



June 30, 2014

Ms. Jemellee Cruz, P.E.
Los Angeles County Flood Control District
Flood Maintenance Division
900 South Fremont Avenue, Annex Building, 2nd Floor
Alhambra, California 91803

VIA EMAIL
jcruz@dpw.lacounty.gov

Subject: Results of Biological Inventory Surveys of Reach 109, Santa Clara River - South Bank West of McBean Parkway MTD 1510, in the City of Santa Clarita, Los Angeles County, California

Dear Ms. Cruz:

This Letter Report presents the findings of plant and wildlife inventory and vegetation mapping surveys conducted at Reach 109, Santa Clara River – South Bank west of McBean Parkway MTD 1510, in the City of Santa Clarita (Exhibit 1). Reach 109 is 371 feet in length with an area of 0.53 acre (Exhibit 2). This soft-bottom channel (SBC) reach is in the process of being added to the Los Angeles County Flood Control District's (LACFCD's) existing California Department of Fish and Wildlife (CDFW), U.S. Army Corps of Engineers (USACE), and Regional Water Quality Control Board (RWQCB) channel maintenance permits. The purpose of these surveys is to provide biological information in support of LACFCD's request for inclusion of SBC Reach 109 with the existing regulatory permits.

METHODS

BonTerra Psomas Senior Biologist Brian Daniels and Biologists Jason Mintzer and Sarah Thomas, and Leatherman BioConsulting Senior Botanist Sandra Leatherman conducted the plant and wildlife inventory and vegetation mapping surveys on April 29, May 5, and June 3, 2014. Previous survey reports of this SBC reach were reviewed, including the results of biological reconnaissance surveys conducted at this SBC reach in 2007 (BonTerra Consulting 2007).

All plant and wildlife 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) and current scientific data (e.g., scientific journals) for scientific and common names. Nomenclature for vegetation types generally follows that of the List of Vegetation Alliances and Associations, Vegetation Classification and Mapping Program (CDFG 2010). The vegetation types identified during the surveys reflected the vegetation shown on the aerial maps and not necessarily the actual vegetation on the channel bottom (invert).

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Active searches for reptiles and amphibians included lifting, overturning, and carefully replacing rocks and debris. Birds were identified by visual and auditory recognition. Surveys for mammals were conducted during the day and included searching for and identifying diagnostic signs including scat, footprints, scratch-outs, dust bowls, burrows, and trails. Taxonomy and nomenclature for wildlife generally follows Stebbins (2012) for amphibians and reptiles, American Ornithologists' Union (2013) for birds, and Baker et al. (2003) for mammals.

RESULTS

The following discussion is primarily limited to those plant and wildlife species observed during the surveys. For a complete list of plant and wildlife species observed during the surveys, see Attachment A.

Vegetation/Plants

The SBC Reach 109 supports four vegetation types (revegetated sage scrub, ruderal, southern cottonwood willow riparian forest, and giant reed breaks) and two other areas (open wash, and disturbed) as illustrated on Exhibit 3 and summarized in Table 1 below. Major vegetation types represented on site, or those with potential to be of high habitat value, are discussed below. Individual plant species are discussed below in conjunction with associated vegetation types. For a complete list of plant species see Attachment A. Representative site photographs are included as Exhibit 4a and 4b.

**TABLE 1
VEGETATION TYPES AND OTHER AREAS**

Vegetation Type	Acres
Revegetated Sage Scrub	0.11
Ruderal	0.16
Southern Cottonwood Willow Riparian Forest	1.24
Giant Reed Breaks	0.27
Open Wash	0.23
Disturbed	0.52
TOTAL ACRES	2.53*
* This total exceeds the total amount described for Reach 109 (0.53 acres) as it includes a buffer area	

Revegetated sage scrub occurs in a small patch onsite. Shrubs such as California sagebrush (*Artemisia californica*), big saltbush (*Atriplex lentiformis*), and California buckwheat (*Eriogonum fasciculatum*) are sparsely scattered within this vegetation type. Non-native weedy species such as shortpod mustard (*Hirschfeldia incana*), white-stemmed filaree (*Erodium moschatum*), Italian thistle (*Carduus pycnocephalus ssp. Pycnocephalus*), prickly lettuce (*Lactuca serriola*), and brome grasses (*Bromus sp.*) dominate the spaces between shrubs in this vegetation type.

The southern cottonwood willow riparian forest is dominated by large (over 20 feet) Fremont cottonwood (*Populus fremontii*), and willow (*Salix* sp.) trees. The canopy is continuous at Reach 109. Understory species consists of mugwort (*Artemisia douglasiana*), caterpillar phacelia (*Phacelia cicutaria*), petty spurge (*Euphorbia peplus*), willow-herb (*Epilobium ciliatum*), and water speedwell (*Veronica anagallis-aquatica*).

Wildlife

SBC Reach 109 consists of a transfer drain that empties into the Santa Clara River from the south bank levee just downstream of McBean Parkway. The river at this location is wide and supports substantial amounts of riparian vegetation dominated by willows. This transfer drain provides a steady supply of water into the river that flows downstream along the left bank and outside this SBC reach to connect with the main low flow channel of the Santa Clara River. Reach 109 and the surrounding habitats in the Santa Clara River provide high quality wildlife habitat. For a complete list of wildlife species observed at this SBC reach see Attachment A.

The constant flowing water of Reach 109 provides suitable habitat for fish. Although no fish species were detected during these surveys, native fish species have been observed in this SBC reach such as arroyo chub (*Gila orcutti*) and Santa Ana speckled dace (*Rhinichthys osailolus*) (BonTerra Consulting 2011). No amphibian species were observed during the surveys, but the Pacific chorus frog (*Pseudacris regilla*) and western toad (*Anaxyrus [Bufo] boreas*) have been observed during previous focused surveys at this SBC reach (BonTerra Consulting 2011). Birds observed during the surveys included white-throated swift (*Aeronautes saxatalis*), Anna's hummingbird (*Calypte anna*), rufous hummingbird (*Selasphorus rufus*), Nuttall's woodpecker (*Picoides nuttallii*), hairy woodpecker (*Picoides villosus*), black phoebe (*Sayornis nigricans*), ash-throated flycatcher (*Myiarchus cinerascens*), warbling vireo (*Vireo gilvus*), western scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), northern rough-winged swallow (*Stelgidopteryx serripennis*), bushtit (*Psaltiriparus minimus*), Swainson's thrush (*Catharus ustulatus*), Nashville warbler (*Oreothlypis [Vermivora] ruficapilla*), yellow warbler (*Setophaga [Dendroica] petechia*), Wilson's warbler (*Cardellina [Wilsonia] pusilla*), spotted towhee (*Pipilo maculatus*), song sparrow (*Melospiza melodia*), and house finch (*Haemorhous [Carpodacus] mexicanus*). Except for the rufous hummingbird, Nashville Warbler, and Wilson's warbler, all of these species may or are expected to breed at or in the vicinity of Reach 109. Overall use of this SBC reach by mammals is expected to be moderate, with the Virginia opossum (*Didelphis virginiana*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), coyote (*Canis latrans*), northern raccoon (*Procyon lotor*), bobcat (*Lynx rufus*), and striped skunk (*Mephitis mephitis*) expected to occur at least occasionally.

CONCLUSIONS AND RECOMMENDATIONS

The 1.24 acre of southern cottonwood willow riparian forest at Reach 109 is considered to be of high value due to its relatively large size, localized distribution in the region, and the relatively rich diversity of wildlife species this habitat can support.

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Vegetation and Wildlife Inventory Survey at Reach 109

Focused surveys for threatened and endangered plant surveys have not previously been recommended for Reach 109; however, focused surveys for special status plant species were conducted in 2014 at this SBC reach for the Santa Clara River Watershed Feasibility Study and the results were negative.

Habitat assessment surveys conducted in 2007 determined that this SBC reach provided potentially suitable habitat for the unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*), arroyo toad (*Anaxyrus californicus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and least Bell's vireo (*Vireo bellii pusillus*). Although not found during the 2013 survey, the unarmored threespine stickleback has been observed in Reach 109 during previous surveys including 2009, 2010, and 2011 (BonTerra Consulting 2013). The arroyo toad, southwestern willow flycatcher, and least Bell's vireo have not been detected in this SBC reach during focused surveys conducted since 2009 (BonTerra Consulting 2009; 2011; 2013).

Because Reach 109 provides potentially suitable habitat for the least Bell's vireo, BonTerra Psomas recommends the following permit language be adopted for this "sensitive" reach: construction activities in waters of the US shall be limited to the period outside of the nesting season (March 15-September 15) of any year.

Once the finalized scopes of work for maintenance activities at this SBC reach are developed by the LACFCD, BonTerra Psomas can calculate the acres of impact per vegetation type. A tree inventory survey for this SBC reach is expected to be conducted in Summer 2014.

BonTerra Psomas has appreciated this opportunity to assist on this project. If you have any comments or questions, please call Marc Blain or Brian Daniels at (626) 351-2000.

Sincerely,
BonTerra Psomas



Joan Patronite Kelly, AICP
Corporate Director of Environmental
Planning and Resource Management



Marc T. Blain
Senior Project Manager

Enclosures: Exhibit 1 – Regional Location
Exhibit 2 – Local Vicinity
Exhibit 3 – Vegetation Types and Other Areas Map
Exhibit 4a-b – Site Photographs
Attachment A – Plant and Wildlife Compendia

REFERENCES

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Regional Location

Santa Clara River - Reach 109



A horizontal number line with tick marks at 10, 5, 0, and 10. The word "Miles" is written at the right end.

Exhibit 1

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Reach 109

Charles Helmers Elem School

Fairview Dr

Newhall Ranch Rd

McBean Pkwy

Bridgeport Ln

Riverchase Dr

Creekside Rd

Magic Mountain Pkwy

Valencia Country Club

Westfield Valencia Town Center

Valencia Blvd

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Local Vicinity map

Exhibit 2

Santa Clara River - Reach 109



1,000 500 0 1,000
Feet

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Vegetation Types and Other Areas

Santa Clara River - Reach 109

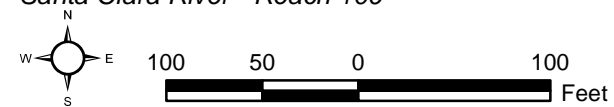


Exhibit 3

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April 29, 2014. View upstream from south bank showing southern cottonwood willow riparian forest.



April 29, 2014. View downstream from near north bank. Showing open wash, giant reed breaks, and southern cottonwood willow riparian forest.

Site Photographs

Santa Clara River - Reach 109

Exhibit 4

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ATTACHMENT A
PLANT AND WILDLIFE COMPENDIUM

REACH 109 PLANT COMPENDIA

Species	
ANGIOSPERMAE – FLOWERING PLANTS	
EUDICOTS	
<i>ASTERACEAE – SUNFLOWER FAMILY</i>	
<i>Artemisia californica</i>	California sagebrush
<i>Artemisia douglasiana</i>	mugwort
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i> *	Italian thistle
<i>Lactuca serriola</i> *	prickly lettuce
<i>Sonchus oleraceus</i> *	common sow thistle
<i>Taraxacum officinale</i> *	common dandelion
<i>BORAGINACEAE – BORAGE FAMILY</i>	
<i>Phacelia cicutaria</i>	caterpillar phacelia
<i>BRASSICACEAE – MUSTARD FAMILY</i>	
<i>Brassica nigra</i> *	black mustard
<i>Hirschfeldia incana</i> *	shortpod mustard
<i>Lepidium didymum</i> [<i>Coronopus didymum</i>]*	lesser swine cress
<i>Lepidium lasiocarpum</i> ssp. <i>lasiocarpum</i>	hairy peppergrass, sand peppergrass
<i>Lepidium latifolium</i> *	broad-leaved peppergrass
<i>Sisymbrium altissimum</i> *	tumble mustard
<i>CARYOPHYLLACEAE – PINK FAMILY</i>	
<i>Stellaria media</i> *	common chickweed
<i>CHENOPODIACEAE – GOOSEFOOT FAMILY</i>	
<i>Atriplex lentiformis</i>	big saltbush
<i>EUPHORBIACEAE – SPURGE FAMILY</i>	
<i>Euphorbia peplus</i> *	petty spurge
<i>FABACEAE – LEGUME FAMILY</i>	
<i>Albizia julibrissin</i>	mimosa tree
<i>LAMIACEAE – MINT FAMILY</i>	
<i>Salvia mellifera</i>	black sage
<i>GERANIACEAE – GERANIUM FAMILY</i>	
<i>Erodium moschatum</i> *	white-stemmed filaree
<i>MORACEAE – FIG FAMILY</i>	
<i>Ficus carica</i> *	edible fig
<i>OLEACEAE – OLIVE FAMILY</i>	
<i>Fraxinus</i> sp.	Fraxinus
<i>ONAGRACEAE – EVENING-PRIMROSE FAMILY</i>	
<i>Epilobium ciliatum</i>	willow-herb
<i>PLANTAGINACEAE – PLANTAIN FAMILY</i>	
<i>Veronica anagallis-aquatica</i> *	water speedwell
<i>PLATANACEAE – SYCAMORE FAMILY</i>	
<i>Platanus racemosa</i>	western sycamore
<i>POLYGONACEAE – BUCKWHEAT FAMILY</i>	
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>SALICACEAE – WILLOW FAMILY</i>	
<i>Populus fremontii</i> ssp. <i>fremontii</i>	Fremont cottonwood
<i>Salix exigua</i>	narrow-leaved willow

Species	
ANGIOSPERMAE – FLOWERING PLANTS	
EUDICOTS	
<i>Salix laevigata</i>	red willow
<i>Salix lasiolepis</i>	arroyo willow
SOLANACEAE – NIGHTSHADE FAMILY	
<i>Datura wrightii</i>	jimson weed
TAMARICACEAE – TAMARISK FAMILY	
<i>Tamarix ramosissima</i> *	saltcedar
URTICACEAE – NETTLE FAMILY	
<i>Urtica dioica</i> ssp. <i>holosericea</i>	hoary nettle
MONOCOTYLEDONES – MONOCOTS	
CYPERACEAE – SEDGE FAMILY	
<i>Cyperus</i> sp.	umbrella-sedge
ARECACEAE – PALM FAMILY	
<i>Syagrus romanzoffiana</i>	queen palm
POACEAE – GRASS FAMILY	
<i>Arundo donax</i> *	giant reed
<i>Festuca perennis</i> [<i>Lolium perenne</i> , <i>L. multiflorum</i>]*	perennial ryegrass
<i>Polypogon monspeliensis</i> *	annual beard grass
<i>Stipa miliacea</i> [<i>Piptatherum miliacea</i>]*	smilo grass
* non-native to the region it was found	

REACH 109 WILDLIFE COMPENDIA

Species		Number Sighted
REPTILES		
LEPIDOSAURIA – LIZARDS AND SNAKES		
<i>PHRYNOSOMATIDAE</i> – ZEBRA-TAILED, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS		
<i>Sceloporus occidentalis</i>	western fence lizard	2
BIRDS		
AVES – BIRDS		
<i>APODIDAE</i> – SWIFTS		
<i>Aeronautes saxatalis</i>	white-throated swift	1
<i>TROCHILIDAE</i> – HUMMINGBIRDS		
<i>Calypte anna</i>	Anna's hummingbird	1
<i>Selasphorus rufus</i>	rufous hummingbird	1
<i>PICIDAE</i> – WOODPECKERS		
<i>Picoides nuttallii</i>	Nuttall's woodpecker	2
<i>Picoides villosus</i>	hairy woodpecker	1
<i>TYRANNIDAE</i> – TYRANT FLYCATCHERS		
<i>Sayornis nigricans</i>	black phoebe	1
<i>Myiarchus cinerascens</i>	ash-throated flycatcher	1
<i>VIREONIDAE</i> – VIREOS		
<i>Vireo gilvus</i>	warbling vireo	1
<i>CORVIDAE</i> – CROWS AND JAYS		
<i>Aphelocoma californica</i>	western scrub-jay	1
<i>Corvus corax</i>	common raven	1
<i>HIRUNDINIDAE</i> – SWALLOWS		
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	1
<i>AEGITHALIDAE</i> – BUSHTITS		
<i>Psaltiriparus minimus</i>	bushtit	2
<i>Catharus ustulatus</i>	Swainson's thrush	1
<i>PARULIDAE</i> – WARBLERS		
<i>Oreothlypis [Vermivora] ruficapilla</i>	Nashville warbler	1
<i>Setophaga [Dendroica] petechia</i>	yellow warbler	1
<i>Cardellina [Wilsonia] pusilla</i>	Wilson's warbler	1
<i>EMBERIZIDAE</i> – SPARROWS AND JUNCOS		
<i>Pipilo maculatus</i>	spotted towhee	1
<i>Melospiza melodia</i>	song sparrow	1
<i>FRINGILLIDAE</i> – FINCHES		
<i>Haemorhous [Carpodacus] mexicanus</i>	house finch	2