

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
jacruz@dpw.lacounty.gov

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

Dear Ms. Cruz:

This letter report presents the findings of focused plant surveys conducted for the San Gabriel 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. This SBC is located in the cities of Long Beach and Seal Beach, and is surrounded mainly by residential, commercial, and industrial development (Exhibits 1 and 2). The SBC starts directly north of the Interstate 405 and Interstate 605 interchange, flows south and crosses under Interstate 405, Highway 22, and 2nd Street, and empties into the Pacific Ocean. The survey area is located on the Los Alamitos 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, 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 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

Freshwater marsh vegetation, mixed together with ruderal and ornamental areas, is present along the SBC banks, mainly in the upper portion of the reach (BonTerra Consulting 2009). The marsh vegetation is found in a narrow and patchy band along the water's edge. Ruderal areas are generally found in a thicker band upslope from the marsh vegetation, and are dominated by non-native species. Ornamental areas are generally found upslope from, and mixed together with, the ruderal areas. Nurseries containing ornamental plants are found immediately adjacent to this SBC reach. Open water was present within this SBC reach at the time of the survey, and developed areas consisting of both grouted and un-grouted rip-rap (large piled rocks) are present along the SBC banks. Soil types generally consist of the Chino association (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



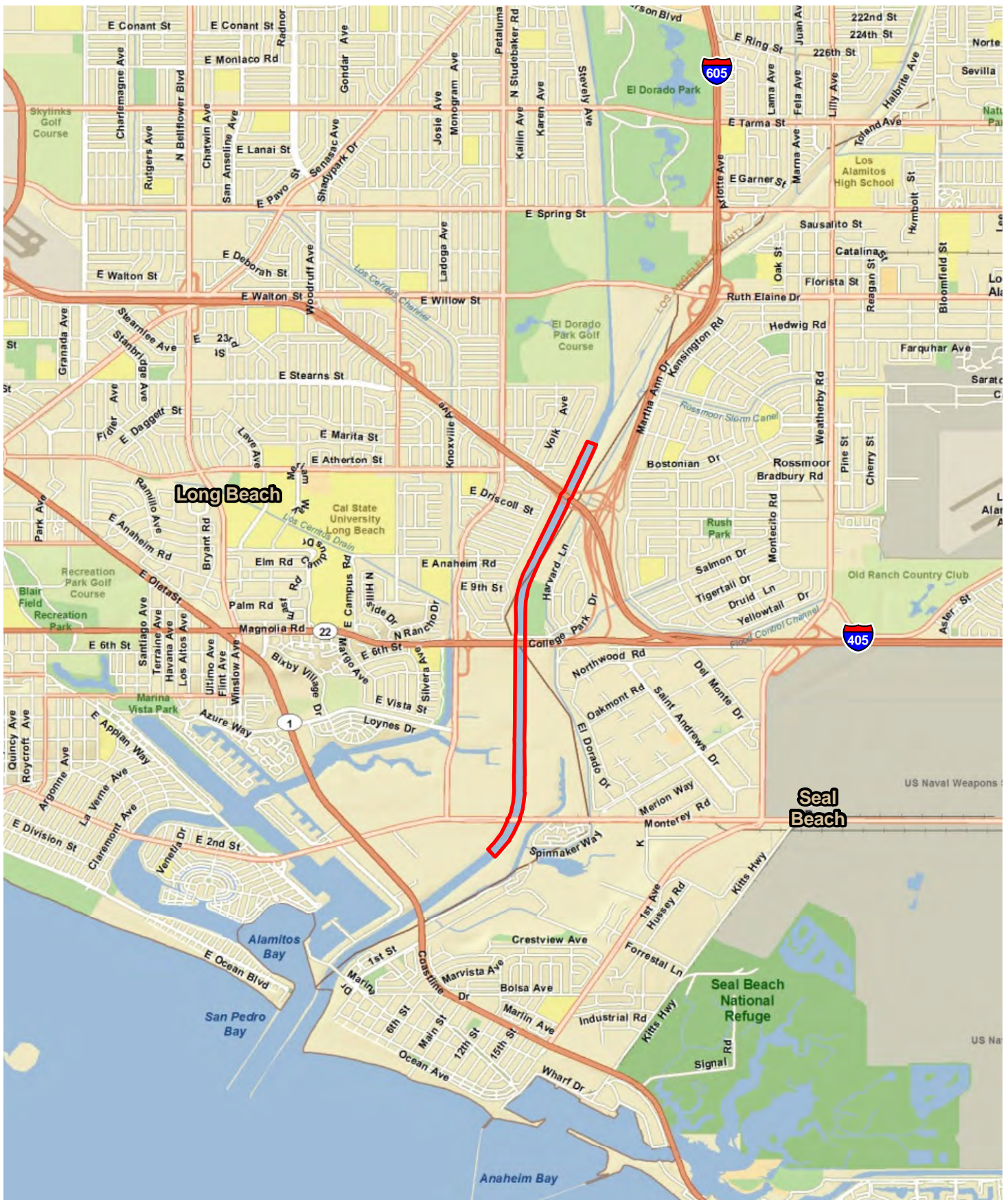
Andrea D. Edwards
Botanist

Enclosures:

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

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). California Natural Diversity Database. 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. Electronic Inventory of Rare and Endangered Vascular Plants of California (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.



Local Vicinity

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

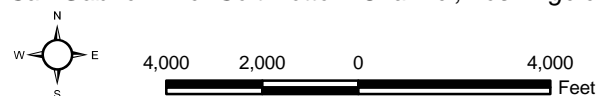
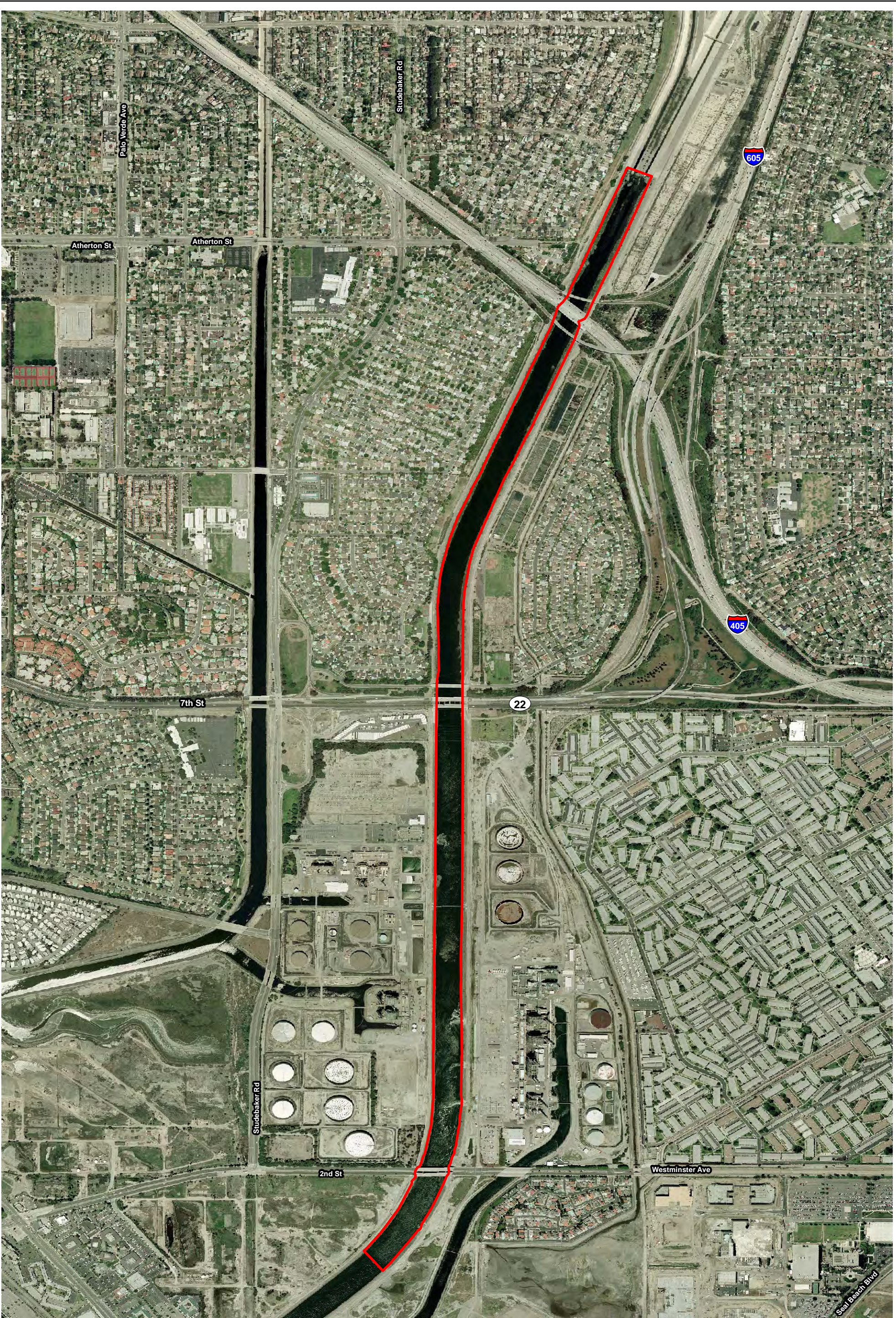


Exhibit 1

Bonterra
CONSULTING



Aerial Photograph

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

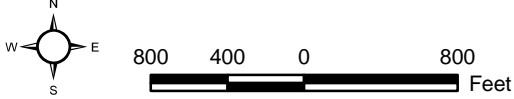


Exhibit 2



ATTACHMENT A PLANT COMPENDIUM

GYMNOSPERMS
PINACEAE - PINE FAMILY
<i>Pinus</i> sp.* ornamental pine
FLOWERING PLANTS
CLASS DICOTYLEDONES (DICOTS)
AIZOACEAE - FIG-MARIGOLD FAMILY
<i>Carpobrotus edulis</i> * hottentot fig
AMARANTHACEAE - AMARANTH FAMILY
<i>Amaranthus albus</i> * tumbleweed
<i>Amaranthus retroflexus</i> * rough pigweed
ANACARDIACEAE - SUMAC FAMILY
<i>Schinus terebinthifolius</i> * Brazilian pepper tree
APIACEAE (UMBELLIFERAE) - CARROT FAMILY
<i>Apium graveolens</i> * common celery
<i>Conium maculatum</i> * poison hemlock
<i>Foeniculum vulgare</i> * sweet fennel
ASTERACEAE (COMPOSITAE) - SUNFLOWER FAMILY
<i>Ambrosia psilostachya</i> western ragweed
<i>Artemisia douglasiana</i> mugwort
<i>Baccharis salicifolia</i> mule fat
<i>Bidens pilosa</i> * common beggar ticks
<i>Chrysanthemum coronarium</i> * garland daisy
<i>Conyza bonariensis</i> * flax-leaved horseweed
<i>Conyza canadensis</i> common horseweed
<i>Cotula coronopifolia</i> * African brass buttons
<i>Gnaphalium luteo-album</i> * weedy cudweed
<i>Helianthus annuus</i> western sunflower
<i>Heterotheca grandiflora</i> telegraph weed
<i>Lactuca serriola</i> * prickly lettuce

PLANT COMPENDIUM (Continued)

FLOWERING PLANTS
<i>Picris echioides</i> * bristly ox tongue
<i>Pluchea odorata</i> salt marsh fleabane
<i>Pulicaria paludosa</i> * Spanish sunflower
<i>Senecio vulgaris</i> * common groundsel
<i>Sonchus oleraceus</i> * common sow-thistle
<i>Xanthium strumarium</i> cocklebur
BORAGINACEAE - BORAGE FAMILY
<i>Heliotropium curassavicum</i> salt heliotrope / alkali heliotrope
BRASSICACEAE (CRUCIFERAE) - MUSTARD FAMILY
<i>Hirschfeldia incana</i> * shortpod mustard
<i>Lepidium latifolium</i> * broad-leaved peppergrass
<i>Raphanus sativus</i> * wild radish
CACTACEAE - CACTUS FAMILY
<i>Opuntia ficus-indica</i> * Indian fig
CAPRIFOLIACEAE - HONEYSUCKLE FAMILY
<i>Sambucus mexicana</i> blue elderberry
CHENOPODIACEAE - GOOSEFOOT FAMILY
<i>Atriplex triangularis</i> sparscale
<i>Bassia hyssopifolia</i> five-hook bassia
<i>Salicornia virginica</i> common woody pickleweed
<i>Salsola tragus</i> * Russian thistle
EUPHORBIACEAE - SPURGE FAMILY
<i>Chamaesyce</i> sp. spurge
<i>Ricinus communis</i> * castor bean
FABACEAE (LEGUMINOSAE) - LEGUME FAMILY
<i>Acacia redolens</i> * prostrate acacia
<i>Melilotus alba</i> * white sweet-clover
<i>Parkinsonia aculeata</i> * Mexican palo verde

PLANT COMPENDIUM (Continued)

FLOWERING PLANTS
MYRTACEAE - MYRTLE FAMILY
<i>Callistemon</i> sp.* bottlebrush
OLEACEAE - OLIVE FAMILY
<i>Fraxinus</i> sp.* ornamental ash
<i>Olea europaea</i> * olive
PLANTAGINACEAE - PLANTAIN FAMILY
<i>Plantago indica</i> * sand plantain
<i>Plantago major</i> * common plantain
POLYGONACEAE - BUCKWHEAT FAMILY
<i>Polygonum lapathifolium</i> willow weed
<i>Rumex crispus</i> * curly dock
SALICACEAE - WILLOW FAMILY
<i>Salix exigua</i> narrow-leaved willow
<i>Salix laevigata</i> red willow
SIMAROUBACEAE - QUASSIA FAMILY
<i>Ailanthus altissima</i> * tree of heaven
SOLANACEAE - NIGHTSHADE FAMILY
<i>Nicotiana glauca</i> * tree tobacco
<i>Solanum americanum</i> white nightshade
TAMARICACEAE - TAMARISK FAMILY
<i>Tamarix ramosissima</i> * Mediterranean tamarisk
ULMACEAE - ELM FAMILY
<i>Ulmus parvifolia</i> * Chinese elm
URTICACEAE - NETTLE FAMILY
<i>Urtica dioica</i> ssp. <i>holosericea</i> hoary nettle
CLASS MONOCOTYLEDONES (MONOCOTS)
ARECACEAE (PALMAE) - PALM FAMILY
<i>Phoenix canariensis</i> * Canary Island date palm
<i>Washingtonia robusta</i> * Mexican fan palm

PLANT COMPENDIUM (Continued)

FLOWERING PLANTS
CYPERACEAE - SEDGE FAMILY
<i>Scirpus californicus</i> California bulrush
POACEAE [GRAMINEAE] - GRASS FAMILY
<i>Arundo donax</i> * giant reed
<i>Cortaderia selloana</i> * Sellow's pampas grass
<i>Cynodon dactylon</i> * bermuda grass
<i>Leptochloa uninervia</i> Mexican sprangletop
<i>Paspalum dilatatum</i> * dallis grass
<i>Paspalum distichum</i> knot grass
* indicates non-native species