BonTerra PSOMAS

Balancing the Natural and Built Environment

May 29, 2014

Ms. Jemellee Cruz, P.E.
County of Los Angeles Department of Public Works
Flood Maintenance Division
900 South Fremont Avenue, 2nd Floor Annex
Alhambra, California 91802-1460

VIA EMAIL
jcruz@dpw.lacounty.gov

Subject: Results of Tree Inventory Surveys at Reach 112, Ballona Creek, Los Angeles County, California

Dear Ms. Cruz:

This letter report presents the results of tree inventory surveys conducted at Reach 112, Ballona Creek, in the community of Marina del Rey in unincorporated Los Angeles County (Exhibit 1). Soft-bottom channel (SBC) Reach 112 extends approximately three miles in length from Centinela Avenue downstream to the end of the Los Angeles County Flood Control District's easement near the ocean outlet (at Vista del Mar extended) (Exhibit 2). From about the Marina Freeway (State Route 90 [SR-90]), SBC Reach 112 is in an area considered "sensitive" as it lies within the Ballona Wetlands Ecological Reserve. The purpose of these surveys is to provide the Los Angeles County Department of Public Works (LACDPW) with the biological information (specifically, tree and root details) in support of vegetation removal and levee repair activities required by the U.S. Army Corps of Engineers (USACE) Levee Certification Project.

SBC Reach 112 is in the process of being added to the LACDPW's existing California Department of Fish and Wildlife (CDFW), USACE, and Regional Water Quality Control Board (RWQCB) channel maintenance permits. The biological information collected during these surveys will complement previous biological survey findings (BonTerra 2009, 2010, 2012, 2014). Survey results are being used to support the LACDPW's request to include SBC Reach 112 in the existing regulatory permits.

SURVEY METHODS

BonTerra Psomas Certified Arborist Trevor Bristol (International Society of Arboriculture Certificate Number WE-10233A), Senior Biologist Jennifer Pareti and Biologists Jason Mintzer, Nathan Moffett, and Kristin Smith conducted tree inventory surveys on March 13, 20, and 21, 2014. The maintenance boundary of the project site (survey area) included the channel, the channel-facing slopes of the levees, the access road/bike path on top of the levees, the landward slopes of the levees, and an additional 15' buffer from the toe of the landward slopes.

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The survey area included areas that were accessible and authorized (i.e. non-private properties) as well as private properties. Private properties were only assessed visually from authorized areas.

All trees found within the survey area boundaries that had estimated root diameter of ½ inch or greater were given a unique identifying number and mapped in the field. Trees with estimated ½ inch root diameter or less were identified and mapped in the field if the biologist determined the presence of the root system extensive enough to note. Tree species were identified in the field or collected for subsequent identification either using the keys in Baldwin et al. (2012) for native species, or using other available resources for non-native ornamental species (Brenzel 2007; Ritter 2011). Taxonomy follows Baldwin et al. (2012) for native trees, but otherwise follows miscellaneous authorities for non-native ornamental vegetation. During the survey the following data were collected: tree diameter at breast height (DBH), tree height, and canopy width, estimated root extent, qualitative ratings on aesthetics and overall health. In addition, a note was made in the field if the tree was likely to fall within the jurisdiction of California Department of Fish and Wildlife (CDFW). Trees were not tagged in the field. Collected data is included in Attachment A.

Mapping

Each tree that was surveyed was mapped on a on a 100-scale (1 inch = 100 feet) aerial photograph in the field.

Diameter

Using a diameter tape, measurements were taken at four and one-half feet above mean natural grade; multiple trunks were measured separately. The diameter of the largest two trunks was combined to determine the total diameter of each tree. In addition, the total number of trunks was recorded. The diameter was estimated for trees that were not accessible (e.g., surrounded by a fence or located on a steep slope).

Height and Canopy

The height of each tree was estimated from mean natural grade to the highest branch. Also, the diameter of each tree's canopy was estimated at its widest point.

Aesthetics

Each tree assessed was inspected and compared to an archetype tree (considered excellent on all points mentioned below) of the same species. Tree aesthetics were evaluated with respect to overall form and symmetry, crown balance, branching pattern, and broken branches.

The trees were rated on a scale of 1 to 5, as follows:

1: Very Poor

2: Poor

3: Fair

4: Good

5: Excellent

Health

The health of each tree was assessed based on visual evidence of vigor, such as the amount of foliage; leaf color and size; presence of branch or twig dieback; severity of insect infestation; the presence of disease; heart rot; fire damage; mechanical damage; amount of new growth; appearance of bark; and rate of callous development over wounds. The tree's structural integrity was also evaluated with respect to branch attachment, branch placement, root health, and stability. In addition, the health assessment considered such elements as the presence of decay, weak branch attachments, and the presence of exposed roots due to soil erosion.

The trees were rated on the 1 to 5 scale, noted above.

Root Structures

Estimates related to the depth and extent of tree roots were based on a brief examination of the tree size (e.g., trunk diameter and canopy dripline) and the location of the tree. Given that some trees are growing among the riprap bank protection, it was difficult to directly observe any indications of root extent; as a result, general estimates were made. In a natural setting, roots can reach well beyond the outer dripline of a tree with roots reaching depths of three feet or more (Day and Wiseman 2009). However, given the developed nature of the project site (e.g. riprap, concrete), the extent and depth of roots is assumed to be affected by soil compaction, physical obstructions, and access to available water and nutrients. Tree size is assumed to be directly correlated to root extent, as larger trees will have more extensive root systems than smaller trees. The depth of tree roots is dependent on many factors, such as the tree's genetics, available oxygen (related directly to soil texture and saturation), and soil compaction (Perry 1989). Therefore, the general character of the substrate was taken into account when determining root extent, as was the nearest available water.

For trees located at the toe of the side levees, the extent of tree roots is expected to generally correspond to the outer tree canopy as roots have easy access to water at that location and don't require extensive root systems to provide adequate water to the trees. The root systems of these trees are probably mostly contained within the sediment and organic matter that has accumulated at the toe of slope and extending into the open water. Tree roots in this area are likely found within the top two to three feet of soil, likely limited by the lack of available oxygen beyond this depth. Roots may also be growing into the levee itself, but the compacted soil of the levee is likely discouraging significant root growth in that soil.

It is difficult to estimate the extent and depth of roots for trees that are located higher up on the side levees. The presence of riprap prevented a close examination of the soil to estimate the extent of root systems in these areas, although it is assumed that roots are extending downslope to reach moist soils that are located at the bottom of the levees. Therefore, most roots are expected to be encountered downslope of these trees. Furthermore, it is assumed that the soil where these trees are growing is highly compacted, which would discourage root penetration into the soil, as the depth of the root zone is limited by the ability of oxygen to reach roots more than one foot deep. Though roots may find cracks to exploit deep root growth on the levees, most roots should be encountered in the top 12 inches of soil.

RESULTS

A total of 133 trees with ½ inch or greater root diameter were documented throughout the survey area on the landward and channel-facing levee slopes and within the 15' buffer from the landward slope. No trees were documented within the river channel or on the access road/bike path. The vast majority of trees species documented were non-native ornamental trees and shrubs such as the Brazilian pepper (*Schinus terebinthifolius*), ash (*Fraxinus* sp.), and bottlebrush (*Callistemon* sp.). Four native trees consisting of Fremont cottonwoods (*Populus fremontii*) are located on the landward side of the south levee between SR-90 and Lincoln Boulevard (Pacific Coast Highway) (see Exhibit 3e). The other native species consisted of four laurel sumacs (*Malosma laurina*) on the south levee south of Culver Boulevard. Three of these four native shrubs are on the channel side of the levee, with the fourth being on the landward side of the levee (see Exhibits 3f and 3g). Most of the trees in SBC Reach 112 (108 of the 133 total trees) are upstream of SR-90 and clustered on the landward side of the south levee. Field data is included as Attachment A.

Tree (and shrub) species documented during the survey include the following:

- *Acacia* sp.
- *Ailanthus altissima*
- *Callistemon* sp.
- *Fraxinus* sp.
- *Juniperus* sp.
- *Malosma laurina*
- *Myoporum laetum*
- *Nicotiana glauca*
- *Pinus* sp.
- *Populus fremontii*
- *Quercus* sp. (non-native)
- *Ricinus communis*
- *Schinus terebinthifolius*
- *Ulmus parviolia*
- *Washingtonia robusta*
- Unknown sp.

RECOMMENDATIONS

Trees documented during the survey fall under the jurisdiction of the County of Los Angeles. The County of Los Angeles Tree Ordinance (Ord. No. 177,404) protects all native oak trees. No native oak trees were documented during the survey. Trees on the channel-facing side of the levee, or

even the four native Fremont cottonwoods on the landward side of the levee, may additionally fall under the jurisdiction of California Department of Fish and Wildlife (CDFW) as it pertains to riparian habitat associated with regulated waterways. It should be noted that disturbance activities, such as tree removal, may require permits from the U.S. Army Corps of Engineers, CDFW, and the Regional Water Quality Control Board due to the potential for discharge of fill material into the waterway.

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

Sincerely,
BonTerra Psomas

Joan Patronite Kelly, AICP
Corporate Director of Environmental Planning and Resource Management

Marc T. Blain
Senior Project Manager

Enclosures: Exhibit 1 – Regional Location
Exhibit 2 – Local Vicinity
Exhibit 3 – Tree Inventory Results
Attachment A – Field Data

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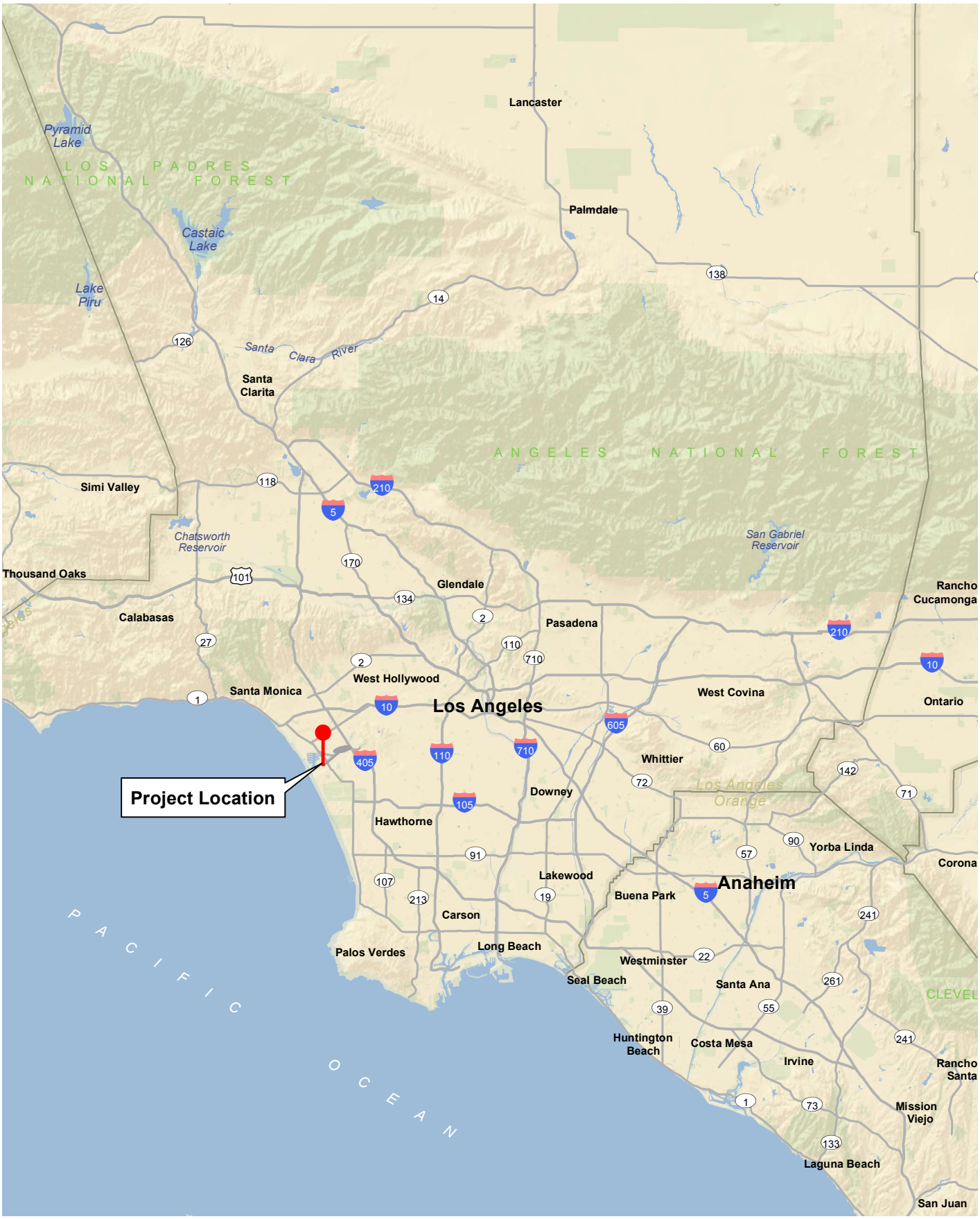

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Regional Location Map

Exhibit 1

Ballona Creek Soft-Bottom Channel - Reach 112

N W E S

10 5 0 10 Miles

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Local Vicinity map

Exhibit 2

Ballona Creek Soft-Bottom Channel - Reach 112

N W E S

2,000 1,000 0 2,000

Feet

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Tree Inventory Results

Exhibit 3a

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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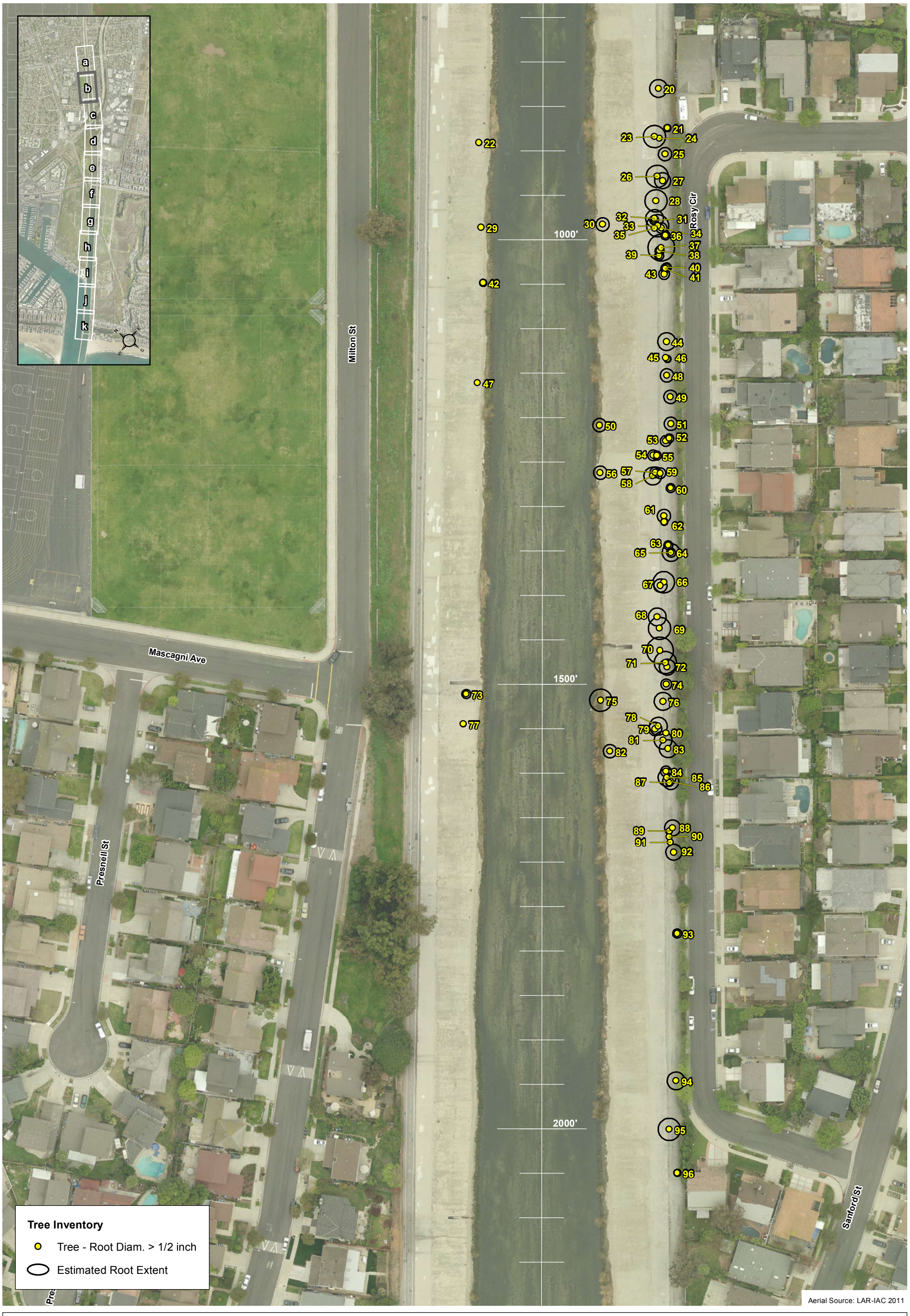

Tree Inventory Results

Exhibit 3b

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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Tree Inventory Results

Exhibit 3c

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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Tree Inventory Results

Exhibit 3d

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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Tree Inventory Results

Exhibit 3e

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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Tree Inventory Results

Exhibit 3f

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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Tree Inventory

- Tree - Root Diam. > 1/2 inch
- Estimated Root Extent

Aerial Source: LAR-IAC 2011

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Tree Inventory Results

Exhibit 3g

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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9500'

128

10000'

Tree Inventory

Tree - Root Diam. > 1/2 inch

Estimated Root Extent

Aerial Source: LAR-IAC 2011

Tree Inventory Results

Exhibit 3h

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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Tree Inventory Results

Exhibit 3i

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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12000'

130

12500'

131

132

133

13000'

Tree Inventory

Tree - Root Diam. > 1/2 inch

Estimated Root Extent

Aerial Source: LAR-IAC 2011

Tree Inventory Results

Exhibit 3j

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

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13500'

14000'

14500'

Esplanade

62nd Ave

Walkway

Pacific Ave

62nd Pl

Speedway

Tree Inventory

Tree - Root Diam. > 1/2 inch

Estimated Root Extent

Aerial Source: LAR-IAC 2011

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Tree Inventory Results

Exhibit 3k

Ballona Creek Soft-Bottom Channel - Reach 112

100 50 0 100 Feet

BonTerra PSOMAS

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ATTACHMENT A

FIELD DATA

Reach 112 Tree Inventory Survey Data

ID	Date_	Srvyr	Species	trunk_num	trunk1	trunk2	trunk_totl	height	canopy	aesthetic	health	root_n	root_s	root_e	root_w	cdfw	field_note	field_ID
1	3/13/2014	JP/JM	Fraxinus sp.	5	2.2	1.4	3.6	18	11	4	5	5.5	5.5	3	7	N	JM gps-"1-1"	0
2	3/13/2014	JP/JM	Schinus terebinthifolius	10	1.2	0.9	2.1	10	10	2	5	SAC	SAC	SAC	SAC	N		7
3	3/13/2014	JP/JM	Fraxinus sp.	14	1.2	1.1	2.3	15	12	3	3	SAC	SAC	SAC	SAC	N		8
4	3/13/2014	JP/JM	Fraxinus sp.	9	1.3	0.8	2.1	12	10	3	3	5	5	4	6	N		10
5	3/20/2014	JM/KS	Schinus terebinthifolius	1	3	X	3	8	10	3	3	SAC	SAC	SAC	SAC	N		126
6	3/13/2014	JP/JM	Ailanthus altissima	13	1.1	1.1	2.2	10	8	2	2	4	4	3	5	N		11
7	3/13/2014	JP/JM	Fraxinus sp.	17	1.6	1.3	2.9	20	20	4	4	SAC	SAC	SAC	SAC	N		12
8	3/20/2014	JM/KS	Schinus terebinthifolius	3	9	8	17	15	18	3	3	SAC	SAC	SAC	SAC	N		120
9	3/20/2014	JM/KS	Schinus terebinthifolius	2	10	9	19	15	18	3	3	SAC	SAC	SAC	SAC	N		125
10	3/20/2014	JM/KS	Fraxinus sp.	2	2	2	4	15	6	3	3	SAC	SAC	SAC	SAC	N		113
11	3/20/2014	JM/KS	Washingtonia robusta	1	5	X	5	8	10	3	3	0	0	0	0	N		112
12	3/20/2014	JM/KS	Fraxinus sp.	2	1.7	1.5	3.2	12	5	3	3	SAC	SAC	SAC	SAC	N		114
13	3/20/2014	JP/JM	Juniperus sp.	1	8	X	8	20	7	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	105
14	3/20/2014	JM/KS	Fraxinus sp.	2	2	1.8	3.8	12	5	3	3	SAC	SAC	SAC	SAC	N		115
15	3/13/2014	JP/JM	Fraxinus sp.	7	1.4	1.2	2.6	20	15	3	4	SAC	SAC	SAC	SAC	N		13
16	3/13/2014	JP/JM	Ricinus Communis	1	2.3	X	2.3	10	8	3	3	SAC	SAC	SAC	SAC	N		14
17	3/20/2014	JM/KS	Fraxinus sp.	2	1.6	1.4	3	12	5	3	3	SAC	SAC	SAC	SAC	N		116
18	3/20/2014	JM/KS	Fraxinus sp.	2	1.6	1.4	3	12	5	3	3	2	2.5	3	2.5	N		117
19	3/13/2014	JP/JM	Ricinus Communis	1	2.9	X	2.9	15	25	4	4	SAC	SAC	SAC	SAC	N		15
20	3/13/2014	JP/JM	Callistemon sp.	10	1.1	1.2	2.3	12	20	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	103
21	3/13/2014	JP/JM	Schinus terebinthifolius	3	2.5	2	4.5	10	8	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	111
22	3/20/2014	JM/KS	Fraxinus sp.	2	1.3	1.2	2.5	8	6	2	1	SAC	SAC	SAC	SAC	N		118
23	3/13/2014	JP/JM	Schinus terebinthifolius	1	13	X	13	25	25	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	110
24	3/13/2014	JP/JM	Ulmus parvifolia	1	3.5	X	3.5	12	5	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	109
25	3/13/2014	JP/JM	Schinus terebinthifolius	8	5	4	9	15	15	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	108
26	3/13/2014	JP/JM	Schinus terebinthifolius	1	13	X	13	25	25	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	107
27	3/13/2014	JP/JM	Schinus terebinthifolius	1	12	X	12	20	18	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	106
28	3/13/2014	JP/JM	Quercus sp.	4	2	2	4	15	25	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	104
29	3/20/2014	JM/KS	Fraxinus sp.	2	1	1	2	8	5	3	3	2	2.5	3	2.5	N		119
30	3/13/2014	JP/JM	Fraxinus sp.	10	1	1.1	2.1	10	15	3	3	SAC	SAC	SAC	SAC	N		1
31	3/13/2014	JP/JM	unknown	1	3.5	X	3.5	20	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	97
32	3/13/2014	JP/JM	Schinus terebinthifolius	1	11	X	11	20	20	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	102
33	3/13/2014	JP/JM	Quercus sp.	6	2	2	4	15	25	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	94
34	3/13/2014	JP/JM	Callistemon sp.	4	1.8	1.8	3.6	12	12	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	93
35	3/13/2014	JP/JM	unknown	3	3	2.7	5.7	15	5	3	3	SAC	SAC	SAC	SAC	N	imated behind fence. Banana li	96
36	3/13/2014	JP/JM	Callistemon sp.	3	2	1.8	3.8	15	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	92
37	3/13/2014	JP/JM	Schinus terebinthifolius	1	18	X	18	35	30	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	91
38	3/13/2014	JP/JM	Callistemon sp.	3	1.5	1.4	2.9	12	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	90
39	3/13/2014	JP/JM	Callistemon sp.	4	1.4	1.4	2.8	12	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	89
40	3/13/2014	JP/JM	Ulmus parvifolia	2	6	4	10	20	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	87
41	3/13/2014	JP/JM	Quercus sp.	3	2	1.7	3.7	15	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	88
42	3/20/2014	JM/KS	Fraxinus sp.	2	1.1	1.1	2.2	7	8	3	3	SAC	SAC	SAC	SAC	N		121
43	3/13/2014	JP/JM	Callistemon sp.	3	20	1.7	3.7	12	12	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	86
44	3/13/2014	JP/JM	Ulmus parvifolia	3	4.5	4	8.5	20	20	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	84
45	3/13/2014	JP/JM	Schinus terebinthifolius	1	2.5	X	3.5	10	5	2	2	SAC	SAC	SAC	SAC	N	Estimated behind fence	83
46	3/13/2014	JP/JM	Schinus terebinthifolius	2	2.5	2	4.5	10	8	2	2	SAC	SAC	SAC	SAC	N	Estimated behind fence	82
47	3/20/2014	JM/KS	Washingtonia robusta	1	7	X	1	8	6	3	3	0	0	0	0	N		122
48	3/13/2014	JP/JM	Schinus terebinthifolius	1	10	X	10	25	15	2	2	SAC	SAC	SAC	SAC	N	Estimated behind fence	81
49	3/13/2014	JP/JM	Schinus terebinthifolius	1	10	X	10	20	15	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	80
50	3/13/2014	JP/JM	Ricinus Communis	4	1.6	1.6	3.2	12	15	3	3	SAC	SAC	SAC	SAC	N		2
51	3/13/2014	JP/JM	Schinus terebinthifolius	3	6.5	6	12.5	20	15	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	101
52	3/13/2014	JP/JM	Callistemon sp.	4	2	1.8	3.8	12	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	100
53	3/13/2014	JP/JM	Callistemon sp.	4	2	1.8	3.8	15	12	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	99
54	3/13/2014	JP/JM	Callistemon sp.	4	1.7	1.7	3.4	12	12	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	95
55	3/13/2014	JP/JM	Schinus terebinthifolius	1	7.5	X	7.5	15	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	98
56	3/13/2014	JP/JM	Ailanthus altissima	9	1.1	0.9	2	10	15	3	3	SAC	SAC	SAC	SAC	N		3
57	3/13/2014	JP/JM	Callistemon sp.	4	1.7	1.7	3.4	15	12	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	79
58	3/13/2014	JP/JM	Schinus terebinthifolius	1	8	X	8	20	20	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	72
59	3/13/2014	JP/JM	Callistemon sp.	4	1.7	1.7	3.4	12	12	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	85
60	3/13/2014	JP/JM	Schinus terebinthifolius	2	2.5	2	4.5	16	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	71
61	3/13/2014	JP/JM	Schinus terebinthifolius	1	8	X	8	20	15	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	69
62	3/13/2014	JP/JM	Schinus terebinthifolius	1	5.5	X	5.5	8	8	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	68
63	3/13/2014	JP/JM	Ulmus parvifolia	1	6	X	6	12	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	67
64	3/13/2014	JP/JM	Schinus terebinthifolius	10	4.4	4	8.5	20	20	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	65
65	3/13/2014	JP/JM	Schinus terebinthifolius	1	7	X	7	20	10	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	66
66	3/13/2014	JP/JM	Schinus terebinthifolius	1	8	X	8	15	24	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	63
67	3/13/2014	JP/JM	Ulmus parvifolia	4	6	5	11	20	15	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	64
68	3/13/2014	JP/JM	Schinus terebinthifolius	1	9	X	9	25	20	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	62
69	3/13/2014	JP/JM	Ulmus parvifolia	2	8	7	15	35	25	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	61
70	3/13/2014	JP/JM	Schinus terebinthifolius	1	14	X	14	30	30	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	59

ID	Date_	Srvyr	Species	trunk_num	trunk1	trunk2	trunk_totl	height	canopy	aesthetic	health	root_n	root_s	root_e	root_w	cdfw	field_note	field_ID
71	3/13/2014	JP/JM	Schinus terebinthifolius	1	12	X	12	27	25	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	58
72	3/13/2014	JP/JM	Schinus terebinthifolius	4	7	3.5	10.5	20	18	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	57
73	3/20/2014	JM/KS	Fraxinus sp.	2	2.2	2	4.2	7	10	2	1	SAC	SAC	SAC	SAC	N		123
74	3/13/2014	JP/JM	Schinus terebinthifolius	1	8	X	8	20	12	2	2	SAC	SAC	SAC	SAC	N	Estimated behind fence	56
75	3/13/2014	JP/JM	Ricinus Communis	4	2.5	1.9	4.4	12	25	4	4	SAC	SAC	SAC	SAC	N		4
76	3/13/2014	JP/JM	Schinus terebinthifolius	1	12	X	12	25	20	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	55
77	3/20/2014	JM/KS	Fraxinus sp.	2	1.5	1.4	2.9	9	6	3	2	SAC	SAC	SAC	SAC	N		124
78	3/13/2014	JP/JM	Ulmus parvifolia	3	8	4	12	25	20	2	2	SAC	SAC	SAC	SAC	N	Estimated behind fence	54
79	3/13/2014	JP/JM	Schinus terebinthifolius	1	9	X	9	25	15	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	53
80	3/13/2014	JP/JM	Schinus terebinthifolius	1	4.4	X	4.5	8	5	1	1	SAC	SAC	SAC	SAC	N	Estimated behind fence	52
81	3/13/2014	JP/JM	Schinus terebinthifolius	1	20	X	20	30	20	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	51
82	3/13/2014	JP/JM	Ricinus Communis	5	1.7	1.3	3	10	15	4	4	SAC	SAC	SAC	SAC	N		5
83	3/13/2014	JP/JM	Schinus terebinthifolius	2	12	10	22	25	20	2	2	SAC	SAC	SAC	SAC	N	Estimated behind fence	50
84	3/13/2014	JP/JM	Schinus terebinthifolius	1	7	X	7	15	12	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	78
85	3/13/2014	JP/JM	Schinus terebinthifolius	3	4	2.5	6.5	20	20	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	77
86	3/13/2014	JP/JM	Schinus terebinthifolius	1	13	X	13	25	18	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	75
87	3/13/2014	JP/JM	Schinus terebinthifolius	1	2.5	X	2.5	12	8	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	76
88	3/13/2014	JP/JM	Schinus terebinthifolius	1	13	X	13	25	18	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	74
89	3/13/2014	JP/JM	Callistemon sp.	4	1.7	1.7	3.4	6	6	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	73
90	3/13/2014	JP/JM	Callistemon sp.	4	1.7	1.7	3.4	6	6	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	70
91	3/13/2014	JP/JM	Callistemon sp.	4	1.7	1.7	3.4	6	6	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	60
92	3/13/2014	JP/JM	Schinus terebinthifolius	1	13	X	13	25	18	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	49
93	3/13/2014	JP/JM	Schinus terebinthifolius	4	1.8	1.6	3.4	12	10	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	47
94	3/13/2014	JP/JM	Schinus terebinthifolius	1	8	X	8	20	20	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	48
95	3/13/2014	JP/JM	Schinus terebinthifolius	1	10	X	10	25	25	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	46
96	3/13/2014	JP/JM	Juniperus sp.	1	11	X	11	25	8	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	45
97	3/13/2014	JP/JM	Pinus sp.	1	17	X	17	50	15	4	4	SAC	SAC	SAC	SAC	N	Estimated behind fence	38
98	3/13/2014	JP/JM	Washingtonia robusta	1	22	X	22	25	8	2	2	0	0	0	0	N	Estimated behind fence	37
99	3/13/2014	JP/JM	Washingtonia robusta	1	10	X	10	20	8	3	3	0	0	0	0	N	Estimated behind fence	36
100	3/13/2014	JP/JM	Washingtonia robusta	1	22	X	22	45	10	3	3	0	0	0	0	N	Estimated behind fence	35
101	3/13/2014	JP/JM	Washingtonia robusta	1	22	X	22	50	10	3	3	0	0	0	0	N	Estimated behind fence	34
102	3/13/2014	JP/JM	Washingtonia robusta	1	12	X	12	35	10	2	2	0	0	0	0	N	Estimated behind fence	44
103	3/13/2014	JP/JM	Myoporum laetum	3	5.5	5	10.5	30	30	2	2	SAC	SAC	SAC	SAC	N	Estimated behind fence	43
104	3/13/2014	JP/JM	Acacia sp.	3	3.2	3	6.2	25	20	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	42
105	3/13/2014	JP/JM	Acacia sp.	4	5	3.8	8.8	20	15	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	41
106	3/13/2014	JP/JM	Acacia sp.	3	3.3	2.7	6	20	25	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	40
107	3/13/2014	JP/JM	Acacia sp.	4	5.5	3.5	9	15	50	3	3	SAC	SAC	SAC	SAC	N	Estimated behind fence	39
108	3/13/2014	JP/JM	Acacia sp.	1	3	X	3	12	15	2	2	SAC	SAC	SAC	SAC	N	Estimated behind fence	9
109	3/13/2014	JP/JM	Myoporum laetum	8	1.4	1.3	2.7	10	10	3	3	SAC	SAC	SAC	SAC	N	t tree to Reach 112 inside chan	6
110	3/20/2014	JM/KS	Populus fremontii	1	8	X	8	35	15	3	3	SAC	SAC	SAC	SAC	N		16
111	3/20/2014	JM/KS	Populus fremontii	1	8	X	8	35	15	3	3	SAC	SAC	SAC	SAC	N		17
112	3/20/2014	JM/KS	Populus fremontii	1	8	X	8	35	15	3	3	SAC	SAC	SAC	SAC	N		18
113	3/20/2014	JM/KS	Populus fremontii	1	7	X	7	35	15	3	3	SAC	SAC	SAC	SAC	N		19
114	3/20/2014	JM/KS	Ulmus parvifolia	2	1.3	1.2	2.5	8	10	3	3	SAC	SAC	SAC	SAC	N		20
115	3/20/2014	JM/KS	Malosma laurina	10	1.3	1.2	2.5	7	10	3	3	SAC	SAC	SAC	SAC	N		21
116	3/20/2014	JM/KS	Ricinus Communis	3	1.5	1.4	2.9	6.5	8	3	3	SAC	SAC	SAC	SAC	N		22
117	3/20/2014	JM/KS	Malosma laurina	10	1.3	1.2	2.5	6.5	10	3	3	SAC	SAC	SAC	SAC	N		23
118	3/20/2014	JM/KS	Malosma laurina	8	4	3	7	8	15	3	3	SAC	SAC	SAC	SAC	N		24
119	3/20/2014	JM/KS	Nicotiana glauca	10	1.3	1.2	2.5	7	5	1	2	SAC	SAC	SAC	SAC	N		25
120	3/20/2014	JM/KS	Ulmus parvifolia	2	1.4	1.1	2.5	5.5	5	1	1	SAC	SAC	SAC	SAC	N		26
121	3/20/2014	JM/KS	Ricinus Communis	10	1.5	1.3	2.8	8	15	3	3	SAC	SAC	SAC	SAC	N		27
122	3/20/2014	JM/KS	Fraxinus sp.	2	1.4	1.3	2.7	7	6	3	3	SAC	SAC	SAC	SAC	N		28
123	3/20/2014	JM/KS	Acacia sp.	6	3.5	3	6.5	12	10	3	3	SAC	SAC	SAC	SAC	N		29
124	3/20/2014	JM/KS	Acacia sp.	6	3.5	3	6.5	12	10	3	3	SAC	SAC	SAC	SAC	N		30
125	3/20/2014	JM/KS	Malosma laurina	15	3	2.5	5.5	10	25	3	3	SAC	SAC	SAC	SAC	N		31
126	3/20/2014	JM/KS	Acacia sp.	10	2	1.5	3.5	9	7	3	3	SAC	SAC	SAC	SAC	N		32
127	3/20/2014	JM/KS	Acacia sp.	10	2	1.5	3.5	9	10	3	3	SAC	SAC	SAC	SAC	N		33
128	3/21/2014	TB/NM	Washingtonia robusta	1	4	X	0	8	5	3	3	0	0	0	0	N		131
129	3/21/2014	TB/NM	Callistemon sp.	1	2	X	0	8	5	2	3	SAC	SAC	SAC	SAC	N		130
130	3/21/2014	TB/NM	Callistemon sp.	3	2	2	4	9	7	3	3	SAC	SAC	SAC	SAC	N		132
131	3/21/2014	TB/NM	Acacia sp.	1	2	X	0	10	8	3	3	SAC	SAC	SAC	SAC	Y		129
132	3/21/2014	TB/NM	Acacia sp.	2	2	2	4	10	8	3	3	SAC	SAC	SAC	SAC	Y		128
133	3/21/2014	TB/NM	Washingtonia robusta	1	5	X	5	10	6	2	2	0	0	0	0	Y	Area Photo	127