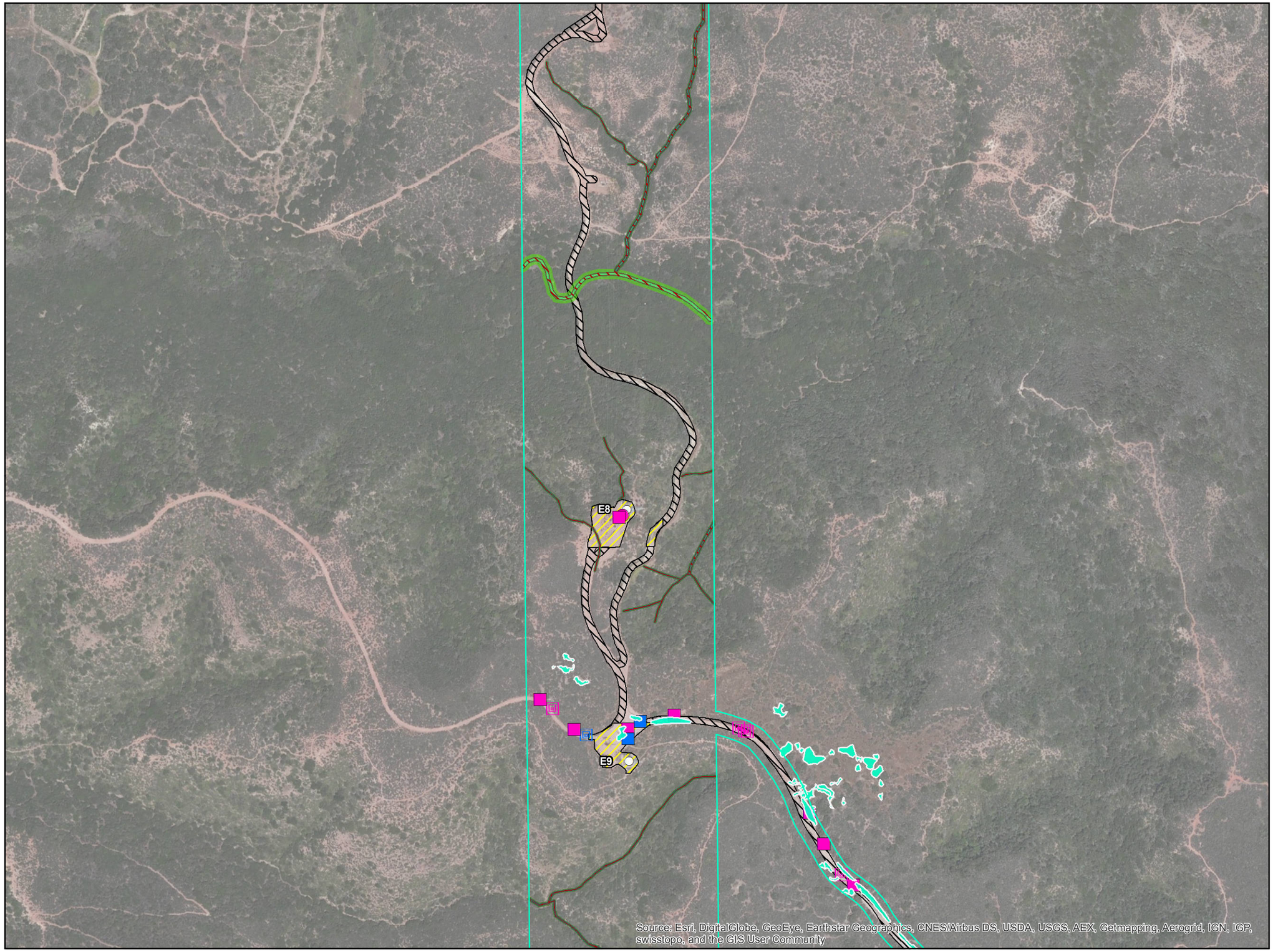
Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 30 of 45)

Legend

- Biological Survey Area
- Identified Basin Boundaries (Busby 2015, Environmental Intelligence 2014, and McMillan 2009, 2010, and 2011)

Vernal Pool Survey Points (Helix 2015)

- Identified Vernal Pool
- Potential Vernal Pool
- Identified Road Pool
- Potential Road Pool

Vernal Pool Survey Points (Environmental Inteligence 2014)

- Identified Road Pool

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator

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Date Created: 9/4/2015

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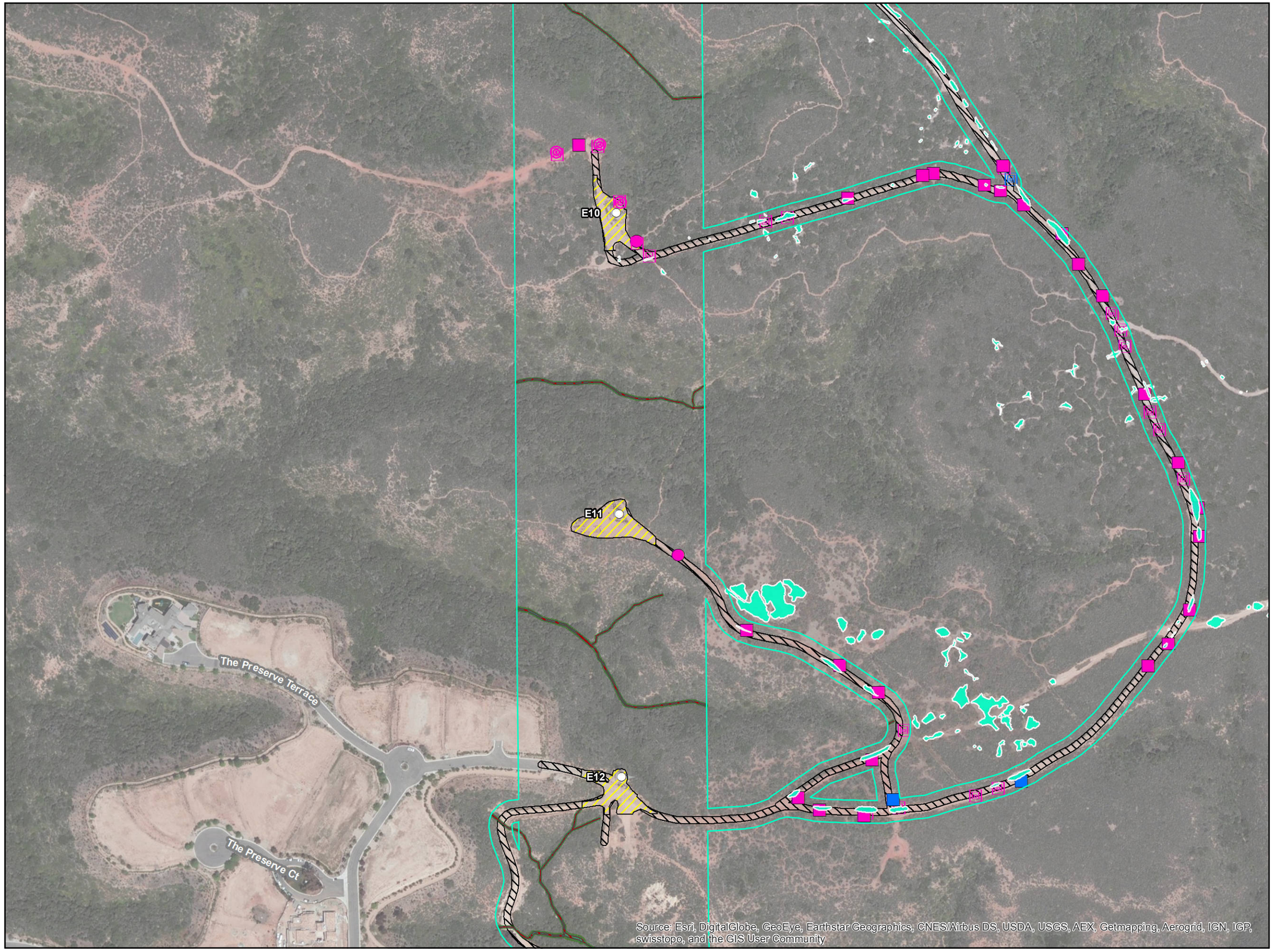


Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 31 of 45)

Legend

- Biological Survey Area
- Identified Basin Boundaries (Busby 2015, Environmental Intelligence 2014, and McMillan 2009, 2010, and 2011)

Vernal Pool Survey Points (Helix

- Identified Vernal Pool
- Potential Vernal Pool
- Identified Road Pool
- Potential Road Pool

Vernal Pool Survey Points (Environmental Inteligence 2014)

- Identified Road Pool
- Potential Road Pool

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Unvegetated Streambed

RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 32 of 45)

Legend

- Biological Survey Area
- Identified Basin Boundaries (Busby 2015, Environmental Intelligence 2014, and McMillan 2009, 2010, and 2011)

Vernal Pool Survey Points (Helix

- Identified Road Pool
- Potential Road Pool

Basin Assessment Points (Busby

- Identified Basin

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Unvegetated Streambed

RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator

Scale = 1:3,000

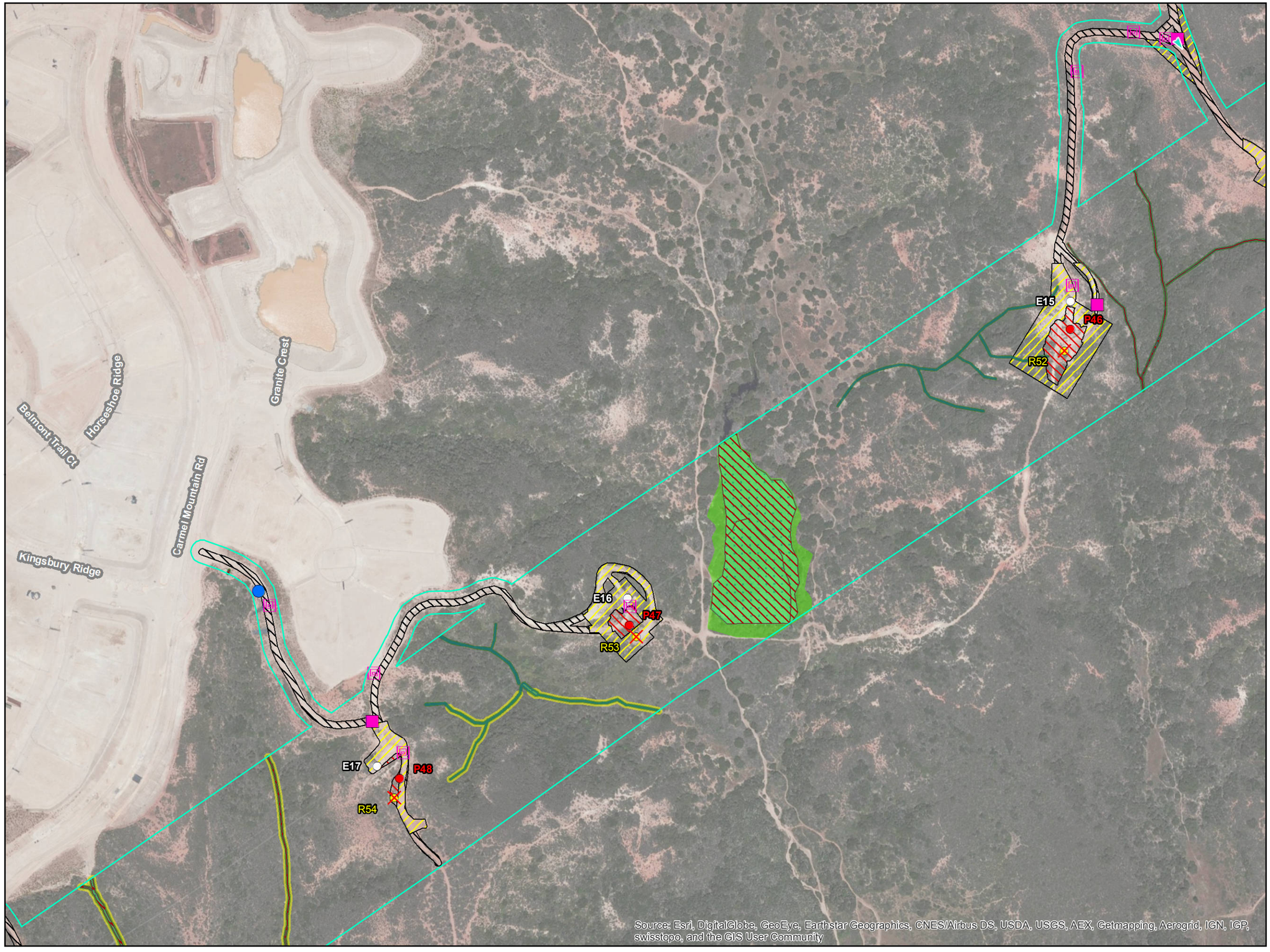
0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 33 of 45)

Legend

- Biological Survey Area
- Identified Basin Boundaries (Busby 2015, Environmental Intelligence 2014, and McMillan 2009, 2010, and 2011)

Vernal Pool Survey Points (Helix

- Identified Road Pool
- Potential Road Pool

Basin Assessment Points (Busby

- Identified Basin

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby

- Riparian
- Unvegetated Streambed

RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the State

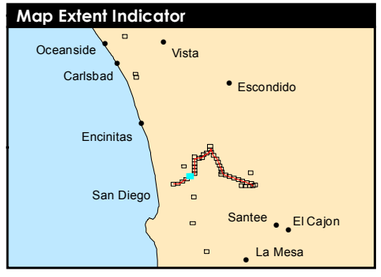
California Coastal Commision

- Wetland in the California Coastal Zone
- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 34 of 45)

Legend

- Biological Survey Area
- Identified Basin Boundaries (Busby 2015, Environmental Intelligence 2014, and McMillan 2009, 2010, and 2011)

Vernal Pool Survey Points (Helix

- Identified Road Pool
- Potential Road Pool

Basin Assessment Points (Busby

- Identified Basin

Vernal Pool Survey Points (Environmental Inteligence 2014)

- Identified Road Pool
- Potential Road Pool

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby

- Unvegetated Streambed

RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the State

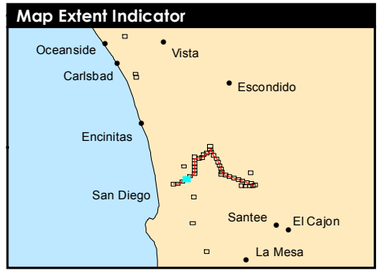
California Coastal Commision

- Wetland in the California Coastal Zone
- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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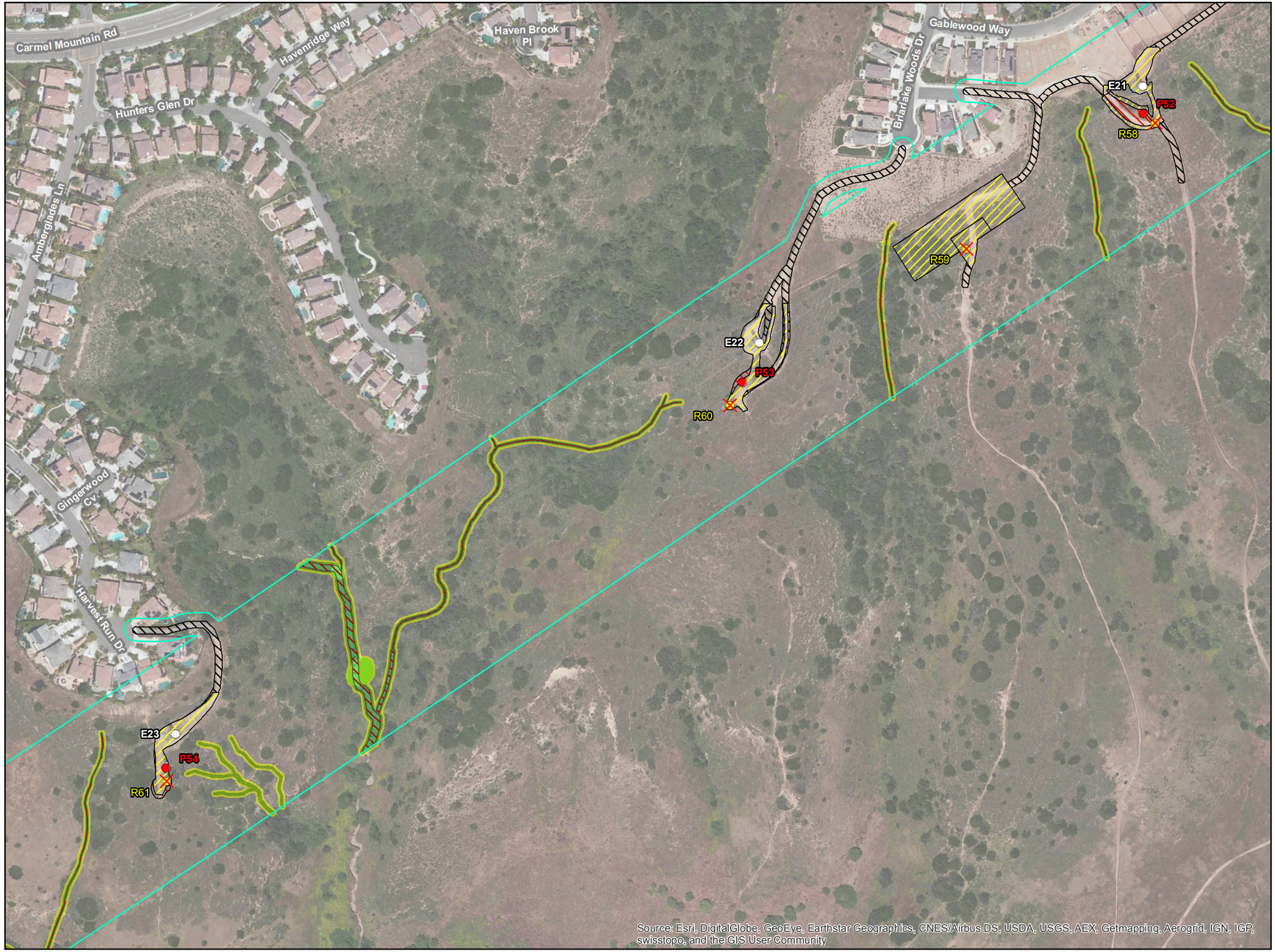
Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 35 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the State

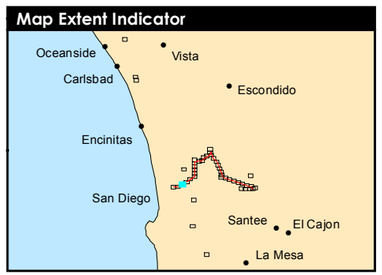
California Coastal Commision

- Wetland in the California Coastal Zone
- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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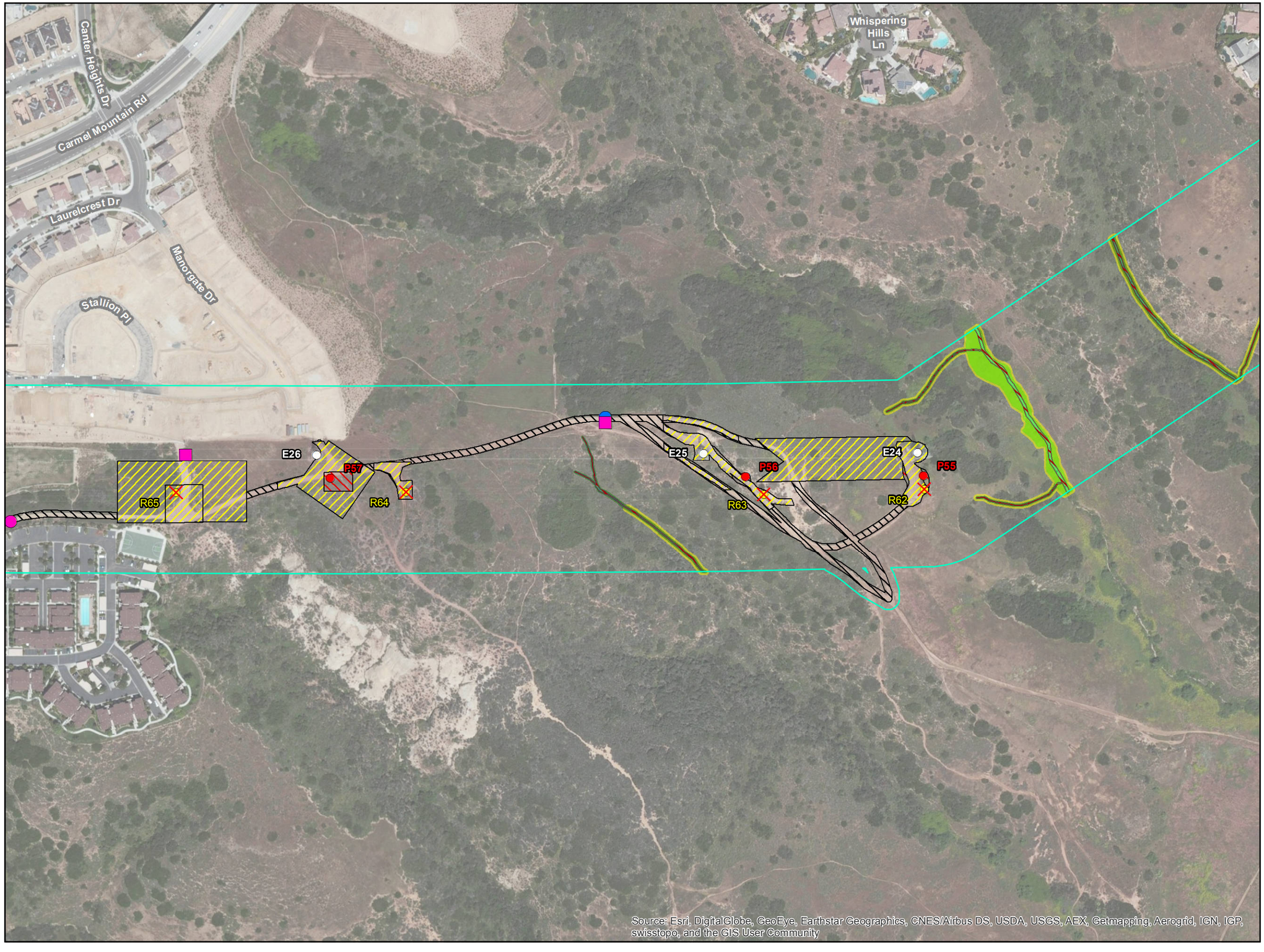


Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 36 of 45)

Legend

- Biological Survey Area

Vernal Pool Survey Points (Helix

- Identified Road Pool

Basin Assessment Points (Busby

- Identified Basin

Vernal Pool Survey Points (Environmental Inteligence 2014)

- Identified Road Pool

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby

- Riparian
- Unvegetated Streambed

RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the State

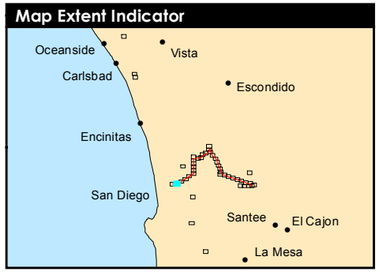
California Coastal Commision

- Wetland in the California Coastal Zone
- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 37 of 45)

Legend

- Biological Survey Area
- Identified Basin Boundaries (Busby 2015, Environmental Intelligence 2014, and McMillan 2009, 2010, and 2011)

Vernal Pool Survey Points (Helix 2015)

- Potential Vernal Pool
- Identified Road Pool
- Potential Road Pool

Basin Assessment Points (Busby 2015)

- Identified Basin

Vernal Pool Survey Points (Environmental Inteligence 2014)

- Identified Road Pool

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Unvegetated Streambed

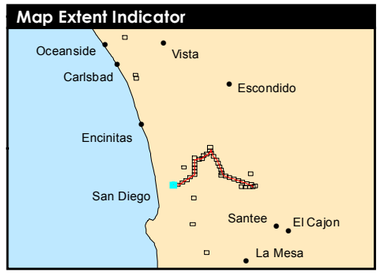
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State
- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

Work Area Impacts

- Permanent (Structure Pad)
- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)
- Substation

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

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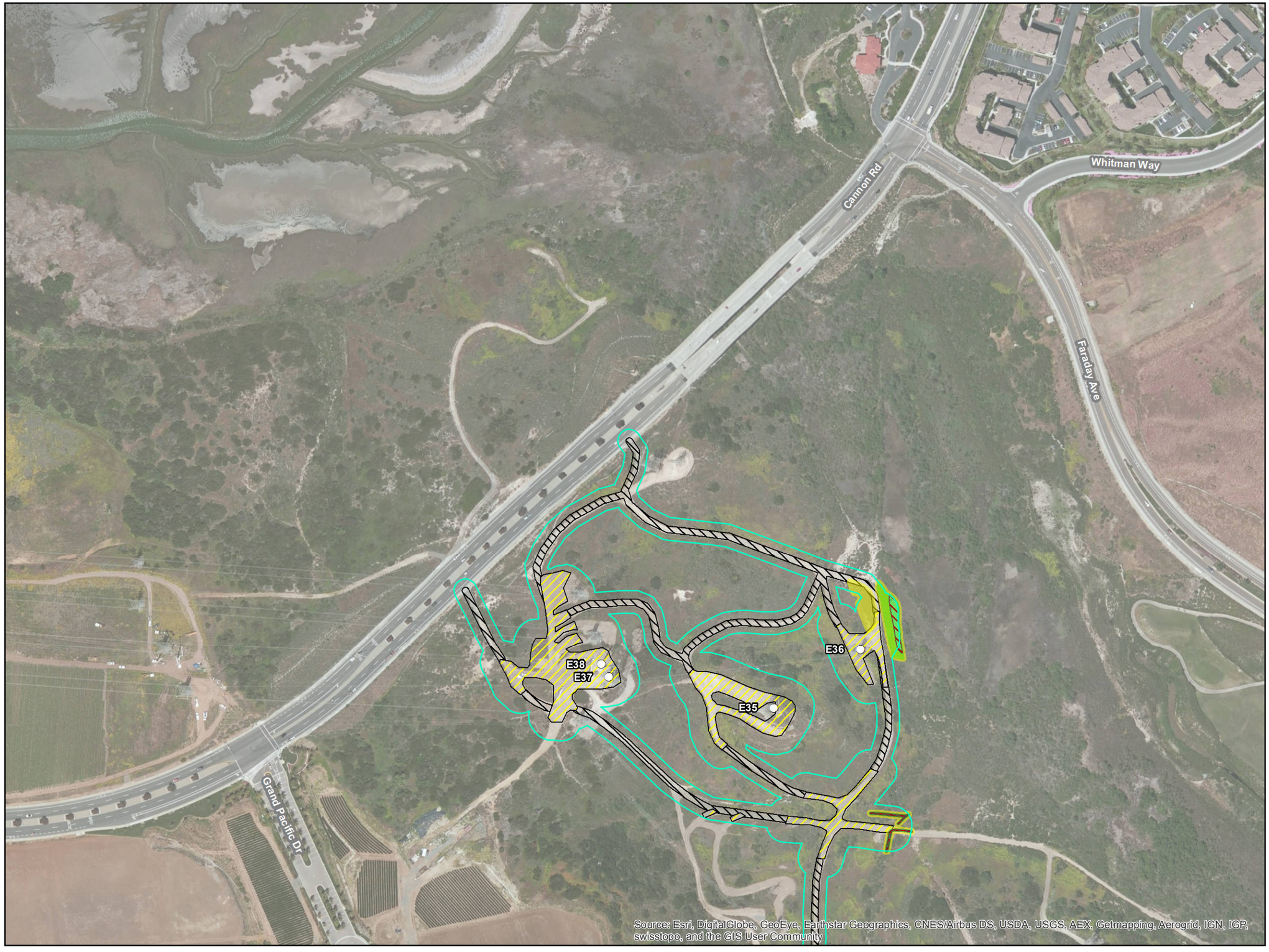


Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 38 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Riparian
- Unvegetated Streambed

RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State

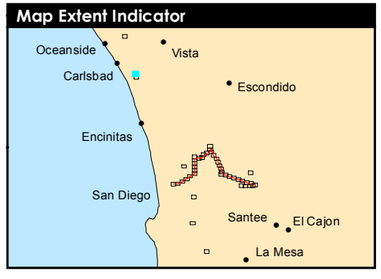
California Coastal Commision Jurisdiction

- Wetland in the California Coastal Zone
- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 39 of 45)

Legend

- Biological Survey Area

U.S. ACOE Jurisdiction (Busby

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby

- Unvegetated Streambed

RWQCB Jurisdiction (Busby

- Wetland Waters and Waters of the State

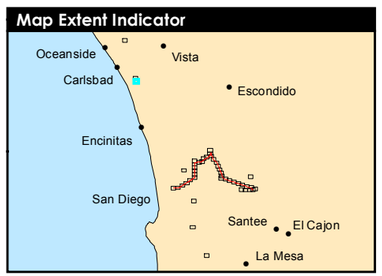
California Coastal Commision

- Wetland in the California Coastal Zone
- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 40 of 45)

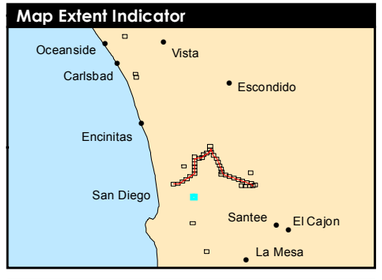
Legend

- Biological Survey Area
- Existing Structures (To Remain)

Work Area

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 41 of 45)

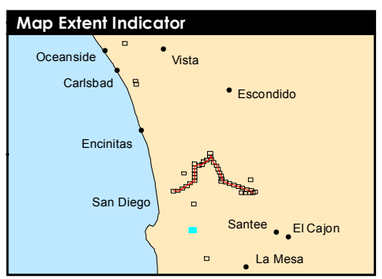
Legend

- Biological Survey Area
- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Map Extent Indicator



Scale = 1:3,000

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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

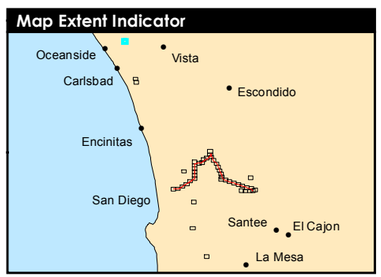
Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 42 of 45)

Legend

Work Area Impacts

- Temporary (All Other Work Areas)
- Substation

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

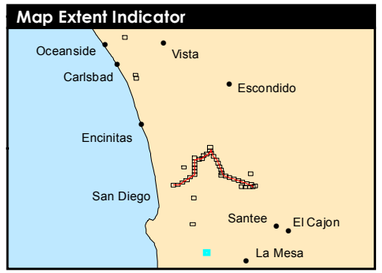
Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 43 of 45)

Legend

Work Area Impacts

- Temporary (All Other Work Areas)
- Substation

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 44 of 45)

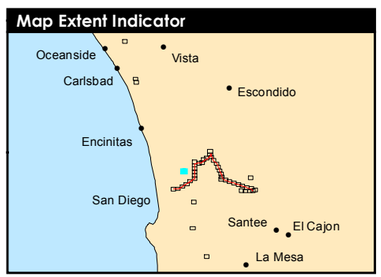
Legend

- Biological Survey Area
- Identified Basin Boundaries (Busby 2015, Environmental Intelligence 2014, and McMillan 2009, 2010, and 2011)

Work Area Impacts

- Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-2: Proposed Project Aquatic Habitat and Jurisdictional Waters in the Biological Survey Area (Map 45 of 45)

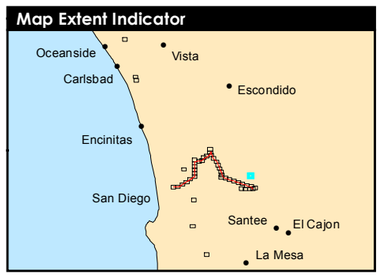
Legend

Biological Survey Area

Work Area Impacts

Temporary (All Other Work Areas)

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-3: Alternative 2A Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 1 of 1)

Legend

- Proposed Structures
- Splice Vault
- Existing Structures (To Remove)
- Existing Structures (To Top)

Work Area Impacts

- Permanent (Structure and Mahole Pads)
- Temporary (All Other Work Areas)
- Proposed Project Work Areas

Rare and Special-Status

- Coast Barrel Cactus
- Decumbent Goldenbush
- Graceful Tarplant
- Palmer's grapplinghook
- San Diego Sunflower
- Small-flowered Morning-glory
- Spineshrub
- Threadleaf Brodiaea

Vegetation

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Native Grassland (NG)
- Nonnative Grassland (NNG)
- Mulefat Scrub (MFS)
- Southern Willow Scrub (SWS)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator

Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-4: Alternative 2B Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 1 of 1)

Legend

- Proposed Structures
- Splice Vault
- Existing Structures (To Remove)
- Existing Structures (To Top)

Work Area Impacts

- Permanent (Structure and Mahole Pads)
- Temporary (All Other Work Areas)
- Proposed Project Work Areas

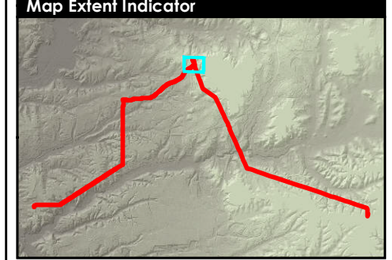
Rare and Special-Status

- Coast Barrel Cactus
- Decumbent Goldenbush
- Graceful Tarplant
- Palmer's grapplinghook
- San Diego Sunflower
- Small-flowered Morning-glory
- Spineshrub
- Threadleaf Brodiaea

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- Native Grassland (NG)
- Nonnative Grassland (NNG)
- Mulefat Scrub (MFS)
- Southern Willow Scrub (SWS)
- Eucalyptus Woodland (EUC)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

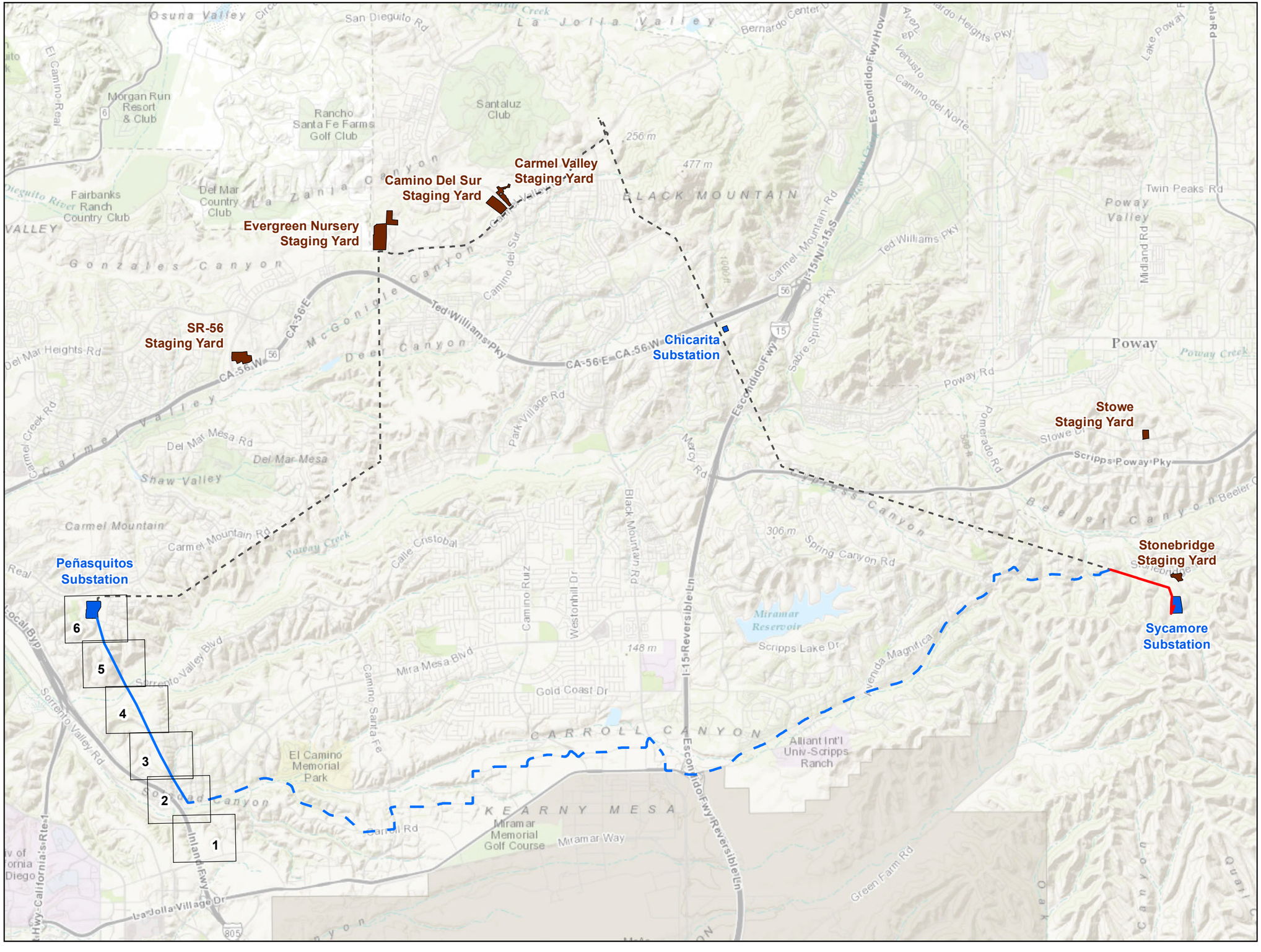
0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/4/2015

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-5: Alternative 5 Vegetation Communities and Special-Status Plants in the Biological Survey Area (Overview Map)

Legend

- Alternative 5 Overhead Alignment
- Alternative 5 Underground Alignment
- Proposed Project Alignment
- Proposed Project Alignment Avoided
- Substation
- Staging Yard
- Map Frame

Scale = 1:60,000

0 0.5 1 Miles

Date Created: 9/8/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-5: Alternative 5 Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 1 of 6)

Legend

- Existing Structures (To Remain)

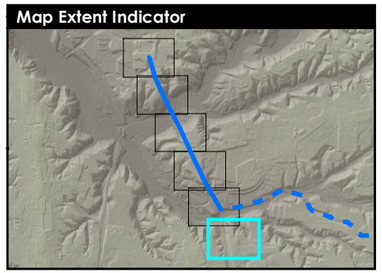
Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Vegetation Communities

- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Nonnative Grassland (NNG)
- Bare Ground (BG)
- Disturbed Habitat (DIST)

Map Extent Indicator



Scale = 1:3,000

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Aerial Imagery: 6/3/2014

Date Created: 1/8/2016

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-5: Alternative 5 Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 2 of 6)

Legend

- Proposed Structures
- Splice Vault
- Existing Structures (To Remain)

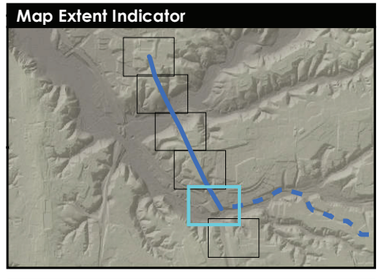
Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Vegetation Communities

- Southern Riparian Forest (SRF)
- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Diegan Coastal Sage Scrub - Restored (DCSS-R)
- Nonnative Grassland (NNG)
- Southern Willow Scrub (SWS)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

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Aerial Imagery: 6/3/2014

Date Created: 1/8/2016

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-5: Alternative 5 Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 3 of 6)

Legend

- Existing Structures (To Remain)

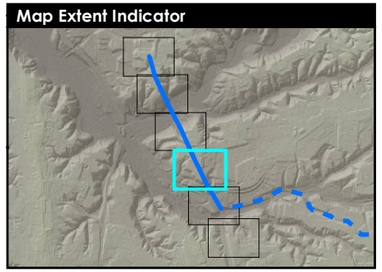
Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Vegetation Communities

- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Restored (DCSS-R)
- Nonnative Grassland (NNG)
- Southern Willow Scrub (SWS)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

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Aerial Imagery: 6/3/2014

Date Created: 1/8/2016

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-5: Alternative 5 Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 4 of 6)

Legend

- Existing Structures (To Remain)

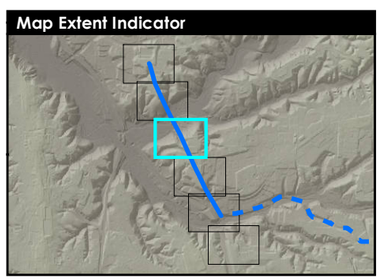
Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Vegetation Communities

- Southern Riparian Forest (SRF)
- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Baccharis Scrub (BS)
- Nonnative Grassland (NNG)
- Nonnative Vegetation (NNV)
- Freshwater Marsh (FWM)
- Southern Riparian Scrub (SRS)
- Mulefat Scrub (MFS)
- Southern Willow Scrub (SWS)
- Eucalyptus Woodland (EUC)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 6/3/2014

Date Created: 1/8/2016

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-5: Alternative 5 Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 5 of 6)

Legend

- Existing Structures (To Remain)

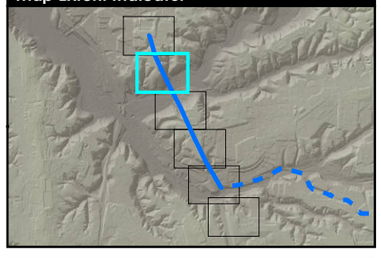
Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

Vegetation Communities

- Southern Riparian Woodland (SRW)
- Maritime Succulent Scrub (MSS)
- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Nonnative Grassland (NNG)
- Freshwater Marsh (FWM)
- Mulefat Scrub (MFS)
- Southern Willow Scrub (SWS)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



Scale = 1:3,000

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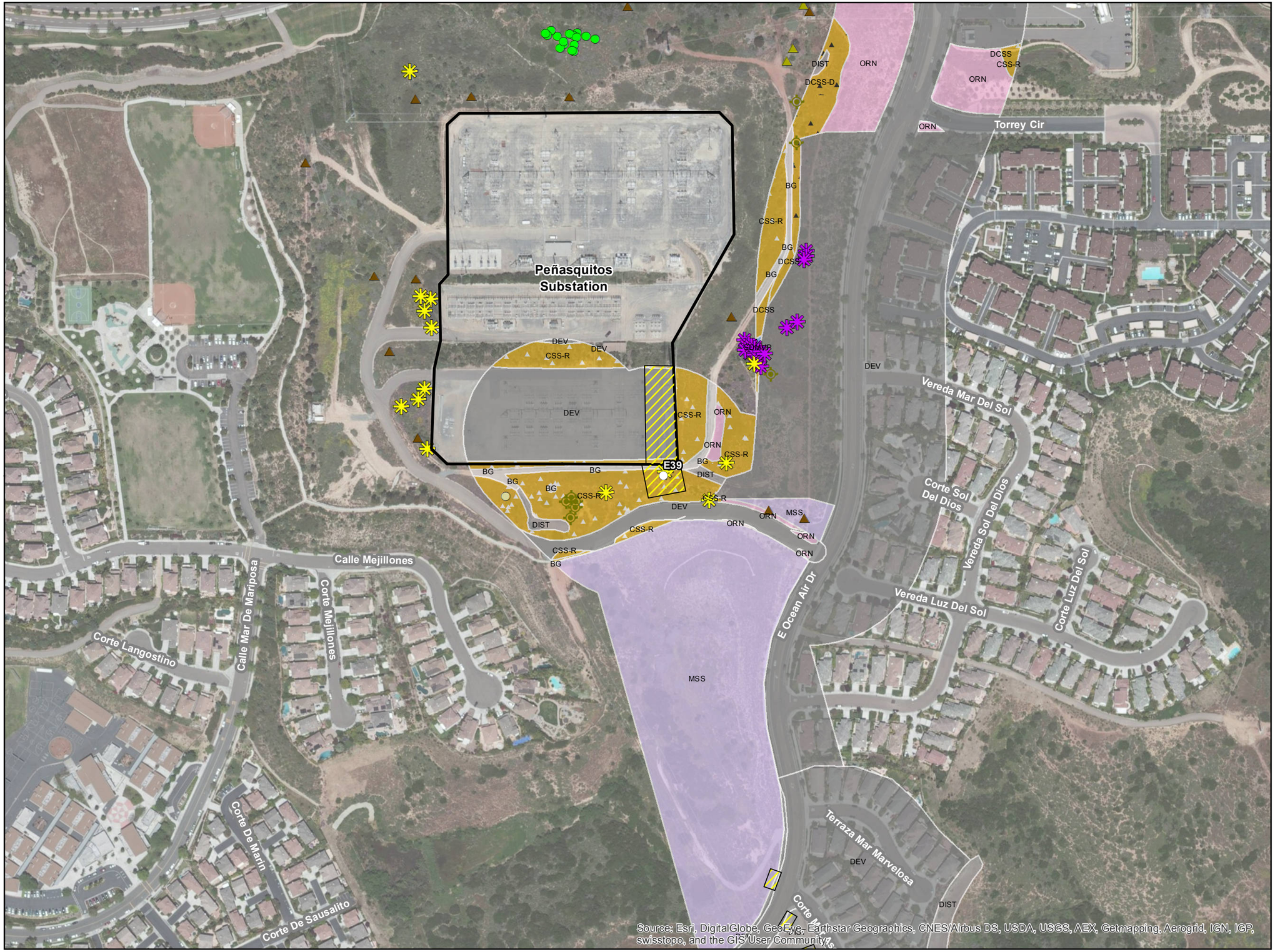
Aerial Imagery: 6/3/2014

Date Created: 1/8/2016

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-5: Alternative 5 Vegetation Communities and Special-Status Plants in the Biological Survey Area (Map 6 of 6)

Legend

- Existing Structures (To Remain)

Work Area Impacts

- Temporary (All Other Work Areas)
- Substation

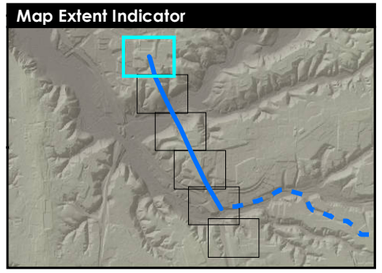
Rare and Special-Status Plants

- Ashy Spikemoss
- Coast Barrel Cactus
- Nuttall's Scrub Oak
- San Diego Button-celery
- San Diego Sunflower
- Torrey Pine
- Western Dichondra

Vegetation Communities

- Maritime Succulent Scrub (MSS)
- Diegan Coastal Sage Scrub (DCSS)
- Diegan Coastal Sage Scrub - Disturbed (DCSS-D)
- Coastal Sage Scrub - Revegetated (CSS-R)
- San Diego Mesa Vernal Pool (SDMVP)
- Ornamental (ORN)
- Bare Ground (BG)
- Disturbed Habitat (DIST)
- Developed Lands (DEV)

Map Extent Indicator



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Aerial Imagery: 6/3/2014

Date Created: 1/8/2016

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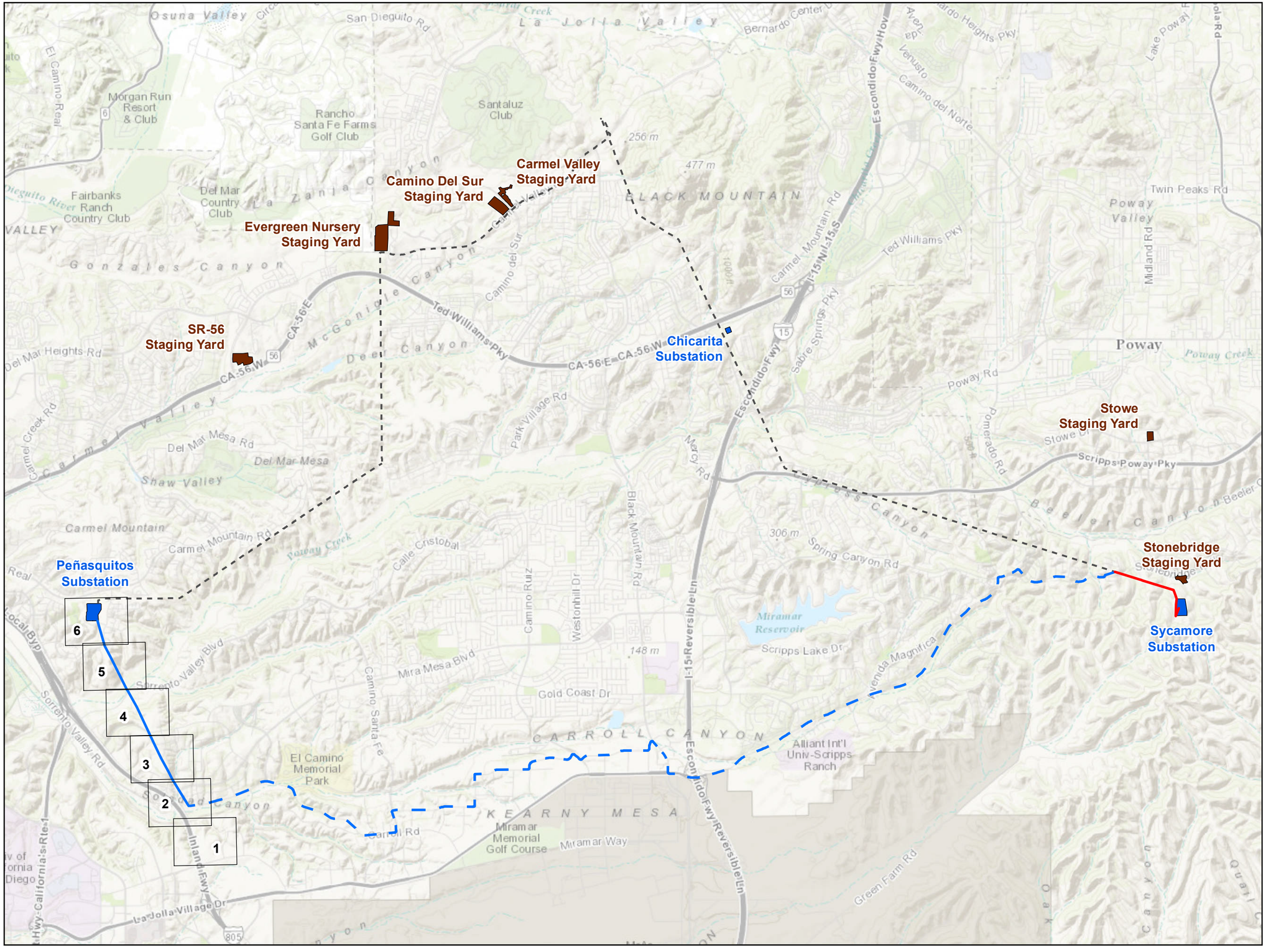


Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-6: Alternative 5 Aquatic Habitat and Potential Jurisdictional Waters in the Biological Survey Area (Overview Map)

Legend

- Alternative 5 Overhead Alignment
- Alternative 5 Underground Alignment
- Proposed Project Alignment
- Proposed Project Alignment Avoided
- Substation
- Staging Yard
- Map Frame

Scale = 1:60,000

0 0.5 1 Miles

Date Created: 9/8/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-6: Alternative 5 Aquatic Habitat and Potential Jurisdictional Waters in the Biological Survey Area (Map 1 of 6)

Legend

- Existing Structures (To Remain)

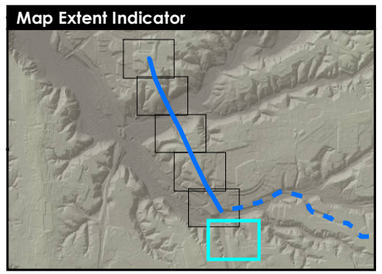
Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

National Wetland Inventory

- Riverine

Map Extent Indicator



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Aerial Imagery: 5/30/2014

Date Created: 9/8/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-6: Alternative 5 Aquatic Habitat and Potential Jurisdictional Waters in the Biological Survey Area (Map 2 of 6)

Legend

- Proposed Structures
- Splice Vault
- Existing Structures (To Remain)

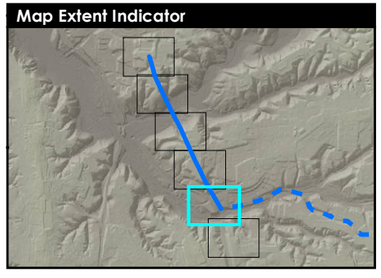
Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

National Wetland Inventory

- Freshwater Forested/Shrub Wetland
- Riverine

Map Extent Indicator



Scale = 1:3,000

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Aerial Imagery: 5/30/2014

Date Created: 9/8/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-6: Alternative 5 Aquatic Habitat and Potential Jurisdictional Waters in the Biological Survey Area (Map 3 of 6)

Legend

- Existing Structures (To Remain)

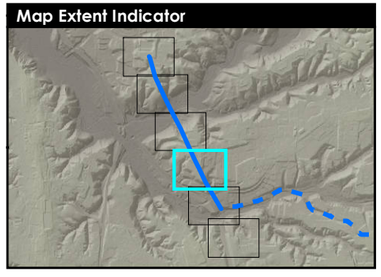
Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

National Wetland Inventory Feature

- Freshwater Forested/Shrub Wetland

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/8/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-6: Alternative 5 Aquatic Habitat and Potential Jurisdictional Waters in the Biological Survey Area (Map 4 of 6)

Legend

- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

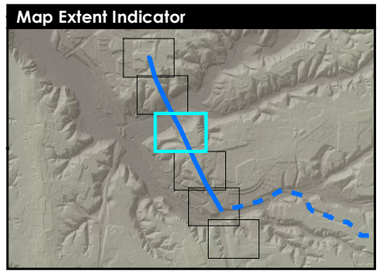
Vernal Pool Survey Points (Helix 2015)

- Identified Road Pool

National Wetland Inventory Feature

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/8/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-6: Alternative 5 Aquatic Habitat and Potential Jurisdictional Waters in the Biological Survey Area (Map 5 of 6)

Legend

- Existing Structures (To Remain)

Work Area Impacts

- Existing/Permanent (Access Roads)
- Temporary (All Other Work Areas)

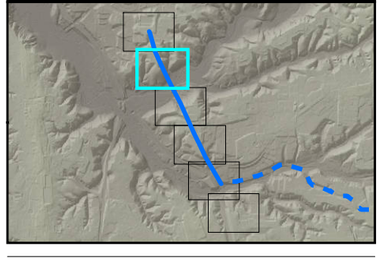
Vernal Pool Survey Points (Helix 2015)

- Potential Road Pool

National Wetland Inventory Feature

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/8/2015

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-6: Alternative 5 Aquatic Habitat and Potential Jurisdictional Waters in the Biological Survey Area (Map 6 of 6)

Legend

- Existing Structures (To Remain)

Work Area Impacts

- Temporary (All Other Work Areas)
- Substation
- Proposed Project Work Areas (Simple 2)
- Identified Basin Boundaries (Busby 2015, Environmental Intelligence 2014, and McMillan 2009, 2010, and 2011)

Vernal Pool Survey Points (Helix 2015)

- Potential Vernal Pool
- Identified Road Pool
- Potential Road Pool

Basin Assessment Points (Busby 2015)

- Identified Basin

U.S. ACOE Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the U.S.

CDFW Jurisdiction (Busby 2015)

- Unvegetated Streambed

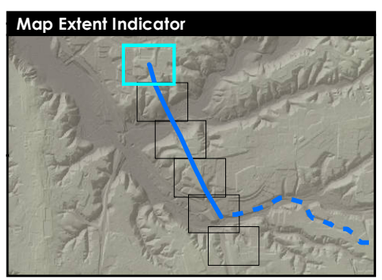
RWQCB Jurisdiction (Busby 2015)

- Wetland Waters and Waters of the State

National Wetland Inventory Feature

- Freshwater Emergent Wetland

Map Extent Indicator



Scale = 1:3,000

0 100 200 Feet

Aerial Imagery: 5/30/2014

Date Created: 9/8/2015

PANORAMA

Peñasquitos Substation

E39

Torrey Cir

Vereda Mar Del Sol

Corte Sol Del Dios

Vereda Sol Del Dios

Corte Luz Del Sol

Vereda Luz Del Sol

E Ocean Air Dr

Terraza Mar Marvelosa

Calle Mejillones

Corte Mejillones

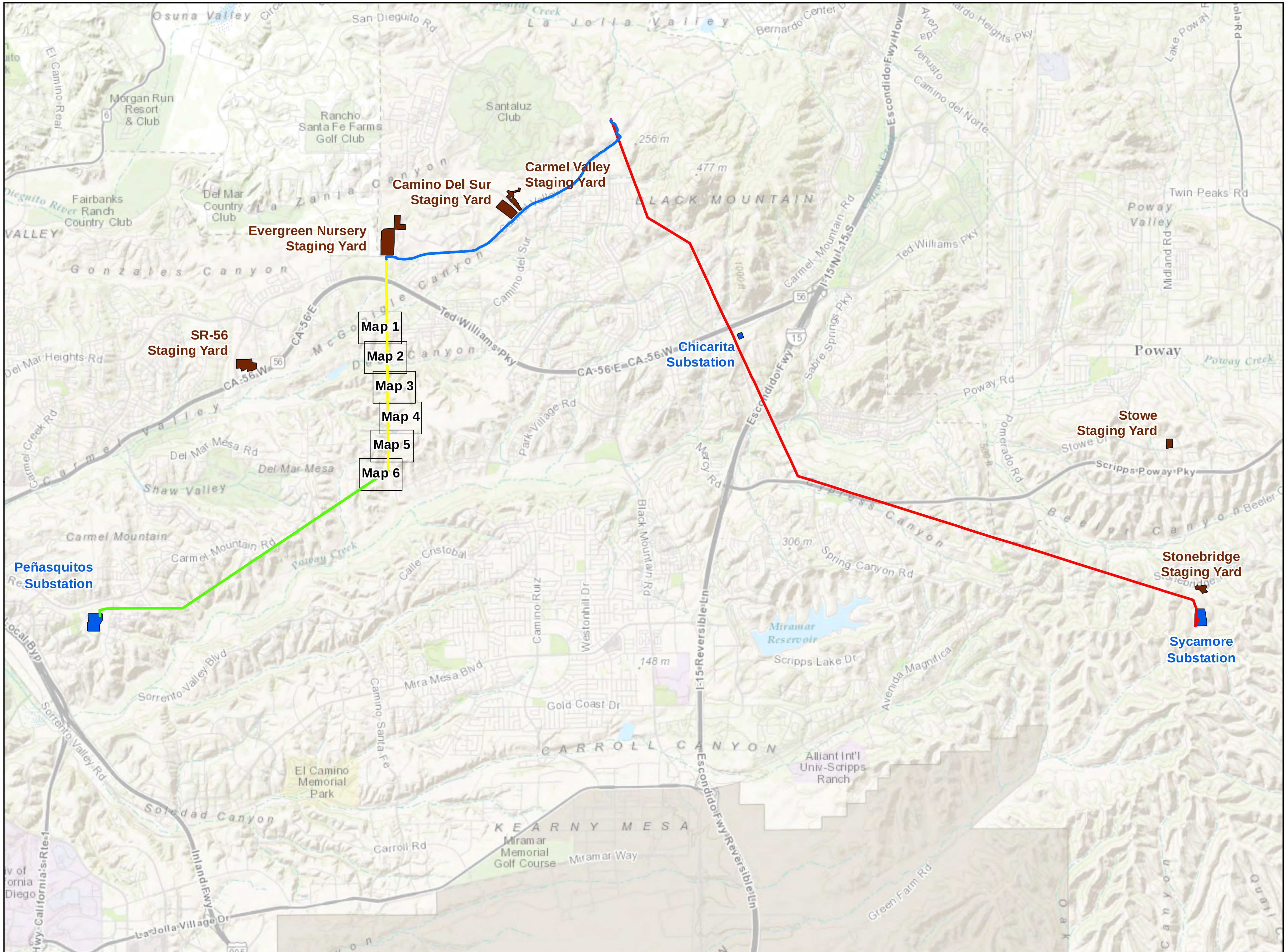
Calle Mar De Mariposa

Corte Langostino

Corte De Martin

Corte De Sausalito

Source: Esri, DigitalBoe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-7: Updated Nuttall's Scrub Oak Points in Segment C (Overview)

Legend

Proposed Project Alignment

- Segment A
- Segment B
- Segment C
- Segment D
- Substation
- Staging Yard
- Map Frame

Scale = 1:60,000

0 0.5 1 Miles

Date Created: 2/18/2016

PANORAMA

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-7: Updated Nuttall's Scrub Oak Points in Segment C (Map 1 of 6)

Legend

- Existing Structures (To Remain)

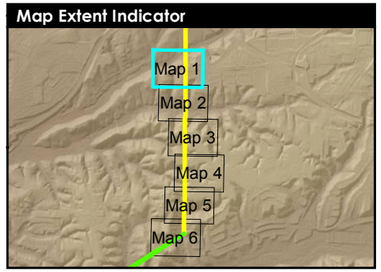
Nuttall's scrub oak (Quercus dumosa) Points

- Within Access Road Buffer
- Within Existing Access Roads
- Outside of All Work Areas

Work Areas

- Temporary Work Area
- Existing Access Road
- Access Road Buffer

Map Extent Indicator



Scale = 1:2,000

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Aerial Imagery: 6/3/2014

Date Created: 2/18/2016

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-7: Updated Nuttall's Scrub Oak Points in Segment C (Map 2 of 6)

Legend

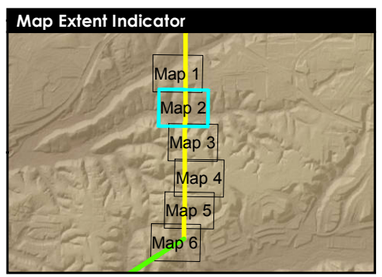
Nuttall's scrub oak (Quercus dumosa) Points

- Within Access Road Buffer
- Within Existing Access Roads
- Outside of All Work Areas

Work Areas

- Temporary Work Area
- Existing Access Road
- Access Road Buffer

Map Extent Indicator



Scale = 1:2,000

0 100 200 Feet

Aerial Imagery: 6/3/2014

Date Created: 2/18/2016

PANORAMA

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-7: Updated Nuttall's Scrub Oak Points in Segment C (Map 3 of 6)

Legend

- Existing Structures (To Remain)

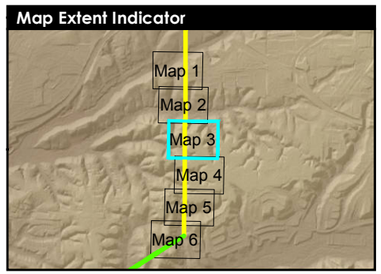
Nuttall's scrub oak (Quercus dumosa) Points

- Within Temporary Work Areas
- Outside of All Work Areas

Work Areas

- Temporary Work Area
- Existing Access Road
- Access Road Buffer

Map Extent Indicator



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Aerial Imagery: 6/3/2014

Date Created: 2/18/2016

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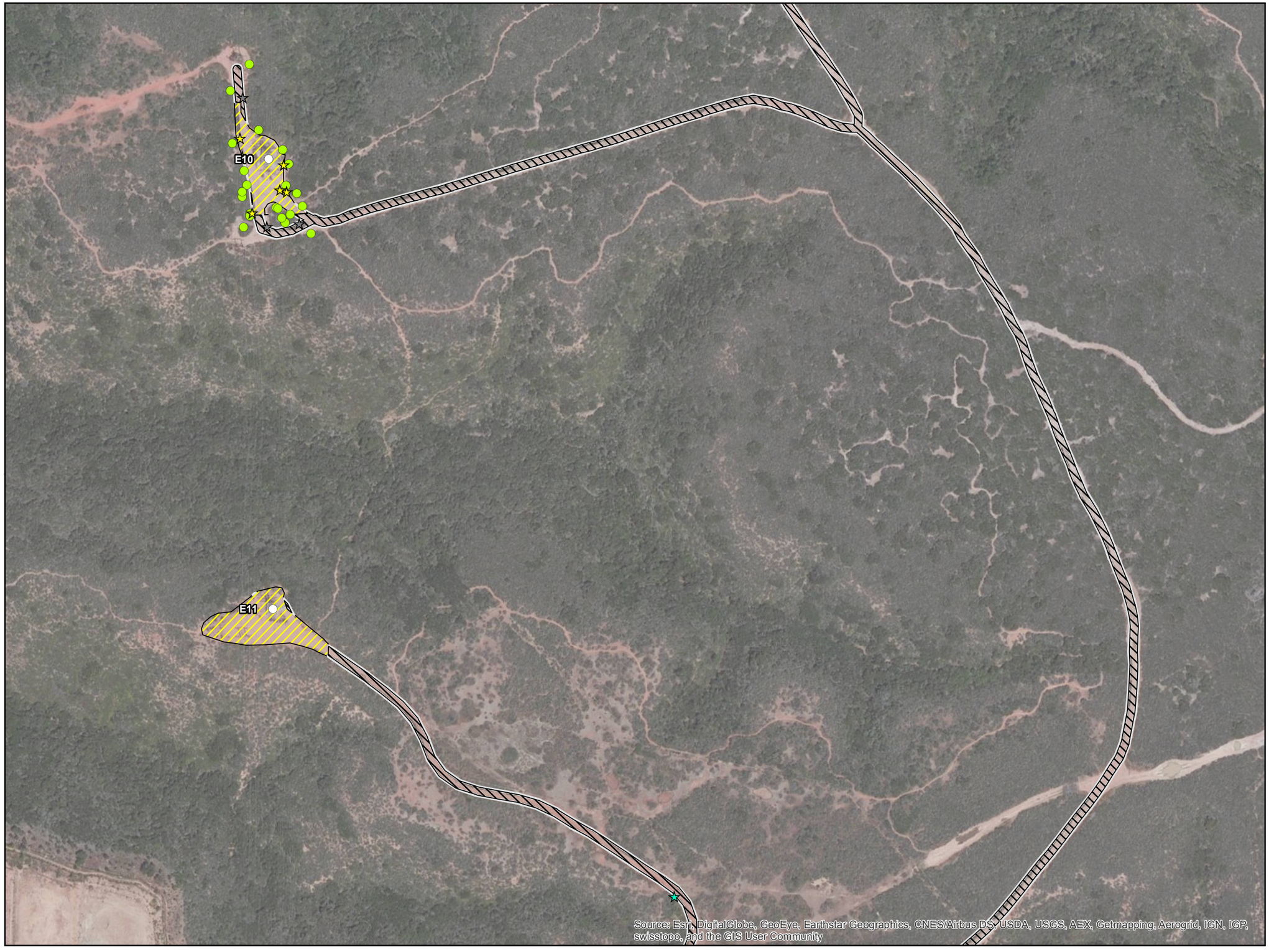


Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-7: Updated Nuttall's Scrub Oak Points in Segment C (Map 4 of 6)

Legend

- Existing Structures (To Remain)

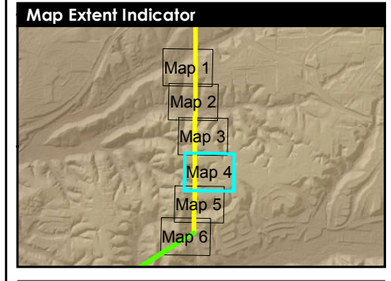
Nuttall's scrub oak (Quercus dumosa) Points

- Within Access Road Buffer
- Within Existing Access Roads
- Within Temporary Work Areas
- Outside of All Work Areas

Work Areas

- Temporary Work Area
- Existing Access Road
- Access Road Buffer

Map Extent Indicator



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Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-7: Updated Nuttall's Scrub Oak Points in Segment C (Map 5 of 6)

Legend

- Existing Structures (To Remain)

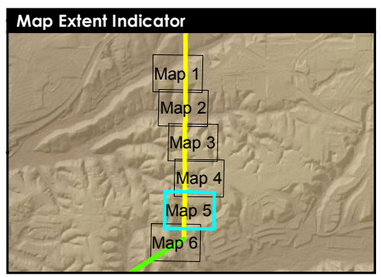
Nuttall's scrub oak (Quercus dumosa) Points

- Within Access Road Buffer
- Within Existing Access Roads
- Within Temporary Work Areas
- Outside of All Work Areas

Work Areas

- Temporary Work Area
- Existing Access Road
- Access Road Buffer

Map Extent Indicator



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Date Created: 2/18/2016

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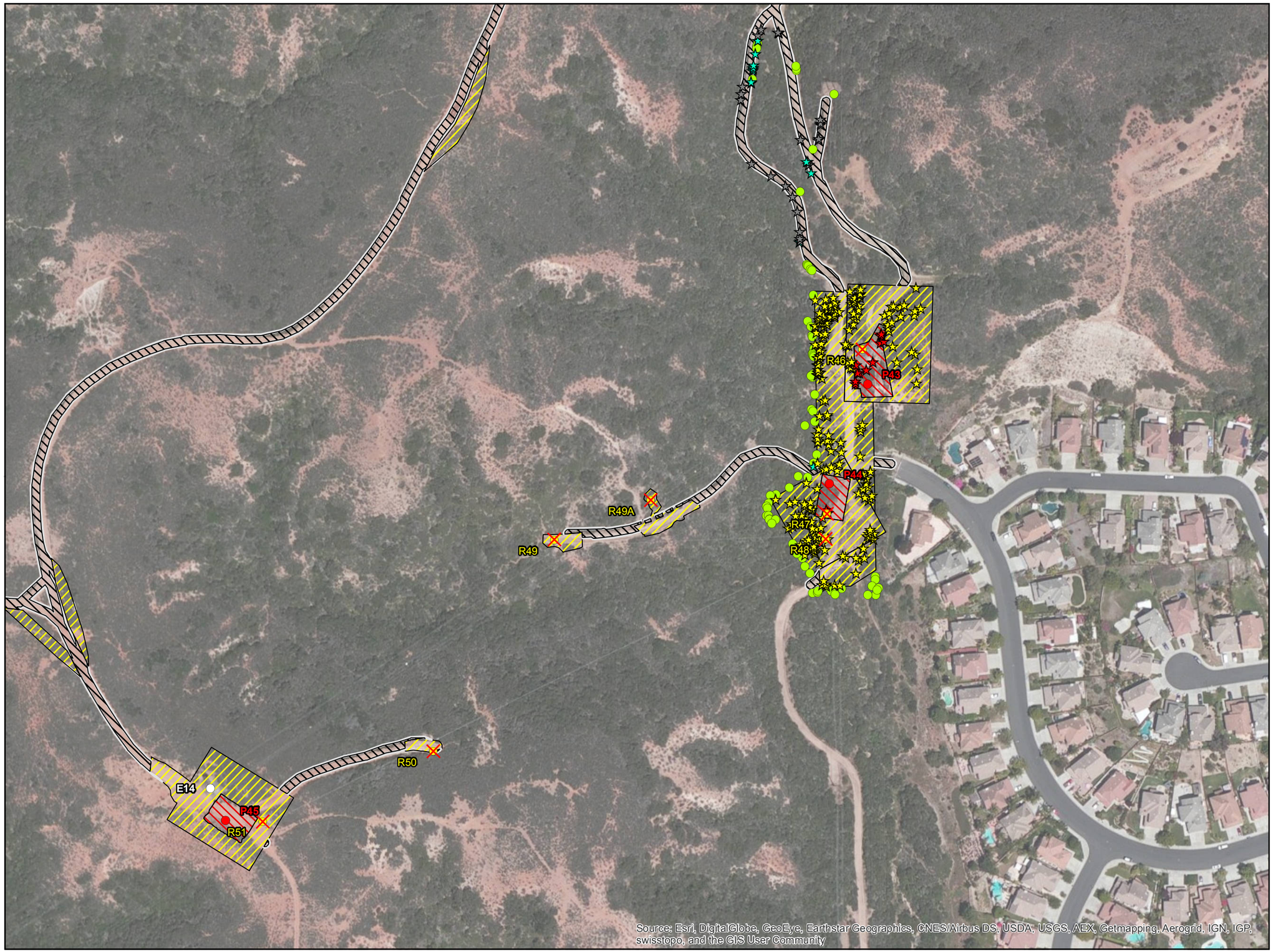


Sycamore-Peñasquitos 230-kV Transmission Line Project

Figure G-7: Updated Nuttall's Scrub Oak Points in Segment C (Map 6 of 6)

Legend

- Proposed Structures
- Existing Structures (To Remain)
- Existing Structures (To Remove)

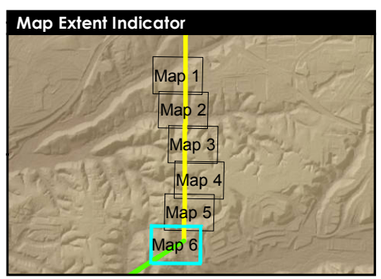
Nuttall's scrub oak (Quercus dumosa) Points

- Within Structure Pads
- Within Access Road Buffer
- Within Existing Access Roads
- Within Temporary Work Areas
- Outside of All Work Areas

Work Areas

- Structure Pad
- Temporary Work Area
- Existing Access Road
- Access Road Buffer

Map Extent Indicator



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Aerial Imagery: 6/3/2014

Date Created: 2/18/2016

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

SDG&E SUBREGIONAL NCCP OPERATING PROTOCOLS

7 Mitigation

The basic formula for addressing the impacts of SDG&E Activities in sensitive resource areas is first to attempt to avoid impacts to Covered Species and their habitats, second to minimize necessary impacts to Covered Species to the extent feasible, and third to mitigate for those unavoidable impacts. The biological mitigation for anticipated impacts of SDG&E Activities takes three forms:

- SDG&E agrees to conduct Activities in an environmentally sensitive manner in accordance with adopted Operational Protocols.

  SDG&E's Operational Protocols are behavioral and construction techniques which, when employed in the field, represent an environmentally sensitive approach to construction and maintenance. The protocols are primarily based upon impact avoidance and minimization and recognize that often minor adjustments during planning, construction, or maintenance activities can yield major benefits to the environment. Operational Protocols are discussed in detail in Section 7.1.

- SDG&E agrees to allow certain fee-owned rights-of-way to be used for wildlife and habitat preservation.

  SDG&E will restrict the use and development of certain land owned by SDG&E underlying specific electric transmission facilities and otherwise comprising a part of SDG&E electric transmission rights-of-way, which contain habitat, connect fragmented habitat areas, or which may contribute to the habitat carrying capacity of Preserve Areas managed as a part of other conservation plans. SDG&E will restrict the use and development of such land to SDG&E's utility activities as described in this Subregional Plan through a prohibitory easement granted in favor of USFWS and

CDFG, as more fully described in Section 7.3 of this Subregional Plan and subject to the terms and conditions of the Implementing Agreement.

- SDG&E agrees to cause the conveyance of certain high quality habitat land to USFWS, CDFG, or their designee, as further mitigation measure for unavoidable impacts to Covered Species or their habitat as a result of Activities covered by the Subregional Plan. These lands will comprise the SDG&E Mitigation Credits. Mitigation Credits will be reduced as they are used for mitigation in accordance with the ratios set forth in Section 7.4. The amount of Mitigation Credit to be conveyed has been predicted for the initial term of this Subregional Plan (25 years) based upon the expected impacts to habitat which will result from the Activities covered by the Subregional Plan, as more fully described in Section 4. The use of Mitigation Credits will not be necessary where habitat enhancement measures have been successful as a mitigation measure.

  Mitigation Credits which are unused at the expiration or termination of the Subregional Plan shall remain available for utilization, as appropriate, as mitigation for any project or action which may be required under CEQA, NEPA, or other environmental or natural resource law, as more fully described in the Implementing Agreement.

As more fully described in the Implementing Agreement, USFWS, CDFG, and SDG&E agree that, absent Unforeseen Circumstances, the mitigation measures provided in this Subregional Plan constitute the only mitigation measures that shall be required for any activity covered by the Subregional Plan where it results in an impact to a Covered Species or its habitat.

7.1 Operational Protocols

Operational protocols represent an environmentally sensitive approach to traditional utility construction, maintenance and repair Activities recognizing that slight adjustments in construction techniques can yield major benefits for the environment. The appropriate Operational Protocols for each individual project will be determined and documented by the Environmental Surveyor. The information regarding the qualifications and responsibilities of the environmental surveyor is contained in Appendix B. The following mitigation measures shall be adhered to by SDG&E.

7.1.1 General Behavior for All Field Personnel

1. Vehicles must be kept on access roads. A 15 mile-per-hour speed limit shall be observed on dirt access roads to allow reptile species to disperse. Vehicles must be turned around in established or designated areas only.

2. No wildlife, including rattlesnakes, may be harmed, except to protect life and limb.

3. Firearms shall be prohibited on the rights-of-way except for those used by security personnel.

4. Feeding of wildlife is not allowed.

5. SDG&E personnel are not allowed to bring pets on the rights-of-way in order to minimize harassment or killing of wildlife and to prevent the introduction of destructive domestic animal diseases to native wildlife populations.

6. Parking or driving underneath oak trees is not allowed in order to protect root structures except in established traffic areas.

7. Plant or wildlife species may not be collected for pets or any other reason.

8. Littering is not allowed. SDG&E shall not deposit or leave any food or waste on the rights-of-way or adjacent property.

9. Wild Fires shall be prevented or minimized by exercising care when driving and by not parking vehicles where catalytic converters can ignite dry vegetation. In times of high fire hazard, it may be necessary for trucks to carry water and shovels, or fire extinguishers in the field. The use of shields, protective mats, or other fire prevention methods shall be used during grinding and welding to prevent or minimize the potential for fire. Care should be exhibited when smoking in natural habitats.

10. Field crews shall refer environmental issues including wildlife relocation, dead or sick wildlife, hazardous waste, or questions about avoiding environmental impacts to the Environmental Surveyor. Biologists or experts in wildlife handling may need to be brought in by Environmental Surveyor for assistance with wildlife relocations.

7.1.2 Training

11. All SDG&E personnel working within the project area shall participate in an employee training program conducted by SDG&E, with annual updates. The program will consist of a brief discussion of endangered species biology and the legal protections afforded to Covered Species; a discussion of the biology of the Covered Species protected under this Subregional Plan; the habitat requirements of these Covered Species; their status under the Endangered Species Acts; measures being taken for the protection of Covered Species and their habitats under this Subregional Plan; and a review of the Operational Protocols. A fact sheet conveying this information will also be distributed to all employees working in the project area.

12. Designated SDG&E staff will conduct selected reviews of SDG&E operations. Any proposed modifications to Operational Protocols, procedures or conditions will be promptly provided to CDFG and USFWS for their review and input for required permit or Subregional Plan amendments.

7.1.3 Preactivity Studies

13. The Environmental Surveyor shall conduct preactivity studies for all activities occurring off of access roads in natural areas. The scope of these studies is included in Appendix A. The Environmental Surveyor will complete a preactivity study form contained in Appendix A, including recommendations for review by a biologist and construction monitoring as appropriate. Biologists should be called in when there is the potential for unavoidable impacts to Covered Species. The forms are for information only, and will not require CDFG or USFWS approval. These forms shall be faxed to CDFG and USFWS, along with phone notification, who will reply within 5 working days, indicating if they would like to review the project and/or suggest recommendations for post project monitoring. If a biologist is required, he/she will be contacted concurrent to notification to CDFG and USFWS. SDG&E's project may proceed during this time if necessary, in compliance with the recommendations of the biologist (For narrow endemic species see mitigation IV following Table 3.1). USFWS survey protocols performed by qualified biologists will be required for new projects which are defined as projects requiring CEQA review.

In those situations where the Environmental Surveyor cannot make a definitive species

identification, an on-call biologist will be brought in. When the biologist is called, he or she will be contacted concurrently with CDFG and USFWS. The biologist will make the determination of the species in question and recommend avoidance or mitigation approaches to the Environmental Surveyor and a decision will be made. In those situations where more than one visit may be necessary to identify a given species, such as certain birds, no more than three site visits shall be required. It is expected that the typical USFWS search protocols will not be utilized in most situations due to the Plan's avoidance priority. Background information necessary to complete the annual report shall be collected on the preactivity study form and used by SDG&E to prepare the annual report.

14. In order to ensure that habitats are not inadvertently impacted, the Environmental Surveyor shall determine the extent of habitat and flag boundaries of habitats which must be avoided. When necessary, the Environmental Surveyor should also demark appropriate equipment laydown areas, vehicle turn around areas, and pads for placement of large construction equipment such as cranes, bucket trucks, augers, etc. When appropriate, the Environmental Surveyor shall make office and/or field presentations to field staff to review and become familiar with natural resources to be protected on a project specific basis.

15. SDG&E will maintain a library of rare plant locations known to SDG&E occurring within easements and fee owned properties. "Known" means a verified population, either extant or documented using record data. Information on known sites may come from a variety of record data sources including local agency Habitat Conservation Plans, pre-activity surveys, or biological surveys conducted for environmental compliance on a project site (e.g. initial study), but there is no requirement for development of original biological data. Plant inventories shall be consulted as part of pre-activity survey procedures.

7.1.4 Maintenance, Repair and Construction of Facilities

16. Maintenance, repair and construction Activities shall be designed and implemented to minimize new disturbance, erosion on manufactured and other slopes, and off-site degradation from accelerated sedimentation, and to reduce maintenance and repair costs.

17. Routine maintenance of all Facilities includes visual inspections on a regular basis, conducted from vehicles driven on the access roads where possible. If it is necessary to inspect areas which cannot be seen from the roads, the inspection shall be done on foot, or from the air.

18. When the view of a gas transmission line marker becomes obscured by vegetation on a regular basis requiring repeated habitat removal, consideration shall be given to the replacement of markers with taller versions.

19. Erosion will be minimized on access roads and other locations primarily with water bars. The water bars are mounds of soil shaped to direct flow and prevent erosion.

20. Hydrologic impacts will be minimized through the use of state-of-the-art technical design and construction techniques to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water by use of Best Management Practices.

21. When siting new facilities, every effort will be made to cross the wetland habitat perpendicular to the watercourse, spanning the watercourse to minimize the amount of disturbance to riparian areas (See Figure 4).

22. Gas and other facilities cross streambeds and require maintenance and repair. During such times water may be temporarily diverted as long as after disturbance natural drainage patterns are restored to minimize the impact of the disturbance and help to reestablish or enhance the native habitat. Erosion control during construction in the form of intermittent check dams and culverts should also be considered to prevent alteration to natural drainage patterns and prevent siltation.

23. Impacts to wetlands shall be minimized by avoiding pushing soil or brush into washes or ravines.

24. During work on facilities, all trucks, tools, and equipment should be kept on existing access roads or cleared areas, to the extent possible.

25. Environmental Surveyor must approve of activity prior to working in sensitive areas where disturbance to habitat may be unavoidable.

26. Insulator washing is allowed from access roads if other applicable protocols are followed.

27. Brush clearing around facilities for fire protection shall not be conducted from March through August without prior approval by the Environmental Surveyor. The Environmental Surveyor will make sure that the habitat contains no active nests, burrows, or dens prior to clearing.

28. In the event SDG&E identifies a covered species of plant within a 10' radius around power poles, which is the area required to be cleared for fire protection purposes, SDG&E shall notify USFWS (for ESA listed plants), and CDFG (for CESA listed plants), in writing, of the plant's identity and location and of the proposed Activity, which will result in a Take of such plant. Notification will occur ten (10) working days prior to such Activity, during which time USFWS or CDFG may remove such plant(s). If neither USFWS or CDFG have removed such plant(s) within the ten (10) working days following the notice, SDG&E may proceed to complete its fire clearing and cause a Take of such plant(s).

    When fire clearing is necessary in instances other than around power poles, and the potential for impacts to Covered Species exists, SDG&E will follow the preactivity study and notification procedures in Operational Protocol number 13.

29. Wire stringing is allowed year round in sensitive habitats if conductor is not allowed to drag on ground or in brush and vehicles remain on access roads.

30. Maintenance of cut and fill slopes shall consist primarily of erosion repair. In situations where revegetation would improve the success of erosion control, planting or seeding with native hydroseed mix may be done on slopes.

31. Spoils created during maintenance operations shall be disposed of only on previously disturbed areas designated by the Environmental Surveyor or used immediately to fill eroded areas. Cleared vegetation shall be hauled off the rights-of-way to a permitted disposal location.

32. Within 6 months of Plan approval, environmentally sensitive tree trimming locations will be identified in the tree trim computer data base system utilized by tree trim contractors. (This data base also tracks the date of each tree trim, type of tree, where threatening dogs reside, etc.). The Environmental Surveyor should be contacted to perform a preactivity survey when trimming is planned in environmentally sensitive areas. Whenever possible, trees in environmentally sensitive areas (determined by CDFG and SDG&E) will be scheduled for trimming in the non-sensitive times.

33. No new Facilities and Activities shall be planned which disturb vernal pools, their watersheds, or impact their natural regeneration. Continued historic maintenance of existing infrastructure utilizing existing access roads is allowed to continue in areas containing vernal pool habitat. New construction of overhead infrastructure which spans vernal pool habitats is allowed as long as the placement of facilities or the associated construction activities in no way impact the vernal pools.

34. If any previously unidentified dens, burrows, or plants are located on any project site after the preactivity survey, the Environmental Surveyor shall be contacted. Environmental Surveyor will determine how to best avoid or minimize impacting the resource by considering such methods as project or work plan redevelopment, equipment placement or construction method modification, seasonal/time of day limitations, etc...

35. The Environmental Surveyor shall conduct monitoring as recommended in the preactivity survey report. At completion of work, the Environmental Surveyor shall check to verify compliance, including observing that flagged areas have been avoided and that reclamation has been properly implemented. Also at completion of work, the Environmental Surveyor is responsible for removing all habitat flagging from the construction site.

36. The Environmental Surveyor shall conduct checks on mowing procedures, to ensure that mowing is limited to a 12-foot wide area on straight portions of the road (slightly wider on radius turns), and that the mowing height is no less than 4 inches.

37. Supplies or equipment where wildlife could hide (e.g., pipes, culverts, pole holes) shall be inspected prior to moving or working on them to reduce the potential for injury to wildlife. Supplies or equipment that cannot be inspected or from which animals could not be removed shall be capped or otherwise covered at the end of each work day. Old piping or other supplies that have been left open, shall not be capped until inspected and any species found in it allowed to escape. Ramping shall be provided in open trenches when necessary. If an animal is found entrapped in supplies or equipment, such as a pipe section, the supplies or equipment shall be avoided and the animal(s) left to leave on its own accord, except as otherwise authorized by CDFG.

38. All steep-walled trenches or excavations used during construction shall be inspected twice daily (early morning and evening) to protect against wildlife entrapment. If wildlife are located in the trench or excavation, the Environmental Surveyor shall be called immediately to remove them if they cannot escape unimpeded.

39. Large amounts of fugitive dust could interfere with photosynthesis. Fugitive dust created during clearing, grading, earth-moving, excavation or other construction activities will be controlled by regular watering. At all times, fugitive dust emissions will be controlled by limiting on-site vehicle speed to 15 miles per hour.

40. Before using pesticides in areas where burrowing owls may be found, a pre-activity survey will be conducted.

7.1.5 Maintenance of access roads shall consist of:

41. Repair of erosion by grading, addition of fill, and compacting. In each case of repair, the total area of disturbance shall be minimized by careful access and use of appropriately sized equipment. Repairs shall be done after preactivity surveys conducted by the Environmental Surveyor and in accordance with the recommendations regarding construction monitoring and relevant protocols. Consideration should be given to source of erosion problem, when source is within control of SDG&E.

42. Vegetation control through grading should be used only where the vegetation obscures the inspection of facilities, access may be entirely lost, or the threat of Facility failure or fire hazard exists. The graded access road area should not exceed 12'-wide on straight portions (radius turns may be slightly wider) (See Figure 23).

43. Mowing habitat can be an effective method for protecting the vegetative understory while at the same time creating access to a work area. Mowing should be used when permanent access is not required since, with time, total revegetation is expected. If mowing is in response to a permanent access need, but the alternative of grading is undesirable because of downstream siltation potential, it should be recognized that periodic mowing will be necessary to maintain permanent access.

44. Maintenance work on access roads should not expand the existing road bed (See Figure 23).

45. Material for filling in road ruts should never be obtained from the sides of the road which contain habitat without approval from Environmental Surveyor..

7.1.6 Construction of new access roads shall comply with the following:

46. SDG&E access roads will be designed and constructed according to the SDG&E *Guide for Encroachment on Transmission Rights-of-Way (4/91).*

47. Access roads will be made available to managers of the regional preserve system subject to coordination with SDG&E.

48. New access roads shall be designed to be placed in previously disturbed areas and areas which require the least amount of grading in sensitive areas during construction whenever possible (See Figure 5). Preference shall be given to the use of stub roads rather than linking facilities tangentially.

49. SDG&E will consider providing access control on access roads leading into the regional preserve system where such control provides benefit to sensitive resources.

50. New access road construction is allowed year round. Every effort shall be made to avoid constructing roads during the nesting season. During the nesting season, the presence or absence of nesting species shall be determined by a biologist and appropriate avoidance and minimization recommendations followed.

7.1.7 Construction and Maintenance of Access Roads Through Streambeds

51. Construction of new access roads through streambeds requires a Streambed Alteration Agreement from CDFG and/or consultation with the Army Corps of Engineers.

52. Maintenance or construction vehicle access through shallow creeks or streams is allowed. However, no filling for access purposes in waterways is allowed without the installation of appropriately sized culverts. The use of geotextile matting should be considered when it would protect wetland species.

53. Staging/storage areas for equipment and materials shall be located outside of riparian areas. (See Figure 23).

7.1.8 Survey Work

54. Brush clearing for foot paths or line-of-sight cutting is not allowed from March through August in sensitive habitats without prior approval from the Environmental Surveyor, who will ensure that activity does not adversely affect a sensitive species.

55. SDG&E survey personnel must keep vehicles on existing access roads. No clearing of brush for panel point placement is allowed from March through August without prior approval from the Environmental Surveyor.

56. Hiking off roads or paths for survey data collection is allowed year round so long as other protocols are met.

7.1.9 Emergency Repairs

57. During a system emergency, unnecessary carelessness which results in environmental damage is prohibited.

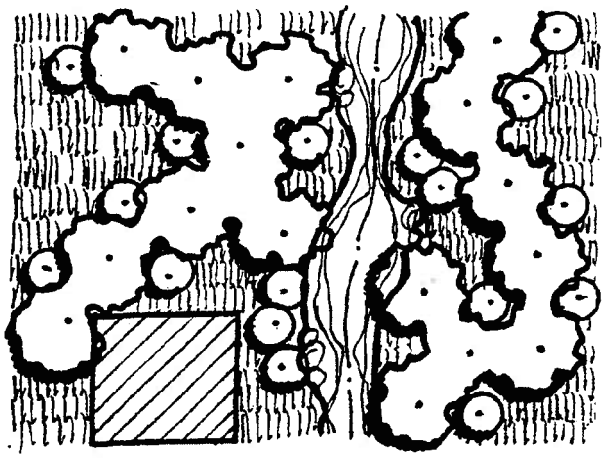
58. Emergency repair of facilities is required in situations which potentially or immediately threaten the integrity of the SDG&E system, such as pipe leaks, or downed lines, slumps, slides, major subsidence, etc. During emergency repairs the Operational Protocols contained in this Subregional Plan shall continued to be followed to fullest extent possible.

59. Once the emergency has stabilized, any unavoidable environmental damage will be reported to the Environmental Surveyor by the foreman. The Environmental Surveyor will develop a mitigation plan and ensure its implementation is consistent with this Subregional Plan.

7.1.10 Activities of Underlying Fee Owners

60. Most SDG&E rights-of-way are held in easement only. The activities of underlying fee owners cannot be controlled by SDG&E and are not covered by this Subregional Plan.

61. When sensitive habitat exists on either side of a utility right-of-way, SDG&E will not oppose underlying fee owners dedicating said property to conservation purposes. Underlying fee owners are expected to comply with applicable federal, state, and local regulations.



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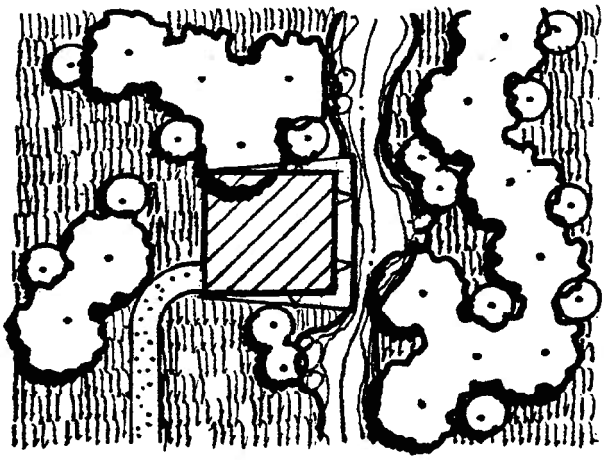

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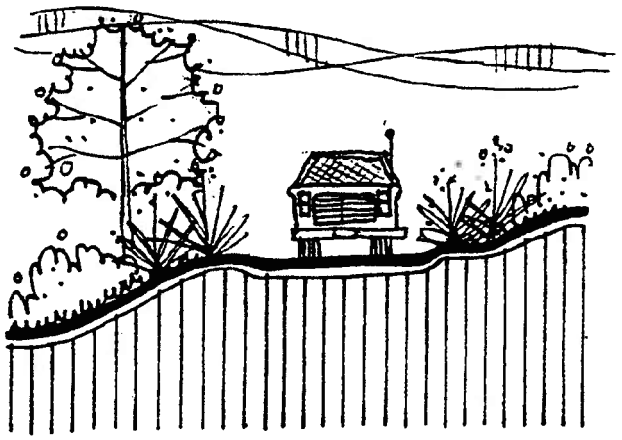
CONSTRUCTION STAGING/STORAGE AREAS SHOULD BE LOCATED OUTSIDE OF STREAMS



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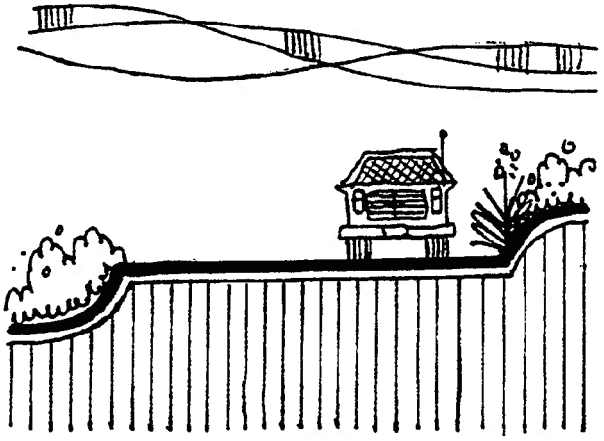

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ACCESS ROAD MAINTENANCE SHOULD NOT EXPAND THE EXISTING ROAD BED

FIGURE

Operational Protocol Diagrams

23

7.2 Habitat Enhancement Measures

The purpose of this section is to describe the techniques and permit the substitution of habitat enhancement measures when it is more beneficial than the use of mitigation credits. Habitat enhancement increases the value of biological resources in an impacted area, thereby improving the value of that habitat for Covered Species. Habitat enhancement activities shall occur under the direction of a Habitat Restoration Specialist. All disturbed areas, whether inside or outside of preserves, and which do not need to be maintained in a cleared state, shall be enhanced, either through vegetation restoration, habitat reclamation, or a combination of the two. Vegetation restoration entails a range of techniques.

For SDG&E Activities occurring within the Preserve, and for SDG&E Activities affecting riparian/wetland areas, the particular enhancement methodology will be proposed by SDG&E, with USFWS and CDFG concurring prior to implementation. For all other areas outside of the Preserve, SDG&E has discretion over the enhancement method selected, although it is expected that a standard coastal sage scrub seed mix will be used for reseeding many disturbed areas. For impacts both within and outside Preserve, if habitat enhancement is not selected, or is not successful according to the criteria specified in the mitigation flow chart (Figure 24), then a deduction from the SDG&E Mitigation Credits shall be made in accordance with ratios contained in Section 7.4. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E mitigation credits at a 1:1 ratio. For areas of less than 500 square feet, success criteria will not be required to be met. In such areas, refer to erosion control measures contained in Section 7.1.

7.2.1 Vegetation Restoration

The Habitat Restoration Specialist has a range of vegetation restoration techniques from which to choose:

Hydroseeding

Vegetation restoration will typically be done using a native seed mix obtained from a commercial seed provider and shall be applied by hydroseeding. For hydroseeding inside the Preserve areas, seed will be obtained from the local gene-pool and similar composition to the reference site.

Vegetation restoration shall be conducted from mid-November through mid-January to take advantage of rainy season precipitation, and should not be artificially irrigated.

Seed mix specifications and application techniques shall be provided by the Habitat Restoration Specialist, who will be an acknowledged specialist in native habitat restoration or a plant ecologist with experience developing native restoration plans in Southern California. The Habitat Restoration Specialist will be responsible for restoration plans within the Preserve.

If restoration lands contain areas used for temporary roads, staging areas, or other intensive activities, the soil may become so compacted that revegetation is difficult. In cases such as this, disking and plowing the compacted soil will loosen it and improve the success of hydroseed revegetation. Disking may also foster weed growth and should only be used where an influx of weeds would not adversely affect adjacent native plant communities.

Consideration shall be given to supplemental planting of species of concern in areas where it is desirable to expand existing colonies. For example, supplemental planting may be highly desirable in areas containing chollas or prickly pear cactus. Supplemental planting and plant relocation should only be done in disturbed areas that are thought to be suitable. Habitat conversion and impacts to extant native vegetation should be avoided.

Hand-Seeding

Seed may be applied by hand and raked into the top inch of soil. This method is best suited for small areas and areas that are inaccessible to a hydroseed truck.

Imprinting

Imprinting is the mechanical formation of smooth-walled V-shaped furrows in the soil surface, application of seed and injection of beneficial mycorrhizal fungi into the soil surface. This method is best suited for areas that are accessible by bulldozer and where there is a potential problem with weeds.

Soil and Plant Salvage

Native vegetation from the area to be impacted should be removed, mulched and stockpiled separately. Top soil should also be removed and stockpiled separately. Following construction activities, the top soil should be replaced and covered with the mulch. The top soil and mulch both have native propagules and the mulch reduces the erosion potential. This method is well suited for temporary roads, staging areas, or other intensive activities.

Quality Assurance

Monitoring, involving visual inspection, shall be conducted on restoration sites after one year. A second application may be made. If, after one more year, restoration is deemed unsuccessful, the wildlife agencies, in cooperation with SDG&E, will determine whether the remaining loss shall be mitigated through a deduction from the SDG&E Mitigation Credits, or a third application would better achieve the intended purpose.

Coverage standards will be based on comparisons with established stands of the target vegetation, or another reference area. The means of determining success should be based on estimates of cover by native species, cover of exotic species, and diversity of native species. The cover of native species should increase and the cover of weed species should decrease, eventually approximating the reference area. The reference areas should be a nearby stand of vegetation that the restoration is attempting to emulate. It should have a similar aspect, slope, and soil type.

Cover for the restoration and references areas should be estimated using repeatable cover classes. One tested system is as follows:

Cover Class	**1**	**2**	**3**	**4**	**5**	**6**
% Cover	0-5	5-25	25-50	50-75	75-95	95-100
Mean Cover	2.5	15	37.5	62.5	85	97.5

SUCCESS CRITERIA MILESTONES

Criteria*	Year 1	Year 2
Cover by Exotic Species**	140%	130%
Cover by Native Species (trees shrubs and herbaceous species)	60%	70%

*Values are relative to reference area
**Percent total cover

7.2.2 Habitat Reclamation

Habitat reclamation techniques should be considered when re-seeding would be an ineffective habitat enhancement due to the presence of stronger and more prolific exotic vegetation in the proximity.

Habitat reclamation involves the elimination of existing exotic vegetation (weed abatement) to facilitate the natural re-colonization of a native habitat. An example of where habitat reclamation would be appropriate is in wetland areas containing tamarisk or giant reed.

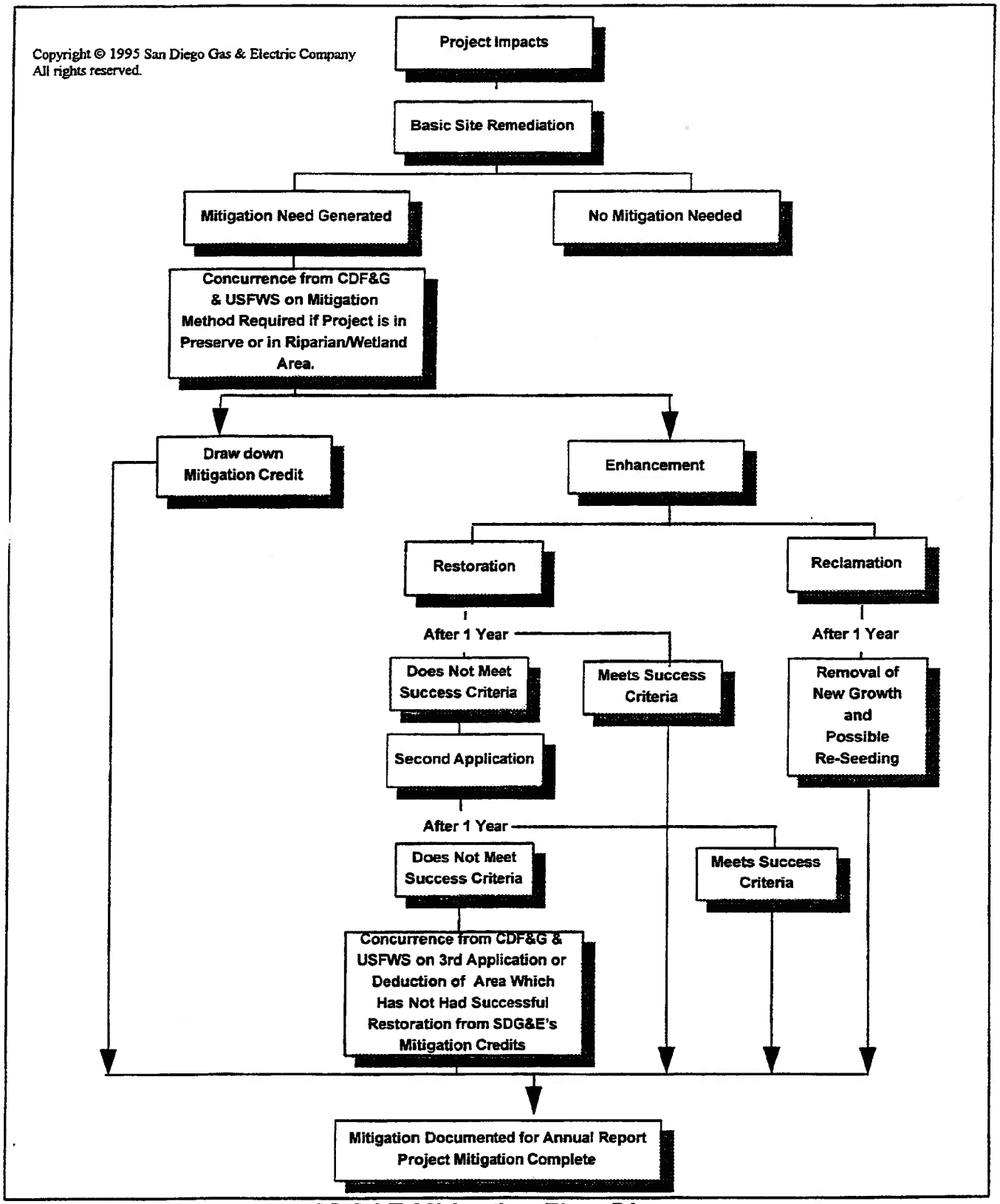
In order to avoid net loss of wetland and riparian habitat, exotic species should be removed at a 2:1 ratio. Exotics should be removed from the site and disposed of off-site. Soil should be prepared for new native growth to occur. In areas larger than 500 square feet, reseeding will supplement the recovery of native vegetation

Reclamation shall be limited to initial removal and one-time removal of new growth within one year if necessary. In certain cases, such as with Arundo removal, it may be necessary to clear invasive vegetation a third time. Once weeds are controlled, if extensive reclamation is undertaken, supplemental planting may be necessary to keep weeds out.

The habitat reclamation shall be done under the direction of the Habitat Restoration Specialist who will determine the abatement technique to be used and the area in the vicinity of the project site on which abatement would be most effective in facilitating reclamation on the project site.

7.2.3 Procedure

(Refer to Figure 24).Figure 24 -- Mitigation Flow Diagram



SDG&E Mitigation Flow Diagram
(For Temporary Disturbances)

FIGURE
24

7.3 Fee-Owned Rights-of-Way

Certain of SDG&E's electric transmission rights-of-way consist of real property owned in fee by SDG&E. Such fee owned rights-of-way are of various widths and cover a variety of habitat types. Some of the fee-owned rights-of-way may serve as the foundation for the creation by USFWS and CDFG of valuable wildlife corridors between Preserve Areas. The fee-owned rights-of-way subject to this subsection are identified on Figure 25a and 25b.

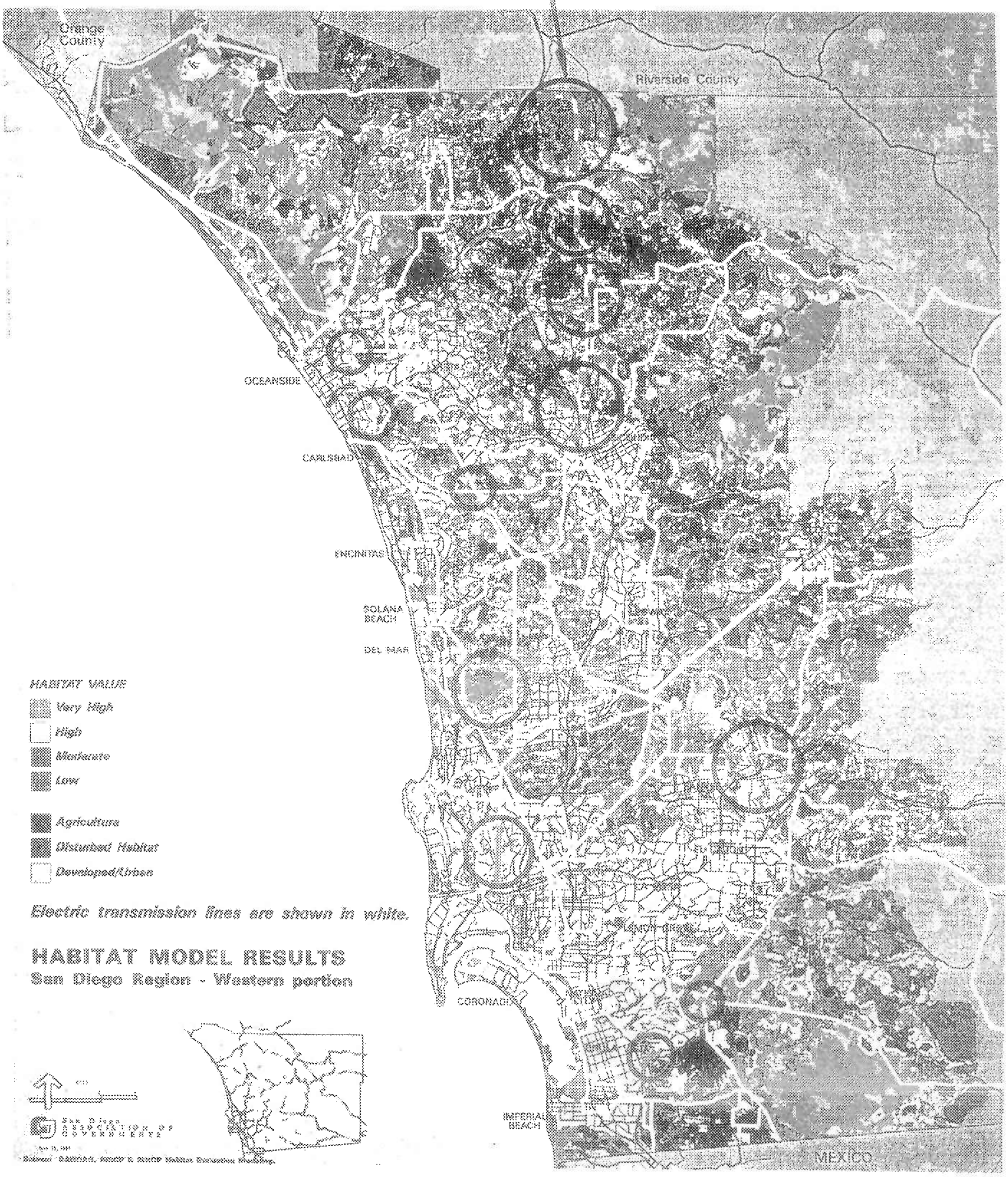
As a further mitigation measure, SDG&E will restrict the use and development of such lands to those SDG&E activities covered by this Subregional Plan. Subject to the terms and conditions of the Implementing Agreement, SDG&E shall effect such use and development restriction by granting a prohibitory easement in favor of USFWS and CDFG, or their designee, to be recorded in County Recorder's Office for the County in which such land is located.

To assist in the creation of these corridors, SDG&E agrees that it will not, and that it will not allow any other person, to use such rights-of-way for any purpose other than for SDG&E Activities conducted in accordance with this Agreement, the Permits and the Subregional Plan. SDG&E's agreement to limit its use of such rights-of-way shall remain effective for so long as USFWS and CDFG continuously uses such rights-of-way in combination with other real property rights acquired by USFWS and CDFG in adjoining property, the use of which is subject to similar limited or restricted uses, to establish functional and effective corridors for Covered Species between separated Habitat and Preserve Areas, and, for so long as such corridors are properly functioning and necessary

for the conservation of Covered Species. SDG&E's agreement to limit the use of such rights-of-way will be memorialized in a negative or open space easement in favor of USFWS and CDFG, or their designee, and recorded in the County Recorder's Office for the county in which such rights-of-way are located. Such easement shall be substantially in the form of the easement attached hereto. However, in the event that any of such rights-of-way shall cease to be an essential element of a properly functioning, effective and necessary corridor, all easement rights conveyed by SDG&E affecting any such right-of-way shall terminate and revert back to SDG&E without limitation or reservation.

To the extent SDG&E rights-of-way extend over land in which it does not hold an undivided fee ownership interest, SDG&E agrees to approve of and when appropriate, encourage the conveyance, grant or dedication of such land by the fee owner to any relevant Habitat Conservation Planning Management entity for wildlife conservation purposes; provided, however, any such conveyance, grant or dedication shall be subject to the authorizations and Permitted Activities granted by USFWS and CDFG to SDG&E herein and to the rights of SDG&E to use such property for public utility purposes to the extent SDG&E held such rights, in law or in equity, at the time of such conveyance, grant or dedication. SDG&E further agrees, where the company's land rights allow, to prevent the underlying land owner from removing habitat within rights-of-way of significant habitat value to the extent feasible.

Fee Owned Rights-of-Way are Designated with Pink Lines Within Black Circles - Typical

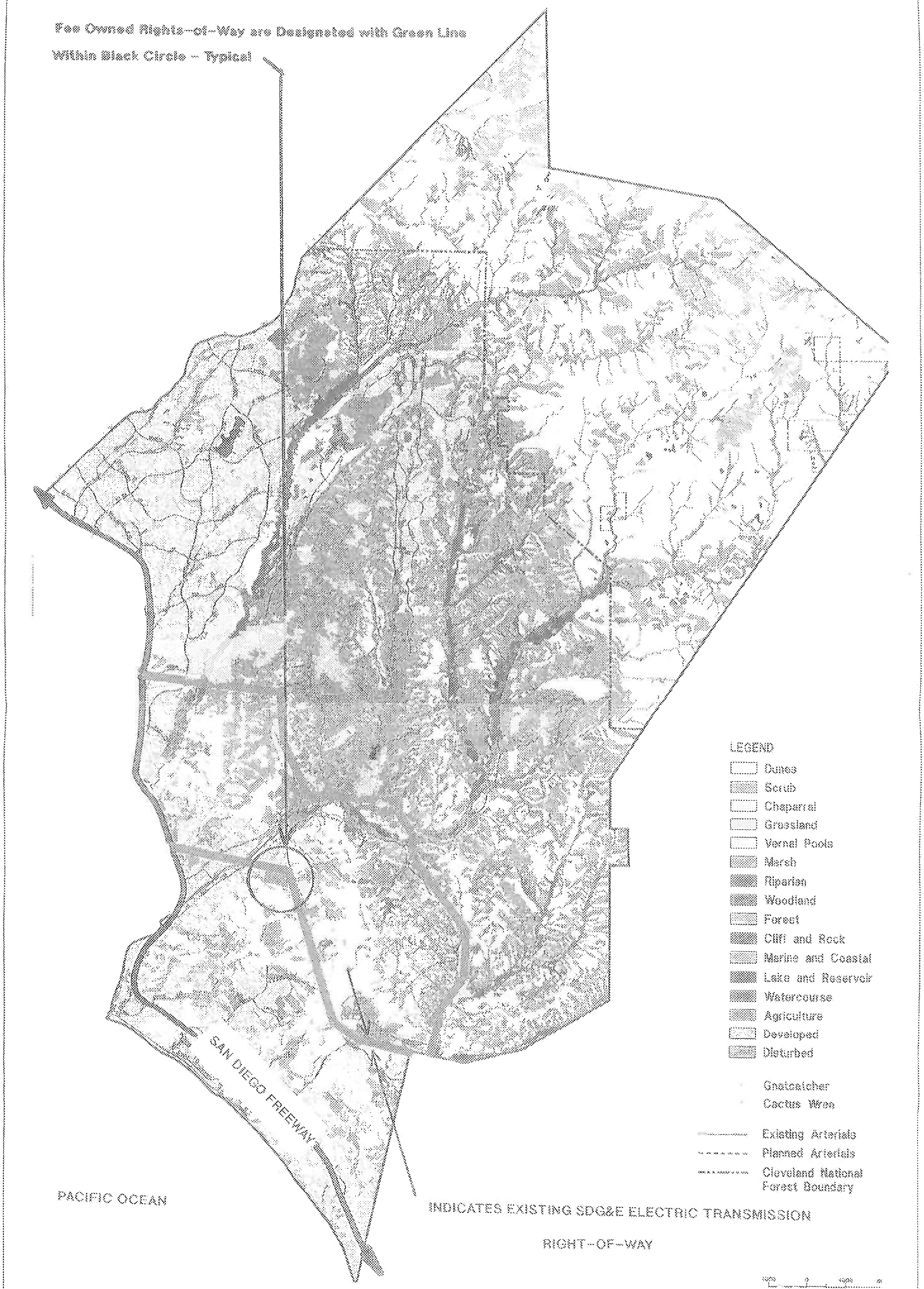


HABITAT MODEL RESULTS

San Diego Region - Western portion

FIGURE 25a

SDG&E Electric Transmission System Fee Owned Rights-of-Way



Source: Dudek 1994, SDG&E 1993

SDG&E Electric Transmission System Fee Owned Rights-of-Way

FIGURE 25b

7.4 Mitigation Credits

SDG&E will provide the USFWS and the CDFG with funds to enable the procurement of approximately 240 acres of high quality habitat land. The provision of such funds will create a conservation bank in favor of SDG&E in which SDG&E will hold approximately 240 acres of Mitigation Credits for impacts to covered species or their habitats which result from SDG&E Activities. Mitigation Credits associated with the SDG&E Subregional Plan will be drawn upon and deducted from available Mitigation Credits to mitigate for unavoidable impacts associated with SDG&E Activities. Habitat enhancement opportunities may be available and pursued prior to such deductions being taken from the SDG&E Mitigation Credits as discussed in Section 7.2.

The habitat associated with the SDG&E Mitigation Credits is of very high value. The location and configuration of the land will play a critical role in meeting region-wide conservation goals. As such, the Mitigation Credits serve as mitigation for both in-kind and out-of-kind covered species and habitat impacts, without regard to the type of habitat and the biological value of the habitat impacted, except with regard to wetlands falling within the jurisdiction of the Army Corps of Engineers pursuant to Section 10 of the Rivers and Harbors Act and Sections 403 and 404 of the Clean Water Act.

In the Annual Report which will be prepared as a condition of this Plan, the general condition of the habitat assoicated with the Mitigation Credits will be discussed, with special attention paid to changes in the habitat such as from stochastic events like fires and drought. The Report will also include a table showing how many credits were used from the Mitigation Credits (expressed in acres) and how many are left.

Also in the Annual Report will be an analysis jointly prepared by SDG&E, CDFG and USFWS on the performance of the management entity who are overseeing the day-to-day

operations of the habitat associated with the Mitigation Credits. It may be necessary based on the outcome of that reporting to transfer control to CDFG or USFWS, if all of the parties agree.

The ratio between impacts from Activities and corresponding deductions from the Mitigation Credits are as follows:

Table 7.4

ACTIVITY	LOCATION	DURATION	RATIO
New Facilities	Inside Preserve*	Permanent	2:1
	Inside Preserve	Temporary	(a)(c)
	Outside Preserve	Permanent	1:1
	Outside Preserve	Temporary	(a)
Maintenance of Existing Facilities	Inside Preserve	Permanent	2:1
		Temporary	(a) (b)
	Outside Preserve	N/A	(b)

(a) Temporary impacts are mitigated through basic site remediation which, includes native hydroseed for erosion control. However, if roots are not grubbed during temporary impacts, the hydroseeding may not be necessary. This applies to areas greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E mitigation credits at a 1:1 ratio.

(b) Impacts associated with maintenance of existing facilities are mitigated for the term of the permit by SDG&E's agreement to restrict development other than SDG&E activities on fee-owned rights-of-way which contain habitat, connect fragmented habitat areas, or contribute to the habitat carrying capacity of the Preserve Areas in the region. SDG&E agrees to limit its use of such rights-of-way to utility activities.

(c) Same as (a), except that any portion of the temporarily impacted area which does not revegetate in accordance with Section 7.2 and the Mitigation Flow Chart attached as Figure 24, then acreage not meeting success criteria shall be deducted from the SDG&E Mitigation Credits.

*The term "Preserve" in Table 7.4 means the area encompassed by the MSCP's Multi-Habitat Planning Area (MHPA) map (as currently defined or ultimately adopted), the equivalent maps for the MHCP and MHCOS programs in San Diego County, the South Orange County NCCP Subregional Plan reserve area, and the Riverside County Conservation Agency Core reserve areas. If no preserve areas are formally delineated, those areas which are designated moderate, high, and very high quality habitat on habitat on evaluation maps prepared for the respective planning areas are considered the "Preserve."