



September 29, 2015
20884

Jemellee Cruz
Flood Maintenance Division
County of Los Angeles Department of Public Works
900 South Fremont Avenue, Annex Building
Alhambra, California 91803

SUBJECT: RESULTS FROM THE FOCUSED PLANT SURVEY FOR SOFT-BOTTOM CHANNEL REACH 116, LOS CERRITOS CHANNEL, MAINTENANCE PROJECT, LOS ANGELES COUNTY, CALIFORNIA. TASK ORDER NUMBER FMD-C339

Dear Ms. Cruz:

This letter report summarizes the findings of the focused plant survey conducted for the Soft-Bottom Channel (SBC) Reach 116, Los Cerritos Channel, for the Los Angeles County Flood Control District (LACFCD) to support the Regional Water Quality Control Board (RWQCB) Waste Discharge Requirements (WDR) for the proposed actions relating to the Los Cerritos Channel SBC Reach Annual Maintenance Project (Project). Information contained in this document is in accordance with accepted scientific and technical standards that are consistent with the requirements of United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW).

The Project reach is surrounded mainly by residential, commercial, and industrial development. The Project is located at the western terminus of the CA-22 freeway, and extends from Atherton Street to Pacific Coast Highway, in the City of Long Beach. The proposed impact area includes:

- The expanse from the top of the riprap on one bank, across the channel, to the top of the riprap on the other bank
- A 50-foot buffer around any tree or shrub identified as having a 0.5-inch or more root diameter within the Los Cerritos Channel Project area (landward side of levee on one bank, across the channel, to the landward side of levee on the other bank plus an additional 15-foot buffer if it is contained within the LACFCD easement)
- The total channel length of 2.1 linear miles

METHODS

The focused plant survey was conducted by Chambers Group, Inc. (Chambers Group) botanists Jeremy Smith and Christina Congedo on September 8, 2015. During the survey, the botanists visually scanned the impact area for the presence of: southern tarplant (*Centromadia parryi* subsp. *australis*) and branching phacelia (*Phacelia ramosissima* var. *australitoralis*), as identified as having potential to occur within the Los Cerritos Channel impact area (Chambers Group 2014) through direct communication with Katie Gallagher and CDFW.

The survey was conducted by walking parallel transects throughout the impact area. If a targeted plant species was observed during the survey, botanists recorded the location using Global Positioning System (GPS) technology that provides real-time sub-meter accuracy and that has the capability to provide sub-foot accuracy with post processing. All plant species observed during the survey were recorded (Attachment 1). Plants of uncertain identity were collected and subsequently identified from keys, descriptions, and illustrations in *The Jepson Manual, Vascular Plants of California, Second Edition* (Baldwin et al. 2012) and the *Sunset Western Garden Book* (Brenzel 2007). Plant nomenclature follows that of Baldwin et al. (2012) for native plants and naturalized waifs, or the Sunset Publishing Corporation (Brenzel 2007) for ornamental cultivars.

RESULTS

Vegetation

Open water is present within this SBC reach, and developed areas consisting of concrete and riprap channel banks line the reach. The channel edges contain thin bands and patches of disturbed coastal saltmarsh vegetation, most dense in the upstream portion of the reach. The vegetated portions of the reach were dominated by alkali heath (*Frankenia salina*), common pickleweed (*Salicornia pacifica*), fleshy jaumea (*Jaumea carnosa*), saltgrass (*Distichlis spicata*), and saltwort (*Batis maritima*). This vegetation type was considered disturbed due to the interspersed patches of ruderal vegetation also present in densities greater than 25 percent throughout the reach. Nonnative ruderal species present included prickly sow thistle (*Sonchus asper* subsp. *asper*), ripgut grass (*Bromus diandrus*), and flax-leaved horseweed (*Erigeron bonariensis*) (Chambers Group 2014).

Sensitive Plants

Southern tarplant and branching phacelia were not observed within the impact area during the survey and are considered absent. No other sensitive plants were observed within the impact area.

CONCLUSIONS

Southern tarplant and branching phacelia were not observed during the survey; therefore, these species are considered absent from the SBC Reach 116. Mitigation will not be required.

Please feel free to contact me at (949) 261-5414 ext. 7241 or at hclayton@chambersgroupinc.com if you have any questions.

Sincerely,



Heather Clayton
Senior Botanist

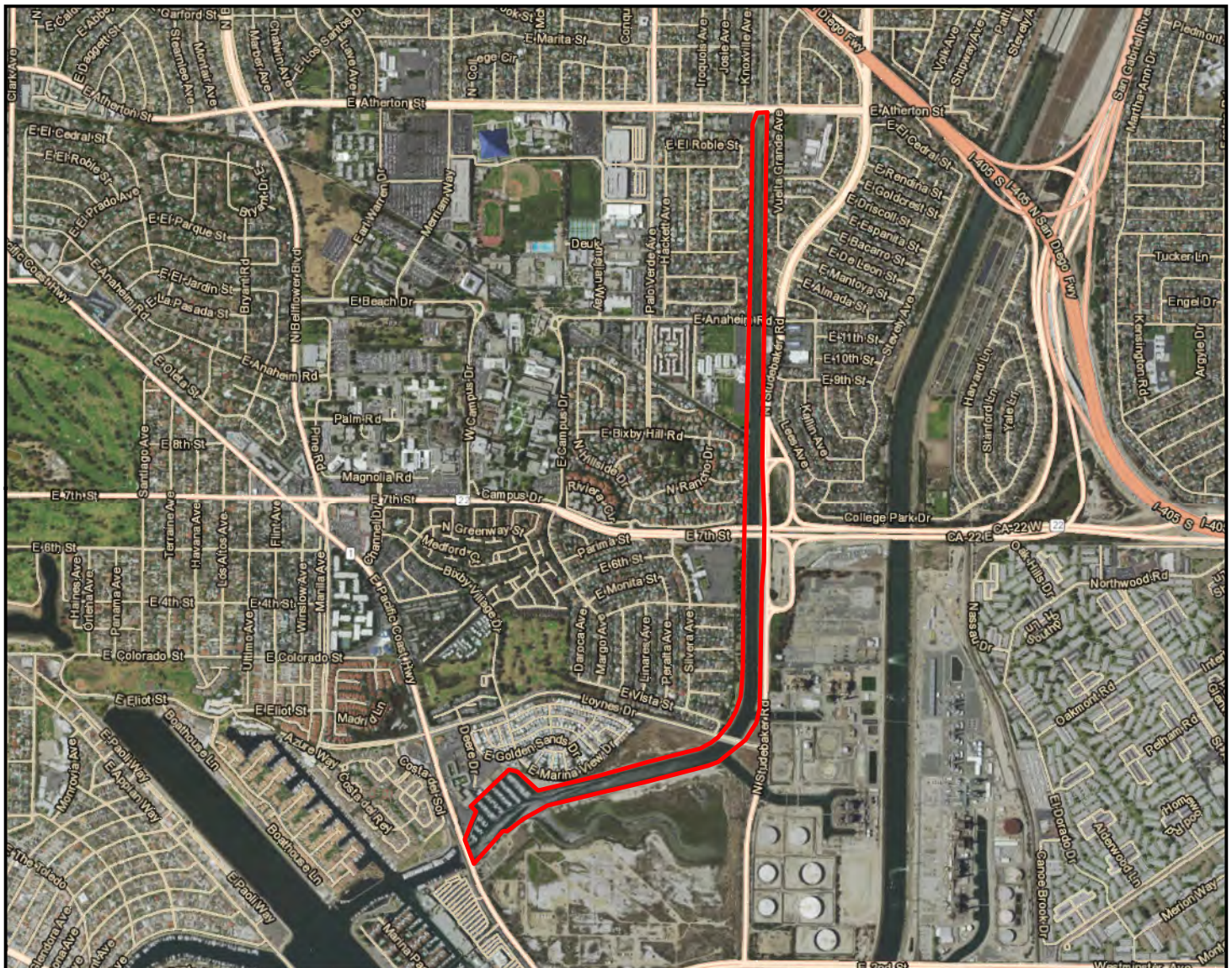
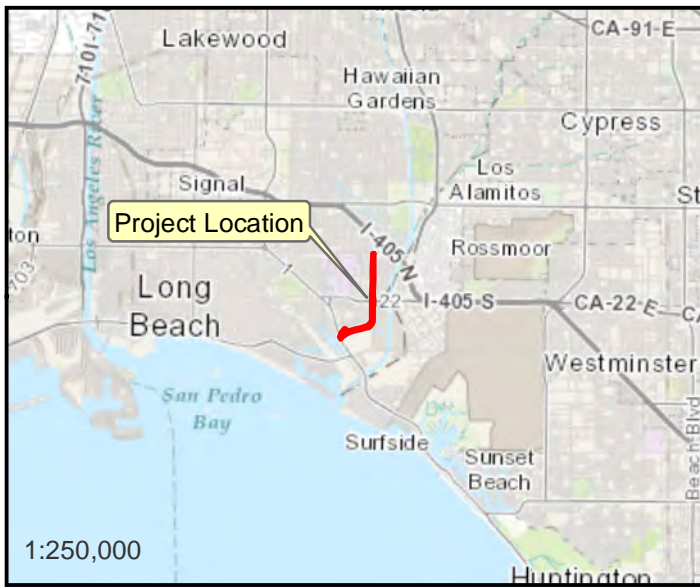
References

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, and T.J. Rosatti, and D.H. Wilken (editors)
2012 *The Jepson Manual: Vascular Plants of California, Second Edition*. University of California Press, Berkeley, CA.
- Brenzel, K. N., (editor)
2007 *The Sunset Western Garden Book, Eighth Edition*. Sunset Publishing Corporation, Menlo Park, CA.
- Chambers Group, Inc. (Chambers Group)
2014 Biological Technical Report for The Los Cerritos Soft Bottom Channel Reach Maintenance Project Los Angeles County, California. Chambers Group, Inc. Santa Ana, CA. Prepared for Los Angeles County Department of Public Works on May 13, 2014.

Figures and Attachments

Figure 1 – Project Location and Vicinity Map

Attachment 1 – Plant Species Observed



Legend

Survey Area



0 1,000 2,000 4,000
Feet

Figure 1
Los Cerritos Soft-Bottom Channel
Project Location & Vicinity Map

ATTACHMENT 1 – PLANT SPECIES OBSERVED



ATTACHMENT 1
PLANT SPECIES OBSERVED

Scientific Name	Common Name
GYMNOSPERMS	
ARAUCARIACEAE	ARAUCARIA FAMILY
<i>Araucaria araucana</i> *+	monkey puzzle
CUPRESSACEAE	CYPRESS FAMILY
<i>Cupressus sempervirens</i> *+	Italian cypress
<i>Hesperocyparis macrocarpa</i> +	Monterey cypress
PINACEAE	PINE FAMILY
<i>Pinus halepensis</i> *	Aleppo pine
MAGNOLIIDS	
LAURACEAE	LAUREL FAMILY
<i>Persea americana</i> *+	avocado
ANGIOSPERMS (EUDICOTS)	
ACANTHACEAE	ACANTHUS FAMILY
<i>Justicia brandegeana</i> *+	shrimp plant
AIZOACEAE	FIG-MARIGOLD FAMILY
<i>Carpobrotus edulis</i> *	hottentot-fig
<i>Malephora crocea</i> *	crocea iceplant
<i>Mesembryanthemum nodiflorum</i> *	slender-leaved iceplant
AMARANTHACEAE	AMARANTH FAMILY
<i>Amaranthus albus</i> *	tumbling pigweed
<i>Amaranthus</i> sp.	pigweed
ANACARDIACEAE	SUMAC OR CASHEW FAMILY
<i>Schinus terebinthifolius</i> *	Brazilian pepper tree
APOCYNACEAE	DOGBANE FAMILY
<i>Mandevilla</i> sp.+	rocktrumpet
<i>Nerium oleander</i> *	oleander
<i>Trachelospermum jasminoides</i> *+	star jasmine
ARALIACEAE	GINSENG FAMILY
<i>Hedera helix</i> *	English ivy
<i>Schefflera</i> sp.+	schefflera
ASTERACEAE	SUNFLOWER FAMILY
<i>Artemisia californica</i>	California sagebrush
<i>Baccharis pilularis</i>	coyote brush
<i>Baccharis salicifolia</i> subsp. <i>salicifolia</i>	mule fat
<i>Centaurea melitensis</i> *	tocalote
<i>Cirsium vulgare</i> *	bull thistle

Scientific Name	Common Name
<i>Encelia californica</i>	California bush sunflower
<i>Erigeron bonariensis</i> *	flax-leaved horseweed
<i>Erigeron canadensis</i>	horseweed
<i>Helianthus annuus</i>	common sunflower
<i>Helminthotheca echioides</i> *	bristly ox-tongue
<i>Jaumea carnosa</i>	fleshy Jaumea
<i>Pseudognaphalium stramineum</i>	cotton-batting plant
<i>Senecio vulgaris</i> *	common groundsel
<i>Sonchus asper</i> subsp. <i>asper</i> *	prickly sow thistle
<i>Sonchus oleraceus</i> *	common sow thistle
<i>Stephanomeria exigua</i>	small wreathplant
<i>Symphyotrichum subulatum</i>	aster
BATACEAE	SALTWORT FAMILY
<i>Batis maritima</i>	saltwort
BETULACEAE	BIRCH FAMILY
<i>Betula</i> sp.*+	birch
BIGNONIACEAE	BIGNONIA FAMILY
<i>Tecoma capensis</i> *+	Cape honeysuckle
BRASSICACEAE	MUSTARD FAMILY
<i>Brassica nigra</i> *	black mustard
<i>Descurainia pinnata</i>	western tansy-mustard
<i>Hirschfeldia incana</i> *	shortpod mustard
<i>Sisymbrium</i> sp.*	mustard
CACTACEAE	CACTUS FAMILY
<i>Opuntia ficus-indica</i> *	Indian fig
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY
<i>Lonicera japonica</i> *+	Japanese honeysuckle
CARYOPHYLLACEAE	PINK FAMILY
<i>Spergularia bocconi</i> *	Boccone's sandspurrey
<i>Spergularia marina</i>	saltmarsh sandspurrey
CHENOPODIACEAE	GOOSEFOOT FAMILY
<i>Arthrocnemum subterminale</i>	Parish's pickleweed
<i>Atriplex prostrata</i> *	fat-hen
<i>Atriplex rosea</i> *	tumbling oracle
<i>Atriplex semibaccata</i> *	Australian saltbush
<i>Atriplex watsonii</i>	Watson's saltbush
<i>Bassia hyssopifolia</i> *	five-hooked bassia
<i>Chenopodium album</i> *	lamb's quarters

Scientific Name	Common Name
<i>Salicornia pacifica</i>	common pickleweed
<i>Salsola tragus</i> *	Russian thistle
<i>Suaeda taxifolia</i>	woolly sea-blite
CONVOLVULACEAE	MORNING-GLORY FAMILY
<i>Cressa truxillensis</i>	alkali weed
<i>Cuscuta pacifica</i> var. <i>pacifica</i>	large-flower saltmarsh dodder
EUPHORBIACEAE	SPURGE FAMILY
<i>Chamaesyce</i> sp.	spurge
<i>Euphorbia cotinifolia</i> *+	Caribbean copper plant
FABACEAE	LEGUME FAMILY
<i>Acacia melanoxylon</i> *+	blackwood acaia
<i>Caesalpinia</i> sp.*+	bird-of-paradise
<i>Ceratonia siliqua</i> *+	St John's bread
<i>Melilotus alba</i> *	white sweetclover
<i>Melilotus indica</i> *	sourclover
<i>Parkinsonia microphylla</i> *+	small-leaved palo verde
<i>Frankenia salina</i>	alkali heath
GERANIACEAE	GERANIUM FAMILY
<i>Erodium cicutarium</i> *	red-stemmed filaree
HAMAMELIDACEAE	WITCH-HAZEL FAMILY
<i>Liquidambar styraciflua</i> *+	sweet gum
LYTHRACEAE	LOOSESTRIFE FAMILY
<i>Lagerstroemia indica</i> *+	crape myrtle
MALVACEAE	MALLOW FAMILY
<i>Grewia occidentalis</i> *+	lavender starflower
<i>Malva parviflora</i> *	cheeseweed
MORACEAE	MULBERRY FAMILY
<i>Ficus benjamina</i> *+	weeping fig
<i>Ficus rubiginosa</i> *+	rustyleaf fig
<i>Ficus rubra</i> *+	fig
MYRTACEAE	MYRTLE FAMILY
<i>Callistemon citrinus</i> *+	crimson bottlebrush
<i>Eucalyptus citriodora</i> *+	lemon-scent gum
NYCTAGINACEAE	FOUR O'CLOCK FAMILY
<i>Bougainvillea spectabilis</i> *+	bougainvillea
OLEACEAE	OLIVE FAMILY
<i>Olea europaea</i> *+	olive

Scientific Name	Common Name
PITTOSPORACEAE	TOBIRA FAMILY
<i>Pittosporum tobira</i> *	Japanese cheesewood
PLUMBAGINACEAE	LEADWORT FAMILY
<i>Limonium ramosissimum</i> *	Algerian sea lavender
<i>Plumbago auriculata</i> *	cape plumbago
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Eriogonum fasciculatum</i>	California buckwheat
PUNICACEAE	POMEGRANATE FAMILY
<i>Punica granatum</i> *+	Pomegranate
ROSACEAE	ROSE FAMILY
<i>Prunus ilicifolia</i>	holly-leaf cherry
RUTACEAE	RUE FAMILY
<i>Citrus sinensis</i> *+	orange
<i>Fortunella obovata</i> *+	kumquat
SALICACEAE	WILLOW FAMILY
<i>Salix lasiolepis</i>	arroyo willow
SAPINDACEAE	SOAPBERRY FAMILY
<i>Acer palmatum</i> *+	Japanese maple
SCROPHULARIACEAE	FIGWORT FAMILY
<i>Myoporum laetum</i> *	myoporum
SOLANACEAE	NIGHTSHADE FAMILY
<i>Nicotiana glauca</i> *	tree tobacco
URTICACEAE	NETTLE FAMILY
<i>Parietaria judaica</i> *	spreading pellitory
VITACEAE	GRAPE FAMILY
<i>Parthenocissus tricuspidata</i> *+	Boston ivy
ZYGOPHYLLACEAE	CALTROP FAMILY
<i>Tribulus terrestris</i> *	puncture vine
ANGIOSPERMS (MONOCOTS)	
AGAVACEAE	AGAVE FAMILY
<i>Yucca elephantipes</i> *+	giant yucca
ARECACEAE	PALM FAMILY
<i>Phoenix canariensis</i> *+	Canary Island date palm
<i>Washingtonia robusta</i> *+	Mexican fan palm
ASPARAGACEAE	ASPARAGUS FAMILY
<i>Asparagus setaceus</i> *+	asparagus fern
POACEAE	GRASS FAMILY
<i>Arundo donax</i> *	giant reed

Scientific Name	Common Name
<i>Avena barbata</i> *	slender wild oat
<i>Bambusa</i> sp. *+	bamboo
<i>Bromus diandrus</i> *	ripgut grass
<i>Bromus hordeaceus</i> *	soft chess
<i>Bromus madritensis</i> subsp. <i>madritensis</i> *	foxtail chess
<i>Cortaderia selloana</i> *	pampas grass
<i>Digitaria sanguinalis</i> *	hairy crabgrass
<i>Distichlis littoralis</i>	shoregrass
<i>Distichlis spicata</i>	saltgrass
<i>Eleusine tristachya</i> *	three-spiked goose grass
<i>Elymus triticoides</i>	beardless wild rye
<i>Hordeum murinum</i> *	glaucous foxtail barley
<i>Muhlenbergia rigens</i>	deergrass
<i>Paspalum distichum</i>	knotgrass
<i>Setaria parviflora</i>	knotroot bristle grass
<i>Stipa miliacea</i> var. <i>miliacea</i> *	smilo grass
*Non-Native Species, +Ornamental, Unlikely to be Invasive	