



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 110, Hasley Canyon Channel (PD 2262), near 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 of Reach 110, Hasley Canyon Channel (PD 2262), in unincorporated Los Angeles County near the City of Santa Clarita (Exhibit 1). Reach 110 is 3,736 feet in length with an area of approximately 7.29 acres and is located in the Santa Clara River Watershed (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 110 with the existing regulatory permits.

METHODS

BonTerra Psomas Senior Biologist Brian Daniels, Biologists Allison Rudalevige and Sarah Thomas, and Leatherman BioConsulting Senior Botanist conducted the plant and wildlife inventory and vegetation mapping surveys on May 1, 5, and June 10, 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 110 supports six vegetation types (sandbar willow thickets, alluvial sage scrub, mule fat scrub, mule fat-tamarisk scrub, mixed willow riparian forest, southern cottonwood willow riparian forest) and one other area (open wash) as illustrated on Exhibits 3a and 3b 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 Exhibits 4a and 4b.

**TABLE 1
VEGETATION TYPES AND OTHER AREAS**

Vegetation Type	Acres
Alluvial Sage Scrub	0.30
Sandbar Willow Thickets	0.28
Mixed Willow Riparian Forest	2.86
Mule Fat Scrub	0.59
Mule Fat Scrub-Tamarisk Scrub	0.11
Southern Cottonwood Willow Riparian Forest	1.16
Open Wash	2.41
TOTAL ACRES	7.71*
* This total exceeds the total amount described for Reach 110 (7.29 acres) as it includes a buffer area	

Alluvial sage scrub is co-dominated by scale-broom (*Lepidospartum squamatum*), California buckwheat (*Eriogonum fasciculatum*), and California sagebrush (*Artemisia californica*). Other species occurring scattered throughout this vegetation type include mule fat (*Baccharis salicifolia*), telegraph weed (*Heterotheca grandiflora*), California everlasting (*Pseudognaphalium californicum*), and black sage (*Salvia mellifera*).

Sandbar willow thickets vegetation type consists predominantly of sandbar willow (*Salix exigua*), with some scattered mule fat also occurring.

Mixed willow riparian forest consists of willow trees such as Goodding's black willow (*Salix gooddingii*), red willow (*Salix laevigata*), and arroyo willow (*Salix lasiolepis*). Understory species include common horsetail (*Erigeron canadensis*), umbrella-sedge (*Cyperus* sp.), and whispering bells (*Emmenanthe penduliflora*).

Mule fat scrub is dominated by mule fat while mule fat-tamarisk scrub is co-dominated by mule fat and tamarisk (*Tamarix ramosissima*). Herbaceous species such as telegraph weed and annual bur-sage (*Ambrosia acanthicarpa*), and non-native brome grasses occur between the dominant shrubs in these vegetation types.

Southern cottonwood willow riparian forest is co-dominated by Fremont cottonwood and willow trees (*Salix* sp.). Common understory species include those given for mixed willow riparian forest.

Open or unvegetated wash are areas that consist of bare sand, silt, or cobble that generally contain no vegetation. These areas have been scoured or otherwise kept clear of vegetation (i.e., clearing activities), however, some small mule fat and telegraph weed vegetation can be found here.

Wildlife

SBC Reach 110 is a relatively narrow channel surrounded by urban habitats dominated by light industry and commercial buildings. Except for during storm events, standing water is typically not present on the channel bottom of this reach. Two or three side outlets on the left bank (i.e. east bank), however, sometime contain standing nuisance water from dry season runoff. This SBC reach supports patches of native willows and cottonwood trees mixed with scrubby vegetation that are generally of moderate to high habitat value for wildlife. Wildlife use of these habitats though is expected to be limited due to the general isolation of Reach 110 from natural open space areas. For a complete list of wildlife species see Attachment A.

No amphibian species were detected during the surveys. The Pacific chorus frog (*Pseudacris regilla*) and western toad (*Anaxyrus* [*Bufo*] *boreas*) may occur occasionally but are not expected to establish populations in this generally dry SBC reach. The common side-blotched lizard (*Uta stansburiana*) and western fence lizard (*Sceloporus occidentalis*) were observed during the surveys. Although not observed, the southern alligator lizard (*Elgaria multicarinata*) is expected to occur at Reach 110. The common kingsnake (*Lampropeltis getula*) was observed during the surveys. Other snakes expected to occur at Reach 110 include the coachwhip (*Masticophis flagellum*) and gopher snake (*Pituophis catenifer*). Birds observed during the surveys included the killdeer (*Charadrius vociferus*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), Costa's hummingbird (*Calypte costae*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), ash-throated flycatcher (*Myiarchus cinerascens*), western scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), northern rough-winged swallow (*Stelgidopteryx serripennis*), cliff swallow (*Petrochelidon pyrrhonota*), bushtit (*Psaltiriparus minimus*), Bewick's wren (*Thryomanes bewickii*), Wilson's warbler (*Cardellina* [*Wilsonia*] *pusilla*), common yellowthroat (*Geothlypis trichas*), spotted towhee (*Pipilo maculatus*), California towhee (*Melospiza* [*Pipilo*] *crissalis*), western tanager (*Piranga ludoviciana*), black-headed grosbeak (*Pheucticus melanocephalus*), house finch (*Haemorhous* [*Carpodacus*] *mexicanus*), and lesser goldfinch (*Spinus* [*Carduelis*] *psaltria*). Except for the Wilson's warbler and

western tanager, all of these species may or are expected to breed at Reach 110. Overall use of this SBC reach by mammals is expected to be low, but the Virginia opossum (*Didelphis virginiana*), desert cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), northern raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*) are expected to occasionally occur.

CONCLUSIONS AND RECOMMENDATIONS

The 4.02 acres of riparian forest vegetation types (2.86 acre of mixed willow riparian forest, and 1.16 acre of southern cottonwood willow riparian forest) at Reach 110 are 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.

Focused surveys for threatened and endangered plant surveys have not previously been recommended for Reach 110; 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.

Although no potentially suitable habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's vireo (*Vireo bellii pusillus*) was present in 2007 (BonTerra Consulting 2007), no maintenance activities have occurred and existing conditions changed. Potentially suitable habitat has since developed and focused surveys for these two migratory bird species were conducted at Reach 110 in 2011 and 2013 with negative results (BonTerra Consulting 2011; 2013).

Because Reach 110 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 in Summer 2014.

BonTerra Psomas has appreciated the 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



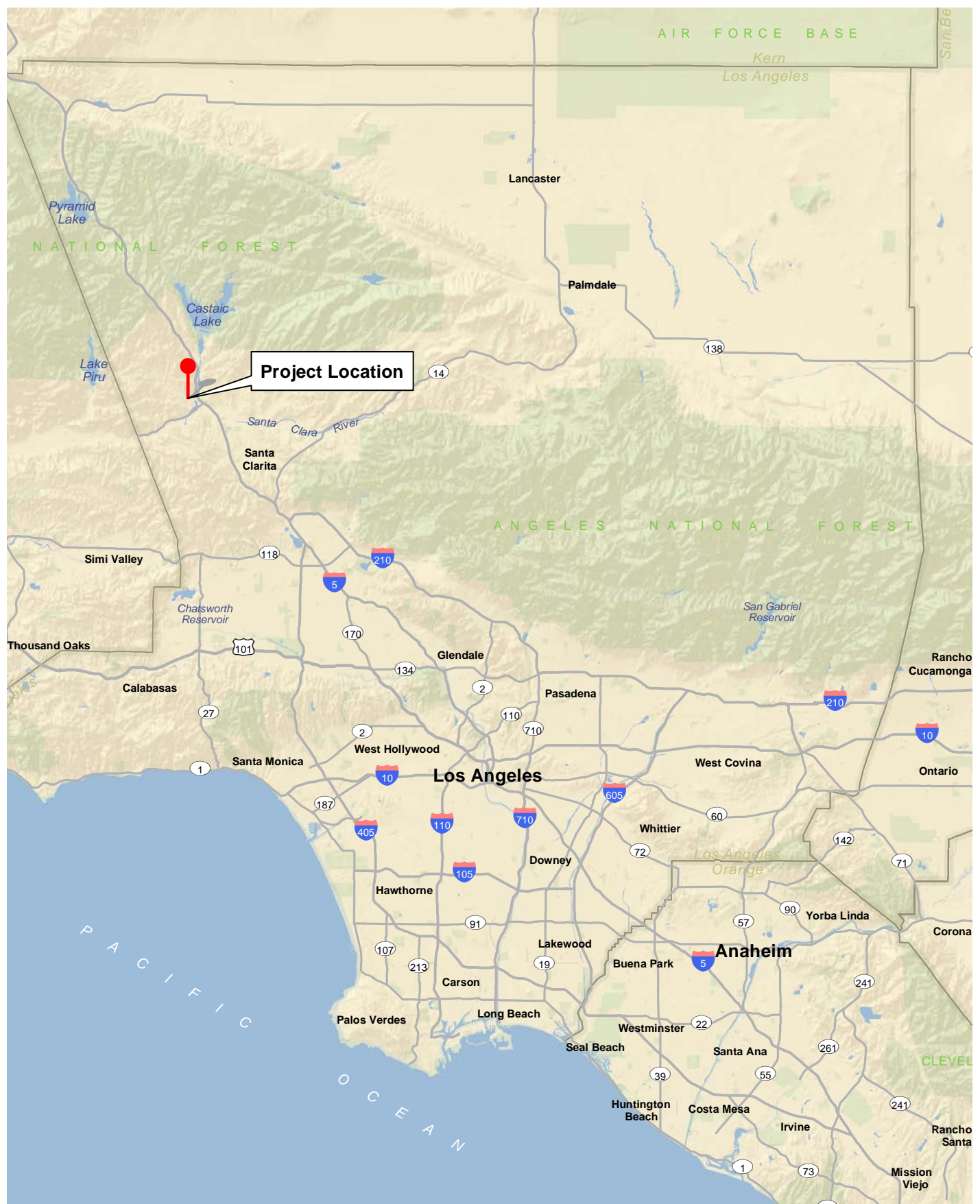
Marc T. Blain
Senior Project Manager

Enclosures: Exhibit 1 – Regional Location
Exhibit 2 – Local Vicinity
Exhibit 3a-c – Vegetation Types and Other Areas Map

Exhibit 4a-b – Site Photographs
Attachment A – Plant and Wildlife Compendia

REFERENCES

- American Ornithologists' Union (AOU). 2013 (September). *Check-list of North American Birds* (7th ed., as revised through 54th Supplement). Washington, D.C.: AOU. <http://www.aou.org/checklist/north/index.php>.
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Regional Location

Hasley Canyon Channel - Reach 110

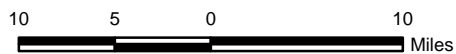
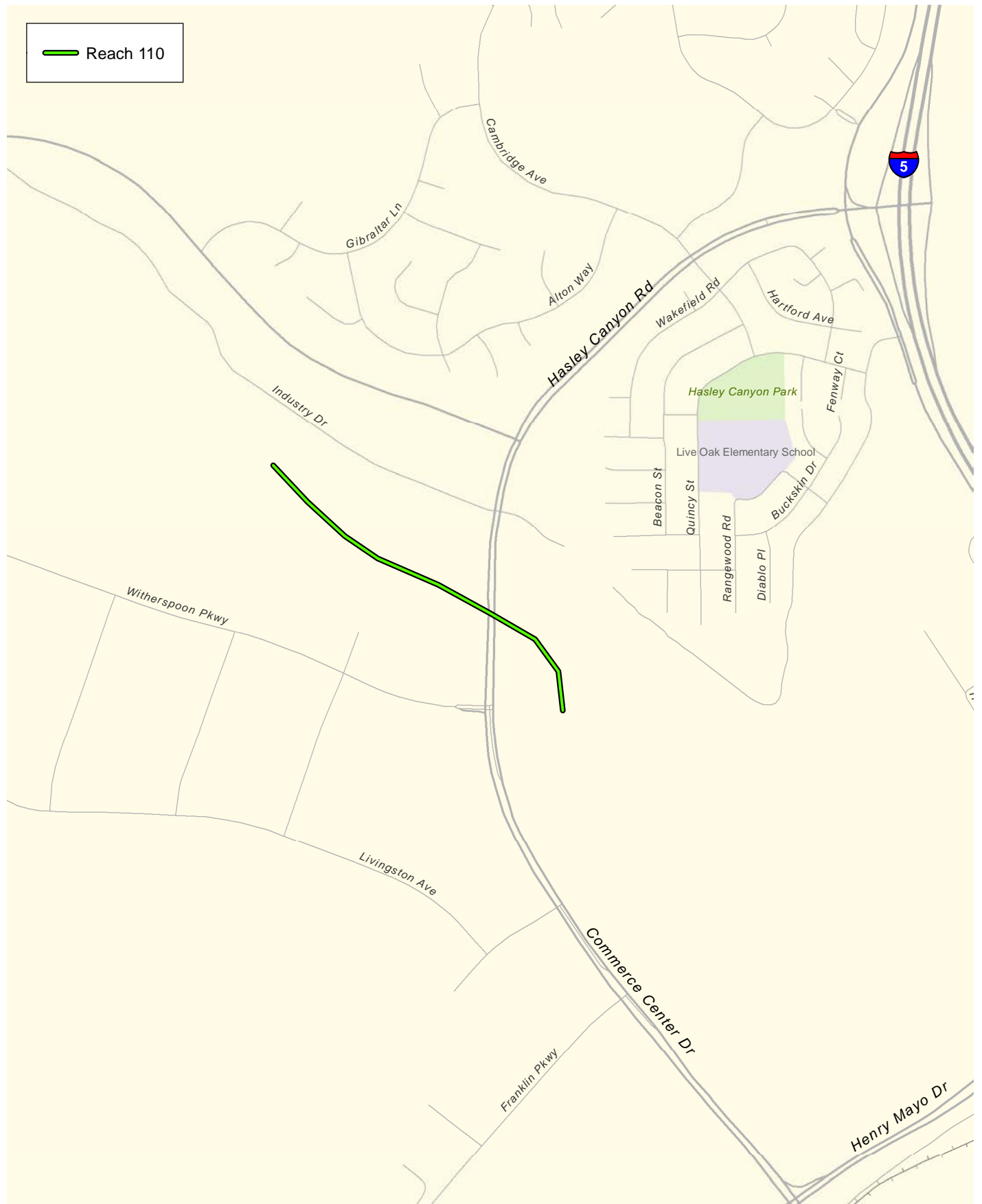


Exhibit 1

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Reach 110



Local Vicinity map

Hasley Canyon Channel - Reach 110



1,000 500 0 1,000
Feet

Exhibit 2

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Vegetation Types and Other Areas

Hasley Canyon Channel - Reach 110

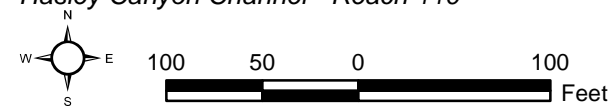
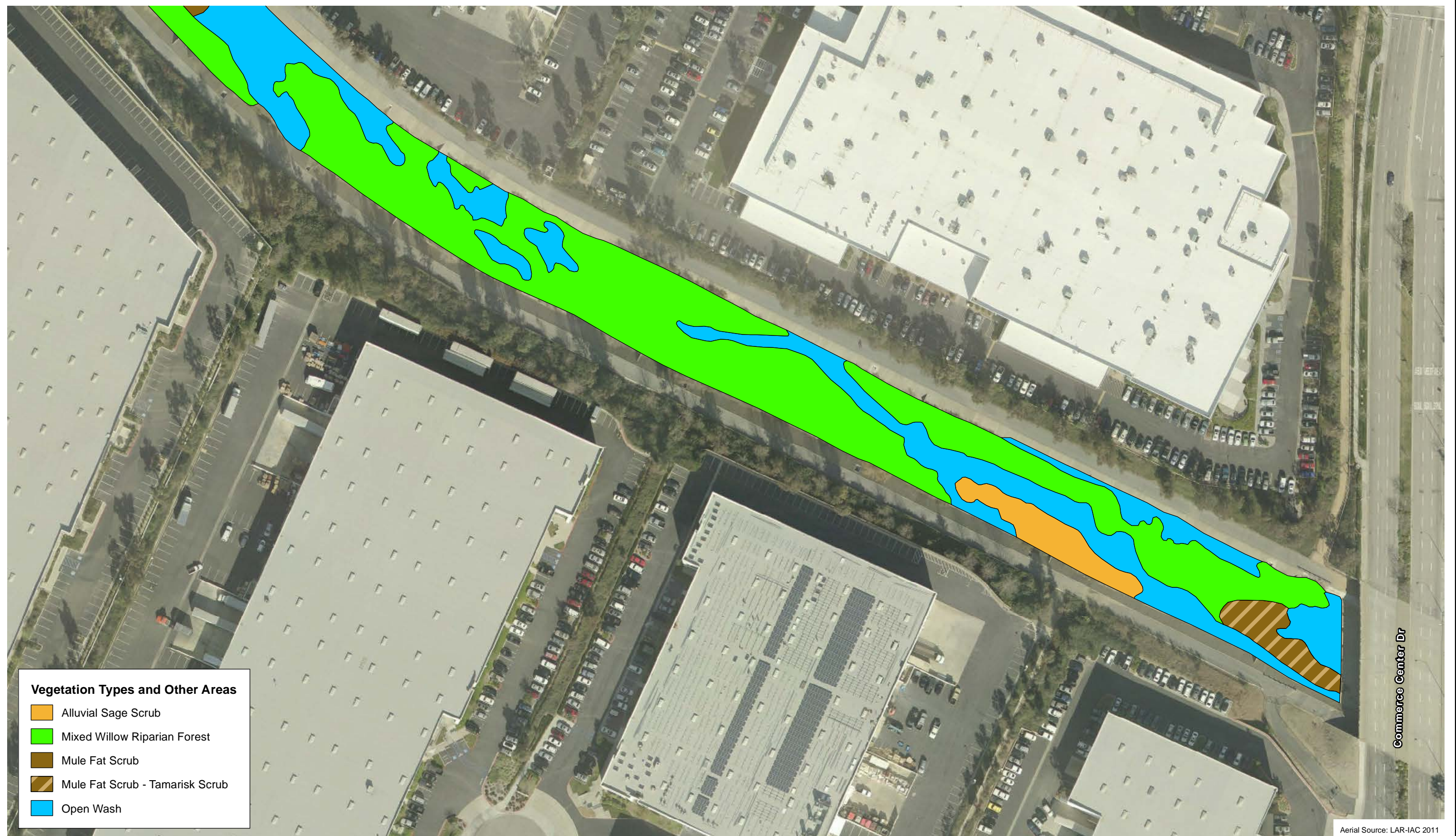


Exhibit 3a

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Aerial Source: LAR-IAC 2011

Vegetation Types and Other Areas

Hasley Canyon Channel - Reach 110

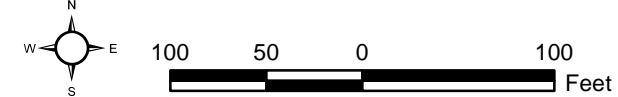
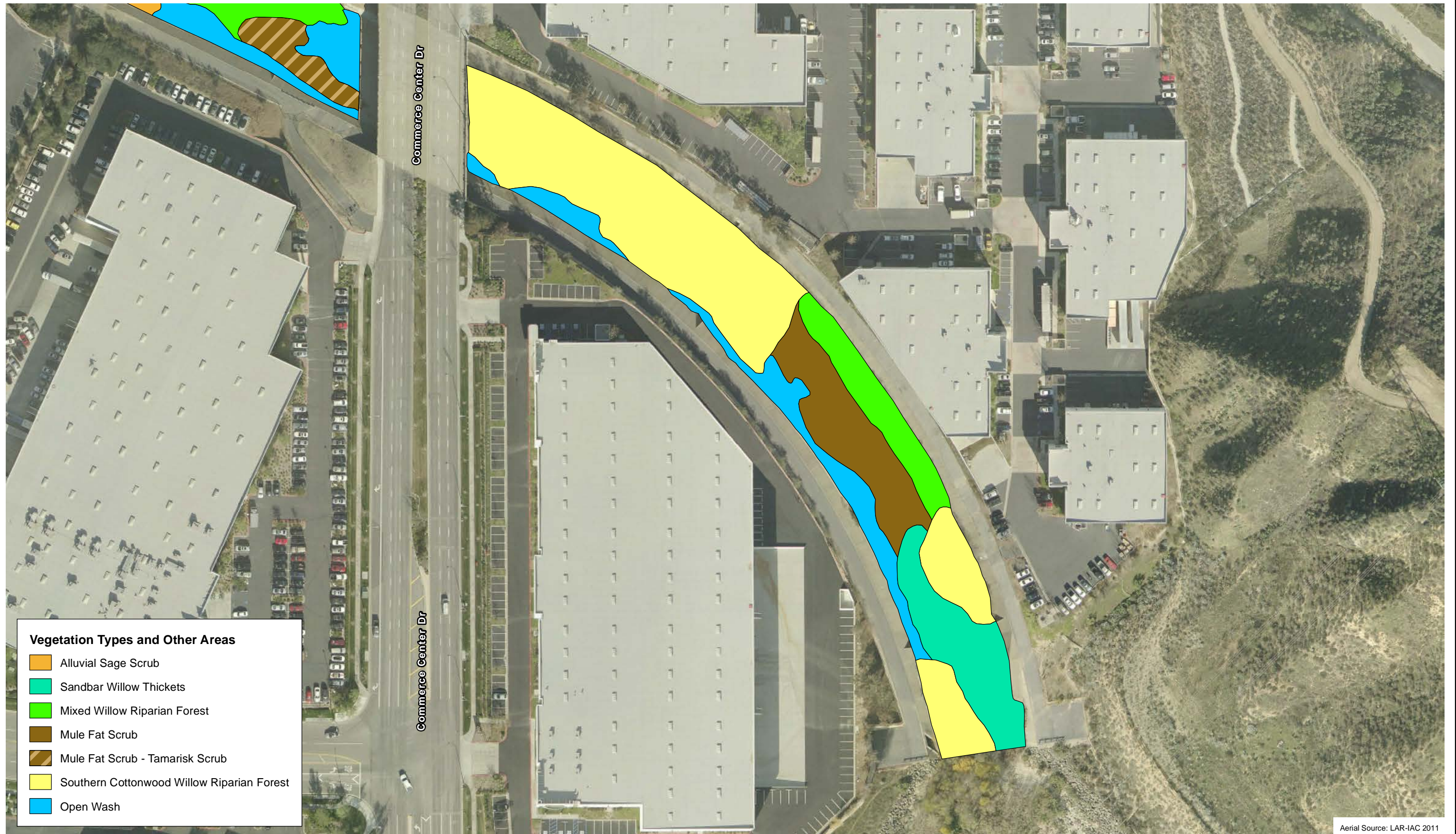


Exhibit 3b

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Vegetation Types and Other Areas

Hasley Canyon Channel - Reach 110

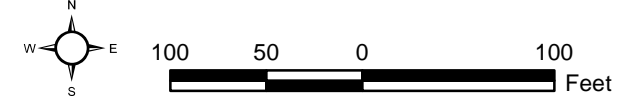


Exhibit 3c

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May 5, 2014. View downstream from north bank showing mixed willow riparian forest.



June 10, 2014. View from upstream end of channel facing downstream.

Site Photographs

Hasley Canyon Channel - Reach 110

Exhibit 4a

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May 5, 2014. View upstream from northbank showing mule fat scrub and cottonwood willow riparian forest.



May 5, 2014. View of open wash from north bank of channel.

Site Photographs

Hasley Canyon Channel - Reach 110

Exhibit 4b

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ATTACHMENT A
PLANT AND WILDLIFE COMPENDIUM

REACH 110 PLANT COMPENDIA

Species	
ANGIOSPERMAE – FLOWERING PLANTS	
EUDICOTS	
ANACARDIACEAE – SUMAC FAMILY	
<i>Schinus molle</i> *	Peruvian pepper tree
ASTERACEAE – SUNFLOWER FAMILY	
<i>Ambrosia acanthicarpa</i>	annual bur-sage
<i>Artemisia californica</i>	California sagebrush
<i>Baccharis pilularis</i> ssp. <i>consanguinea</i> [<i>B. pilularis</i>]	coyote brush
<i>Baccharis salicifolia</i> ssp. <i>salicifolia</i> [<i>B. salicifolia</i>]	mule fat
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i> *	Italian thistle
<i>Centaurea melitensis</i> *	totalote, Malta star-thistle
<i>Centaurea solstitialis</i> *	yellow star-thistle
<i>Corethrogyne filaginifolia</i> [<i>Lessingia</i> f.]	California-aster
<i>Encelia californica</i>	California brittlebush
<i>Erigeron canadensis</i> [<i>Conyza</i> c.]	common horseweed
<i>Gazania linearis</i> *	gazania
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Lactuca serriola</i> *	prickly lettuce
<i>Lepidospartum squamatum</i>	scale-broom
<i>Logfia filaginoides</i> [<i>Filago californica</i>]	California cottonrose
<i>Malacothrix saxatilis</i> var. <i>saxatilis</i>	cliff malacothrix
<i>Matricaria discoidea</i> [<i>Chamomilla suaveolens</i>]*	pineapple weed
<i>Pseudognaphalium californicum</i> [<i>Gnaphalium</i> c.]	California everlasting
<i>Sonchus oleraceus</i> *	common sow thistle
<i>Xanthium strumarium</i>	cocklebur
BORAGINACEAE – BORAGE FAMILY	
<i>Cryptantha</i> sp.	cryptantha
<i>Emmenanthe penduliflora</i>	whispering bells
<i>Eriodictyon crassifolium</i>	thick-leaf yerba santa
<i>Eucrypta chrysanthemifolia</i>	common eucrypta
BRASSICACEAE – MUSTARD FAMILY	
<i>Brassica nigra</i> *	black mustard
<i>Hirschfeldia incana</i> *	shortpod mustard
CACTACEAE – CACTUS FAMILY	
<i>Opuntia basilaris</i> var. <i>basilaris</i>	beavertail cactus
<i>Opuntia littoralis</i>	coastal prickly-pear
CUCURBITACEAE – GOURD FAMILY	
<i>Marah macrocarpus</i>	wild cucumber, chilicothe
FABACEAE – LEGUME FAMILY	
<i>Acacia</i> sp.*	acacia
<i>Acmispon glaber</i>	deerweed
<i>Acmispon maritimus</i> var. <i>maritimus</i> [<i>Lotus salsuginosus</i> ssp. <i>salsuginosus</i>]	alkali lotus
<i>Acmispon strigosus</i> [<i>Lotus</i> s.]	strigose lotus
<i>Astragalus trichopodus</i>	locoweed
<i>Lupinus bicolor</i>	miniature lupine

Species	
<i>Lupinus hirsutissimus</i>	stinging lupine
<i>Lupinus microcarpus</i> var. <i>microcarpus</i>	chick lupine
<i>Lupinus succulentus</i>	arroyo lupine
<i>Lupinus truncatus</i>	truncate lupine, collar lupine
<i>Medicago minima</i> *	burclover
<i>Medicago polymorpha</i> *	California burclover
<i>Melilotus alba</i> *	white sweetclover
<i>Melilotus indica</i> *	sourclover
FAGACEAE – OAK/BEECH FAMILY	
<i>Quercus agrifolia</i>	coast live oak
GERANIACEAE – GERANIUM FAMILY	
<i>Erodium botrys</i> *	long-beaked filaree
<i>Erodium cicutarium</i> *	red-stemmed filaree
LAMIACEAE – MINT FAMILY	
<i>Marrubium vulgare</i> *	common horehound
<i>Salvia apiana</i>	white sage
<i>Salvia mellifera</i>	black sage
MYRTACEAE – MYRTLE FAMILY	
<i>Eucalyptus</i> sp.*	gum
OLEACEAE – OLIVE FAMILY	
<i>Fraxinus</i> sp.	Fraxinus
ONAGRACEAE – EVENING-PRIMROSE FAMILY	
<i>Epilobium ciliatum</i> ssp. <i>cilatum</i>	green willow-herb
<i>Eulobus californicus</i> [<i>Camissonia californica</i>]	mustard-like evening primrose
PHRYMACEAE – LOPSEED FAMILY	
<i>Mimulus aurantiacus</i>	bush monkeyflower
PLANTAGINACEAE – PLANTAIN FAMILY	
<i>Veronica anagallis-aquatica</i> *	water speedwell
POLEMONIACEAE – PHLOX FAMILY	
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar
POLYGONACEAE – BUCKWHEAT FAMILY	
<i>Eriogonum fasciculatum</i>	California buckwheat
PORTULACACEAE – PURSLANE FAMILY	
<i>Portulaca oleracea</i> *	common purslane
SALICACEAE – WILLOW FAMILY	
<i>Populus fremontii</i> ssp. <i>fremontii</i>	Fremont cottonwood
<i>Salix exigua</i>	narrow-leaved willow
<i>Salix gooddingii</i>	Goodding's black willow
<i>Salix laevigata</i>	red willow
<i>Salix lasiolepis</i>	arroyo willow
SIMAROUACEAE – QUASSIA FAMILY	
<i>Ailanthus altissima</i> *	tree of heaven
SOLANACEAE – NIGHTSHADE FAMILY	
<i>Datura wrightii</i>	jimson weed
<i>Nicotiana glauca</i> *	tree tobacco
<i>Solanum xanti</i>	chaparral nightshade

Species	
TAMARICACEAE – TAMARISK FAMILY	
<i>Tamarix ramosissima</i> *	saltcedar
MONOCOTYLEDONES – MONOCOTS	
CYPERACEAE – SEDGE FAMILY	
<i>Cyperus</i> sp.	umbrella-sedge
POACEAE – GRASS FAMILY	
<i>Arundo donax</i> *	giant reed
<i>Avena barbata</i> *	slender wild oat
<i>Bromus diandrus</i> *	ripgut grass
<i>Bromus madritensis</i> ssp. <i>rubens</i> *	red brome
<i>Cortaderia selloana</i> *	pampas grass
<i>Cynodon dactylon</i> *	bermuda grass
<i>Elymus condensatus</i> [<i>Leymus</i> c.]	giant wild rye
<i>Hordeum murinum</i> var. <i>leporinum</i> *	hare barley
<i>Polypogon monspeliensis</i> *	annual beard grass
<i>Schismus barbatus</i> *	Mediterranean schismus
* non-native to the region it was found	

REACH 101 WILDLIFE COMPENDIA

Species		Number Sighted
REPTILES		
LEPIDOSAURIA – LIZARDS AND SNAKES		
PHRYNOSOMATIDAE – ZEBRA-TAILED, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS		
<i>Sceloporus occidentalis</i>	western fence lizard	1
<i>Uta stansburiana</i>	side-blotched lizard	1
COLUBRIDAE – COLUBRID SNAKES		
<i>Lampropeltis getula</i>	common kingsnake	1
BIRDS		
AVES – BIRDS		
CHARADRIIDAE – PLOVERS		
<i>Charadrius vociferus</i>	killdeer	2
COLUMBIDAE – PIGEONS AND DOVES		
<i>Zenaida macroura</i>	mourning dove	1
TROCHILIDAE – HUMMINGBIRDS		
<i>Calypte anna</i>	Anna's hummingbird	2
<i>Calypte costae</i>	Costa's hummingbird	1
TYRANNIDAE – TYRANT FLYCATCHERS		
<i>Sayornis nigricans</i>	black phoebe	1
<i>Sayornis saya</i>	Say's phoebe	1
<i>Myiarchus cinerascens</i>	ash-throated flycatcher	1
CORVIDAE – CROWS AND JAYS		
<i>Aphelocoma californica</i>	western scrub-jay	3
<i>Corvus corax</i>	common raven	3
HIRUNDINIDAE – SWALLOWS		
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	2

Species		Number Sighted
<i>Petrochelidon pyrrhonota</i>	cliff swallow	1
AEGITHALIDAE – BUSHTITS		
<i>Psaltiriparus minimus</i>	bushtit	1
TROGLODYTIDAE – WRENS		
<i>Thryomanes bewickii</i>	Bewick's wren	1
PARULIDAE – WARBLERS		
<i>Cardellina [Wilsonia] pusilla</i>	Wilson's warbler	2
<i>Geothlypis trichas</i>	common yellowthroat	1
EMBERIZIDAE – SPARROWS AND JUNCOS		
<i>Pipilo maculatus</i>	spotted towhee	5
<i>Melospiza [Pipilo] crissalis</i>	California towhee	3
CARDINALIDAE – CARDINALS AND ALLIES		
<i>Piranga ludoviciana</i>	western tanager	3
<i>Pheucticus melanocephalus</i>	black-headed grosbeak	1
FRINGILLIDAE – FINCHES		
<i>Haemorhous [Carpodacus] mexicanus</i>	house finch	5
<i>Spinus [Carduelis] psaltria</i>	lesser goldfinch	4