T: (626) 351-2000 F: (626) 351-2030 www.BonTerraConsulting.com

3452 E. Foothill Blvd., Suite 420 Pasadena, CA 91107

October 30, 2009

Ms. Jemellee Cruz Flood Maintenance Division Department of Public Works County of Los Angeles 900 South Fremont Ave Annex Building, 2nd Floor Alhambra, CA 91802-1460 VIA EMAIL AND OVERNITE EXPRESS jcruz@dpw.lacounty.gov

Subject: Results of Focused Plant Surveys for the Los Angeles River Soft-Bottom Channel,

Los Angeles County, California

Dear Ms. Cruz:

This letter report presents the findings of focused plant surveys conducted for the Los Angeles River Soft-Bottom Channel (SBC), in Los Angeles County, California. Surveys were conducted for southern tarplant (*Centromadia parryi* ssp. *australis*), a California Native Plant Society (CNPS) List 1B species with potential to occur because of the presence of suitable habitat. Los Angeles River SBC is located in the City of Long Beach, and is surrounded mainly by residential, commercial, and industrial development (Exhibits 1 and 2). This SBC reach starts at State Highway 1/Pacific Coast Highway, flows south parallel to and east of Interstate 710, and ends at Ocean Boulevard. The survey area is located on the Long Beach U.S. Geological Survey (USGS) 7.5-minute quadrangle map, with an elevation below approximately ten feet above mean sea level (msl).

METHODS

Prior to the field survey, a literature review was conducted to identify special status plants known from the general vicinity. This included a review of Inglewood, South Gate, Whittier, Torrance, Long Beach, Los Alamitos, San Pedro, and Seal Beach USGS 7.5-minute quadrangles in the California Department of Fish and Game (CDFG) California Natural Diversity Database (CDFG 2009) and the CNPS Inventory (CNPS 2009). Reference populations of southern tarplant were visited to confirm that this species was blooming during the surveys; it was observed to be flowering in the Newport Beach area on July 9, 2009, and in the City of Carson on July 13, 2009.

According to the National Weather Service, Long Beach Airport (located about three miles from the survey area) has received 9.4 inches of precipitation over the past year (since July 1, 2008), which is about 73 percent of the normal 12.9 inches based on 1971-2000 averages (National Weather Service 2009).

Special status plant surveys were conducted on July 13 and 14, 2009 by BonTerra Consulting Botanist Andrea Edwards and Ecologist David Hughes. Meandering transects were used to search the survey area. All plant species observed were recorded in field notes. Plant species were identified in the

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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.

SITE DESCRIPTION

Giant reed (*Arundo donax*), an invasive non-native plant species, is dominant near the water's edge in the upper portion of this SBC reach (BonTerra Consulting 2009). Open water was present within the reach at the time of the survey, and developed areas consisting of rip-rap (large piled rocks) are present along the banks of this SBC reach. Soil types generally consist of the Hanford and Tujunga-Soboba associations (USDA 1969).

RESULTS

No special status plant species were observed during the survey. A list of all plants observed within the survey area during focused surveys can be found in Attachment A.

If you have any comments or questions, please call Marc Blain at (626) 351-2000.

Sincerely,

BONTERRA CONSULTING

Marc T. Blain

Biological Resources Manager/Associate

Andrea D. Edwards

Andrea D. Edwards

Botanist

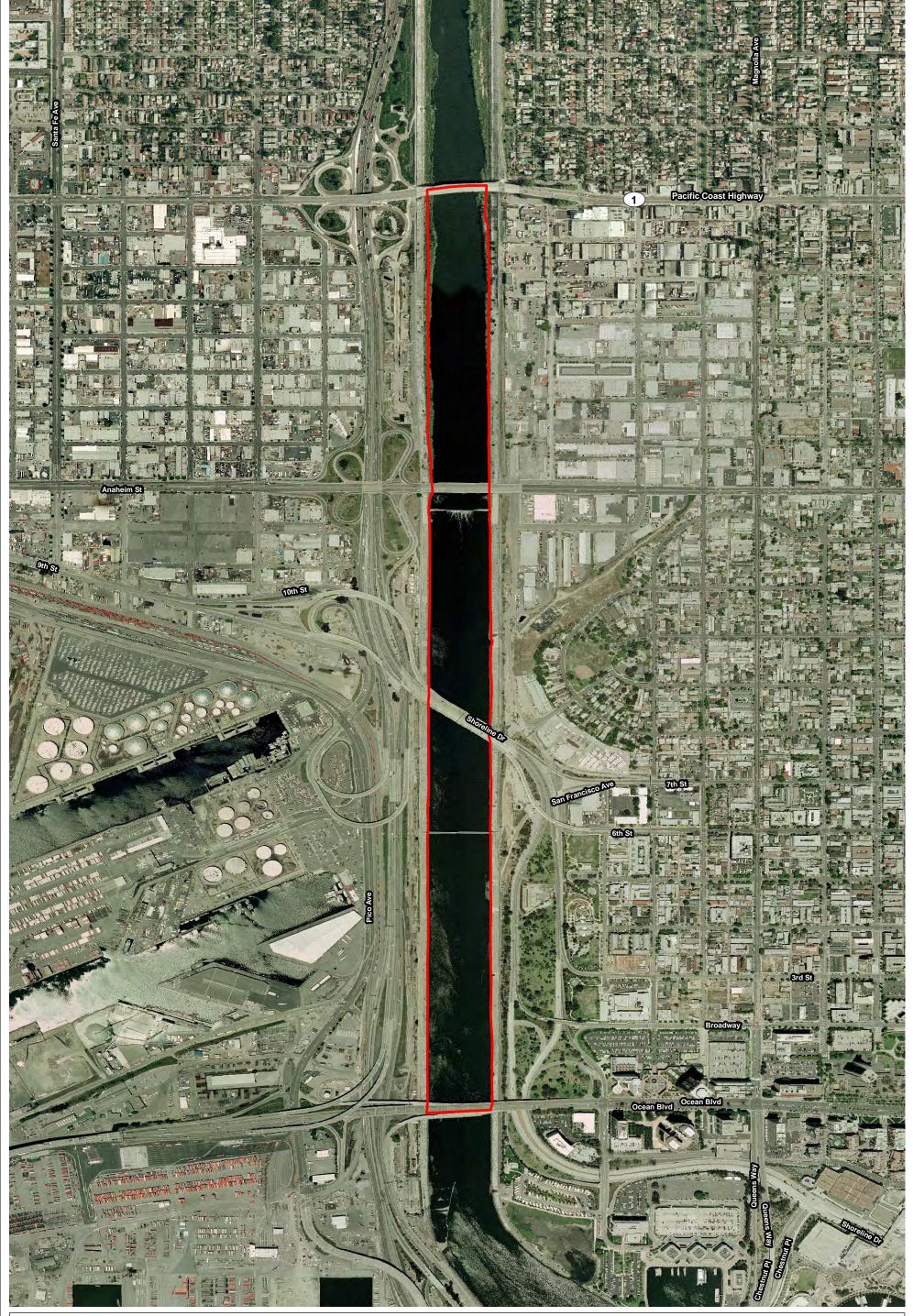
Enclosures:

Exhibit 1 – Local Vicinity
Exhibit 2 – Aerial Photograph
Attachment A – Plant Compendium

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REFERENCES

- BonTerra Consulting. 2009 (June 10). Results of Biological Reconnaissance Surveys of Three Soft-Bottom Channels, Los Angeles County, California. Pasadena, CA: BonTerra Consulting.
- California Department of Fish and Game (CDFG). 2009 (February 1). <u>California Natural Diversity Database</u>. Records of Occurrence for Inglewood, South Gate, Whittier, Torrance, Long Beach, Los Alamitos, San Pedro, and Seal Beach quadrangle maps. Sacramento, CA: CDFG, Natural Heritage Division.
- California Native Plant Society (CNPS). 2009. <u>Electronic Inventory of Rare and Endangered Vascular Plants of California</u> (v7-09d). Records of Occurrence for Inglewood, South Gate, Whittier, Torrance, Long Beach, Los Alamitos, San Pedro, and Seal Beach quadrangle maps. Sacramento, CA: CNPS. http://www.cnps.org/inventory.
- Hickman, J.C., Ed. 1993. The Jepson Manual of Higher Plants of California. Berkeley, CA: University of California Press.
- Munz, P.A. 1974. A Flora of Southern California. Berkeley, CA: University of California Press.
- National Weather Service. 2009 (June 12). National Weather Service Forecast Office: Los Angeles/Oxnard. http://www.weather.gov/climate.
- United States Department of Agriculture (USDA). 1969 (revised). Report and General Soil Map, Los Angeles County, California. Lancaster, CA: USDA, Natural Resources Conservation Service.



Aerial Photograph Exhibit 2

Los Angeles River Soft-Bottom Channel, Los Angeles County California



ATTACHMENT A PLANT COMPENDIUM

FLOWERING PLANTS CLASS DICOTYLEDONES (DICOTS) ANACARDIACEAE - SUMAC FAMILY Schinus terebinthifolius* Brazilian pepper tree APIACEAE (UMBELLIFERAE) - CARROT FAMILY Foeniculum vulgare* sweet fennel ASTERACEAE (COMPOSITAE) - SUNFLOWER **FAMILY** Ambrosia psilostachya western ragweed Artemisia douglasiana mugwort Baccharis salicifolia mule fat Chrysanthemum coronarium* garland daisy Conyza bonariensis* flax-leaved horseweed Conyza canadensis common horseweed Gnaphalium luteo-album* weedy cudweed Helianthus annuus western sunflower Heterotheca grandiflora telegraph weed Lactuca serriola* prickly lettuce Picris echioides* bristly ox tongue Pulicaria paludosa* Spanish sunflower Senecio vulgaris* common groundsel Sonchus asper* prickly sow-thistle Sonchus oleraceus* common sow-thistle BRASSICACEAE (CRUCIFERAE) - MUSTARD **FAMILY** Hirschfeldia incana* shortpod mustard Lepidium latifolium* broad-leaved peppergrass Raphanus sativus* wild radish CHENOPODIACEAE - GOOSEFOOT FAMILY Atriplex triangularis spearscale

PLANT COMPENDIUM (Continued)

(Continued)
FLOWERING PLANTS
Bassia hyssopifolia five-hook bassia
Salsola tragus* Russian thistle
CONVOLVULACEAE - MORNING-GLORY FAMILY
Convolvulus arvensis* bindweed
CUSCUTACEAE - DODDER FAMILY
Cuscuta californica California dodder
EUPHORBIACEAE - SPURGE FAMILY
Ricinus communis* castor bean
FABACEAE (LEGUMINOSAE) - LEGUME FAMILY
Acacia sp.* acacia
Melilotus alba* white sweet-clover
Melilotus indica* sourclover
LAURACEAE - LAUREL FAMILY
Cinnamomum camphora* camphor tree
MYRTACEAE - MYRTLE FAMILY
Eucalyptus sp.* gum
OLEACEAE - OLIVE FAMILY
Fraxinus sp.* ornamental ash
PLANTAGINACEAE - PLANTAIN FAMILY
Plantago lanceolata* English plantain
POLYGONACEAE - BUCKWHEAT FAMILY
Rumex crispus* curly dock
SALICACEAE - WILLOW FAMILY
Salix exigua narrow-leaved willow
SIMAROUBACEAE - QUASSIA FAMILY
Ailanthus altissima* tree of heaven
SOLANACEAE - NIGHTSHADE FAMILY
Nicotiana glauca* tree tobacco

ULMACEAE - ELM FAMILY

Ulmus parvifolia* Chinese elm

PLANT COMPENDIUM (Continued)

FLOWERING PLANTS
CLASS MONOCOTYLEDONES (MONOCOTS)
ARECACEAE (PALMAE) - PALM FAMILY
Phoenix canariensis* Canary Island date palm
Washingtonia robusta* Mexican fan palm
CYPERACEAE - SEDGE FAMILY
Scirpus californicus California bulrush
POACEAE [GRAMINEAE] - GRASS FAMILY
Arundo donax* giant reed
Avena barbata* slender wild oat
Bromus diandrus* ripgut grass
Cynodon dactylon* bermuda grass
Lolium perenne* perennial ryegrass
Pennisetum setaceum* African fountain grass
Piptatherum miliaceum* smilo grass / millett ricegrass
TYPHACEAE - CATTAIL FAMILY
Typha sp. cattail
* indicates non-native species