

January 6, 2010

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VIA EMAIL AND OVERNITE EXPRESS
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Subject: Results of Biological Reconnaissance Surveys of Two Soft-Bottom Channels,
Los Angeles County, California

Dear Ms. Cruz:

This letter report presents the findings of biological reconnaissance surveys of two soft-bottom channel (SBC) reaches which are in the process of being added to the Los Angeles County Department of Public Work's (LACDPW's) existing California Department of Fish and Game (CDFG), U.S. Army Corps of Engineers (USACE), and Regional Water Quality Control Board (RWQCB) channel maintenance permits. These two new SBC reaches are referred to as Ballona Creek and Los Cerritos SBCs. The purpose of the surveys was to evaluate existing biological resources where present in order to determine the potential for special status plant and wildlife species to occur at each SBC reach.

The LACDPW maintains numerous soft-bottom channel reaches and debris basins that primarily function to control flood waters. Maintained soft-bottom channels are located in association with concreted segments of rivers and creeks in order to prevent backup of debris and sediment that moves downstream during high rainfall events. Vegetation within the maintained segments of the soft-bottom channels increases the collection of debris, and periodic maintenance therefore involves removal of vegetation and debris from the SBC reaches.

METHODS

BonTerra Consulting Biologists Brian Daniels and Andrea Edwards conducted general plant and wildlife surveys on July 22, 2009. The California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2009) and CDFG's California Natural Diversity Database (CDFG 2009) were reviewed to identify special status plants, wildlife, and habitats known to occur in the vicinity of the project sites, including the following U.S. Geological Survey (USGS) quadrangles: Beverly Hills, Hollywood, Venice, and Inglewood for Ballona Creek SBC; and Long Beach, Los Alamitos, and Seal Beach for Los Cerritos SBC.

All species observed were recorded in field notes. Plant species were identified in the field or collected for subsequent identification using keys in Hickman (1993) and Munz (1974). Taxonomy follows Hickman (1993) and current scientific data (e.g., scientific journals) for scientific and common names.



Nomenclature for vegetation types generally follows that of *The Vegetation Classification and Mapping Program: List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (CDFG 2003).

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 Fisher and Case (1997) for amphibians and reptiles, American Ornithologists Union (1998) for birds, and Baker *et al.* (2003) for mammals.

Local vicinity maps are attached as Exhibits 1A and 1B, and aerial photographs are attached as Exhibits 2A and 2B. Site photographs are included as Exhibits 3A and 3B. Table 1 presents detailed information for each reach. Elevations for the two SBC reaches are below approximately ten feet (above mean sea level).

TABLE 1
SOFT-BOTTOM CHANNEL (SBC) REACH INFORMATION

| Soft-Bottom Channel | USGS Quadrangles | Thomas Guide Location | Soil Type Association | Watershed |
|---------------------|------------------|-------------------------|---------------------------------------|-------------------|
| Ballona Creek | Venice | 672: D6-7 and E6-7 | Chino (loam surface layer/substratum) | Santa Monica Bay |
| Los Cerritos | Los Alamitos | 796: E5-7 and 826:D1-E1 | Chino (loam surface layer/substratum) | San Gabriel River |

RESULTS

Ballona Creek SBC

Location

The approximately 0.6-mile Ballona Creek SBC reach is located in the Marina Del Rey area of the City of Los Angeles, and is surrounded mainly by residential, commercial, and industrial development. The reach starts at Centinela Avenue, and extends downstream almost to State Highway 90. It is located west of Interstate 405, east of Marina Del Rey, and north of Los Angeles International Airport.

Vegetation

Open water is present within this SBC reach, and developed areas consisting of concrete channel banks line the reach. The channel edges contain thin bands and patches of disturbed freshwater marsh vegetation, most dense in the upstream half of the reach, dominated by southern cattail (*Typha domingensis*), California bulrush (*Scirpus californicus*), and cocklebur (*Xanthium strumarium*). This vegetation type was considered disturbed due to the interspersed patches of ruderal vegetation, dominated by non-native African fountain grass (*Pennisetum setaceum*), Mexican fan palm (*Washingtonia robusta*), bristly ox tongue (*Picris echioides*), African umbrella-sedge (*Cyperus involucratus*), curly dock (*Rumex crispus*), and common beggar ticks (*Bidens pilosa*).

Wildlife

The open freshwater of the channel invert is the dominant habitat feature of this SBC reach. Vegetation is limited in size and primarily confined to the water's edge at the toe of the concrete levee. As a result, this SBC reach is expected to be used by a variety of water birds, but relatively few land birds. Water birds observed during the survey included mallard (*Anas platyrhynchos*), great blue heron (*Ardea herodias*), snowy egret (*Egretta thula*), American coot (*Fulica americana*), black-necked stilt (*Himantopus mexicanus*), spotted sandpiper (*Actitis macularius*), greater yellowlegs (*Tringa melanoleuca*), and western gull (*Larus occidentalis*). The diversity of water birds expected to use this SBC reach would be higher during the winter season. Land bird use of the channel is expected to be limited, with most species occurring primarily for bathing and drinking opportunities. For example, the hooded oriole (*Icterus cucullatus*) 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 the SBC reach during the survey included northern rough-winged swallow (*Stelgidopteryx serripennis*), cliff swallow (*Petrochelidon pyrrhonota*), and barn swallow (*Hirundo rustica*).

This SBC reach provides minimal habitat for amphibians or reptiles and none were observed during the survey. However, the western fence lizard (*Sceloporus occidentalis*) is expected to occur. No mammals were observed during the survey, but several species are expected to occur such as the Virginia opossum (*Didelphis virginiana*) and black rat (*Rattus rattus*). Larger mammals including the common raccoon (*Procyon lotor*) and coyote (*Canis latrans*) are also expected to occur occasionally. Only non-native fish species such as the mosquitofish (*Gambusia affinis*) are expected to occur in the freshwater of this SBC reach.

Special Status Species

Although vegetation is limited in this SBC reach, the southern tarplant (*Centromadia parryi* ssp. *australis*), a CNPS List 1B species, may occur within the disturbed freshwater marsh/ruderal patches of vegetation. There is also very limited potential for marsh sandwort (*Arenaria paludicola*), a federally and State-listed Endangered and CNPS List 1B species, although it has not been found this far south in over 100 years. Several other special status plant species have potential to occur in the general project vicinity, including ten listed as State and/or federally Threatened and/or Endangered or as a Candidate for listing as Threatened and Endangered: Braunton's milk-vetch (*Astragalus brauntonii*), Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*), coastal dunes milk-vetch (*Astragalus tener* var. *titi*), San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), salt marsh bird's beak (*Cordylanthus maritimus* ssp. *maritimus*), beach spectaclepod (*Dithyrea maritima*), Gambel's water cress (*Nasturtium gambelii*), Moran's navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Brand's star phacelia (*Phacelia stellaris*). However, the disturbed condition and limited extent of the vegetation is not suitable habitat for these species and they are not expected to occur.

Numerous species status wildlife species occur or have occurred in the general vicinity of this SBC reach, especially downstream in the Ballona Wetlands. The terrestrial habitats of this SBC reach are not expected to support any of these special status wildlife species. However, the open water habitat of this SBC reach may provide foraging opportunities for some of these species including two bird species that are State- and federally listed as Endangered: California

brown pelican (*Pelecanus occidentalis californicus*) and California least tern (*Sternula antillarum browni*). The California brown pelican may occasionally occur for loafing and foraging activities throughout the year. The California least tern occurs in southern California from April to August and may occasionally occur in this SBC reach for foraging activities only. These two species would not nest in this SBC reach. If proposed maintenance activities occur outside the nesting season and do not impact the aquatic habitats, the California brown pelican and California least tern are not expected to be affected by any proposed maintenance activities at this SBC reach.

Los Cerritos SBC

Location

The approximately 2-mile Los Cerritos SBC reach is located in the City of Long Beach, and is surrounded mainly by residential, commercial, and industrial development, and by open spaces in the downstream portions. This SBC reach starts upstream at Atherton Street, crosses under bridges at Anaheim Road, State Highway 22, and Loynes Drive, and the downstream boundary is Pacific Coast Highway.

Vegetation

Open water is present within this reach, and developed areas consisting of rip-rap (large piled rocks) are present along the banks. The channel edges contain thin bands of disturbed salt marsh dominated by native common woody pickleweed (*Salicornia virginica*) and non-native African brass buttons (*Cotula coronopifolia*). The upper slopes of the banks contain patches of riparian herb vegetation including native spearscale (*Atriplex triangularis*), common horseweed (*Conyza canadensis*), and five-hook bassia (*Bassia hyssopifolia*), along with non-native common sow-thistle (*Sonchus oleraceus*). On the upper banks at the downstream end of the reach, there are also patches of non-native iceplant hottentot fig (*Carpobrotus edulis*) and non-native grassland dominated by wild oats (*Avena* sp.), smilo grass (*Piptatherum miliaceum*), and foxtail barley (*Hordeum murinum*).

Wildlife

The open brackish water of the channel invert is the dominant habitat feature of this SBC reach. The vegetation is very limited in size and extent on the rip-rap of the channel banks. As a result, this SBC reach is expected to be used by a variety of water birds, but relatively few land birds. Water birds observed during the survey included mallard, snowy egret, American coot, spotted sandpiper, least tern (*Sternula antillarum*), and Forster's tern (*Sterna forsteri*). The diversity of water birds expected to use this SBC reach would be higher during the winter season. Land bird use of the channel is expected to be very limited. Some land bird species observed during the survey included the rock pigeon (*Columba livia*), mourning dove (*Zenaida macroura*), and house finch (*Carpodacus mexicanus*). 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 the SBC reach during the survey included northern rough-winged swallow and barn swallow.

This SBC reach provides minimal habitat for amphibians or reptiles and none were observed during the survey. However, the western fence lizard (*Sceloporus occidentalis*) is expected to occur. No mammals were observed during the survey, but several species are expected to occur such as the Virginia opossum and black rat. Larger mammals including the common raccoon and coyote are also expected to occur occasionally. The brackish waters of this SBC reach are expected to support several fish species. Fish species expected to occur, especially

near the mouth of this SBC include the northern anchovy (*Engraulis mordax*), cheek-spotted goby (*Lythrypnus albigena*), arrow goby (*Clevelandia ios*), and California killifish (*Fundulus parvipinnis*).

Special Status Species

Although vegetation is also limited in this SBC reach, the southern tarplant may occur within the disturbed salt marsh and riparian herb patches of vegetation. There is also limited potential for Sanford's arrowhead (*Sagittaria sanfordii*) and estuary seablite (*Suaeda esteroa*), two other CNPS List 1B species. Several other special status plant species have potential to occur in the general project vicinity, including five listed as State and/or federally Threatened and/or Endangered: Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*), salt marsh bird's beak (*Cordylanthus maritimus* ssp. *maritimus*), Gambel's water cress (*Nasturtium gambelii*), California Orcutt grass (*Orcuttia californica*), and Lyon's pentachaeta (*Pentachaeta lyonii*). However, the disturbed condition and limited extent of the vegetation is not suitable habitat for these species and they are not expected to occur.

Numerous species status wildlife species occur or have occurred in the general vicinity of this SBC reach, especially downstream near its confluence with the Los Cerritos Wetlands and the harbor. The terrestrial habitats of this SBC reach are not expected to support any of these special status wildlife species. However, the open water habitat of this SBC reach does provide foraging opportunities for some of these species including two bird species that are State- and federally listed as Endangered: California brown pelican and California least tern. The California least tern was observed (see above Wildlife discussion) and the California brown pelican is expected to occasionally occur for loafing and foraging activities. The California least tern occurs in southern California from April to August and the California brown pelican is a year-round visitor. Four California least terns were observed during the survey at the mouth of this SBC reach. The adults were foraging in the waters at the confluence of this SBC reach with the channel inlet to the Los Cerritos Wetlands and the harbor. One young was observed being fed by an adult California least tern land bordering the channel inlet to the Los Cerritos Wetlands and the harbor (opposite side of confluence from the SBC reach). The young was capable of flight and at an age (four to seven weeks old) where it could have dispersed from the nesting colony. No nesting colony was evident during this survey but there is potentially suitable nesting habitat for this species in the vicinity of this SBC reach at its confluence with the Los Cerritos Wetlands and the harbor. Since the California least tern will nest on bare ground, the access road on the north side of this SBC reach between Loynes Drive and its confluence with the harbor provides potentially suitable nesting habitat for this species. If proposed maintenance activities occur outside the nesting season and do not impact aquatic habitats, the California brown pelican and California least tern are not expected to be affected by any proposed maintenance activities at this SBC reach.

RECOMMENDATIONS

Focused plant surveys are recommended at the Ballona Creek SBC reach for southern tarplant and at the Los Cerritos SBC reach for southern tarplant, Sanford's arrowhead, and estuary seablite during the appropriate blooming time (generally during July) to determine the presence or absence of these special status plant species.

It is recommended that all proposed maintenance activities for these two SBC reaches occur outside the nesting season for the California least tern (April 1 through August 31). If work needs to be conducted at the Los Cerritos SBC reach during the California least tern nesting season, then a qualified biologist should conduct a survey prior to the proposed activities to determine the status of this species at this SBC reach. If the California least tern is present and

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nesting in the vicinity of this SBC reach, then the biologist will inform the CDFG and the U.S. Fish and Wildlife Service and appropriate avoidance measures will be implemented.

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

Sincerely,

BONTERRA CONSULTING



Marc T. Blain
Biological Resources Manager/Associate



Andrea D. Edwards
Project Botanist

Attachments: Exhibits 1A and 1B – Local Vicinity
Exhibits 2A and 2B – Aerial Photograph
Exhibits 3A and 3B – Site Photographs

REFERENCES

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Local Vicinity - Ballona Creek

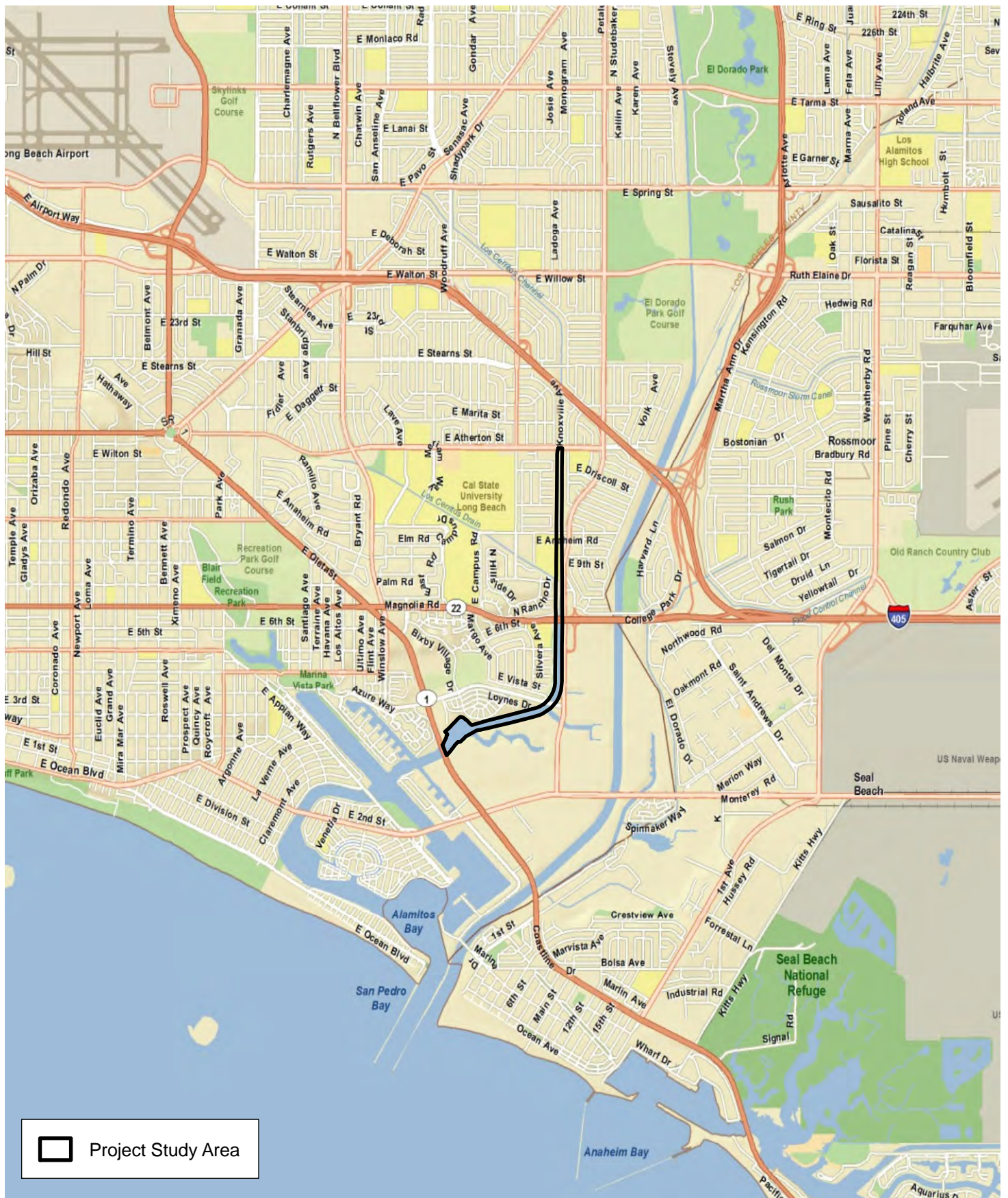
Biological Reconnaissance Surveys of Two Soft-Bottom Channels



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Feet

Exhibit 1A

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 Project Study Area

Local Vicinity - Los Cerritos

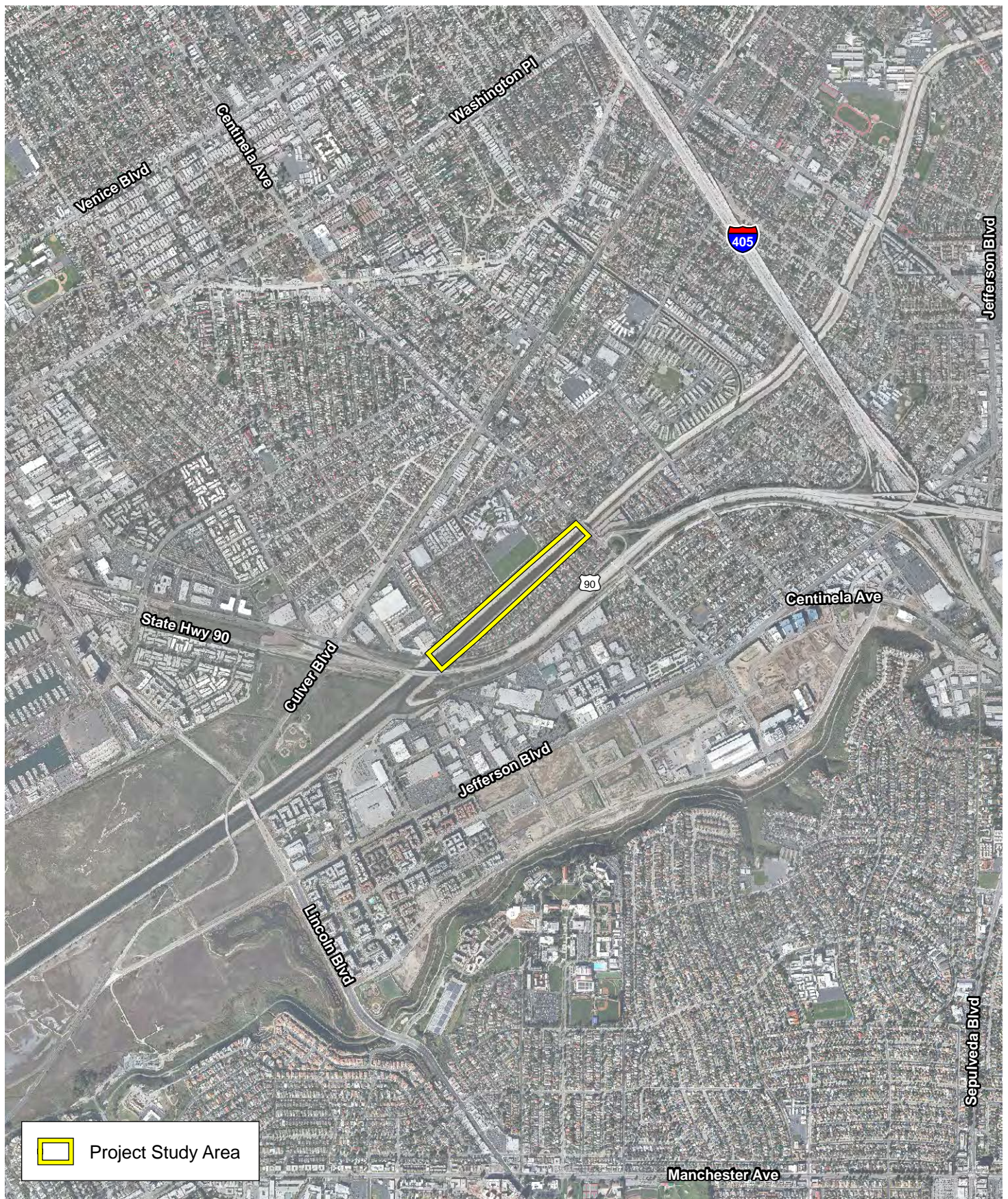
Biological Reconnaissance Surveys of Two Soft-Bottom Channels



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Exhibit 1B

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Aerial Photograph – Ballona Creek

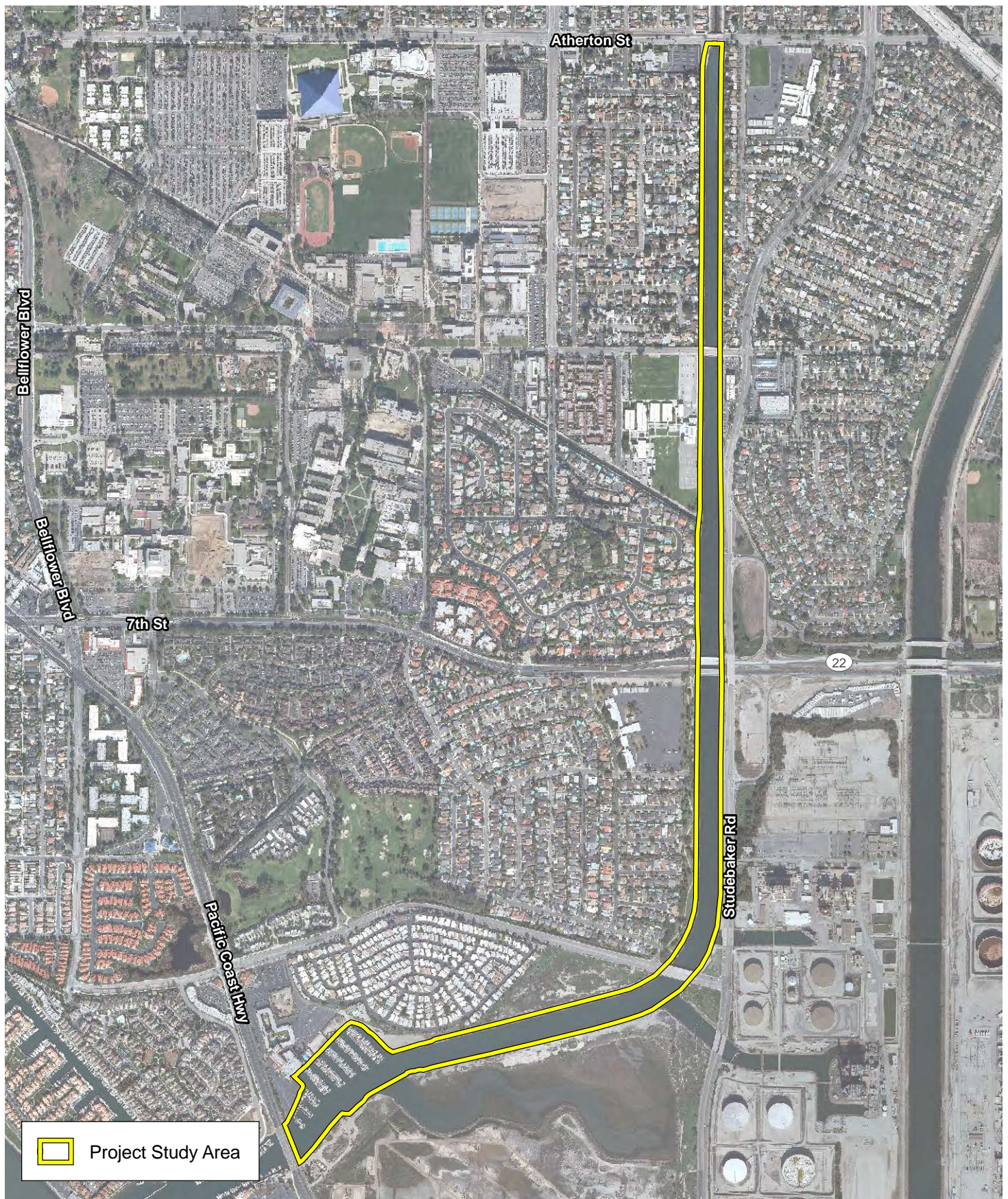
Exhibit 2A

Biological Reconnaissance Surveys of Two Soft-Bottom Channels



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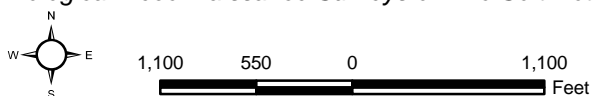
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Aerial Photograph – Los Cerritos

Biological Reconnaissance Surveys of Two Soft-Bottom Channels

Exhibit 2B



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View downstream from Centinela Avenue bridge.



View upstream from left bank.

Site Photographs – Ballona Creek

Exhibit 3A

Biological Reconnaissance Surveys of Two Soft-Bottom Channels

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View downstream from Atherton Street bridge.



View upstream from Anaheim Road bridge.



View upstream from Loynes Drive bridge.



View upstream from terminus at harbor.

Site Photographs - Los Cerritos

Biological Reconnaissance Surveys of Two Soft-Bottom Channels

Exhibit 3B

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