



May 28, 2014

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 Centinela Creek Reach 117, 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 117, Centinela Creek, in the community of Marina del Rey in unincorporated Los Angeles County (Exhibit 1). The confluence of Centinela and Ballona Creeks is about 500 feet downstream of the Marina Freeway (90) (Exhibit 2). Centinela Creek is a soft-bottom channel (SBC) for about 500 feet upstream of its confluence with the Ballona Creek Channel. This soft-bottom channel reach of Centinela 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 the Centinela Creek SBC Reach 117 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.

METHODS

BonTerra Psomas Biologists Brian Daniels, Jennifer Pareti and 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 this SBC reach were reviewed (BonTerra 2012).

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

Vegetation

The Centinela Creek SBC Reach 117 supports two vegetation types (freshwater [cattail] marsh and ruderal) and two other areas (open water and developed) as illustrated, except for the freshwater marsh, on Exhibit 3 and summarized in Table 1 below. The area covered by freshwater marsh vegetation in Reach 117 is less than 25 square feet and, as a result, was too small to map. This vegetation type is at the toe of the levee on the left (or west) bank near the upstream limits of Reach 117. Site photographs are included as Exhibit 4. Vegetation in Reach 117 is limited to patches at the levee toe and a relatively large patch in the center of the channel near the confluence with the Ballona Creek Channel (see Exhibit 4).

Where present in more than marginal amounts, freshwater (cattail) marsh vegetation typically provides high habitat value. At SBC Reach 117, however, the amount of freshwater marsh vegetation is not large enough to provide important habitat value. This freshwater marsh vegetation consists of a few tules (*Typha* sp.) and one small black willow (*Salix goodingii*). Reach 117 is dominated by the non-native ruderal (weedy) vegetation type. The mounding grass, seashore paspalum (*Paspalum vaginatum*), dominates the ruderal vegetation at this site. Other species present include garland daisy (*Glebionis coronaria* [*Chrysanthemum coronarium*]) and sea lavender (*Limonium* sp.).

TABLE 1
VEGETATION TYPES

Vegetation Type	Acres
Freshwater (Cattail) Marsh	0.00*
Ruderal	0.48
Open Water	0.67
Developed	1.10
Total Acres	2.25
* based on rounding to the nearest 100 th	

Wildlife

The dominant habitat feature of Reach 117 is the island of sediment at its mouth that is covered by seashore paspalum (*Paspalum vaginatum*), a short, mounding species of non-native grass. Upstream of this SBC reach, Centinela Creek is a flood-control channel with a concrete-lined bottom and minimal vegetation. The exposed mud flats in the Ballona Creek Channel opposite the Centinela Creek mouth supported a variety of waterbirds during the survey, including waterfowl, wading birds, shorebirds, and gulls. The Centinela Creek SBC reach, however, provides relatively few resources for these birds. Shorebird activity during the survey was limited in this SBC reach to the downstream edge of the sediment island where a muddy edge was exposed to the lowering tide. Waterbirds observed foraging on the exposed mud adjacent to the sediment island included snowy egret (*Egretta thula*), black-necked stilt (*Himantopus mexicanus*), spotted sandpiper (*Actitis macularius*), willet (*Tringa semipalmata*), least sandpiper (*Calidris minutilla*), and long-billed dowitcher (*Limnodromus scolopaceus*). Other waterbirds observed foraging and/or roosting in this SBC reach included gadwall (*Anas strepera*), American wigeon (*Anas americana*), mallard (*Anas platyrhynchos*), northern shoveler (*Anas clypeata*), green-winged teal (*Anas crecca*), ruddy duck (*Oxyura jamaicensis*), American coot (*Fulica americana*), and ring-billed gull (*Larus delawarensis*).

Land bird use of the channel is expected to be very limited as the seashore paspalum that dominates the sediment island appears to provide minimal foraging opportunities. No land birds were observed using this SBC reach during this survey, but the common yellowthroat (*Geothlypis trichas*) and song sparrow (*Melospiza melodia*) are expected to occur here at least occasionally. As with the Ballona Channel, water is plentiful in this SBC reach and a variety of resident and migrant land birds are expected to occasionally occur for bathing and drinking.

This SBC reach provides minimal habitat for amphibians or reptiles and none were observed during the survey. The western fence lizard (*Sceloporus occidentalis*) is the only reptile species expected to occur. No mammals were observed during the survey, but species such as the Virginia opossum (*Didelphis virginiana*) and black rat (*Rattus rattus*) are expected to occur. Larger mammals, including the common raccoon (*Procyon lotor*) and coyote (*Canis latrans*), are also expected to occur at least occasionally. The mosquitofish (*Gambusia affinis*) may be released in this channel for control of mosquitoes, but otherwise no freshwater fish species are expected to occur. The brackish waters at the confluence with Ballona Creek Channel, however, are expected to support a variety of fish species.

RECOMMENDATIONS

The 0.48 acre of ruderal vegetation in Reach 117 is dominated by seashore paspalum, an invasive species. This vegetation provides very low habitat value and, due to its invasive nature, tends to diminish the overall habitat values that would otherwise be present in this SBC reach.

There are no special status plant species with potential to occur in this SBC reach; therefore, no focused surveys for special status plants are recommended. There is one State- and federally listed Endangered species with potential to occur in this SBC reach: California least tern (*Sternula antillarum browni*). The adjacent Ballona Creek Channel provides higher quality habitat for the California least tern, but this SBC reach may also provide a limited amount of potentially suitable foraging habitat for this species during high tides. The California least tern occurs in Southern California from April to August and may occur in this SBC reach, but for foraging activities only. The California least tern would not nest in this SBC reach; therefore, no focused surveys for special status wildlife species are recommended.

Even though very few bird species have the potential to nest in Reach 117, any proposed maintenance activities should be scheduled outside the nesting bird season (that is, maintenance activities should occur between September 1 and March 14). Proposed maintenance activities that are limited to removal of vegetation outside the nesting bird season would not require a Biological Monitor or any further biological surveys.

Those proposed maintenance activities that involve the removal of sediments have the potential to affect downstream habitats. Therefore, BonTerra Psomas has the following recommendation if sediment removal is proposed at this SBC reach:

1. Conduct benthic macroinvertebrate and essential fish habitat surveys in order to establish baseline species frequency and distribution profiles.

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

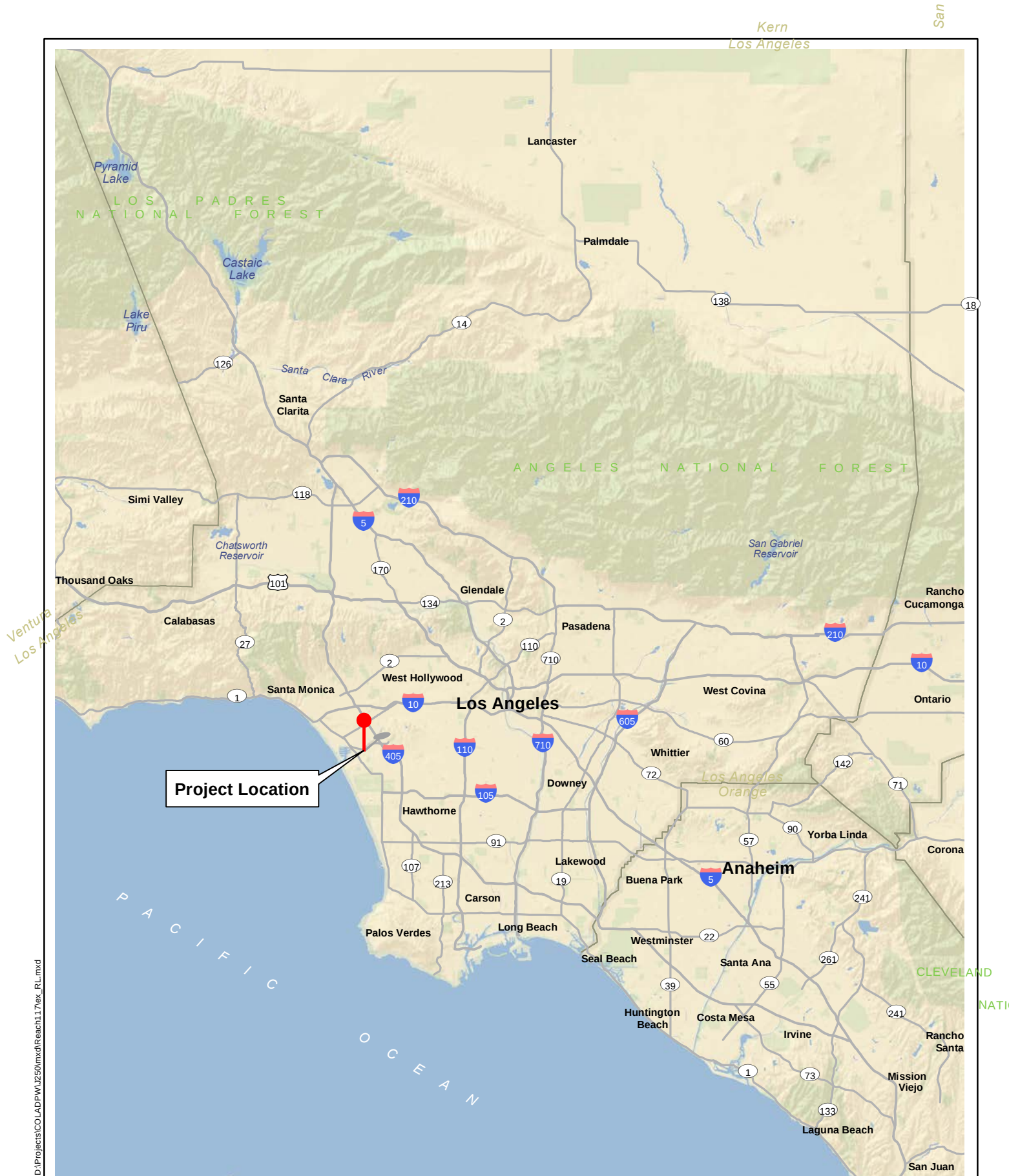


Marc T. Blain
Senior Project Manager

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

REFERENCES

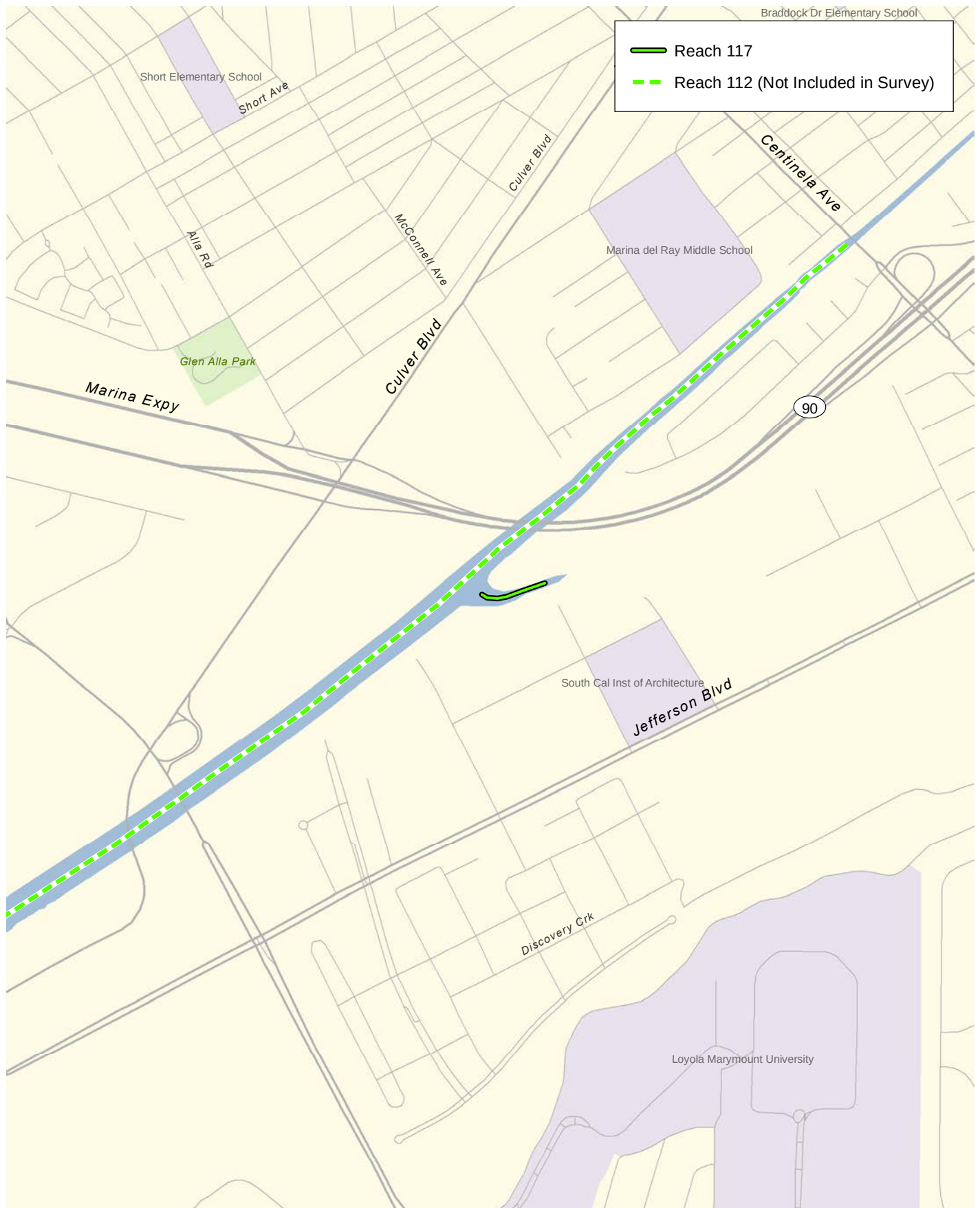
- American Ornithologists' Union (AOU). 2013 (August). *Check-list of North American Birds* (7th ed., as revised through 54th Supplement). Washington, D.C.: AOU. <http://www.aou.org/checklist/north/index.php>.
- Baker, R.J., L.C. Bradley, R.D. Bradley, J.W. Dragoo, M.D. Engstrom, R.S. Hoffmann, C.A. Jones, F. Reid, D.W. Rice, and C. Jones. 2003 (December). Revised Checklist of North American Mammals North of Mexico, 2003. Occasional Papers (No. 229). Waco, TX: Museum of Texas Tech University.
- Baldwin, B.G., et al. (eds.), 2012. The Jepson Manual: Vascular Plants of California (Second ed.). Berkeley, CA: University of California Press.
- BonTerra Consulting 2012 (July). Results of Biological Inventory Surveys of Centinela Creek, Los Angeles County, California. Pasadena, CA. BonTerra Consulting.
- California Department of Fish and Wildlife (CDFW). 2010 (September). List of Vegetation Alliances and Associations, Vegetation Classification and Mapping Program. Sacramento, CA: CDFW.
- Stebbins, R.C. 2012. A Field Guide to Amphibians and Reptiles of California.(REV ed.). Berkeley and Los Angeles, CA: University of California Press.



Regional Location



Bonterra
PSOMAS



D:\Projects\COLADPW\250\mxd\Reach117\ex_LV.mxd

Local Vicinity

Centinela Soft-Bottom Channel – Reach 117



1,000 500 0 1,000
Feet

Exhibit 2

Bonterra
PSOMAS

(Rev: 5-21-2014 JAZ) D:\PAS_R_Temp\Projects\COLADPW\250\Graphics\Reach117\ex2_LV.pdf

D:\Projects\COLADPW\J250\mxd\Reach117\ex_Veg.mxd



Vegetation Types and Other Areas

Exhibit 3

Centinela Soft-Bottom Channel – Reach 117



100 50 0 100
Feet

Bonterra
PSOMAS

(Rev: 5-27-2014 JAZ) H:\Projects\ColADPW\J250\Graphics\Reach117\ex3_Veg.pdf



March 6, 2014. View Downstream of Reach 117.



March 6, 2014. View of Confluence of Reaches 117 and 112.

Site Photographs

Centinela Soft-Bottom Channel – Reach 117

Exhibit 4a

Bonterra
PSOMAS



March 6, 2014. View of Vegetation at Reach 117 Mouth.



March 6, 2014. View of Reach 117 from Reach 112.

Site Photographs

Centinela Soft-Bottom Channel – Reach 117

Exhibit 4b

Bonterra
PSOMAS

(05/27/2014 JAZ) H:\Projects\CoLADPWJ250\Graphics\Reach117\ex4b_SP.pdf

ATTACHMENT A
PLANT AND WILDLIFE COMPENDIA

CENTINELA CREEK PLANT LIST

Species	
EUDICOTS	
ASTERACEAE – SUNFLOWER FAMILY	
<i>Glebionis coronaria</i> [<i>Chrysanthemum coronarium</i>]*	garland daisy
PLUMBAGINACEAE – LEADWORT FAMILY	
<i>Limonium perezii</i> *	Perez's sea-lavender
SALICACEAE – WILLOW FAMILY	
<i>Salix gooddingii</i>	Goodding's black willow
POACEAE – GRASS FAMILY	
<i>Paspalum vaginatum</i>	seashore paspalum
TYPHACEAE – CATTAIL FAMILY	
<i>Typha</i> sp.	typha

CENTINELLA CREEK WILDLIFE LIST

Species	
BIRDS	
AVES – BIRDS	
ANATIDAE – WATERFOWL	
<i>Anas strepera</i>	gadwall
<i>Anas americana</i>	American wigeon
<i>Anas platyrhynchos</i>	mallard
<i>Anas clypeata</i>	northern shoveler
<i>Anas crecca</i>	green-winged teal
<i>Oxyura jamaicensis</i>	ruddy duck
ARDEIDAE – HERONS, BITTERNS, AND ALLIES	
<i>Egretta thula</i>	snowy egret
ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES	
<i>Buteo jamaicensis</i>	red-tailed hawk
RALLIDAE – RAILS	
<i>Fulica americana</i>	American coot
RECURVIROSTRIDAE – STILTS AND AVOCETS	
<i>Himantopus mexicanus</i>	black-necked stilt
SCOLOPACIDAE – SANDPIPERS AND PHALAROPES	
<i>Actitis macularia</i>	spotted sandpiper
<i>Tringa</i> [<i>Catoptrophorus</i>] <i>semipalmata</i>	willet
<i>Calidris minutilla</i>	least sandpiper
<i>Limnodromus scolopaceus</i>	long-billed dowitcher
LARIDAE – GULLS AND TERNS	
<i>Larus delawarensis</i>	ring-billed gull
HIRUNDINIDAE – SWALLOWS	
<i>Tachycineta bicolor</i>	tree swallow
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow