Balancing the Natural and Built Environment

February 8, 2019

Nandini T. Moran Los Angeles County Flood Control District Stormwater Maintenance Division 900 South Fremont Avenue, Annex Building, 2nd Floor Alhambra, California 91803 VIA EMAIL ntmoran@dpw.lacounty.gov

Subject: Results of the Focused Special Status Plant Survey Conducted for the Los Angeles County Flood Control District Soft Bottom Channels Annual Maintenance Program, Los Angeles County, California

Dear Ms. Moran:

This Letter Report presents the results of focused surveys to determine the presence or absence of the federally and state-listed endangered slender-horned spineflower (*Dodecahema leptoceras*) at soft-bottom channel (SBC) Reaches 120 (Jake's Way) and 121 (San Francisquito Creek) for the Los Angeles County Flood Control District Soft Bottom Channel Annual Maintenance Program located in Los Angeles County, California (Exhibit 1). Previous reconnaissance surveys have identified potentially suitable habitat for the slender-horned spineflower at these two reaches (BonTerra Psomas 2018). Focused surveys have not been performed at these reaches prior to 2018.

PROJECT DESCRIPTION

The proposed project descriptions for Reaches 120 and 121 are included in a draft maintenance plan. Approval of the plan has been acquired or is in process by all relevant regulatory agencies.

Reach 120 (Jake's Way; PD 2496)

This facility was constructed by a private developer, and the responsibility for long term maintenance was transferred to LACFCD. The proposed project description includes the following tasks:

- Hand and mechanical removal of all vegetation within 15 feet of the toe of slope along the bank protection structure lining throughout the entire reach.
- All rock rip rap including at the outfall structure and turnaround areas and the concrete lined side slope will be maintained in a vegetation-free state.
- Periodically remove any accumulated sediment, debris and vegetation in the vicinity of the outfall structure to allow water to drain.
- Periodic removal of ponded water.
- As-needed repairs to the outfall structure, rip-rap, concrete lined side slope, access road, invert ramp, turnaround area and other on-site structures.
- Clear trash, debris, and non-native vegetation by hand within easement boundaries.

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Reach 121 (San Francisquito Creek; PD 2271)

This facility was constructed by a private developer, and the responsibility for long term maintenance was transferred to LACFCD. The proposed project description includes the following tasks:

- Maintenance will occur by means of hand and mechanical equipment to reduce the impact on flow in the channel and to maintain the structural integrity of the levee.
- The channel clearing will involve mechanized removal of all vegetation within 15 feet of the toe of slope along the bank protection structure lining throughout the entire reach.
- The rock rip rap for the outfall structure for the storm drain , and the concrete lined side slope will be maintained in a vegetation-free state.
- The storm drain requires periodic maintenance to remove any accumulated sediment, debris and vegetation in the vicinity of the outfall structure to allow water to drain.
- Grade to drain a 10-foot wide training channel from the outlet structure to the easement line and grade and clear a 10-foot wide path from the invert ramp to the toe of the lining.
- Periodic removal of ponded water and as-needed repairs to the outfall structure, rip-rap, concrete lined side slope, access road, invert ramp, turnaround area and other on-site structures to maintain their structural integrity.

SURVEY AREAS

Reach 120

SBC Reach 120 (Jake's Way; PD 2496) is located in the Canyon Country Community of the City of Santa Clarita, Los Angeles County (Exhibit 2a). This SBC reach extends for 950 feet along the south bank of the Santa Clara River just east of the State Route 14 (Antelope Valley Freeway) bridge. This SBC reach is bounded by residential development to the south, but otherwise borders open spaces of the Santa Clara River. Surface water was present during the surveys at the mouth of the outlet located at the west end of the reach. This reach is located within the Mint Canyon USGS 7.5-minute quadrangle map (Exhibit 3a).

Reach 121

SBC Reach 121 (San Francisquito Creek; PD 2271) is located within the City of Santa Clarita, Los Angeles County (Exhibit 2b). The reach is situated on the east bank of San Francisquito Creek, extending from approximately 330 feet upstream to approximately 562 feet downstream of Newhall Ranch Road for a total length of 1,150 feet. Reach 121 is bounded by an urban park and residential development to the east, but otherwise borders open spaces of San Francisquito Creek. Construction for the Newhall Ranch Road bridge widening project spanned the entire creek and encompassed both sides of the existing bridge. Surface water was present during the survey at the south end of this SBC reach outside the construction zone. The reach is located within the Newhall USGS 7.5-minute quadrangle map (Exhibit 3b).

SITE DESCRIPTION

Reach 120

This SBC supports alluvial sage scrub (scale-broom-buckwheat alluvial shrubland), annual brome grassland, open water, and disturbed areas graded by adjacent construction. Individual Fremont

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cottonwood trees (*Populus fremontii*; cottonwood forest) are scattered throughout the adjacent riverbed, but do not occur within the project boundaries. The alluvial sage scrub vegetation type in this SBC reach provides potentially suitable habitat for the slender-horned spineflower.

Alluvial sage scrub occurs throughout most of the riverbed outside the survey area. It is dominated by scattered scale-broom (*Lepidospartum squamatum*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), and mulefat (*Baccharis salicifolia*). Ephemeral scoured streambed takes up a large portion between the canopies of the dominant shrubs within this vegetation type. Several individuals of the invasive tree-of-heaven (*Ailanthus altissima*) shows evidence of cutting and resprouting. Scattered and infrequent invasive brome grasses occur throughout this vegetation type. A vegetation map of Reach 120 and adjacent areas is attached as Exhibit 4a.

Soil types/other areas along the survey area include Cortina sandy loam, and riverwash (USDA NRCS 2007). Exhibit 5a present maps of soil types throughout the survey area.

Reach 121

This SBC includes annual brome grassland, arroyo willow–giant reed shrubland, Fremont cottonwood– willow–mulefat woodland, ephemeral scoured streambed, open cottonwood–mulefat woodland, revegetated sagebrush-tamarisk shrubland, sandbar willow shrubland, alluvial sage scrub (scale-broombuckwheat alluvial shrubland), open water, disturbed areas graded by adjacent construction, and developed concrete levees and access ramps. Revegetated–cottonwood–deer grass woodland occurs adjacent to the project area along the bike path but does not occur within the project boundaries. The alluvial sage scrub vegetation type in this SBC reach provides potentially suitable habitat for the slenderhorned spineflower.

Alluvial sage scrub (scale-broom-buckwheat alluvial shrubland) covers most of the dry open riverbed. It is dominated by scale-broom and California buckwheat with some scattered California sagebrush, mulefat and sandbar willow individuals. Ephemeral scoured streambed took up a large portion of the area between the canopies of the dominant shrubs within this vegetation type. Scattered and infrequent invasive brome grasses occurred throughout this vegetation type. A vegetation map of Reach 121 and adjacent areas is attached as Exhibit 4b.

Soil types/other areas along the survey area include Hanford sandy loam, sandy alluvial land, and Sorrento loam (USDA NRCS 2007). Exhibit 5b present maps of soil types throughout the survey area.

METHODS

Botanical surveys were floristic in nature and consistent with the protocols created by the California Department of Fish and Wildlife (CDFW) (CDFG 2009). According to the National Weather Service, Castaic Junction (located approximately 9.7 and 2.9 miles east of Reach 120 and Reach 121, respectively) received 6.38 inches of precipitation from October 2017 through the survey dates, which is about 43 percent of the normal average (National Weather Service 2018).

The reference populations were monitored for the target species to ensure that the scheduled surveys were comprehensive. This is especially relevant during periods of unusual rainfall patterns or below-average rainfall. If conditions at a nearby reference population are suitable for germination and growth, then it can be inferred that conditions would also be suitable in the survey area. Due to the rarity of the target species, those reference populations monitored for this survey are limited to nearest accessible options. Slender-horned spineflower was observed blooming on May 4, 2018 at 2,400 feet in Cajon Pass, San

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Bernardino County. It was not observed on May 9, 2018 at 1,700 feet elevation in Bee Canyon Wash, Los Angeles County.

Psomas Botanist Katie Gallagher and Biologists Trevor Bristle, and Cristhian Mace conducted special status plant surveys on May 11 and June 13, 2018. Surveys at Reach 120 comprised 7 total person-hours. Surveys at Reach 121 comprised 15 total person-hours. The potentially suitable habitats for special status plants within the survey areas were systematically surveyed to the extent possible during the site visits (Exhibit 6a and 6b). All plant species observed were recorded in field notes. Plant species were identified in the field or collected for subsequent identification using keys in Baldwin et al. (2012). Taxonomy follows Baldwin et al. (2012) for scientific and common names.

SPECIES DESCRIPTION

Slender-horned spineflower is a federally and State-listed Endangered species and has a California Rare Plant Rank of 1B.1. It typically blooms between March and June (CNPS 2018a). This annual herb is found in sandy areas in chaparral, cismonane woodlands, and coastal scrub/alluvial fan scrub at elevations between approximately 656 and 2,493 feet above msl (CNPS 2018a). It is documented to occur in Los Angeles, San Bernardino, and Riverside Counties (CNPS 2018b; CDFW 2018). The nearest documented populations occur in Bee Canyon (approximately 4.64 miles east of Reach 120); Mint Canyon (approximately 0.60 miles north of Reach 120); and Newhall (approximately 4.45 miles southwest of Reach 120). The Mint Canyon and Newhall locations are historic, while the Bee Canyon population is probably extant.

SURVEY RESULTS

One southern California black walnut (*Juglans californica*) was observed in the survey area at Reach 121 (Exhibit 6b). The individual tree was located in a sandy wash on the edge of cottonwood-mulefat woodland. The overstory consists of loosely distributed tall cottonwoods (*Populus fremontii*). The understory is mostly cottonwood leaf litter covered by a dense thicket of dead mulefat (*Baccharis salicifolius*) branches with some scattered live mulefat, sandbar willow (*Salix exigua*), black sage (*Salvia mellifera*), and mugwort (*Artemisia douglasiana*). A photograph of the willow can be found in Attachment A.

The southern California black walnut is a California Rare Plant Rank (CRPR) 4.2 species. Plants with a CRPR of 4 are of limited distribution or are infrequent throughout a broader area in California; this is a "watch" list. Plants with a Threat Rank of (0.2) are moderately threatened in California (20-80% of occurrences are threatened or have a moderate degree and immediacy of threat. A CDFW California Natural Diversity Database (CNDDB) form is included as Attachment B.

Slender-horned spineflower (*Dodecahema leptoceras*) was not observed during the surveys. A list of all plants observed within the survey areas during the focused plant surveys can be found in Attachment C.

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Psomas appreciates the opportunity to assist on this project. If you have any comments or questions, please call Katie Gallagher or Marc Blain at (626) 351-2000.

Sincerely, **P S O M A S**

Ann M. Johnston/ Vice President, Resource Management

Marc T. Blain Senior Project Manager

Enclosures: Exhibit 1 – Regional Location Exhibit 2a–2b – Local Vicinity Exhibit 3a–3b – U.S. Geological Survey 7.5-Minute Quadrangle Exhibit 4a–4b – Vegetation Types and Other Areas Exhibits 5a–5b – Soil Types Exhibits 6a–6b – Survey Area Attachment A – Representative Site Photograph Attachment B – CNDDB Form Attachment C – Plant Compendia

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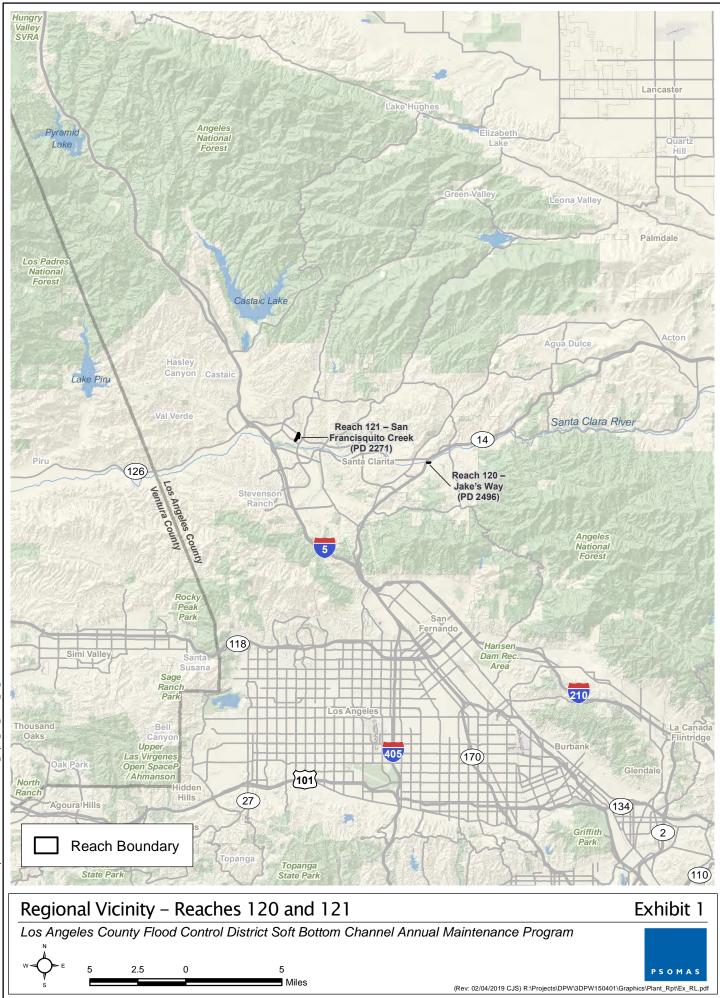
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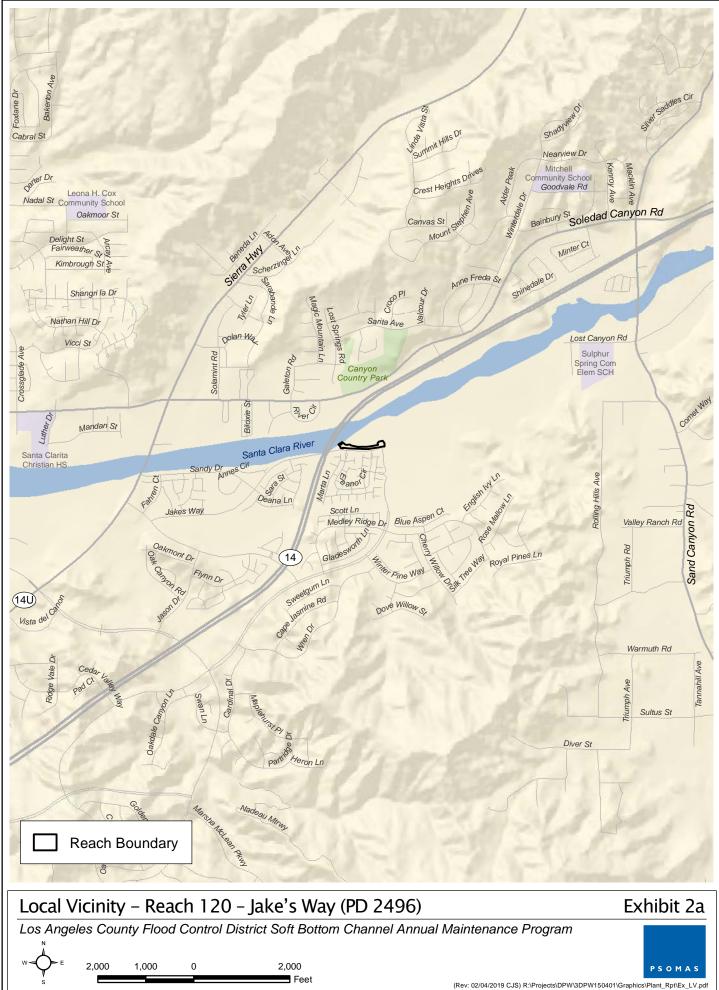
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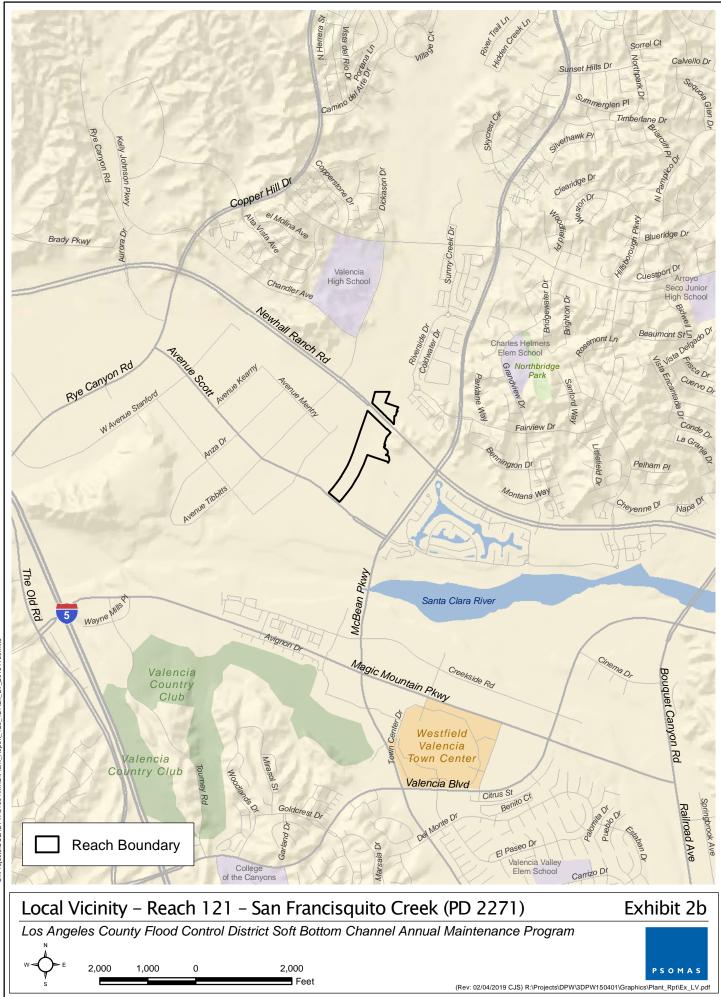
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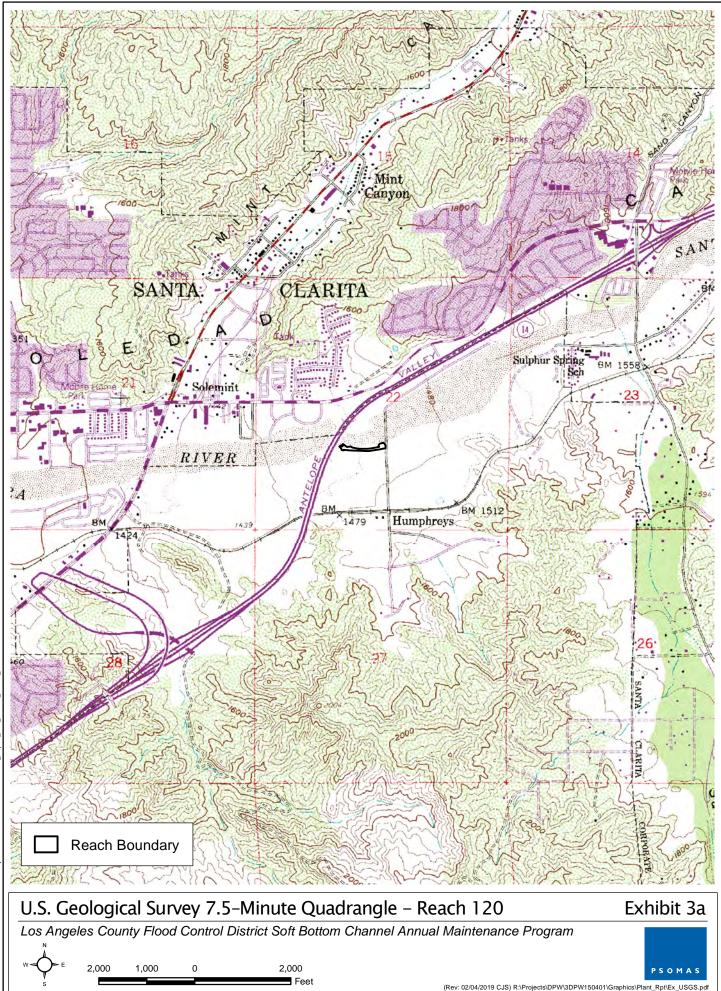
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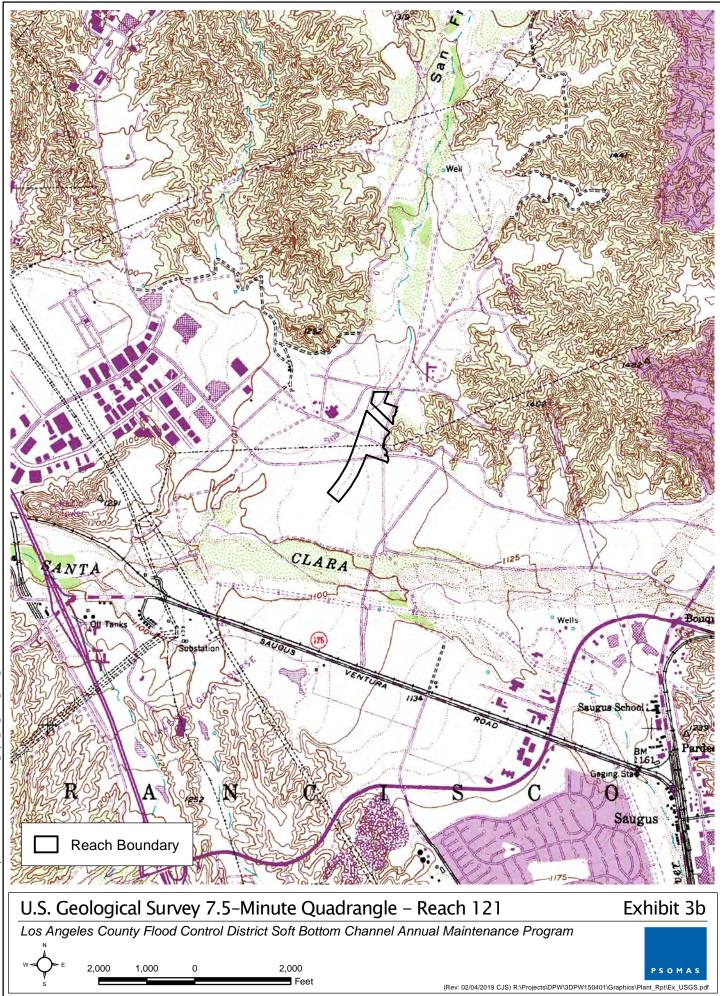


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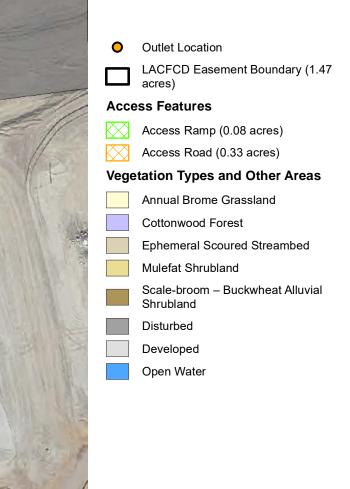


Reach 120 - Jake's Way (PD 2496)

Los Angeles County Flood Control District Soft Bottom Channel Annual Maintenance Program







Aerial Date: February, 2016



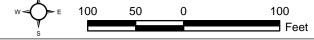












et or Ave Soledad Canyon Rd Soledad Canyon Rd Soledad Canyon Rd
Jakes Way Gatesworth Ln Gladesworth Ln

- Outlet Location

LACFCD Easement Boundary (1.47 acres)

Access Features

- Access Ramp (0.08 acres)
- Access Road (0.33 acres) \bigotimes

Soil Types



- CyA Cortina sandy loam, 0 to 2 percent slopes
- Rg Riverwash

Aerial Date: February, 2016











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Sarita Ave Santa Clara Rive Blue Aspen Ct

LACFCD Easement Boundary (1.47 acres)

Aerial Date: February, 2016



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Los Angeles County Flood Control District Soft Bottom Channel Annual Maintenance Program





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ATTACHMENT A

REPRESENTATIVE SITE PHOTOGRAPH



Southern California black walnut observed in Reach 121 on June 13, 2018; view facing upstream.

Representative Site Photograph

Attachment A

PSOMAS

Los Angeles County Flood Control District Soft Bottom Channel Annual Maintenance Program

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ATTACHMENT B

CNDDB FORM

Mail to:			Ear Office	Lloo Oply	
California Natural Diversity Databa			For Office	2	
California Dept. of Fish & Wildlif P.O. Box 944209	e Sourc	ce Code:		Quad Code:	
Sacramento, CA 94244-2090 CNDDB@wildlife.ca.gov	Elm C	Code:		Occ No.:	
Date of Field Work (mm/dd/yyyy): 06	/13/2018 EO In	idex:		Map Index:	
Clear Form California	Native Specie	s Field	Survey	Form	Print Form
Scientific Name: Juglans californica	а				
Common Name: southern Californi	a black walnut				
Species Found?	If not found, why?	Reporter:	Katie Gallagh	ner	
	equent Visit? • Yes No	Address:	225 S. Lake	Ave #1000	
		Pasaden	a, CA 91101		
Is this an existing NDDB occurrence?	es, Occ. # No Unk.		dress: katie.g	allagher@pson	nas.com
Collection? If yes:			626-351-2000		
Number	Museum / Herbarium				
Plant Information	Animal Information				
Phenology: 100	# adults # ju	veniles	# larvae	# egg masses	# unknown
% vegetative % flowering % fruiting	wintering breeding	nesting	rookery	burrow site	lek other
Location Description (please attach	map AND/OR fill out y	our choice	e of coordina	ates, below)	
San Francisquito Canyon channel, about 70	0 meters from the confluence	with Santa C	lara River		
County:	Landowner / Mgr:				
Quad Name:		<u> </u>		Elevation:	
TRSec,1/4 of1/4,				s, topo. map & ty ung Galaxy S7	
T R Sec,1/4 of1/4, DATUM: NAD27 O NAD83 O	WGS84 O				meters/feet
Coordinate System: UTM Zone 10 O			ccuracy c (Latitude & Lo	-	
-		Geographic		Singitude) 🕑	
Coordinates: 34.433043, -118.561650					
Habitat Description (plants & animals) pla				•	
Animal Behavior (Describe observed behavior	, such as territoriality, foraging, sir	nging, cailing, c	copulating, perchir	ng, roosting, etc., e	specially for avitauna):
Topography is sandy wash of San France					
cottonwood-mulefat woodland. The over understory is mostly cottonwood leaf litte					
some scattered live mulefat, sandbar wi					
douglasiana). Water source for riparian					
Please fill out separate form for other rare taxa see	en at this site.				
Site Information Overall site/occurren	ce quality/viability (site + p	opulation):	O Excellent	• Good) Fair (Poor
Immediate AND surrounding land use: <u>F</u>	lood control channel, concrete	elevees			
Visible disturbances: Construction of New	hall Ranch Road bridge expan	nsion immedi	ately north of rip	arian area	
Threats: None					
Comments: Individual is roughly five me	ters tall with a DBH of roug	hlv eiaht ce	ntimeters. Indi	vidual will likelv	remain of
juvenile stature until the adj	acent cottonwoods give wa	y to allow m	nore sunlight in	to the heavily s	haded area.
			1		
Determination: (check one or more, and fill in bla	inks)		Photograph	S: (check one or mor	e) Slide Print Digital
Keyed (cite reference): Compared with specimen housed at:			Plant	/ animal	
Compared with specifier housed at. <u></u> Compared with photo / drawing in:			Habit		
By another person (name):			-	nostic feature	
Other: Reporter is familiar with Juglans	calitornica		May we obtain o	duplicates at our ex	∢pense? ⊙ yes ⊖ no

ATTACHMENT C

PLANT COMPENDIA

Species			
Scientific Name	Common Name		
EUDI	сотѕ		
APIACEAE – C/	ARROT FAMILY		
Apiastrum angustifolium	narrow-leaved apiastrum		
ASTERACEAE – SL	INFLOWER FAMILY		
Ambrosia acanthicarpa	annual bur-sage		
Ambrosia psilostachya	western ragweed		
Artemisia californica	California sagebrush		
Baccharis pilularis ssp. consanguinea	coyote brush		
Baccharis salicifolia ssp. salicifolia	mule fat		
Centaurea melitensis*	tocalote		
Cirsium vulgare*	bull thistle		
Dittrichia graveolens*	stinkwort		
Erigeron canadensis	horseweed		
Helianthus annuus	annual sunflower		
Heterotheca grandiflora	telegraph weed		
Heterotheca sessiliflora ssp. echioides	viper's sessileflower goldenaster		
Lepidospartum squamatum	scaly scale-broom		
Logfia filaginoides	California cottonrose		
Logfia gallica*	daggerleaf cottonrose		
Pseudognaphalium luteoalbum*	white lamb cudweed		
Senecio flaccidus	threadleaf ragwort		
Senecio flaccidus var. douglasii	Douglas' threadleaf ragwort		
Senecio vulgaris*	common groundsel		
Sonchus asper ssp. asper*	prickly sow thistle		
Sonchus oleraceus*	common sow thistle		
Stylocline gnaphaloides	everlasting neststraw		
BORAGINACEAE -	- BORAGE FAMILY		
Cryptantha intermedia var. intermedia	intermediate cryptantha		
Eriodictyon crassifolium	thick-leaved yerba santa		
Heliotropium curassavicum var. oculatum	seaside heliotrope		
Pectocarya linearis ssp. ferocula	narrow-toothed pectocarya		
BRASSICACEAE – MUSTARD FAMILY			
Hirschfeldia incana*	grayish shortpod mustard		
Lepidium latifolium*	perennial pepperweed		
Lepidium nitidum	shining peppergrass		
Nasturtium officinale	water cress		
Sisymbrium altissimum*	tumble mustard		
CACTACEAE – C	CACTUS FAMILY		
Cylindropuntia californica var. parkeri	cane cholla		
CHENOPODIACEAE -	GOOSEFOOT FAMILY		
Chenopodium album*	lamb's quarters		
Dysphania botrys*	Jerusalem oak		

Species			
Scientific Name	Common Name		
Salsola tragus*	Russian thistle		
EUPHORBIACEAE	– SPURGE FAMILY		
Croton setiger	turkey-mullein		
Euphorbia maculata*	spotted spurge		
Euphorbia polycarpa	smallseed sandmat		
FABACEAE – L	EGUME FAMILY		
Acmispon americanus var. americanus	American deervetch		
Acmispon glaber var. glaber	glabrous deerweed		
Lupinus hirsutissimus	stinging lupine		
Melilotus albus*	white sweetclover		
Melilotus indicus*	sourclover		
GERANIACEAE – G	GERANIUM FAMILY		
Erodium botrys*	long-beaked filaree		
Erodium cicutarium*	redstem filaree		
LAMIACEAE -	MINT FAMILY		
Salvia columbariae	chia		
Salvia mellifera	black sage		
ONAGRACEAE – EVEN	ING PRIMROSE FAMILY		
Camissoniopsis hirtella	pubescent camissoniopsis		
Epilobium ciliatum ssp. ciliatum	fringed willowherb		
Eulobus californicus	California eulobus		
PHRYMACEAE -	LOPSEED FAMILY		
Mimulus cardinalis	red monkeyflower		
Mimulus guttatus	red-dotted monkeyflower		
Mimulus pilosus	downy monkey flower		
POLYGONACEAE – I	BUCKWHEAT FAMILY		
Eriogonum fasciculatum var. fasciculatum	coastal California buckwheat		
Eriogonum fasciculatum var. foliolosum	leafy California buckwheat		
Polygonum aviculare ssp. aviculare*	oval leaf knotweed		
Rumex crispus*	curly dock		
SALICACEAE – WILLOW FAMILY			
Populus fremontii ssp. fremontii	Fremont cottonwood		
Salix exigua	weak willow		
Salix exigua var. exigua	narrow-leaved willow		
Salix gooddingii	Goodding's black willow		
Salix laevigata	red willow		
SCROPHULARIACEAE – FIGWORT FAMILY			
Myoporum parvifolium*	myoporum		
SIMAROUBACEAE -	SIMAROUBA FAMILY		
Ailanthus altissima*	tree of heaven		
SOLANACEAE – NIGHTSHADE FAMILY			
Datura wrightii	Wright's jimsonweed		

Species			
Scientific Name	Common Name		
Nicotiana attenuata	narrowed-tip tobacco		
Nicotiana glauca*	tree tobacco		
Solanum nigrum*	black nightshade		
TAMARICACEAE –	TAMARISK FAMILY		
Tamarix ramosissima*	saltcedar		
URTICACEAE -	NETTLE FAMILY		
Urtica dioica	dioecious stinging nettle		
MONOCOTS			
ARECACEAE -	- PALM FAMILY		
Washingtonia robusta*	Mexican fan palm		
CYPERACEAE -	- SEDGE FAMILY		
Carex alma	sturdy sedge		
POACEAE – C	GRASS FAMILY		
Arundo donax*	giant reed		
Bromus diandrus*	ripgut grass		
Bromus madritensis ssp. rubens*	red brome		
Bromus tectorum*	cheat grass		
Festuca perennis*	rye grass		
Gastridium phleoides*	nit grass		
Polypogon monspeliensis*	annual beard grass		
Schismus barbatus*	barbed Mediterranean grass		
TYPHACEAE –	CATTAIL FAMILY		
Typha latifolia	broad-leaved cattail		
* Non-native or invasive species			

Species			
Scientific Name	Common Name		
EUDICOTS			
ADOXACEAE – MUSKROOT FAMILY			
Sambucus nigra ssp. caerulea	blue elderberry		
ANACARDIACEAE – SUMAC FAMILY			
Rhus integrifolia	lemonade berry		
Searsia lancea*	African sumac		
APIACEAE – CARROT FAMILY			
Apiastrum angustifolium	narrow-leaved apiastrum		
ASTERACEAE – SUNFLOWER FAMILY			
Ambrosia acanthicarpa	annual bur-sage		
Ambrosia psilostachya	western ragweed		
Artemisia californica	California sagebrush		
Artemisia douglasiana	mugwort		
Artemisia dracunculus	tarragon		
Baccharis pilularis ssp. consanguinea	coyote brush		
Baccharis salicifolia ssp. salicifolia	mule fat		
Carduus pycnocephalus ssp. pycnocephalus*	Italian thistle		
Centaurea benedicta*	blessed thistle		
Centaurea melitensis*	tocalote		
Cirsium vulgare*	bull thistle		
Corethrogyne filaginifolia	filago-leaved sand-aster		
Erigeron canadensis	horseweed		
Helianthus annuus	annual sunflower		
Heterotheca grandiflora	telegraph weed		
Heterotheca sessiliflora	sessileflower goldenaster		
Lactuca serriola*	prickly lettuce		
Lepidospartum squamatum	scaly scale-broom		
Logfia filaginoides	California cottonrose		
Malacothrix saxatilis var. tenuifolia	slender-leaf rocky malacothrix		
Senecio flaccidus	threadleaf ragwort		
Silybum marianum*	blessed milk thistle		
Sonchus asper ssp. asper*	prickly sow thistle		
Sonchus oleraceus*	common sow thistle		
Xanthium strumarium	cocklebur		
BORAGINACEAE – BORAGE FAMILY			
Amsinckia intermedia	common fiddleneck		
Eriodictyon crassifolium var. crassifolium	thick-leaved yerba santa		
Eucrypta chrysanthemifolia var. chrysanthemifolia	chrysanthemum-leaved eucrypta		
Heliotropium curassavicum var. oculatum	seaside heliotrope		
Phacelia cicutaria var. hispida	hairy cicuta-leaved phacelia		
Phacelia ciliata	slightly fringed phacelia		

Species			
Scientific Name	Common Name		
BRASSICACEAE – MUSTARD FAMILY			
Hirschfeldia incana*	grayish shortpod mustard		
Nasturtium officinale	water cress		
Sisymbrium altissimum*	tumble mustard		
CACTACEAE – CACTUS FAMILY			
Opuntia littoralis	seaside prickly-pear		
CHENOPODIACEAE – GOOSEFOOT FAMILY			
Chenopodium album*	lamb's quarters		
Salsola tragus*	Russian thistle		
CUCURBITACEAE – GOURD FAMILY			
Cucurbita foetidissima	buffalo gourd		
Marah macrocarpa	chilicothe		
EUPHORBIACEAE – SPURGE FAMILY			
Croton setiger	turkey-mullein		
Ricinus communis*	common castor bean		
FABACEAE – LEGUME FAMILY			
Acacia redolens*	vanilla-scented wattle		
Acmispon americanus var. americanus	American deervetch		
Acmispon glaber	deerweed		
Acmispon glaber var. glaber	glabrous deerweed		
Lupinus bicolor	miniature lupine		
Lupinus truncatus	cut leaf lupine		
Medicago polymorpha*	variable burclover		
Melilotus albus*	white sweetclover		
Melilotus indicus*	sourclover		
FAGACEAE – OAK FAMILY			
Quercus agrifolia var. agrifolia	coast live oak		
Quercus lobata	valley oak		
GERANIACEAE – GERANIUM FAMILY			
Erodium cicutarium*	redstem filaree		
GROSSULARIACEAE – GOOSEBERRY FAMILY			
Ribes aureum	golden currant		
JUGLANDACEAE – WALNUT FAMILY			
Juglans californica	southern California black walnut		
LAMIACEAE – MINT FAMILY			
Marrubium vulgare*	common horehound		
Salvia apiana	white sage		
Salvia leucophylla	purple sage		
Salvia mellifera	black sage		
Trichostema lanceolatum	vinegar weed		
LOASACEAE – BLAZING STAR FAMILY			
Mentzelia laevicaulis	smooth-stemmed blazing star		

Scientific Name Common Name MALVACEAE - MALLOW FAMILY Malacothamuss fasciculatus var. fasciculatus chaparral mallow Malacothamuss fasciculatus var. fasciculatus chaparral mallow Malacothamuss fasciculatus var. fasciculatus cheeseweed ONAGRACEAE - EVENING PRIMROSE FAMILY pubescent camissoniopsis Camissoniopsis hirtelia pubescent camissoniopsis Epilobium ciliatum ssp. ciliatum fringed willowherb Oenothera elata ssp. hirsulissima hairy tall evening primrose Oenothera elata ssp. hirsulissima soft orange monkeyflower PLANTAGINACEAE - LOPSEED FAMILY Primago major* Mimulus aurantiacus var. pubescens soft orange monkeyflower PLANTAGINACEAE - SYCAMORE FAMILY Plantago major* Veronica anagaliis-aquatica* water speedwell PLATANACEAE - SYCAMORE FAMILY Platanus raceamosa POLYGONACEAE - BUCKWHEAT FAMILY coastal California buckwheat Eriogonum fasciculatum var. fasciculatum coastal California buckwheat Eriogonum gacilevar. gracile slender woolly wild buckwheat Rumex salicifolus willow dock SALICACEAE - WILLOW FAMILY populus fremoriti sp	Species			
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Tamarix ramosissima* saltcedar ULMACEAE – ELM FAMILY	-			
ULMACEAE – ELM FAMILY		saltcedar		
	Ulmus parvifolia*	Chinese elm		

Species			
Scientific Name	Common Name		
URTICACEAE – NETTLE FAMILY			
Urtica dioica ssp. holosericea	hoary nettle		
MONOCOTS			
AGAVACEAE – AGAVE FAMILY			
Hesperoyucca whipplei	Whipple's chaparral yucca		
ARACEAE – ARUM FAMILY			
Lemna minor	lesser duckweed		
ARECACEAE – PALM FAMILY			
Washingtonia robusta*	Mexican fan palm		
CYPERACEAE – SEDGE FAMILY			
Carex alma	sturdy sedge		
Cyperus involucratus*	involucre flatsedge		
Cyperus sp.	flatsedge		
Eleocharis rostellata	beaked spikerush		
Scirpus microcarpus	small fruit bulrush		
IRIDACEAE – IRIS FAMILY			
Iris pseudacorus*	yellow iris		
JUNCACEAE – RUSH FAMILY			
Juncus mexicanus	Mexican rush		
Juncus xiphioides	iris-leaved rush		
POACEAE – GRASS FAMILY			
Arundo donax*	giant reed		
Avena barbata*	slender wild oat		
Bromus diandrus*	ripgut grass		
Bromus madritensis ssp. rubens*	red brome		
Bromus tectorum*	cheat grass		
Eragrostis sp.	love grass		
Festuca myuros*	rattail sixweeks grass		
Muhlenbergia rigens	deer grass		
Poa annua*	annual blue grass		
Polypogon interruptus*	ditch beard grass		
Polypogon monspeliensis*	annual beard grass		
Schismus arabicus*	Arabian Mediterranean grass		
Stipa miliacea var. miliacea*	smilo grass		
Stipa sp.	needle grass		
TYPHACEAE – CATTAIL FAMILY			
Typha latifolia	broad-leaved cattail		
* Non-native or invasive species			