

December 21, 2018

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VIA EMAIL AND MAIL
Stacey_Love@fws.gov

Subject: Results of Southwestern Willow Flycatcher and Least Bell's Vireo Focused Surveys for the Los Angeles County Flood Control District Soft Bottom Channels Maintenance Project, Los Angeles County, California

Dear Ms. Love:

This Letter Report presents the results of focused surveys to determine the presence or absence of the southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's vireo (*Vireo bellii pusillus*) for the Soft Bottom Channel (SBC) Reach 121 of the Los Angeles County Flood Control District Soft Bottom Channels Maintenance Project located in Los Angeles County, California (Exhibit 1). Focused surveys for Threatened and Endangered species are conducted on a regular basis at selected soft-bottom channel reaches maintained by the Los Angeles County Flood Control District (LACFCD). Focused surveys for the southwestern willow flycatcher and least Bell's vireo are conducted every other year for the LACFCD's SBC maintenance program. The surveys for these two avian species were last performed in 2017 but were not conducted at new SBC Reach 121 (San Francisquito Creek) that contains potentially suitable habitat for these species.

PROJECT BACKGROUND

To effectively control flood waters from the mountainous watersheds surrounding the Los Angeles Basin, the U.S. Army Corps of Engineers (USACE) and the LACFCD constructed concrete-bottom and earth-bottom channels leading from dams and debris basins located along the frontal slopes of the San Gabriel, Santa Monica, Verdugo, and Santa Susanna Mountains. Construction began in the 1930s. These channels, as a system, provide flood protection for Los Angeles County.

Channel maintenance activities have been performed regularly in Flood Control District channels for over 50 years. Originally constructed by the USACE, upon completion, most of the channel facilities were transferred to the LACFCD for cyclic maintenance. The USACE's maintenance guidelines require that "debris, objectionable growth, shoals, and waste materials must not encroach on the invert. Excess materials that will not move readily with low flows must be removed. Measures must be taken to control objectionable growth by approved chemical or mechanical means" (USACE 1996).

The County formerly maintained channels clear of any vegetation, as required under the *Code of Federal Regulations* (CFR, specifically Title 33, Section 208.10), until the California Department of Fish and Wildlife (CDFW) began requiring the County to clear vegetation on alternating sides of the channels each year. The USACE allowed limited clearing to occur between 1993 and 1995. Anticipated heavy rains during the 1997/1998 storm season caused

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by El Niño conditions resulted in a statewide need to remove vegetation and sediment from soft-bottom channels to restore their flood-carrying capacity. The LACFCD obtained all necessary permits to conduct this work in the 1997/1998 storm season and has continued the ongoing maintenance as approved by the permits.

PROJECT DESCRIPTION

Vegetative growth in a channel system reduces channel capacity. All soft-bottom channels were designed and constructed as relatively clean, unvegetated channels. As vegetation grows more densely, the roughness of the channel increases, and the velocity of flows decrease, which corresponds to a loss in the channel's carrying capacity. The vegetation also traps some of the sediments being transported by flood flows which, when deposited, further reduce channel capacity. Studies have shown that increased vegetation and sediments in the channels result in reduced flow area with a concomitant decrease in flow velocity. A loss of carrying capacity in the channels could cause flood flows to escape the channel systems and impact adjacent properties (LACDPW 1996).

Vegetation can also affect the structural integrity of bridges during a major storm event. Vegetation slows flood flows, which creates a backwater effect and increases water surface elevations upstream. Bridges are not normally designed to withstand the forces that result from significantly increased flood water elevations. Additionally, increased flood depths upstream can result in flooding of adjacent properties and erosion of channel banks.

The LACFCD performs minor grading and annual vegetation clearing in channels to retrain channel flows consistent with the clearing limits established by the permitted maintenance plan (BonTerra 1999). This ongoing program is necessary to maintain the design capacities of the channels and to ensure the proper functioning of these facilities located within the LACFCD boundaries.

Within each reach, the LACFCD proposes to clear the same areas (and acreage) that have been cleared annually since 1997. Biological impacts to these channel reaches associated with the initial clearing of vegetation for maintenance activities were previously mitigated through maintaining and enhancing 62.7 acres of riparian habitats at the Big Tujunga Wash Mitigation Bank site (BonTerra 1999).

Channel clearing activities are performed primarily by mechanical means, using heavy equipment (such as trucks, bulldozers, dump trucks, and loaders), as well as other specialized equipment designed for this type of work. Hand clearing is conducted in areas where mechanical equipment cannot be used or where important biological resources exist nearby. Herbicides approved by regulatory agencies are applied, as necessary, to eradicate invasive and/or non-native vegetation including, but not limited to, giant reed (*Arundo donax*) and castor bean (*Ricinus communis*).

The channel maintenance activities are performed under an existing Maintenance Plan approved by the Los Angeles Regional Water Quality Control Board (RWQCB) and USACE and modified by the CDFW under the existing Streambed Alteration Agreement between CDFW and the LACFCD. Psomas has reviewed the Maintenance Plan and has extensive knowledge of channel clearing activities in all channel reaches, having worked with the LACFCD since 1997 to provide biological monitoring of flood-control channel maintenance work. Pre-clearing and post-clearing photos have been taken every year to document the biological resources in these channel reaches in compliance with the mitigation requirements of existing permits from the USACE, RWQCB, and CDFW.

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SURVEY AREA

SBC Reach 121 (San Francisquito Creek; PD 2271) is located within the City of Santa Clarita, Los Angeles County (Exhibit 2 and 3). 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 (or wash) and encompassed both sides of the existing bridge. Surface water was present during the survey at a side outlet located at the south end of this SBC reach downstream of the bridge and outside the construction zone. The reach is located within the Newhall USGS 7.5-minute quadrangle map (Exhibit 4).

SPECIES BACKGROUND

The southwestern willow flycatcher and least Bell's vireo were formerly more common and widespread but became rare and local summer residents of Southern California's lowland riparian woodlands (Grinnell and Miller 1944; Garrett and Dunn 1981). The substantial population declines of these avian species over the latter half of the twentieth century is attributable to the loss and degradation of riparian habitats and brood parasitism by the brown headed cowbird (*Molothrus ater*). As a result, the least Bell's vireo was listed by the CDFW as Endangered on October 2, 1980, and by the USFWS as Endangered on May 2, 1986 (USFWS 1986). The CDFW listed all three subspecies of willow flycatcher that breed in California (*E. t. brewsteri*, *E. t. extimus*, and *E. t. adastus*) as Endangered on January 2, 1991 (CDFW 2018). The USFWS listed the southwestern willow flycatcher (*E. t. extimus*) as Endangered on February 7, 1995 (USFWS 1995) with an effective list date of March 29, 1995.

Least Bell's Vireo

Bell's vireo is a Neotropical migrant that breeds in central and southwestern North America from northern Mexico to Southern California, Nevada, and Utah; east to Louisiana; and north to North Dakota, Wisconsin, and Indiana in the central United States (AOU 1998). Although not well known, the winter range of the Bell's vireo is believed to be the western coast of Central America from southern Sonora south to northwestern Nicaragua, including the cape region of Baja California, Mexico (Brown 1993). Of the four Bell's vireo subspecies, only two breed in California: the least Bell's vireo and the Arizona Bell's vireo (*V. b. arizonae*), which breeds in the Colorado River Valley (Garrett and Dunn 1981; Rosenberg et al. 1991). Though the least Bell's vireo was formerly considered a common breeder in riparian habitats throughout the Central Valley and other low-elevation riverine systems in California and Baja California, Mexico (Franzreb 1989), presently, the least Bell's vireo has been eliminated from much of its historical range (Franzreb 1989; Brown 1993).

The breeding habitat of the least Bell's vireo is primarily riparian dominated by willows with dense understory vegetation; shrubs such as mule fat (*Baccharis salicifolia*) and California rose (*Rosa californica*) are often a component of the understory (Goldwasser 1981). The least Bell's vireo is often found in areas that include trees such as willow (*Salix* sp.), western sycamore (*Platanus racemosa*) or cottonwood (*Populus* sp.), particularly where the canopy is within or immediately adjacent to an understory layer of vegetation (Salata 1983). The least Bell's vireo generally nests in early successional stages of riparian habitats, with nest sites frequently located in willows that are between four and ten feet high (Franzreb 1989). The most critical factor in habitat structure is the presence of a dense understory shrub layer from approximately two to ten feet above ground (Goldwasser 1981; Salata 1983; Franzreb 1989).

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The least Bell's vireo population has increased tenfold from 291 territories in the early 1980s to an estimated 2,968 territories 20 years later (USFWS 2006). After a decade or more of absence in Los Angeles County, the least Bell's vireo returned by the mid-1980s with a pair reported from Whittier Narrows in 1985 and 1986 (Long 1993). Numbers of least Bell's vireo have continued to increase since that time, and it is now known to occur at several other locations in Los Angeles County such as the San Fernando (Van Norman) Dam; the San Gabriel River at Fish Canyon and Van Tassel Canyon; the Sepulveda Basin Wildlife Area; and the Castaic Lagoon Recreation Area (CDFW 2018). The two largest populations in the county are at Hansen Dam in the northeastern corner of the San Fernando Valley where 44 least Bell's vireo territories were present in 2009 (Griffith Wildlife Biology 2009) and on the Santa Clara River from I-5 downstream to the Las Brisas Bridge where 56 least Bell's vireo territories were present in 2007 (Bloom Biological, Inc. 2007).

On February 2, 1994, the USFWS issued their final determination of critical habitat for the least Bell's vireo (USFWS 1994), identifying approximately 37,560 acres as critical habitat in Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego counties. The survey area is not located in the designated critical habitat area for this species.

Southwestern Willow Flycatcher

The willow flycatcher is a Neotropical migrant that breeds in the west from northern Baja California, Mexico to central British Colombia, and generally east through the northern half of the United States to the Atlantic coast (AOU 1998). Depending on the authority, there are four or five recognized subspecies of willow flycatcher (Sedgwick 2000). The breeding range of southwestern willow flycatcher includes Southern California, Arizona, New Mexico, western Texas, and the extreme southern parts of Nevada and Utah (USFWS 1993). In California, the southwestern willow flycatcher breeds along the coast south of the San Fernando Valley and north in the interior to about Independence, Inyo County (Unitt 1987). The largest breeding populations of southwestern willow flycatcher in California are located at the South Fork of the Kern River in Kern County and on the Santa Margarita River in Camp Pendleton in San Diego County (Unitt 1987). The range-wide population of southwestern willow flycatcher is estimated at between 300 and 500 pairs (USFWS 1997). The population of southwestern willow flycatcher in California is estimated to be about 70 pairs (USFWS 1993). More recent estimates for California include a total of 200 territories in 2004 (Durst et al. 2005), which indicates that the California population may slowly be recovering.

The southwestern willow flycatcher typically breeds in willow-dominated riparian habitats that are similar to least Bell's vireo breeding habitats. Dense tree or shrub cover from six to about 15 or 16 feet above msl, with or without higher vegetation strata, is characteristic of southwestern willow flycatcher breeding habitats (Sogge et al. 2010). The southwestern willow flycatcher appears to have a preference for sites with surface water in the vicinity, such as along streams, on the margins of a pond or lake, and at wet mountain meadows (Grinnell and Miller 1944; Flett and Sanders 1987; Harris et al. 1987). In Arizona, the southwestern willow flycatcher invariably nests near surface water (Phillips et al. 1964). Recently, the southwestern willow flycatcher has adapted to introduced vegetation present in riparian communities, such as tamarisk (*Tamarix* sp.) and Russian olive (*Elaeagnus angustifolia*) (USFWS 1993).

The willow flycatcher is a common migrant in the interior of California and a rare-to-uncommon migrant along the coastal slope, with most birds moving through Southern California between May 15 and June 20 (Garrett and Dunn 1981; Unitt 1987). The spring southwestern willow flycatcher migration is earlier than that of the northern subspecies (Unitt 1984; USFWS 1993). As a result, the presence of more abundant subspecies that migrate through the range of the southwestern willow flycatcher during its breeding season complicates surveys for nesting southwestern willow flycatchers.

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On October 19, 2005, the USFWS published a final rule designating critical habitat for the southwestern willow flycatcher (USFWS 2013). This final rule designated 120,824 acres in Arizona, California, Nevada, New Mexico, and Utah as critical habitat. Following lawsuits, the USFWS recently issued a revised final rule on January 3, 2013. This final rule designates critical habitat that covers 2,090 stream miles in California, Nevada, Utah, Colorado, Arizona, and New Mexico. This final rule uses a slightly different methodology to designate critical habitat. For example, it includes areas that are considered essential for the recovery of the species even if they were not occupied at the time of the species' listing. These new stream segments include Castaic Creek (3.0 miles), Little Tujunga (1.4 miles), Big Tujunga (3.0 miles), and the San Gabriel River (8.8 miles) (USFWS 2013). The project site survey areas are not located in this proposed revised critical habitat.

SURVEY METHODS

A total of eight surveys for the least Bell's vireo and southwestern willow flycatcher were conducted on April 19 and 30; May 10 and 21; June 1, 11, and 21; and July 2, 2017. All surveys followed the recommended USFWS guidelines for both species. The southwestern willow flycatcher survey protocol was updated in June 2010 (Sogge et al. 2010). The first survey should be conducted between May 15 and May 31, and two surveys are required in the second survey window (June 1 to June 24). Two surveys are required in the last survey window (June 25 to July 17). As required by the 2010 protocol, each survey must be at least five days apart. Updated guidelines for least Bell's vireo surveys were issued on April 8, 1999 and require that at least eight surveys be conducted from April 10 to July 31 with a ten-day interval between each site visit. All surveys were conducted by Psomas Senior Biologist Brian Daniels (Recovery Permit No. 821401-5) and Psomas Biologist Sarah Thomas.

The riparian habitat was systematically surveyed by walking slowly and methodically along two transects (downstream then upstream or the reverse) with some variance depending on streambed width. Taped vocalizations of southwestern willow flycatcher were used to elicit a response from any potentially territorial southwestern willow flycatcher; taped vocalizations of least Bell's vireo were not used according to typical survey methods for this species. If no southwestern willow flycatchers were detected after the initial tape playing, the recording was usually replayed at least once. Any observations of willow flycatcher (all subspecies) and least Bell's vireo, including any pertinent behavior, were recorded and their locations mapped in the field. It should be noted that all subspecies of the willow flycatcher breeding in California are listed as State Endangered species.

Surveys were conducted during the early morning hours and under optimal weather conditions for detection of birds. Survey dates, times, and weather data are shown in Table 1. Survey conditions and results were documented in field notes. Daily tallies of all bird species recorded during these surveys are included in Attachment B.

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TABLE 1
SUMMARY OF SURVEY DATA AND CONDITIONS FOR SOUTHWESTERN WILLOW
FLYCATCHER AND LEAST BELL'S VIREO

Survey	Survey Date	Surveying Biologists	Start/End Time	Wind (miles/hour)		Temperature (°F)		Cloud Cover
				Start	End	Start	End	
1	4/19/2018	Thomas	0630/0840	0	1-2	55	60	20%/Clear
2	4/30/2018	Thomas	0650/0855	3-5	3-5	54	60	80%/80%
3	5/10/2017	Thomas	0830/1200	1-2	1-2	68	73	50%/Clear
4	5/21/2018	Daniels	0615/0915	4	7	59	64	100%/100%
5	6/1/2018	Daniels	0715/0930	3	2	57	68	Clear/Clear
6	6/11/2018	Daniels	0610/0900	4	3	61	73	Clear/Clear
7	6/21/2018	Daniels	0630/0830	2	2	59	66	Clear/Clear
8	7/2/2018	Daniels	0630/0830	0-1	2	65	69	Clear/Clear

SURVEY RESULTS

No southwestern willow flycatcher or least Bell's vireo were detected during any of these focused surveys. Note SBC Reach 121 will be added to the list of SBC Reaches regularly surveyed for the southwestern willow flycatcher and least Bell's vireo under the LACFCD's SBC maintenance program. The next round of these focused surveys is scheduled for 2019.

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

Sincerely,

P S O M A S



Marc T. Blain
Senior Project Manager

Enclosures: Exhibits 1–4
Attachment A – Avian Compendium
Attachment B – Surveyor Certificate Statement

cc: Nandini Moran, ntmoran@dpw.lacounty.gov

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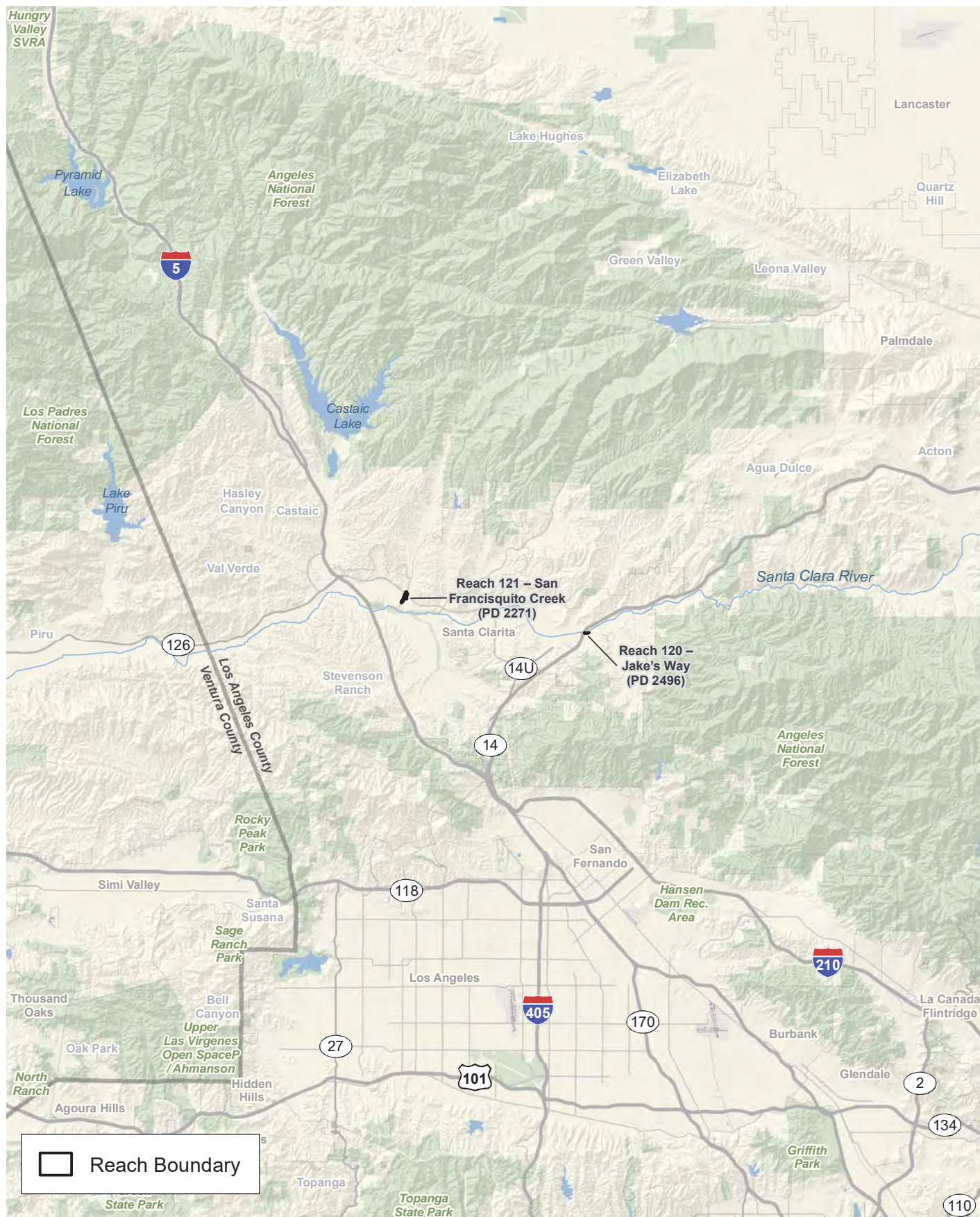
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Regional Vicinity – Reaches 120 and 121

Exhibit 1

Los Angeles County Flood Control District – Soft-Bottom Channel Maintenance Program



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Local Vicinity – Reach 121 – San Francisquito Creek (PD 2271)

Exhibit 2b

Los Angeles County Flood Control District Soft Bottom Channels Maintenance Clearing Project

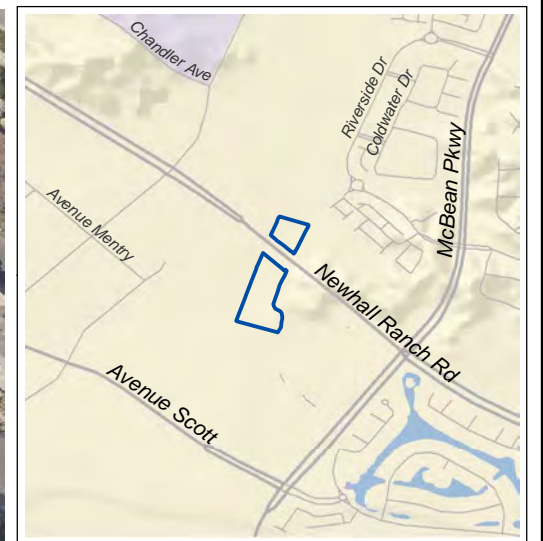




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-  Reach Boundary and Survey Area (6.17 acres)
-  LACFCD Easement Boundary (17.94 acres)

Aerial Source: LAR-IAC 2014

Survey Area – Reach 121 – San Francisquito Creek (PD 2271)

Los Angeles County Flood Control District Soft Bottom Channels Maintenance Clearing Project

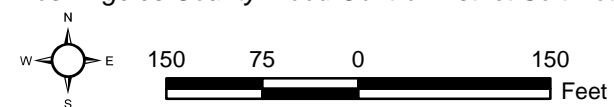
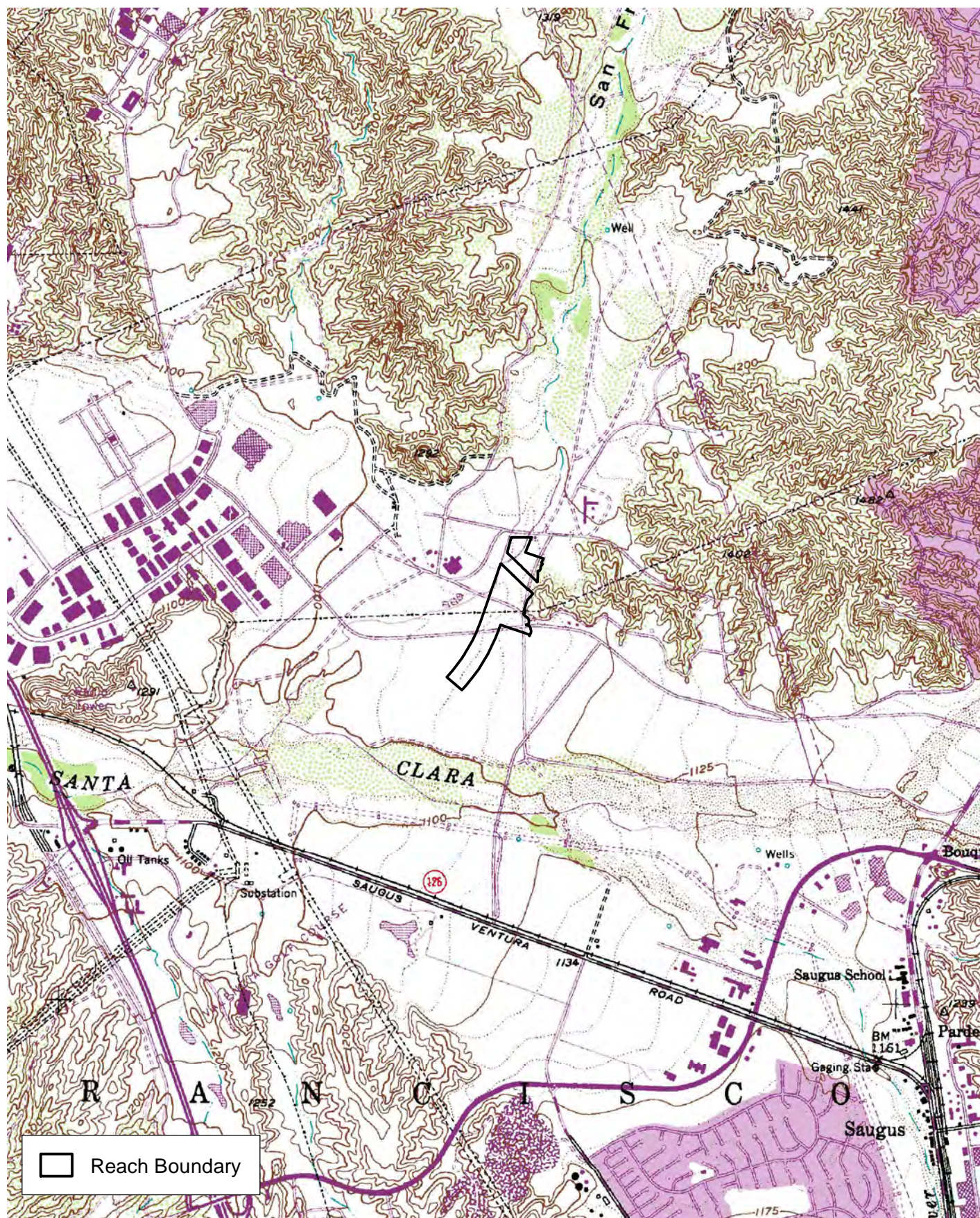


Exhibit 6b



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ATTACHMENT A
AVIAN COMPENDIUM

AVIAN COMPENDIUM

Species	Survey 1	Survey 2	Survey 3	May 21	June 1	June 11	June 21	July 2
Canada goose <i>Branta canadensis</i>								
mallard <i>Anas platyrhynchos</i>		1						
California quail <i>Callipepla californica</i>	2	1	3	5	2	2	2	2
rock pigeon <i>Columba livia</i>								
Eurasian collared-dove <i>Streptopelia decaocto</i>								
mourning dove <i>Zenaida macroura</i>	1	1	1	2	3	2	3	1
greater roadrunner <i>Geococcyx californianus</i>								
white-throated swift <i>Aeronautes saxatalis</i>		1						
black-chinned hummingbird <i>Archilochus alexandri</i>								
Anna's hummingbird <i>Calypte anna</i>	2	3	4	4	1		1	
Costa's hummingbird <i>Calypte costae</i>		1	1					
Allen's hummingbird <i>Selasphorus sasin</i>		1	1	1				
rufous/Allen's hummingbird <i>Selasphorus rufus/sasin</i>	1		1	1	2	1	1	1
killdeer <i>Charadrius vociferus</i>								
snowy egret <i>Egretta thula</i>				1				
green heron <i>Butorides virescens</i>								
black-crowned night-heron <i>Nycticorax nycticorax</i>				1				
turkey vulture <i>Cathartes aura</i>								

AVIAN COMPENDIUM

Species	Survey 1	Survey 2	Survey 3	May 21	June 1	June 11	June 21	July 2
white-tailed kite <i>Elanus leucurus</i>								
Cooper's hawk <i>Accipiter cooperii</i>	1	1						
red-shouldered hawk <i>Buteo lineatus</i>			1	1		1	2	1
red-tailed hawk <i>Buteo jamaicensis</i>	1	1						
belted kingfisher <i>Megaceryle alcyon</i>								
acorn woodpecker <i>Melanerpes formicivorus</i>	1		2					
downy woodpecker <i>Picoides pubescens</i>				1				
Nuttall's woodpecker <i>Picoides nuttallii</i>	3	4	1	1	2	5	1	1
American kestrel <i>Falco sparverius</i>								
willow flycatcher <i>Empidonax traillii</i>				3	1			
Pacific-slope flycatcher <i>Empidonax difficilis</i>								
black phoebe <i>Sayornis nigricans</i>	1				2		1	1
Say's phoebe <i>Sayornis saya</i>			1	1	1	1	2	1
ash-throated flycatcher <i>Myiarchus cinerascens</i>		1	1	3				
Cassin's kingbird <i>Tyrannus vociferans</i>								
western kingbird <i>Tyrannus verticalis</i>								
Bell's vireo <i>Vireo bellii</i>								
warbling vireo <i>Vireo gilvus</i>				1				

AVIAN COMPENDIUM

Species	Survey 1	Survey 2	Survey 3	May 21	June 1	June 11	June 21	July 2
California scrub-jay <i>Aphelocoma californica</i>	4	3	4	4	5	4	5	4
American crow <i>Corvus brachyrhynchos</i>						2	2	3
common raven <i>Corvus corax</i>	5	4	6	5	8	5	5	1
northern rough-winged swallow <i>Stelgidopteryx serripennis</i>							4	2
cliff swallow <i>Petrochelidon pyrrhonota</i>						2		
barn swallow <i>Hirundo rustica</i>								
oak titmouse <i>Baeolophus inornatus</i>	1	1	2	5	5	2	2	2
bushtit <i>Psaltirparus minimus</i>		1	5	2	1	3	6	15
white-breasted nuthatch <i>Sitta carolinensis</i>								
rock wren <i>Salpinctes obsoletus</i>								
house wren <i>Troglodytes aedon</i>							1	1
Bewick's wren <i>Thryomanes bewickii</i>	4	4	5	3	6	3	3	2
western bluebird <i>Sialia Mexicana</i>			2	1	1	1		
Swainson's thrush <i>Catharus ustulatus</i>				1				
American robin <i>Turdus migratorius</i>								
California thrasher <i>Toxostoma redivivum</i>	2	3	1	1	2		1	1
northern mockingbird <i>Mimus polyglottos</i>								
European starling <i>Sturnus vulgaris</i>								

AVIAN COMPENDIUM

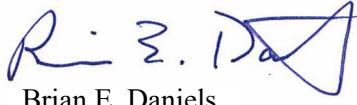
Species	Survey 1	Survey 2	Survey 3	May 21	June 1	June 11	June 21	July 2
phainopepla <i>Phainopepla nitens</i>		1					1	
scaly-breasted munia <i>Lonchura punctulata</i>								
house sparrow <i>Passer domesticus</i>								
house finch <i>Haemorhous mexicanus</i>	11	10	15	15	15	20	10	12
lesser goldfinch <i>Spinus psaltria</i>	5	4	10	2	6	5	6	3
Lawrence's goldfinch <i>Spinus lawrencei</i>								
American goldfinch <i>Spinus tristis</i>								
yellow-breasted chat <i>Icteria virens</i>								
spotted towhee <i>Pipilo maculatus</i>	3	3	3	3	4	3	2	5
Rufous-crowned sparrow <i>Aimophila ruficeps</i>								
California towhee <i>Melospiza crissalis</i>	3	2	3	6	2	1	2	3
lark sparrow <i>Chondestes grammacus</i>								
song sparrow <i>Melospiza melodia</i>	3	5	5	2	1	1		
hooded oriole <i>Icterus cucullatus</i>								
Bullock's oriole <i>Icterus bullockii</i>								
red-winged blackbird <i>Agelaius phoeniceus</i>								
brown-headed cowbird <i>Molothrus ater</i>								
Brewer's blackbird <i>Euphagus cyanocephalus</i>				3				

AVIAN COMPENDIUM

Species	Survey 1	Survey 2	Survey 3	May 21	June 1	June 11	June 21	July 2
great-tailed grackle <i>Quiscalus mexicanus</i>								
orange-crowned warbler <i>Oreothlypis celata</i>								
common yellowthroat <i>Geothlypis trichas</i>								
yellow warbler <i>Setophaga petechial</i>		2						
Hermit warbler <i>Setophaga occidentalis</i>				1				
Wilson's warbler <i>Cardellina pusilla</i>		1		1				
western tanager <i>Piranga flava</i>				1				
black-headed grosbeak <i>Pheucticus melanocephalus</i>		1	1					
blue grosbeak <i>Passerina caerulea</i>								
lazuli bunting <i>Passerina amoena</i>								

ATTACHMENT B
SURVEYOR CERTIFICATE STATEMENT

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.

A handwritten signature in blue ink, appearing to read "R. E. Daniels", with a stylized flourish at the end.

Brian E. Daniels
(TE-821401-5)