BonTerra PSOMAS

Balancing the Natural and Built Environment

May 29, 2014
REVISED September 30, 2015

Ms. Jemellee Cruz, P.E.
County of Los Angeles Department of Public Works
Flood Maintenance Division
900 South Fremont Avenue, Annex Building, 2nd Floor
Alhambra, California 91802-1460

VIA EMAIL
jcruz@dpw.lacounty.gov

Subject: Results of Biological Inventory Surveys of Reach 112, Ballona Creek, 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 112, Ballona Creek, in the community of Marina del Rey in Los Angeles County (Exhibit 1). A habitat inventory survey was previously conducted for Reach 112, but it was limited to the "upper" section of the channel that consisted of about a half-mile segment downstream of Centinela Avenue (see BonTerra report dated July 26, 2012). The current Reach 112 survey area for these surveys is approximately three miles in length and extends from Centinela Avenue downstream to the end of the Los Angeles County Flood Control District's easement near the ocean outlet (at Vista del Mar extended). From about the Marina Freeway (State Route 90 [SR-90]), this new survey area is considered "sensitive" as it lies within the Ballona Wetlands Ecological Reserve. This soft-bottom channel (SBC) reach of Ballona Creek is in the process of being added to the Los Angeles County Department of Public Work's (LACDPW'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 LACDPW's request for inclusion of SBC Reach 112, Ballona Creek, with the existing regulatory permits.

The LACDPW maintains numerous SBC reaches and debris basins that primarily function to control flood waters. Maintained SBC reaches are located in association with concrete-lined segments of rivers and creeks in order to prevent backup of debris and sediment that moves downstream during heavy rainfall events. High volumes of storm-water-carrying debris and sediment can cause considerable damage to downstream and upstream properties and result in the loss of human life. The dams, barriers, and debris basins also have spillways designed to allow removal of excess runoff water at safe velocities that will not damage the dam or downstream structures. Vegetation within the channels increases the collection of debris and requires periodic maintenance that involves removal of vegetation and debris from these SBC reaches. LACDPW maintenance activities in the SBC reaches and debris basins are conducted in conformance with permits issued by the CDFW, the USACE, and the RWQCB.

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METHODS

BonTerra Psomas Senior Biologist Brian Daniels and Jennifer Pareti and Biologist Sarah Thomas conducted the plant and wildlife inventory and vegetation mapping surveys on March 6, 2014. The surveys focused on the identification of all plant and wildlife species present within the channel. Previous survey reports of the upper portion of this SBC reach were reviewed, including the focused plant and biological reconnaissance surveys conducted in July 2009 at Ballona Creek (BonTerra 2009, 2010).

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* (CDFW 2010).

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

For a complete list of plant and wildlife species observed during the March 6, 2014 survey, see Attachment A. The following discussion is primarily limited to those plant and wildlife species observed during the survey.

Vegetation

The Ballona Creek SBC reach supports four vegetation types (disturbed freshwater (cattail) marsh, disturbed saltwater marsh, ornamental, and ruderal) and two other areas (open water and developed) as illustrated on Exhibits 31a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 3i, 3j, and 3k and summarized in Table 1 below. Site photographs are included as Exhibits 4a and 4b. Vegetation in this SBC reach is limited to thin bands and patches at the toe of the levees. The native freshwater marsh vegetation is limited to the "upper" section of Reach 112 from Centinela Avenue downstream to SR-90 (see Exhibit 3a). Native saltwater marsh vegetation is limited to the "lower" section of Reach 112 from the ocean outlet upstream to about Lincoln Blvd (Pacific Coast Highway [PCH]). The vegetation becomes more sparse and bare areas begin to dominate just upstream of SR-90 in the "upper" section of this SBC reach. Essentially no vegetation is present in the "middle" section of this SBC reach from SR-90 to PCH. The tidal influence in the lower portion of this SBC reach is greater in the "middle" section and, as a result, the higher salt content of the water limits the downstream expansion of the upstream vegetation types.

TABLE 1
VEGETATION TYPES

Vegetation Type	Acres
Freshwater (Cattail) Marsh	0.55*
Saltwater Marsh	4.47
Ornamental	1.00
Ruderal	6.24
Open Water	69.82
Developed	23.90
Total Acres	**105.98**

The freshwater marsh vegetation type in the "upper" section of Reach 112 is dominated by southern cattail (*Typha domingensis*), southern bulrush (*Schoenoplectus californicus* [*Scirpus californicus*]), and cocklebur (*Xanthium strumarium*). It is identified as disturbed freshwater marsh vegetation since it is intermixed with relatively high amounts of non-native ruderal (weedy) and exotic (or invasive) ornamental species. The ruderal vegetation consists of non-native species such as African fountain grass (*Pennisetum setaceum*), Mexican fan-palm (*Washingtonia robusta*), African umbrella-sedge (*Cyperus involucratus*), curly dock (*Rumex crispus*), and common beggar ticks (*Bidens pilosa*). The ornamental vegetation includes volunteers of several species of ornamental trees, including Brazilian pepper (*Schinus terebinthifolius*), shamel ash (*Fraxinus uhleri*), rain tree (*Koelreuteria paniculata*), and Chinese elm (*Ulmus parvifolia*).

Freshwater marsh vegetation typically provides high habitat values. This is particularly evident in Southern California where it is relatively scarce. The freshwater marsh vegetation at this SBC reach, however, has been degraded by numerous non-native ruderal (weedy) and invasive species such as the Mexican fan palms that intermix with the cattail and bulrush beds. The concreted levee also limits the distribution of these cattail and bulrush beds in the channel and diminishes their overall habitat value. The ruderal vegetation in this SBC reach is dominated by non-native ruderal species and ornamental species and provides low value habitat.

The saltwater marsh vegetation type in the "lower" section of Reach 112 is dominated by seablite (*Sueda* sp.) and pickleweed (*Salicornia* sp.). This vegetation type has adapted to the high salinity of ocean salt water. It is identified at this location as disturbed saltwater marsh vegetation since it is intermixed with relatively high amounts of non-native ruderal (weedy) and exotic (or invasive) ornamental species. The ruderal vegetation consists of non-native species such as Chrysanthemum (*Chrysanthemum* sp.), telegraph weed (*Heterotheca grandiflora*), sea-lavender (*Limonium* sp.). The ornamental vegetation includes volunteers of several widely used ornamental shrubs and trees including bottlebrush (*Callistemon* sp.), acacia (*Acacia* sp.), and Brazilian pepper. Shrubs cover roughly 35% of the ruderal vegetation. About 25% of the total shrub cover consists of scattered native species including coyotebush (*Baccharis pilularis*) and laurel sumac (*Malosma laurina*).

Saltwater marsh vegetation typically provides high habitat values. This is especially true in Southern California where it is a rare plant community with a very limited distribution. It is limited to those areas on the coast where natural or controlled tidal regimes still exist. The saltwater marsh vegetation at this SBC reach, however, has been degraded by the presence of numerous non-native ruderal (weedy) and invasive species. The rip-rap of the levee walls also limits the distribution and growth (i.e., its stature is not as tall or dense as in a natural setting) of the saltmarsh vegetation. The saltmarsh vegetation in this SBC reach still provides valuable foraging habitat for a variety of bird species, but its overall value is

limited due to its location on rip-rap and the presence of non-native ruderal species and ornamental species.

Wildlife

Open water is the dominant habitat feature of this SBC reach. The water transitions from fresh at the upper end of this SBC reach (Centinela Avenue) to brackish near the SR-90 and to salt water in the lower part of the channel in the vicinity of the ocean outlet. The specific location of these zones is in constant flux due to tidal influences. Vegetation is limited in size and extent; it is primarily confined to the water's edge at the toe of the concrete and rip-rap levees. As a result, Reach 112 is expected to be used by a variety of water birds, but relatively few land birds. Water birds observed during the survey include American wigeon (*Anas americana*), mallard (*Anas platyrhynchos*), northern pintail (*Anas acuta*), blue-winged teal (*Anas discors*), cinnamon teal (*Anas cyanoptera*), green-winged teal (*Anas crecca*), bufflehead (*Bucephala albeola*), red-breasted merganser (*Mergus serrator*), ruddy duck (*Oxyura jamaicensis*), pied-billed grebe (*Podilymbus podiceps*), eared grebe (*Podiceps nigricollis*), western grebe (*Aechmophorus occidentalis*), double-crested cormorant (*Phalacrocorax auritus*), brown pelican (*Pelecanus occidentalis*), great blue heron (*Ardea herodias*), snowy egret (*Egretta thula*), American coot (*Fulica americana*), black-necked stilt (*Himantopus mexicanus*), black oystercatcher (*Haematopus bachmani*), killdeer (*Charadrius vociferous*), spotted sandpiper (*Actitis macularius*), greater yellowlegs (*Tringa melanoleuca*), willet (*Tringa semipalmata*), whimbrel (*Numenius phaeopus*), least sandpiper (*Calidris minutilla*), long-billed dowitcher (*Limnodromus scolopaceus*), ring-billed gull (*Larus delawarensis*), western gull (*Larus occidentalis*), and California gull (*Larus californicus*). Some of the above species may nest in the vegetation at the water's edge in this SBC reach. These species include the mallard, cinnamon teal, pied-billed grebe, and American coot. Other species on the list, such as the killdeer and black-necked stilt may also nest here. The other species on the above list, however, were using the channel habitats exclusively for foraging and/or loafing.

Land bird use of the channel is expected to be limited, with most species occurring primarily for bathing and drinking opportunities. For example, the mourning dove (*Zenaida macroura*) was observed during the survey in the vegetation adjacent to the water's edge, but is expected to nest and primarily forage in the vegetation outside the channel. Some bird species observed during the survey such as the common yellowthroat (*Geothlypis trichas*) and song sparrow (*Melospiza melodia*) may nest in the vegetation at the water's edge in this SBC reach. The open water habitats of the channel are expected to support insect life that provides foraging opportunities for aerial foraging bird species. Birds observed foraging over Reach 112 during the survey included tree swallow (*Tachycineta bicolor*) and northern rough-winged swallow (*Stelgidopteryx serripennis*).

This SBC reach provides minimal habitat for amphibians and reptiles and only two were observed during the survey: red-eared slider (*Trachemys scripta*) and the western fence lizard (*Sceloporus occidentalis*). While the lizard is a native species, the slider is a non-native turtle species that can be detrimental to native species. The California ground squirrel (*Otospermophilus beecheyi*) and domestic cat (*Felis catus*) were observed, as well as the sign of common raccoon (*Procyon lotor*) and coyote (*Canis latrans*) during the survey. No fish species were identified during the survey. The freshwater parts of this SBC reach provide limited habitat for fish, but a variety of species are expected to use the brackish and salt waters downstream of SR-90.

CONCLUSIONS AND RECOMMENDATIONS

The 0.55 acre of freshwater marsh and 4.47 acres of saltmarsh vegetation in SBC Reach 112 is of high value due to its relative scarcity in the region. The habitat values for these two vegetation types, however,

are degraded by the abundance of invasive ornamental and non-native ruderal (weedy) vegetation that are found in association with these two native vegetation types in SBC Reach 112.

The results of the July 2009 biological reconnaissance surveys to determine the potential for special status plant and wildlife species at this SBC reach (BonTerra 2010) found that the southern tarplant *(Centromadia parryi* ssp. *australis)* had potential to occur and, as a result, focused surveys were warranted. The results of a southern tarplant survey conducted in July 2009 was negative; however, this focused survey was limited to the "upper" part of this SBC reach from Centinela Avenue to SR-90. The remainder of this SBC reach also provides potentially suitable habitat for the southern tarplant and it may occur.

Although the results of the July 2009 biological reconnaissance survey did not recommend any focused wildlife surveys, this survey was limited to the "upper" part of the Reach 112 from Centinela Ave to SR-90. The results of the July 2009 survey did indicate that the State and federally listed Endangered California least tern *(Sternula antillarum browm)* had potential to occur at this SBC reach for loafing and foraging activities, but not for nesting. The California least tern is more likely to occur downstream near the ocean outlet of this channel. Nesting California least terns are possible in the vicinity of the "lower" parts of this SBC reach; however, this species is not expected to nest on bare substrates (i.e., the access road) of this SBC reach. The California least tern is a migratory species; therefore, it is only present in the region for the nesting season from about April 1 to August 31. The State Endangered Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) is a year-round resident of salt marsh habitats in the region. It is known to occur at the Ballona Wetlands and one individual was observed during the survey foraging in the salt marsh vegetation on the rip-rap of this SBC reach. As a result, focused surveys are not recommended for this species as the "lower" parts of this SBC reach that contain salt marsh vegetation are considered occupied by the Belding's savannah sparrow. The salt marsh vegetation on the rip-rap of this SBC reach provides suitable foraging habitat for the Belding's savannah sparrow, but is not tall or dense enough to provide suitable nesting habitat for this species.

To obtain the regulatory permits necessary for maintenance activities at this SBC reach, BonTerra Psomas recommends performing a focused survey for the southern tarplant that updates the 2009 survey results for the "upper" part of this SBC reach, Centinela Avenue to SR-90, but also covers for the first time, appropriate areas downstream of SR-90 in the "lower" part of this SBC reach. BonTerra Psomas recommends that the LACDPW perform maintenance activities in an alternating pattern similar to other maintained SBC reaches. BonTerra Psomas also proposes the following Maintenance Plan language for the "upper" part of this SBC reach: "The channel clearing work would involve an alternating pattern of hand-clearing of vegetation. Only one-half of the channel would be cleared each year. The other one-half of the channel would be cleared the following year. A Biologist would be present during clearing activities to recommend appropriate avoidance measures of any biological resources that may warrant such measures. All invasive plant species would be removed in a manner approved by the Monitoring Biologist".

In order to obtain regulatory permits for maintenance activities in the "lower" part of this SBC reach that supports habitat (i.e. salt marsh vegetation) for the State Endangered Belding's savannah sparrow, it will be necessary for the LACDPW to incorporate avoidance measures into their maintenance plan for this species. BonTerra Psomas proposes the following Maintenance Plan language for the "lower" part of this SBC reach: "The channel clearing work will involve hand-clearing of non-native vegetation outside the Belding's savannah sparrow nesting season (March – August). A Biologist familiar with Belding's savannah sparrow ecology will be present during all clearing activities and have the authority to delay or

stop any clearing activities that may affect individual Belding's savannah sparrows. Salt marsh vegetation will be avoided and protected during these clearing activities."

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
Senior Vice President/Principal

Marc T. Blain
Senior Project Manager

Enclosures: Exhibit 1 – Regional Location
Exhibit 2 – Local Vicinity
Exhibit 3 – Vegetation Types
Exhibit 4 – Site Photographs
Attachment A – Plant and Wildlife Compendia

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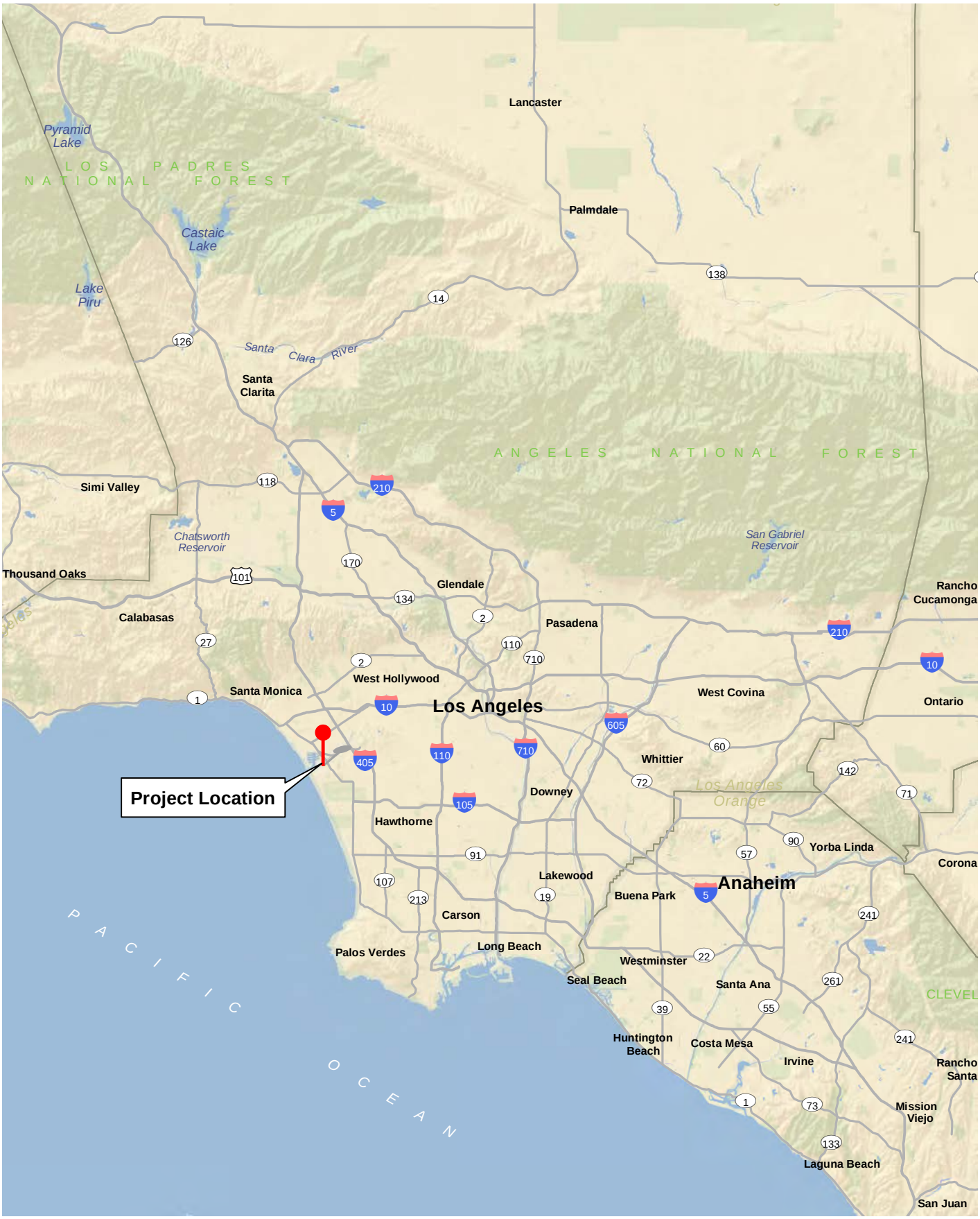

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Regional Location Map

Exhibit 1

Ballona Creek Soft-Bottom Channel - Reach 112

N W E S

10 5 0 10 Miles

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Local Vicinity map

Exhibit 2

Ballona Creek Soft-Bottom Channel - Reach 112

N W E S

2,000 1,000 0 2,000

Feet

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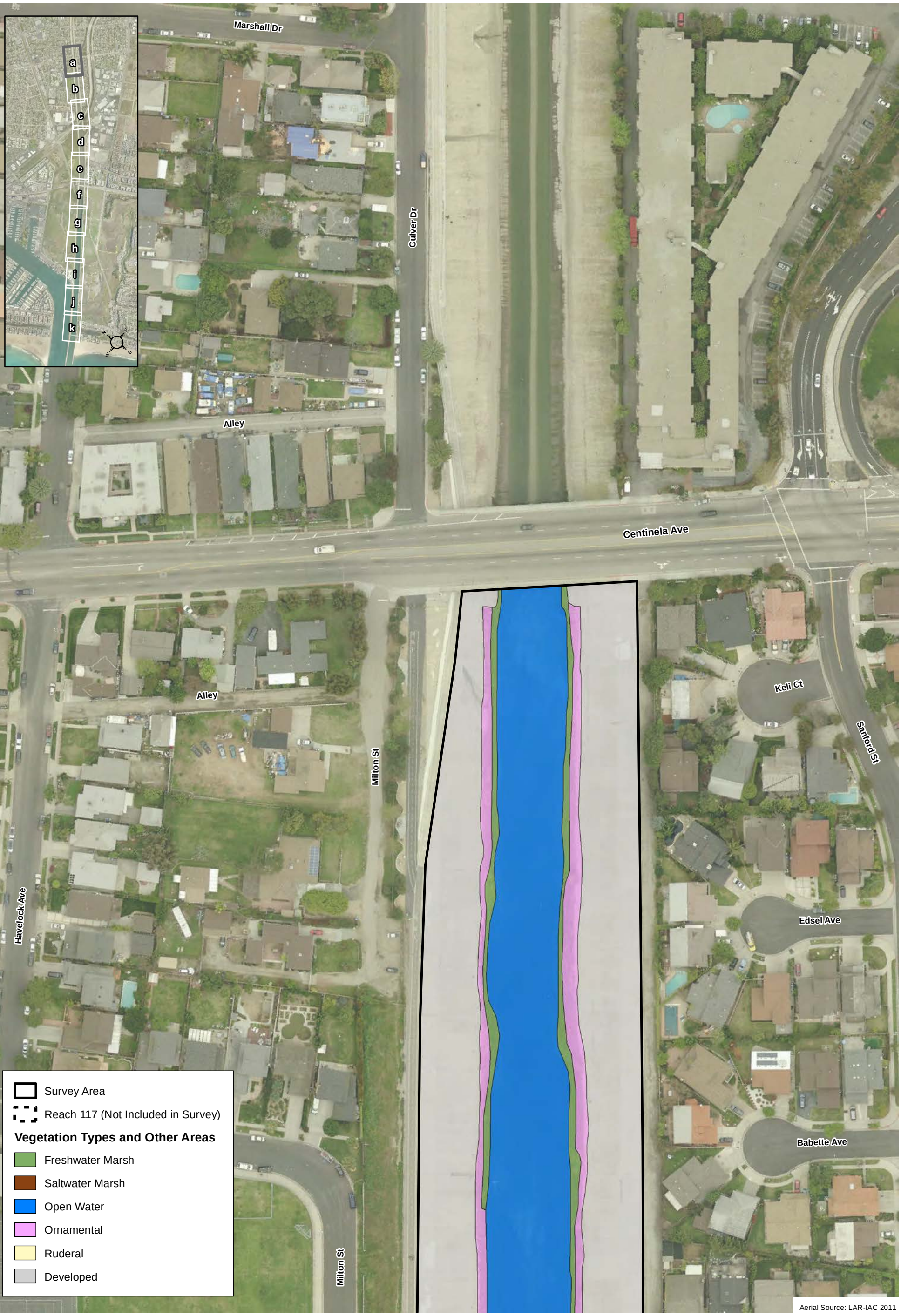

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Vegetation Types and Other Areas

Exhibit 3a

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

BonTerra PSOMAS

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Vegetation Types and Other Areas

Exhibit 3b

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

BonTerra PSOMAS

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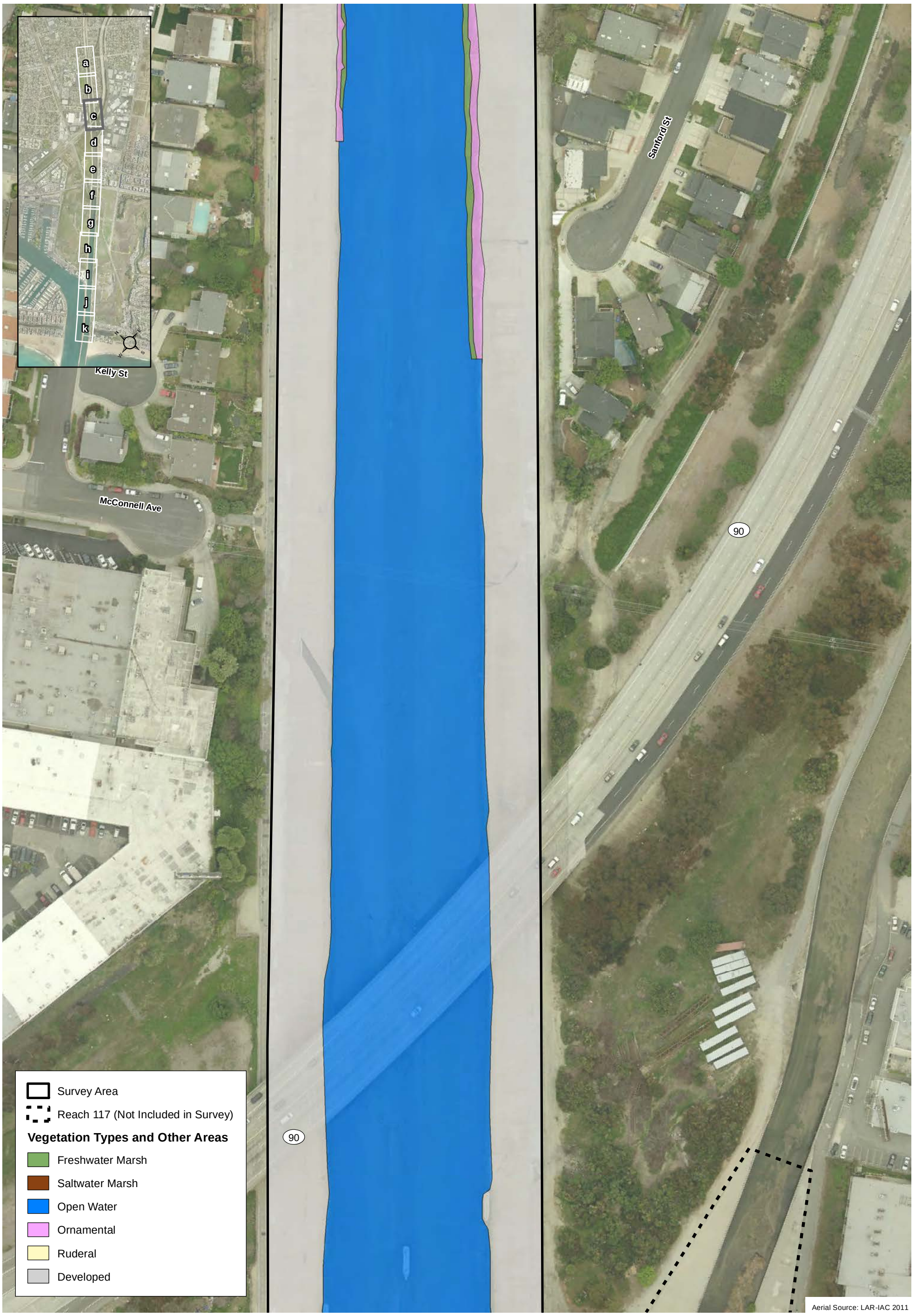

Vegetation Types and Other Areas

Exhibit 3c

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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Alla Rd

Survey Area

Reach 117 (Not Included in Survey)

Vegetation Types and Other Areas

Freshwater Marsh

Saltwater Marsh

Open Water

Ornamental

Ruderal

Developed

Aerial Source: LAR-IAC 2011

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Vegetation Types and Other Areas

Exhibit 3d

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

BonTerra PSOMAS

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Playa Vista Dr

Survey Area

Reach 117 (Not Included in Survey)

Vegetation Types and Other Areas

Freshwater Marsh

Saltwater Marsh

Open Water

Ornamental

Ruderal

Developed

Aerial Source: LAR-IAC 2011

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Vegetation Types and Other Areas

Exhibit 3e

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

BonTerra PSOMAS

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Lincoln Blvd

Culver Blvd

Survey Area

Reach 117 (Not Included in Survey)

Vegetation Types and Other Areas

Freshwater Marsh

Saltwater Marsh

Open Water

Ornamental

Ruderal

Developed

Aerial Source: LAR-IAC 2011

Vegetation Types and Other Areas

Exhibit 3f

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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Survey Area

Reach 117 (Not Included in Survey)

Vegetation Types and Other Areas

- Freshwater Marsh
- Saltwater Marsh
- Open Water
- Ornamental
- Ruderal
- Developed

Aerial Source: LAR-IAC 2011

Vegetation Types and Other Areas

Exhibit 3g

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

BonTerra PSOMAS

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Survey Area

Reach 117 (Not Included in Survey)

Vegetation Types and Other Areas

- Freshwater Marsh
- Saltwater Marsh
- Open Water
- Ornamental
- Ruderal
- Developed

Aerial Source: LAR-IAC 2011

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Vegetation Types and Other Areas

Exhibit 3h

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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Vegetation Types and Other Areas

Exhibit 3i

Ballona Creek Soft-Bottom Channel - Reach 112

N E S W

100 50 0 100 Feet

BonTerra PSOMAS

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Survey Area

Reach 117 (Not Included in Survey)

Vegetation Types and Other Areas

- Freshwater Marsh
- Saltwater Marsh
- Open Water
- Ornamental
- Ruderal
- Developed

Aerial Source: LAR-IAC 2011

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Vegetation Types and Other Areas

Exhibit 3j

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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Vegetation Types and Other Areas

Exhibit 3k

Ballona Creek Soft-Bottom Channel - Reach 112

N E S W

100 50 0 100 Feet

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March 6, 2014. View Downstream from Centinela Ave.

March 6, 2014. View Upstream of Lower Ballona Channel from Pacific Ave Bridge.

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Site Photographs

Exhibit 4a

Ballona Creek Soft-Bottom Channel - Reach 112

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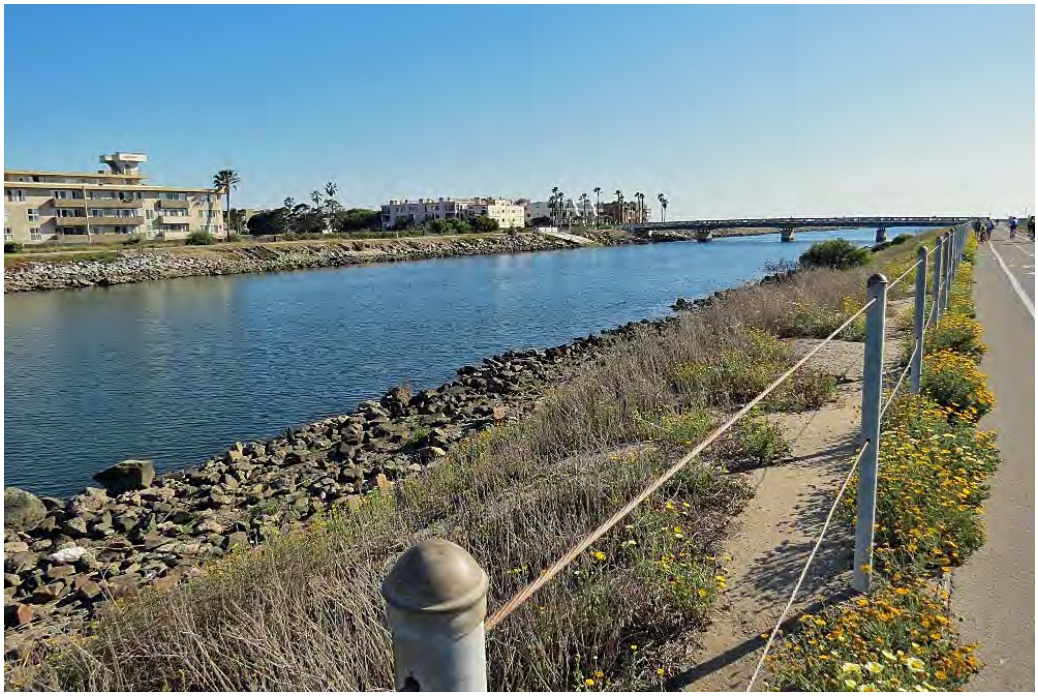

March 6, 2014. View Downstream from North Bank of Lower Ballona Channel toward Ocean.

March 6, 2014. View Upstream of Lower Ballona Channel from North Bank.

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Site Photographs

Exhibit 4b

Ballona Creek Soft-Bottom Channel - Reach 112

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ATTACHMENT A

PLANT AND WILDLIFE COMPENDIA

BALLONA CREEK PLANT LIST

Species	
EUDICOTS	
AIZOACEAE – FIG-MARIGOLD FAMILY	
*Carpobrotus edulis**	freeway iceplant
ANACARDIACEAE – SUMAC FAMILY	
Malosma laurina	laurel sumac
Rhus integrifolia	lemonade berry
*Schinus terebinthifolius**	Brazilian pepper tree
APIACEAE – CARROT FAMILY	
*Foeniculum vulgare**	sweet fennel
ASTERACEAE – SUNFLOWER FAMILY	
*Ageratina adenophora**	crofton weed
Artemisia californica	California sagebrush
Baccharis pilularis ssp. *consanguinea* [*B. pilularis*]	coyote brush
Baccharis salicifolia ssp. *salicifolia* [*B. salicifolia*]	mule fat
Encelia californica	California brittlebush
Erigeron canadensis [*Conyza c.*]	common horseweed
Glebionis coronaria [*Chrysanthemum coronarium*]*	garland daisy
Heterotheca grandiflora	telegraph weed
Pseudognaphalium luteoalbum [*Gnaphalium l.*]*	weedy cudweed
*Sonchus oleraceus**	common sow thistle
BRASSICACEAE – MUSTARD FAMILY	
*Raphanus sativus**	radish
CHENOPODIACEAE – GOOSEFOOT FAMILY	
Atriplex canescens	four-wing saltbush
*Chenopodium album**	lamb's quarters
Suaeda sp.	seablite
CONVOLVULACEAE – MORNING-GLORY FAMILY	
*Ipomoea purpurea**	common morning-glory
EUPHORBIACEAE – SPURGE FAMILY	
*Ricinus communis**	castor bean
FABACEAE – LEGUME FAMILY	
Acacia sp.*	acacia
FAGACEAE – OAK/BEECH FAMILY	
Quercus agrifolia	coast live oak
MALVACEAE – MALLOW FAMILY	
*Malva parviflora**	cheeseweed
MYRTACEAE – MYRTLE FAMILY	
Callistemon sp.*	bottlebrush
OLEACEAE – OLIVE FAMILY	
Fraxinus sp.	ash
PLANTAGINACEAE – PLANTAIN FAMILY	
*Plantago lanceolata**	English plantain
SIMAROUBACEAE – QUASSIA FAMILY	
*Ailanthus altissima**	tree of heaven

BALLONA CREEK PLANT LIST

Species	
EUDICOTS	
SOLANACEAE – NIGHTSHADE FAMILY	
*Nicotiana glauca**	tree tobacco
Solanum douglasii	Douglas' nightshade
TROPAEOLACEAE – NASTURTIUM FAMILY	
*Tropaeolum majus**	garden nasturtium
ULMACEAE – ELM FAMILY	
*Ulmus parvifolia**	Chinese elm
***MONOCOTYLEDONES* – MONOCOTS**	
ARECACEAE – PALM FAMILY	
Phoenix sp.*	date palm
Washingtonia sp.	fan palm
CYPERACEAE – SEDGE FAMILY	
*Cyperus involucratus**	African umbrella-sedge
Isolepis cernuus [*Scirpus c.*]	California club-rush
POACEAE – GRASS FAMILY	
*Avena barbata**	slender wild oat
Bromus madritensis ssp. *rubens**	red brome
Distichlis spicata	salt grass
Festuca perennis [*Lolium perenne, L. multiflorum*]*	perennial ryegrass
*Pennisetum setaceum**	crimson fountain grass
Stipa miliacea [*Piptatherum miliacea*]*	smilo grass
TYPHACEAE – CATTAIL FAMILY	
Typha angustifolia	narrow-leaved cattail
Typha latifolia	broad-leaved cattail

BALLONA CREEK WILDLIFE LIST

Species	
REPTILES	
***TESTUDINES* – TURTLES**	
EMYDIDAE – WATER AND BOX TURTLES	
*Trachemys scripta elegans**	red-eared slider
PHRYNOSOMATIDAE – ZEBRA-TAILED, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS	
Sceloporus occidentalis	western fence lizard
Uta stansburiana	side-blotched lizard
BIRDS	
***AVES* – BIRDS**	
ANATIDAE – WATERFOWL	
Anas americana	American wigeon
Anas platyrhynchos	mallard
Anas cyanoptera	cinnamon teal
Anas acuta	northern pintail

BALLONA CREEK WILDLIFE LIST

Species	
Anas crecca	green-winged teal
Bucephala albeola	bufflehead
Mergus serrator	red-breasted merganser
Oxyura jamaicensis	ruddy duck
PODICIPEDIDAE – GREBES	
Podilymbus podiceps	pied-billed grebe
Podiceps nigricollis	eared grebe
Aechmophorus occidentalis	western grebe
PHALACROCORACIDAE – CORMORANTS	
Phalacrocorax auritus	double-crested cormorant
PELECANIDAE – PELICANS	
Pelecanus occidentalis	brown pelican
ARDEIDAE – HERONS, BITTERNS, AND ALLIES	
Egretta thula	snowy egret
ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES	
Buteo jamaicensis	red-tailed hawk
RALLIDAE – RAILS	
Fulica americana	American coot
RECURVIROSTRIDAE – STILTS AND AVOCETS	
Himantopus mexicanus	black-necked stilt
HAEMATOPODIDAE – OYSTERCATCHERS	
Haematopus bachmani	black oystercatcher
CHARADRIIDAE – PLOVERS	
Charadrius vociferus	killdeer
SCOLOPACIDAE – SANDPIPERS AND PHALAROPES	
Actitis macularius	spotted sandpiper
Tringa [*Catoptrophorus*] *semipalmata*	willet
Numenius phaeopus	whimbrel
Calidris minutilla	least sandpiper
Limnodromus scolopaceus	long-billed dowitcher
LARIDAE – GULLS AND TERNS	
Larus delawarensis	ring-billed gull
Larus occidentalis	western gull
Larus californicus	California gull
COLUMBIDAE – PIGEONS AND DOVES	
*Columba livia**	rock pigeon
*Streptopelia decaocto**	Eurasian collared-dove
Zenaida macroura	mourning dove
TROCHILIDAE – HUMMINGBIRDS	
Selasphorus sasin	Allen's hummingbird
FALCONIDAE – FALCONS	
Falco sparverius	American kestrel
TYRANNIDAE – TYRANT FLYCATCHERS	
Sayornis nigricans	black phoebe

BALLONA CREEK WILDLIFE LIST

Species	
CORVIDAE – CROWS AND JAYS	
Corvus brachyrhynchos	American crow
Corvus corax	common raven
HIRUNDINIDAE – SWALLOWS	
Tachycineta bicolor	tree swallow
Stelgidopteryx serripennis	northern rough-winged swallow
Hirundo rustica	barn swallow
TROGLODYTIDAE – WRENS	
Cistothorus palustris	marsh wren
PARULIDAE – WARBLERS	
Setophaga [*Dendroica*] *coronata*	yellow-rumped warbler
EMBERIZIDAE – SPARROWS AND JUNCOS	
Passerculus sandwichensis	savannah sparrow
Melospiza melodia	song sparrow
Melospiza lincolnii	Lincoln's sparrow
Zonotrichia leucophrys	white-crowned sparrow
FRINGILLIDAE – FINCHES	
Haemorhous [*Carpodacus*] *mexicanus*	house finch
MAMMALS	
***MAMMALIA* – MAMMALS**	
LEPORIDAE – HARES AND RABBITS	
Sylvilagus audubonii	desert cottontail
SCIURIDAE – SQUIRRELS	
Spermophilus beecheyi	California ground squirrel
CANIDAE – WOLVES AND FOXES	
Canis latrans	coyote
PROCYONIDAE – RACCOONS	
Procyon lotor	northern raccoon