



Balancing the Natural and Built Environment

October 5, 2015

Belinda Kwan, PE Water Resource Division County of Los Angeles Department of Public Works 900 South Fremont Avenue Alhambra, California 91803-1331 VIA EMAIL BKwan@dpw.lacounty.gov

Subject: Quarterly Status Report for the Oak Woodland Habitat Revegetation/Mitigation Program for the Santa Anita Dam Riser Modification and Reservoir Sediment Removal Project, Los Angeles County, California

Dear Ms. Kwan:

This status report addresses site conditions for the Los Angeles County Department of Public Works' (LACDPW's) 2014 *Oak Woodland Habitat Revegetation/Mitigation Program for the Santa Anita Dam Riser Modification and Reservoir Sediment Removal Project* (OWHMRP). The OWHRMP describes the creation of 5.5 acres of oak woodland habitat and 2.5 acres of sage scrub habitat as compensation for impacts associated with the Santa Anita Dam Riser Modification and Sediment Removal Project. The creation of oak woodland and sage scrub habitat is required by Mitigation Measures BIO-D and BIO-E in the LACDPW's 2009 *Santa Anita Dam Riser Modification and Reservoir Sediment Removal Project Final Environmental Impact Report* and by the Streambed Alteration Agreement (Agreement, No. 1600-2008-0173-R5), which was granted by the California Department of Fish and Wildlife (CDFW) in 2009. The mitigation program includes a seven- to ten-year maintenance and monitoring period that began after the completion of mitigation installation which occurred in December 2014.

The locations of the Upper, Middle, and Lower Sediment Placement Sites (SPS) are shown in Exhibits 1, 2, and 3. As detailed in the OWHRMP, final grading of the Lower SPS included the placement of approximately 30 feet of sediment (over the pre-existing condition) and the subsequent creation of dual, spiraling drainage channels to a relocated standpipe. The drainage design is intended to optimize retention and percolation of on-site precipitation and off-site inflows (from the eastern slopes). Final grading was completed by Quest Construction (for LACDPW) in October 2012.

The LACDPW retained BonTerra Psomas to prepare the OWHRMP document in 2009 (including the performance of reference site surveys); to participate in community outreach efforts related to the OWHRMP; to provide biological monitoring and documentation services; and to implement the mitigation program. The reference site surveys were performed in existing oak woodland and sage scrub habitat areas on the Santa Anita Dam site for purpose of developing mitigation performance criteria. BonTerra Psomas retained the following sub-contractors/vendors: (1) S&S Seeds, Inc. (S&S) to collect site-specific native seeds (including oak acorns) and cuttings (cactus) in the Santa Anita Dam/Rio Hondo Sub-Watershed (started in 2011); (2) El Nativo Growers (ENG) and Rancho Santa Ana Botanic Garden (RSABG) to collect (ferns and rare oak propagules) and to propagate native container plants (started in 2012); (3) Cornerstone Studios, Inc. (Landscape Architect) to prepare irrigation

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plans and photo simulations for the mitigation site (2013); and (4) Nakae & Associates, Inc. (Nakae) to perform mitigation site preparation, installation, and long-term maintenance tasks. Site photographs are provided in Attachment A.

SEED AND CUTTINGS COLLECTION

BonTerra Psomas (Biological Monitor) and S&S started local seed collection tasks in June 2011. Seed collection in 2011 was limited to the LACDPW's Santa Anita Dam property; however, the LACDPW secured access in 2012 to off-site open space areas in the Cities of Arcadia and Monrovia for more extensive seed collection. BonTerra Psomas/S&S collected cuttings (pads) of Vasey's prickly pear cactus (Opuntia x vaseyi) from the Middle SPS on the Santa Anita Dam site in June 2013. The cactus pads were selected from a minimum of ten separate cactus patches and were delivered to ENG for propagation on the same day they were collected. BonTerra Psomas Biologists have also collected small quantities of native seeds and rooted cuttings on the Santa Anita Dam property during native seed scouting activities. Most of the collected seed was applied to the mitigation site via hydroseeding or hand broadcasting. A small portion of the collected seed material was used for container plant propagation. BonTerra Psomas/RSABG collected local seed (rare oaks) and cuttings (fern species) in October and November 2013. RSABG propagated the ferns and rare oaks for installation in fall 2014, and it continues to propagate ferns and other native plant species for installation in fall 2015 and beyond. Fern 'stock plants' (a minimum of ten individual plants each, of four different species) have been established in the RSABG nursery; these plants will be used for ongoing future rhizome cutting collection for vegetative propagation of four-inch container plants. More than 90 native plant species (seed and/or cuttings) have been collected in the Sub-watershed for the OWHRMP. The seed species and quantities installed to date on the mitigation site are listed in Attachment B of this document. Seed and cutting collection for the mitigation program will continue in 2015 and throughout the long-term maintenance period.

MITIGATION SITE PREPARATION

BonTerra Psomas and Nakae (a licensed landscape contractor that specializes in habitat restoration) started mitigation site preparation tasks in September 2013. The mitigation site (Exhibit 3) includes oak woodland habitat establishment on the deck portion of the Lower SPS, and sage scrub establishment in slope areas on the Lower SPS. Site preparation included the following tasks:

- 1. Preliminary flagging of existing native plants (especially 'volunteer' oak seedlings) to be protected on the mitigation site and in adjacent weed-abatement buffer areas.
- 2. The installation of erosion-control measures, including fully biodegradable fiber rolls on the slopes of the Lower SPS (i.e., the sage scrub site) and fiber rolls and sandbags (temporary check dams) in the dual drainages of the plateau area (oak woodland site).
- 3. The initial treatment (via Aquamaster[™] herbicide) and/or removal of non-native plants from the mitigation site and adjacent buffer weed-abatement areas (including the slope that was manufactured by a development located adjacent to the Lower SPS).
- 4. The distribution and incorporation into the top two feet of topsoil (via heavy machinery) of a large volume of mulched native vegetation resulting from January 2011 construction activities at the Middle SPS.
- 5. The placement (in excavated pits) of a total of 14 artificial snags on the oak woodland site, consisting of large oak and sycamore trunks that were salvaged with a portion of the root tissue attached (for stability upon installation) during January 2011 construction activities.
- 6. The placement of several tons of conserved coarse woody debris (predominantly oak, but also sycamore) on the oak woodland site, which was salvaged in January 2011.

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- 7. The placement of many tons of boulders, rocks, and cobble on the oak woodland site, which were salvaged during sediment removal operations at Santa Anita Dam.
- 8. The installation of a temporary irrigation system, including overhead spray components (sitewide) and individual bubblers for each oak planting location.
- 9. The installation of temporary water tanks for wildlife ('drinkers') adjacent to the Middle SPS.
- 10. The construction of a temporary eight-foot-high perimeter fence (wood posts and smooth wire) to exclude large mammals (only) to reduce herbivory during the initial oak establishment phase.
- 11. The installation of interpretive signage on the site, explaining the goals of the OWHRMP. The mitigation site preparation tasks listed above were completed in January 2014, with the exception of the signage which was installed in June 2014.

Protective wire cages were installed around approximately 50 'volunteer' (naturally occurring) coast live oak seedlings (*Quercus agrifolia* var. *agrifolia*) in the weed-abatement buffer area to reduce herbivory impacts.

Irrigation system installation included the construction of a new water meter by the City of Arcadia Public Works Services Department (PWSD) near the intersection of Highland Oaks Drive and East Woodland Avenue. Nakae installed a new gate valve in the same box as the PWSD meter, and a new backflow preventer device (caged) was installed in the same general location. Water is delivered to the Lower SPS via a four-inch mainline that extends north from the point of connection along the alignment of the Santa Anita Wash box channel.

MITIGATION SITE INSTALLATION – PHASE I (PLANT AND SEED MATERIALS)

BonTerra Psomas/Nakae performed mitigation site installation tasks (native plant and seed materials) in January/February 2014. The Phase I installation included the following tasks: (1) planting coast live oak acorns (ten per planting hole), installing protective caging and shade cloth at each oak location, and placing conserved oak leaf mulch at each oak planting site; (2) installing native container plants (4,963 total plants, including 358 coast live oak planting locations); and (3) installing native seed mixes (hydroseeding and hand-broadcasting) totaling approximately 135 pounds and including 78 different seeded plant species.

The Biological Monitor marked the container planting locations using color-coded wire flags for each plant species, and also flagged the various seed mix application areas in the field. The planting/seeding area layouts roughly follow the conceptual planting plans provided in the OWHRMP; in addition, designated polygons were flagged and planted with cactus and herbaceous species (which will be maintained on a long-term basis free of other shrub species) to improve vegetative diversity. Initial container plant installation was completed in January 2014, and Phase I seed mix installation was completed in early February 2014 (a small number of additional Phase I container plants were installed on the site in March/April 2014, as these species became available from the nursery).

MITIGATION SITE INSTALLATION – PHASE II (PLANT AND SEED MATERIALS)

Nakae installed a total of 1,973 additional container plants and approximately 25 pounds of additional native seed of numerous plant species (all locally obtained) on the 8.0-acre mitigation site in December 2014, in coordination with the Biological Monitor. The Phase II container plants included ferns and rare oaks propagated by RSABG, including Engelmann oak (*Quercus engelmannii*), San Gabriel oak (*Quercus durata* var. *gabrielensis*), and four species of native ferns (e.g., coffee cliff-brake [*Pellaea andromedifolia*]). Most of the Phase II container materials for fall planting were propagated by El Nativo Growers and included a variety of native shrubs, herbs, vines, and

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succulent species, most of which did not previously occur on the mitigation site (e.g., chaparral virgin's bower [*Clematis lasiantha*], giant wild rye [*Elymus condensatus*], and California coffeeberry [*Frangula californica* ssp. *californica*]). Additional native seed species (three total) installed in fall 2014 included stinging lupine (*Lupinus hirsutissimus*), wild heliotrope phacelia (*Phacelia distans*), and wild Canterbury bells (*Phacelia minor*), which all bloomed/seeded over much of the oak woodland mitigation site in spring 2015. A total of 81 native seed species and 40 native container plant/cutting species were installed on the site in 2014. A summary of all native container plants and seed mix species and quantities installed to-date is provided in Attachment B.

MITIGATION MAINTENANCE

The mitigation site and adjacent buffer weed-abatement areas are essentially weed free at this stage, as non-native plant species are promptly treated and removed when observed during regular maintenance activities. Weeds are removed prior to seed production/dispersal to avoid re-infestation of the site. Herbicide use is minimized in favor of hand pulling of weeds whenever possible.

There is no significant erosion on the site, and there has been no problematic trespassing or trash deposition in the vicinity. Nakae is maintaining the concrete down-drains and V-ditches to ensure they are clear of sediment and debris in order to facilitate the County's ongoing inspection of the Lower SPS' integrity. Supplemental irrigation (bubblers only) is currently being applied to the oak woodland (SPS deck) mitigation site approximately every two to three weeks, depending on weather conditions. Overhead irrigation has not been applied to the sage scrub planting areas (SPS slopes) since June 9, 2015, or to the oak woodland site since July 9, 2015. The frequency of irrigation will continue to be decreased, and all watering may be halted with the onset of the 2015–2016 rainy season.

The Biological Monitor periodically coordinates with a representative of the San Gabriel Valley Vector Control District (SGVVCD) to discuss ongoing, potential mosquito vector issues associated with the drainage channels on the site. The SGVVCD typically performs vector control via the application of *Bacillus thuringiensis* (BTi), a bacterial/biological control material. SGVVCD applied a volatile mineral oil to control more mature mosquito larvae following a few past inspections (to maintain compliance with public health and safety codes); however, since project initiation, the LACDPW/BonTerra Psomas have requested that SGVVCD use only BTi on the site (rather than other materials, to the extent practicable) to minimize adverse impacts on mitigation habitat (e.g., arthropod species diversity and abundance).

Nakae performed additional exotic plant species removal on the slopes to the east of the mitigation site in October 2014. The LACDPW obtained rights-of-entry from several private landowners to allow access for removal of numerous invasive Mexican fan palms (*Washingtonia robusta*) and other non-native, perennial plant species. The east slope exotic vegetation removal was coordinated with the Biological Monitor to ensure that biological resources were not adversely impacted during these activities. The removal of these invasive plants from areas adjacent to the mitigation site will improve long-term mitigation site performance by eliminating a significant source of weed seeds that would otherwise infest the site on an ongoing basis.

SUPPLEMENTAL PLANTING AND SEEDING - 2015/2016

The Biological Monitor monitored/coordinated the collection and propagation of supplemental seed and plant materials with RSABG and S&S in 2015, including field collections from open space areas in the cities of Monrovia and Sierra Madre (LACDPW secured access to Sierra Madre open space areas for seed/plant collection in 2014). It is anticipated that supplemental planting and seeding will occur in November/December 2015, and a summary of these materials is provided in Tables 1 and 2. Supplemental seeding of oak acorns (*Quercus* spp.) will occur in portions of the oak woodland site in fall

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2015 to provide added contingency plants (as needed) toward compliance with mitigation performance criteria.

Plant Species ^a	Container Size	Quantity (Approx.)
Aspidotis californica ^b	4" pot	7
Dudleya lanceolata ^b	4" pot	33
Epilobium canum ssp. canum	3" x 6" tree-band	39
Eriodictyon crassifolium	1-gal	7
Pellaea andromedifolia	4" pot	125
Pellaea mucronata var. mucronata	4" pot	61
Polypodium californicum	4" pot	90
Rhamnus crocea ^b	4" pot	12
Ribes californicum ^b	3" x 6" tree-band	29
Stachys bullata	4" pot	112
Stipa lepida ^b	2" liner	300
	Total	815
 ^a All container plant species were propagated from cuttings collected ^b Plant species that does not yet occur on the OWHRMP site, as of Section 2012 		Sub-watershed.

TABLE 1 SUPPLEMENTAL CONTAINER PLANTS (FALL 2015)

TABLE 2 SUPPLEMENTAL SEED SPECIES (FALL 2015)

Plant Species ^a	Pounds (Approx.)			
Artemisia douglasiana	1.00			
Clematis lasiantha	1.00			
Eulobus californicus	0.82			
Hesperoyucca whipplei	1.00			
Lupinus hirsutissimus	3.41			
Malacothrix saxatilis	2.22			
Mimulus aurantiacus var. pubescens	0.50			
Penstemon spectablis var. spectabilis	3.00			
Phacelia minor	3.00			
Quercus spp. (acorns; pounds/species to be determined)	_			
Stipa lepida ^b	0.06			
Total	16.01			
 ^a All seed species were collected in the Santa Anita Wash/Rio Hondo Sub-Watershed. ^b Plant species that does not yet occur on the OWHRMP site, as of September 2015. 				

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MITIGATION PERFORMANCE

As of September 2015, the mitigation site already supports an excellent diversity of plant and animal species and is developing vegetation structure/cover. A total of 121 native plant species have been observed on the site, including trees, shrubs, sub-shrubs, vines, succulents, herbs, grasses, ferns, spikemoss, and emergent plant species. Oak tree seedling survival currently exceeds 100 percent (compared to the quantities specified in the OWHRMP) due to supplemental Phase II planting of oaks and additional germination of volunteer oaks on the site. Many of the oak saplings now exceed six to eight feet in height. As the growing branch tips of these larger oaks rise above deer browsing height, Nakae is removing the upper four feet of caging to enable the trees to assume a natural, spreading form. The lower two feet of caging is being left in place as a longer-term rodent deterrent.

Beneficial decay processes, including the growth of fungi (several species), have been observed in the coarse woody debris assemblages. These decay processes naturally occur in woodland habitats as a part of biological resource nutrient cycles. It is important to note that, without the installation of the salvaged woody material, such processes would not otherwise occur on the mitigation site for many years.

Wildlife species—including southern mule deer (Odocoileus hemionus) and black bear (Ursus americanus)—have been observed using the two drinker tanks that were installed just northeast of the Lower SPS to provide a water source for wildlife. Three different species of birds were observed nesting on the mitigation site in 2014 (killdeer [Charadrius vociferus], common yellowthroat [Geothlypis trichas], and acorn woodpecker [Melanerpes formicivorus]) and three bird species (acorn woodpecker [2015 nesting confirmed], western bluebird [Sialia mexicana], and rock wren [Salpinctes obsoletus]) exhibited nesting behaviors on the site in March 2015. The acorn woodpeckers nested on the site far earlier than expected to occur during the seven-year to ten-year maintenance and monitoring period. The Biological Monitor will continue to note wildlife species observed on the site and ensure that maintenance activities do not adversely sensitive biological resources. California ground squirrels (Otospermophilus beecheyi), rock wrens, native reptiles (including striped racer [Coluber lateralis], a snake species), and other wildlife species are increasingly colonizing the created boulder and woody debris piles. A total of 88 native vertebrate wildlife species (79 native bird species) have been observed on the site, in addition to numerous native invertebrate species (e.g., butterflies, beetles, bees, dragonflies) since project initiation in September 2013. The compendia of all native plant and wildlife species observed on the site are provided in Attachments C and D, respectively.

Phase II installation was completed in December 2014, and the seven-year to ten-year mitigation maintenance clock began on January 1, 2015. The Biological Monitor will continue to perform regular qualitative inspections of the mitigation site through spring 2016, at which time the first quantitative survey of the mitigation site will be conducted. The quantitative survey will include the performance of vegetation quadrats and transects; the evaluation of all oak trees on the site by a Certified Arborist; site photographs from established photo stations; and other performance analyses. The first annual monitoring report will be prepared subsequent to the spring 2016 first annual quantitative survey.

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Please call Richard Lewis at (626) 351-2000 with any questions regarding this report.

Sincerely, **BonTerra Psomas**

Melissa A. Howe

Vice President, Resource Management

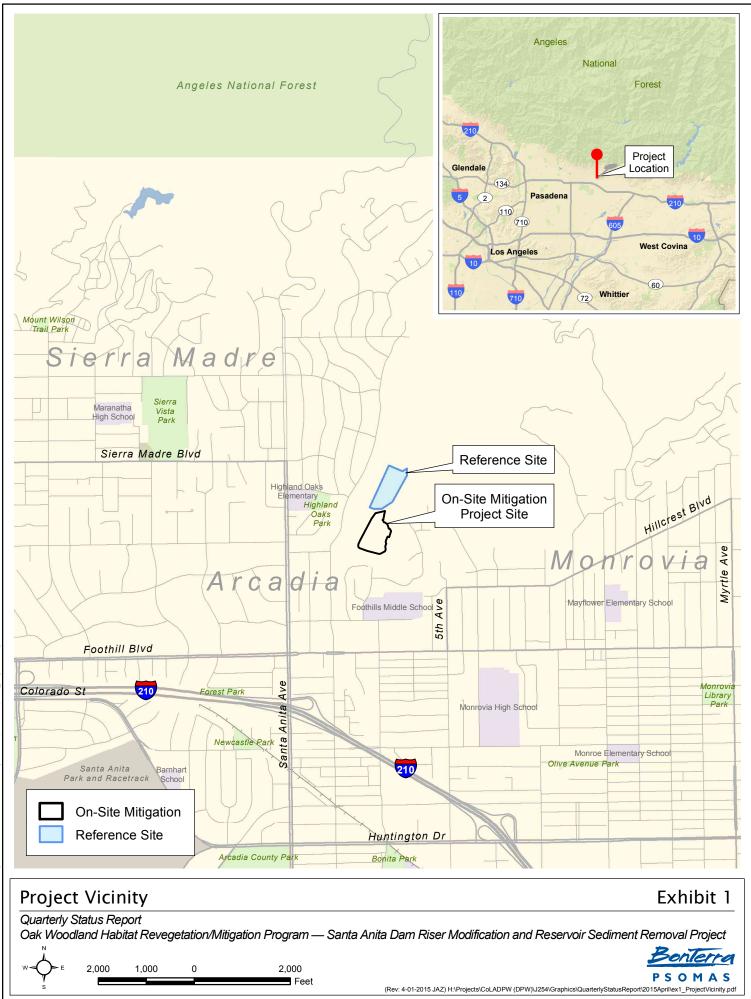
Richard B. Lewis, III

Senior Project Manager

Enclosures:	Exhibit 1 – Project Vicinity
	Exhibit 2 – Sediment Placement Site Locations
	Exhibit 3 – Mitigation Site Location (Lower Sediment Placement Site)
	Attachment A – Site Photographs
	Attachment B – Installed Native Plant and Seed Materials
	Attachment C – Plant Compendium (September 2013 through September 2015)
	Attachment D – Wildlife Compendium (September 2013 through September 2015)

cc: Pat Wood, (PWood@dpw.lacounty.gov) Joan Kelly, BonTerra Psomas

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Exhibit 2

Quarterly Status Report

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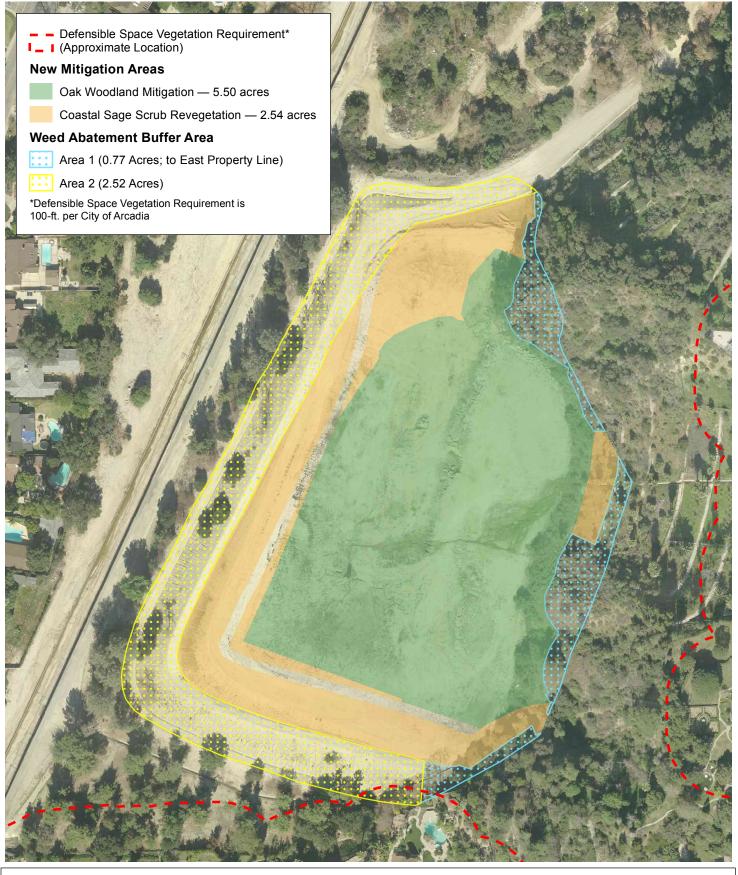
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Oak Woodland Habitat Revegetation/Mitigation Program — Santa Anita Dam Riser Modification and Reservoir Sediment Removal Project





Mitigation Site Location (Lower Sediment Placement Site)

Exhibit 3

Quarterly Status Report

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ATTACHMENT A

SITE PHOTOGRAPHS



September 2015. The habitat creation site supports diverse vegetative cover and naturalistic assemblages of placed boulders and coarse woody debris.



September 2015. Portions of the oak woodland and sage scrub planting areas include only succulent or herbaceous species such as cactus, yucca, and wildflowers, to provide contrasting habitat composition/structure.



August 2015. A small number of volunteer riparian trees (western sycamore and willows) have been preserved in the drainages on the site, to provide habitat diversity.



September 2015. Oaks planted outside the exclosure fence have temporary individual wire mesh cages, with shade cloth to provide protection from hot afternoon sun.



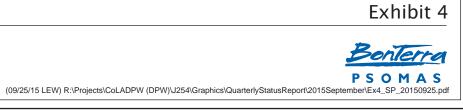
September 2015. Robust growth of a planted coast live oak tree amid placed coarse woody debris and a diverse understory of native shrubs and herbaceous plants. Two large, placed natural snags are in the background.

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September 2015. The Restoration Contractor is carefully removing the caging from coast live oak saplings that have grown above deer-browsing height.





September 2015. Placed piles of salvaged native brush provide valuable cover for wildlife and improve moisture retention/percolation.



June 2015. Golden woolly sunflower, a native perennial herb, is growing among placed boulders. Each native plant species on the site offers unique value (e.g., fruits/seeds/nectar/cover) for wildlife species (e.g., including birds, insects).





May 2015. A coast live oak seedling in the voluntary weed abatement buffer area.



September 2015. There is increasing coverage of volunteer native plants in the buffer areas, resulting from the assertive removal of weeds. It is anticipated that, with ongoing maintenance, good ancillary habitat conditions will develop in the buffer areas.

plant) in fall 2015.

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July 2015. Flowers of cardinal catchfly, which is a native perennial herb that was established on the site via seeding. Several of the native plant species on the site were introduced via trace amounts of seed collected in nearby natural areas.



September 2015. Some east- and north-facing portions of the placed boulder assemblages have been kept free of vegetation, awaiting the installation of plant species that prefer shady locations (e.g., lance-leaved dudleya, a native succulent





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August 2015. A duskywing butterfly on Douglas' threadleaf ragwort (a late seasonal bloomer), a flowering shrub established from seeding on the site.



August 2015. A blue mud wasp on the site. An increasing abundance and diversity of insects (pollinators, predators, larvae, etc.) are colonizing the habitat area.



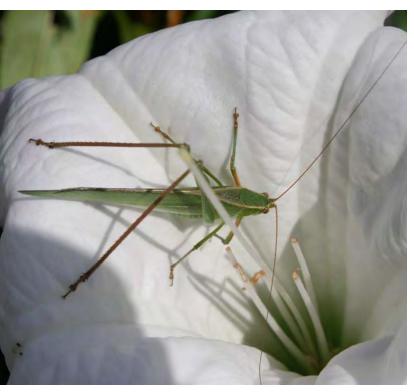


June 2015. A California ground squirrel hiding in a placed boulder assemblage. A variety of birds, reptiles, and small mammals use these habitat features on the site.

May 2015. A female phainopepla perched in woody debris that was placed upright in one of the boulder assemblages for wildlife value.

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May 2015. A bush katydid on a large jimsonweed flower.



July 2015. A Cooper's hawk perched on the temporary, 8-foot-high, deer exclosure fence. The wildlife-friendly fence is constructed of wood posts and smooth (nonbarbed) wire to avoid injuries to wildlife.



Exhibit 6

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September 2013. A west-facing slope in the sage scrub planting area, prior to native plant and seed mix installation.



October 2012. The eastern slope sage scrub planting area, prior to the removal of invasive fan palms and other non-native vegetation.

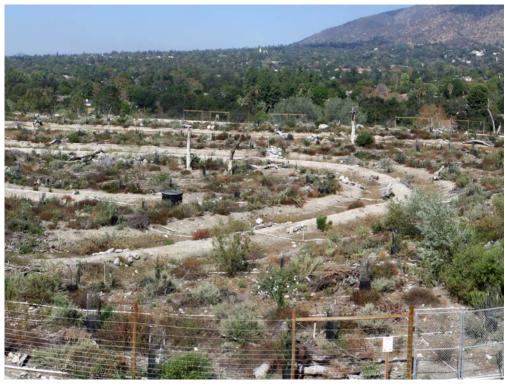
May 2013. The deck of the Lower Sediment Placement Site (the oak woodland mitigation site) prior to project implementation.



September 2015. Irrigation of the sage scrub planting areas (slopes) was discontinued on June 9, 2015. The diverse planted/seeded vegetation exhibits the normal seasonal browning/desiccation of a natural sage scrub habitat.



September 2015. The eastern slope sage scrub planting area with excellent coverage of planted and seeded native vegetation.



September 2015. The oak woodland mitigation site, nine months following the completion of mitigation installation.

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Exhibit 7

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ATTACHMENT B

INSTALLED NATIVE PLANT AND SEED MATERIALS

ATTACHMENT B-1

CONTAINER PLANT SPECIES INSTALLED (JANUARY 2014–DECEMBER 2014)

CONTAINER PLANTS AND CUTTINGS INSTALLED (JANUARY 2014 – DECEMBER 2014)

Container Plants and Cuttings Species ^a		Container Plan	ts and Cuttings	Quantities
Scientific Name	c Name Common Name		Phase II (Dec 2014)	Total
Acmispon glaber var. glaber	deerweed	400	0	400
Acourtia microcephala (cuttings)	sacapellote	0	10	10
Artemisia californica	California sagebrush	1,050	0	1,050
Artemisia douglasiana (cuttings)	mugwort	10	0	10
Artemisia douglasiana	mugwort	0	100	100
Asclepias californica (cuttings)	California milkweed	0	10	10
Asclepias fascicularis ^b	narrow-leaf milkweed	0	0	0
Ceanothus leucodermis	whitebark ceanothus	0	75	75
Cercocarpus betuloides var. betuloides	birchleaf mountain mahogany	0	50	50
Clematis lasiantha	chaparral virgin's bower	0	200	200
Dryopteris arguta	coastal woodfern	0	5	5
Elymus condensatus	giant wildrye	0	80	80
Eriogonum fasciculatum var. foliolosum	California buckwheat	750	0	750
Frangula californica ssp. californica	California coffeeberry	0	100	100
Hesperoyucca whipplei	chaparral yucca	150	100	250
Heteromeles arbutifolia	toyon	55	0	55
Juncus textilis (cuttings)	basket rush	10	0	10
Keckiella cordifolia	heartleaf bush penstemon	0	271	271
Lonicera subspicata var. denudata	Johnston's honeysuckle	0	20	20
Malosma laurina	laurel sumac	40	0	40
Melica imperfecta	coast range onion grass	150	125	275
Mimulus aurantiacus var. pubescens	bush monkeyflower	425	0	425
Opuntia x vaseyi	Vasey's prickly pear	200	100	300
Pellaea andromedifolia (cuttings)	coffee cliff-brake	5	0	5
Pellaea andromedifolia	coffee cliff-brake	0	20	20
Pellaea mucronata var. mucronata	bird's-foot cliff-brake	0	5	5
Penstemon spectabilis var. spectabilis	showy beardtongue	75	5	80
Polypodium californicum	California polypody	0	20	20
Prunus ilicifolia ssp. ilicifolia	holly leaf cherry	0	50	50
Pseudognaphalium californicum	California everlasting	460	0	460
Quercus agrifolia var. agrifolia ^c	coast live oak	358	0	358
Quercus agrifolia var. agrifolia ^d	coast live oak	0	24	24
Quercus engelmannii	Engelmann oak	0	57	57
Quercus durata var. gabrielensis	San Gabriel oak	0	25	25
Rhamnus ilicifolia	hollyleaf redberry	0	31	31
Rhus aromatica (cuttings)	skunk bush	10	0	10
Rhus ovata	sugar bush	55	0	55
Ribes aureum var. gracillumum	little graceful golden currant	100	275	375
Rubus ursinus (cuttings)	California blackberry	10	0	10
Salvia apiana	white sage	250	150	400

CONTAINER PLANTS AND CUTTINGS INSTALLED (JANUARY 2014 - DECEMBER 2014)

Container Plants and Cuttings Species ^a		Container Plants and Cuttings Quantities				
Scientific NamePhase IScientific Name(Jan/Feb 2014)						Total
Salvia mellifera	black sage	400	0	400		
Sambucus nigra ssp. caerulea	blue elderberry	0	55	55		
Selaginella bigelovii	bushy spike-moss	0	10	10		
Stipa lepida ^e	foothill needle grass	0	0	0		
Total (40 Na	ative Container Plant/Cuttings Species)	4,963	1,973	6,936		
^b Seed for this species has yet to be o	gs species will be propagated and installed in 20 obtained in the Santa Anita Wash – Rio Hondo S hed via direct sown acorns/seedlings.		pagation.			

Supplemental planting of oaks in "T4" (deep 1-gallon) size. Seed for this species was obtained in May 2015 for container plant propagation (fall 2015 installation).

ATTACHMENT B-2

NATIVE SEED SPECIES COLLECTED/INSTALLED (JANUARY 2014–DECEMBER 2014)

NATIVE SEED SPECIES COLLECTED/INSTALLED (JANUARY 2014–DECEMBER 2014)

				Seed Qu	antities		
Scientific Name		_	Sage Scrub See	d Mixes/Aspect	Hand Se	eding	Total
Scientific Name			South/West	North			Pounds Installed
	Common Name	Pounds Collected	(2.0 acres)	(0.54 acres)	Oak Woodland	Sage Scrub	
	Total) Collected by S&S Seeds in the Santa Anita Was	h – Rio Hondo Sub-waters	hed and Used for Initial H	ydroseeding and Hand Se	eding in January 2014 and		ſ
Acmispon glaber var. glaber	deerweed	43.82	12.00	2.00	8.00	2.40	24.40
Artemisia californica	California sagebrush	81.78	8.00	2.00		_	10.00
Camissoniopsis hirtella	hairy sun cups	0.20	_	0.10	0.05	0.05	0.20
Eriogonum fasciculatum var. foliolosum	California buckwheat	81.95	20.00	5.00	_	_	25.00
Hesperoyucca whipplei	chaparral yucca	42.34	1.00	—	—	2.00	3.00
Mimulus aurantiacus var. pubescens	bush monkey flower	19.88	0.50	2.00	2.00	1.00	5.50
Phacelia cicutaria	caterpillar phacelia	0.56	0.26	0.10	0.10	0.10	0.56
Pseudognaphalium californicum	ladies' tobacco	5.54	1.00	1.00	2.00	1.34	5.34
Quercus agrifolia var. agrifolia	coast live oak	16.92	_	_	1.92	_	1.92
Salvia mellifera	black sage	13.14	1.00	1.00	1.00	_	3.00
Sambucus nigra ssp. caerulea	blue elderberry	6.07	_	_	1.00	0.50	1.50
Other Seed Species (22 Total) Collected To-Dat	te by S&S Seeds in the Santa Anita Wash – Rio Hondo	Sub-watershed (applied in	n 2014)				
Acer macrophyllum	big leaf maple	1.86	_	_	1.86		1.86
Artemisia douglasiana	mugwort	8.64	_	_	3.00	_	3.00
Ceanothus leucodermis	chaparral whitethorn	0.52	0.20	0.10	_	_	0.30
Cercocarpus betuloides var. betuloides	birch-leaf mountain-mahogany	4.92	1.00	0.50	_	_	1.50
Chaenactis glabruiscula var. glabruiscula	yellow pincushion	0.92	0.25	0.10	0.10	0.47	0.92
Clarkia purpurea ssp. quadrivulnera	purple clarkia	0.20	0.05	0.05	0.05	0.05	0.20
Clematis lasiantha	chaparral clematis	4.30	0.80	0.20	1.00	_	2.00
Datura wrightii	jimson weed	0.56	0.20	0.16	0.10	0.10	0.56
Heteromeles arbutifolia	toyon	5.78	_	_	1.00	_	1.00
Lepidospartum squamatum	scale broom	14.56	_	_	1.00	_	1.00
Lupinus hirsutissimus (2014 collection)	stinging lupine	8.49	_	_	8.49	_	8.49
Oenothera elata ssp. hirsutissima	great marsh evening primrose	0.04	_	_	0.04	_	0.04
Phacelia distans (2014 collection)	common phacelia	0.96	_	_	0.96	_	0.96
Phacelia minor (2014 collection)	wild Canterbury-bell	6.15	_	_	6.15	_	6.15
Phacelia ramosissima	branching phacelia	2.40	_	_	2.40	_	2.40
Prunus ilicifolia ssp. ilicifolia	hollyleaf cherry	9.20	_	_	4.00	_	4.00
Pseudognaphalium stramineum	cottonbatting plant	3.20	1.00	0.20	1.00	1.00	3.20
Rhamnus ilicifolia	hollyleaf redberry	2.64	_	_	1.89	0.50	
Rhus ovata	sugar bush	7.35	_	_	1.00		1.00
Solanum douglasii	white nightshade	0.02	_	_	0.02	_	0.02
Stachys bullata	California hedgenettle	0.01	_	_	0.01	_	0.01
Umbellularia californica	California laurel bay	4.44	_	_	3.00	_	3.00
	Total (33 Native Seed Species)	399.36	47.26	14.51	53.14	9.51	124.42

NATIVE SEED SPECIES COLLECTED/INSTALLED (JANUARY 2014–DECEMBER 2014)

Seed Quantitie					uantities
Scientific Name			Sage Scrub Se	ed Mixes/Aspect	
			South/West	North	
	Common Name	Pounds Collected	(2.0 acres)	(0.54 acres)	Oak Woodla
Seed Species (64 Total) Collected To-Date by BonTer Acer macrophyllum (big leaf maple), Acourtia microcepha			-		
californica (California brickellbush), Brickellia nevinii (New californicum (California thistle), Clematis Iasiantha (chapa rye), Epilobium canum ssp. canum (California fuchsia), E woolly sunflower), Frangula californica ssp. californica (C Heteromeles arbutifolia (toyon), Heterotheca grandiflora (Lepidospartum squamatum (scale broom), Linanthus cali macrocarpus (wild cucumber), Melica imperfecta (Californ penstemon), Phacelia cicutaria (caterpillar phacelia), Pha agrifolia var. agrifolia (coast live oak), Quercus chrysolep flaccidus var. douglasii (Douglas' threadleaf ragwort), Sile bay).	arral clematis), Corethrogyne filaginifolia (common Ericameria parishii (Parish's goldenbush), Eriodictyo alifornia coffeeberry), Galium angustifolium ssp. an (telegraph weed), Holodiscus discolor (oceanspray ifornicus (prickly phlox), Lonicera subspicata var. c nia melic), Mimulus aurantiacus var. pubescens (h acelia ramosissima (branching phacelia), Pseudogu is (canyon live oak), Rhus ovata (sugar bush), Rib ene laciniata (cardinal catchfly), Stephanomeria cio	sandaster), Datura wrightii on crassifolium (thick-leaf ye ngustifolium (narrow leaved r), Juncus rugulosus (wrinkle lenudata (southern honeysu airy bush monkeyflower), M naphalium bioletti (bi-color e es aureum var. gracillimum choriacea (silver rock-lettuce	(Jimson weed), Delphinium erba santa), Eriogonum elo bedstraw), Hazardia squal ed rush), Juncus textilis (ba ickle), Lupinus concinnus (l lirabilis laevis var. crassifoli everlasting), Pseudognapha (golden currant), Salvia ap e), Stipa coronata (giant ne	n cardinale (scarlet larkspur), ngatum var. elongatum (long rrosa var. grindelioides (saw- isket rush), Keckiella cordifo bajada lupine), Lupinus long a (wishbone bush), Paeonia alium californicum (California iana (white sage), Solidago edlegrass), Symphoricarpos	Dudleya lanceolata gstem buckwheat), I toothed goldenbush lia (heart-leaved kea ifolius (pauma lupin californica (Californi everlasting), Pseud velutina (California cf. mollis (creeping
Cuttings Species (4 Total) and Rare Oak Acorns (2 Sp Dryopteris arguta	California wood fern	1	ainer plant propagation (on		atersned (for Cont
	coffee fern				
Pellaea andromedifolia					
Pellaea mucronata var. mucronata	Bird's-foot cliff-brake		ainer plant propagation (on		
Polypodium californicum	California polypody	Rhizome cuttings for cont	ainer plant propagation (on	ly).	
Quercus durata var. gabrielensis	San Gabriel oak	Container plant propagation	on (only).		

				Seed Q	uantities		
Scientific Name			Sage Scrub See	d Mixes/Aspect	Hand S	eeding	Total
			South/West	North			Pounds Installed
	Common Name	Pounds Collected	(2.0 acres)	(0.54 acres)	Oak Woodland	Sage Scrub	
Seed Species (64 Total) Collected To-Date by BonTer	ra Psomas in the Santa Anita Wash – Rio Hond	lo Sub-watershed (Small q	quantities, <1.0 lb. collecte	d, per species)			
Acer macrophyllum (big leaf maple), Acourtia microcepha californica (California brickellbush), Brickellia nevinii (Nev californicum (California thistle), Clematis lasiantha (chapa rye), Epilobium canum ssp. canum (California fuchsia), E woolly sunflower), Frangula californica ssp. californica (C Heteromeles arbutifolia (toyon), Heterotheca grandiflora (Lepidospartum squamatum (scale broom), Linanthus cali macrocarpus (wild cucumber), Melica imperfecta (Californ penstemon), Phacelia cicutaria (caterpillar phacelia), Pha agrifolia var. agrifolia (coast live oak), Quercus chrysolep, flaccidus var. douglasii (Douglas' threadleaf ragwort), Sile bay).	in's brickellia), <i>Ceanothus leucodermis</i> (whitebark arral clematis), <i>Corethrogyne filaginifolia</i> (common <i>ricameria parishii</i> (Parish's goldenbush), <i>Eriodictyc</i> alifornia coffeeberry), <i>Galium angustifolium</i> ssp. ar (telegraph weed), <i>Holodiscus discolor</i> (oceanspray fornicus (prickly phlox), <i>Lonicera subspicata</i> var. d nia melic), <i>Mimulus aurantiacus</i> var. <i>pubescens</i> (ha necelia ramosissima (branching phacelia), <i>Pseudogr</i> <i>is</i> (canyon live oak), <i>Rhus ovata</i> (sugar bush), <i>Rib</i>	ceanothus), Ceanothus olig sandaster), Datura wrightii on crassifolium (thick-leaf ye ngustifolium (narrow leaved r), Juncus rugulosus (wrinkle denudata (southern honeysu airy bush monkeyflower), M naphalium bioletti (bi-color e es aureum var. gracillimum	ganthus (hairy ceanothus), ((Jimson weed), Delphinium erba santa), Eriogonum elon bedstraw), Hazardia squarr ed rush), Juncus textilis (bas uckle), Lupinus concinnus (b lirabilis laevis var. crassifolia everlasting), Pseudognaphal (golden currant), Salvia apia	Cercocarpus betuloides var. cardinale (scarlet larkspur) gatum var. elongatum (long osa var. grindelioides (saw ket rush), Keckiella cordifo ajada lupine), Lupinus long (wishbone bush), Paeonia ium californicum (California ana (white sage), Solidago	betuloides (birch-leaf mount , Dudleya lanceolata (lance-l gstem buckwheat), Eriophyllu toothed goldenbush), Hespe lia (heart-leaved keckiella), L ifolius (pauma lupine), Lupin californica (California peony everlasting), Pseudognapha velutina (California goldenro	tain-mahogany), Cirsium (eaf dudleya), Elymus con um confertiflorum ssp. cor eroyucca whipplei (chapar Lathyrus vestitus (chapar us truncatus (blunt leaved), Penstemon spectabilis alium canescens (hairy ev d), Salvia mellifera (black	occidentale var. densatus (giant wild nfertiflorum (golden ral yucca), al sweet pea), I lupine), <i>Marah</i> var. spectabilis (showy rerlasting), <i>Quercus</i> sage), <i>Senecio</i>
Cuttings Species (4 Total) and Rare Oak Acorns (2 Sp	pecies) Collected To-Date by Rancho Santa Ana	a Botanic Garden or S&S	Seeds in the Santa Anita V	/ash – Rio Hondo Sub-Wa	atershed (for Container Pla	ant Propagation)	
Dryopteris arguta	California wood fern	Rhizome cuttings for conta	ainer plant propagation (only	/).			
Pellaea andromedifolia	coffee fern	Rhizome cuttings for conta	ainer plant propagation (only	/).			
Pellaea mucronata var. mucronata	Bird's-foot cliff-brake	Rhizome cuttings for conta	ainer plant propagation (only	/).			
Polypodium californicum	California polypody	Rhizome cuttings for conta	ainer plant propagation (only	/).			
Quercus durata var. gabrielensis	San Gabriel oak	Container plant propagation	on (only).				
Quercus engelmannii	Engelmann oak	Container plant propagation	on (only).				
OWHRMP: Oak Woodland Habitat Revegetation/Mitigation Prog	ram for the Santa Anita Dam Riser Modification and Res	ervoir Sediment Removal Proje	ect; FM: Field Material - 2015 (C	Quantity of Cleaned Seed to be	Determined; Container Plant Pr	ropagation Only; Fall 2015)	

ATTACHMENT C

NATIVE PLANT COMPENDIUM (SEPTEMBER 2013–SEPTEMBER 2015)

Plant Species (121 To	tal Native Species)	Special	Wetland
Scientific Name	Common Name	Status	Rank
LYCOPH	IYTES		
SELAGINELLACEAE - S	PIKE-MOSS FAMILY		
Selaginella bigelovii	bushy spike-moss		
FERI	NS		
DRYOPTERIDACEAE - \	NOOD FERN FAMILY		
Dryopteris arguta	coastal woodfern		
POLYPODIACEAE - P	OLYPODY FAMILY		
Polypodium californicum	California polypody		
PTERIDACEAE - E	BRAKE FAMILY		
Pellaea andromedifolia	coffee cliff-brake		
Pellaea mucronata var. mucronata	bird's-foot cliff-brake		
CERATOPH	YLLALES		
CERATOPHYLLACEAE -	HORNWORT FAMILY		
Ceratophyllum demersum	vascular hortwort		OBL
EUDIC	отѕ		
ADOXACEAE - MUS	SKROOT FAMILY		
Sambucus nigra ssp. caerulea	blue elderberry		FAC
ANACARDIACEAE -	SUMAC FAMILY		
Malosma laurina	laurel sumac		
Rhus aromatica	skunk bush		FACU
Rhus ovata	sugar bush		
Toxicodendron diversilobum	western poison oak		FACU
APOCYNACEAE - D			
Asclepias californica	California milkweed		
ASTERACEAE - SUN	IFLOWER FAMILY		
Acourtia microcephala	sacapellote		
Artemisia californica	California sagebrush		
Artemisia douglasiana	Douglas' sagebrush		FAC
Baccharis pilularis ssp. consanguinea	coyote brush		
Baccharis salicifolia ssp. salicifolia	mule fat		FAC
Brickellia californica	California brickellbush		FACU
Chaenactis glabriuscula	yellow pincushion		
Cirsium occidentale	cobwebby thistle		
Corethrogyne filaginifolia	common sand aster		
Deinandra fasciculata	fascicled tarplant		FACU
Ericameria parishii var. parishii	Parish's goldenbush		
Erigeron canadensis	horseweed		FACU
Eriophyllum confertiflorum var. confertiflorum	golden woolly sunflower		
Helianthus annuus	annual sunflower		FACU
Heterotheca grandiflora	telegraph weed		
Heterotheca sessiliflora ssp. fastigiata	upright sessileflower false goldenaster		

NATIVE PLANT COMPENDIUM (SEPTEMBER 2013-SEPTEMBER 2015)

Plant Species (12	Special	Wetland	
Scientific Name	Common Name	Status	Rank
Lasthenia gracilis	common goldfields		
Lepidospartum squamatum	California scale-broom		FACU
Malacothrix saxatilis	cliff desert dandelion		
Pseudognaphalium biolettii	bi-color everlasting		
Pseudognaphalium californicum	California everlasting		
Pseudognaphalium canescens	hairy everlasting		FACU
Pseudognaphalium stramineum	cotton batting everlasting		FAC
Senecio flaccidus var. douglasii	Douglas' threadleaf ragwort		
BORAGINACEA	E - BORAGE FAMILY		
Cryptantha intermedia var. intermedia	common cryptantha		
Eriodictyon crassifolium	thickleaf yerba santa		
Eriodictyon parryi	poodle-dog bush		
Phacelia cicutaria	caterpillar phacelia		
Phacelia distans	wild heliotrope phacelia		OBL
Phacelia minor	wild canterbury bells		
Phacelia ramosissima	branching phacelia		FACU
CACTACEAE	- CACTUS FAMILY		
Opuntia ×vaseyi	vasey's prickly pear		
Opuntia littoralis	coastal prickly pear		
CAPRIFOLIACEAE -	HONEYSUCKLE FAMILY		
Lonicera subspicata var. denudata	Johnston's honeysuckle		
CARYOPHYLLA	CEAE - PINK FAMILY		
Silene laciniata	cardinal catchfly		
CONVOLVULACEAE -	MORNING-GLORY FAMILY		
Calystegia macrostegia	coast morning-glory		
CUCURBITACE	AE - GOURD FAMILY		
Marah macrocarpa	large fruit wild cucumber		
FABACEAE -	LEGUME FAMILY		
Acmispon brachycarpus	short fruit lotus		
Acmispon glaber var. glaber	deerweed		
Acmispon maritimus var. maritimus	coastal lotus		
Acmispon strigosus	strigose lotus		
Lupinus concinnus	bajada lupine		
Lupinus hirsutissimus	stinging lupine		
Lupinus longifolius	long leaf lupine		
Lupinus succulentus	arroyo lupine		
Lupinus truncatus	cut leaf lupine		
FAGACEA	E - OAK FAMILY		
Quercus agrifolia var. agrifolia	coast live oak		
Quercus durata var. gabrielensis	San Gabriel oak	CRPR 4.2	
Quercus engelmannii	Engelmann oak	CRPR 4.2	

NATIVE PLANT COMPENDIUM (SEPTEMBER 2013–SEPTEMBER 2015)

Common Name	Special	Wetland
	Status	Rank
GOOSEBERRY FAMILY		
little graceful golden currant		FAC
MINT FAMILY		
white sage		
chia		
black sage		
California hedgenettle		
ING STAR FAMILY		
smooth stem blazing star		
valley redstem		OBL
coastal wishbone plant		
•		
-		
tall annual willowherb		
California fuchsia		
		FACW
		FACW
California wood-sorrel		
		FACU
		FACW
		OBL
· · ·		
		FAC
		-
		1
-		FACW
	MINT FAMILY white sage chia black sage California hedgenettle ZING STAR FAMILY smooth stem blazing star DSESTRIFE FAMILY valley redstem DUR O'CLOCK FAMILY coastal wishbone plant NG PRIMROSE FAMILY hairy suncup Dudley's clarkia purple clarkia tall annual willowherb California fuchsia fringed willowherb false-mustard great marsh evening primrose OXALIS FAMILY	MINT FAMILY white sage chia black sage California hedgenettle ZING STAR FAMILY smooth stem blazing star DSESTRIFE FAMILY valley redstem DUR O'CLOCK FAMILY coastal wishbone plant NG PRIMROSE FAMILY hairy suncup Dudley's clarkia purple clarkia tall annual willowherb California fuchsia fringed willowherb false-mustard great marsh evening primrose OXALIS FAMILY hairy bush monkeyflower scarlet monkeyflower scarlet monkeyflower scarlet monkeyflower seep monkeyflower showy beardtongue glandular showy beardtongue glandular showy beardtongue glandular showy beardtongue YCAMORE FAMILY westem sycamore - PHLOX FAMILY longstem buckwheat leafy California buckwheat

NATIVE PLANT COMPENDIUM (SEPTEMBER 2013-SEPTEMBER 2015)

Plant Species (121 T	otal Native Species)	Special	Wetland
Scientific Name	Common Name	Status	Rank
RANUNCULACEAE -	BUTTERCUP FAMILY		
Clematis lasiantha	chaparral virgin's bower		
RHAMNACEAE - BL	JCKTHORN FAMILY		
Ceanothus leucodermis	whitebark ceanothus		
Ceanothus oliganthus	hairy ceanothus		
Frangula californica ssp. californica	California coffeeberry		
Rhamnus ilicifolia	hollyleaf redberry		
ROSACEAE - I	ROSE FAMILY		
Cercocarpus betuloides var. betuloides	birch-leaf mountain mahogany		
Heteromeles arbutifolia	toyon		
Prunus ilicifolia ssp. ilicifolia	holly leaf cherry		
Rubus ursinus	California blackberry		FAC
RUBIACEAE - C	OFFEE FAMILY		
Galium angustifolium ssp. angustifolium	narrow leaved bedstraw		1
SALICACEAE - V	WILLOW FAMILY		1
Populus fremontii ssp. fremontii	Fremont cottonwood		FAC
Salix exigua	sand bar willow		FACW
Salix gooddingii	Goodding's black willow		FACW
Salix laevigata	red willow		FACW
Salix lasiolepis	arroyo willow		FACW
	GHTSHADE FAMILY		
Datura wrightii	Wright's jimsonweed		
Solanum americanum	white nightshade		FACU
Solanum douglasii	Douglas' nightshade		FAC
URTICACEAE - I			
Urtica dioica ssp. holosericea	hoary stinging nettle		FAC
VERBENACEAE -			
Verbena lasiostachys	western vervain		FAC
MONO	DCOTS		
AGAVACEAE - /	AGAVE FAMILY		
Hesperoyucca whipplei	chaparral yucca		
CYPERACEAE -			
Cyperus eragrostis	tall flatsedge		FACW
	RUSH FAMILY		
Juncus rugulosus	wrinkled rush		OBL
Juncus textilis	basket rush		FACW
Juncus xiphioides	iris leaved rush		OBL
-	RASS FAMILY		
Elymus condensatus	giant wildrye		FACU
Festuca microstachys	Pacific fescue		
Leptochloa fusca	bearded sprangletop		
Melica imperfecta	coast range onion grass		
Stipa coronata	crested needle grass		

NATIVE PLANT COMPENDIUM (SEPTEMBER 2013–SEPTEMBER 2015)

NATIVE PLANT COMPENDIUM (SEPTEMBER 2013-SEPTEMBER 2015)

Plant Species (121 Total Native Species)		Special	Wetland		
Scientific Name	Common Name	Status	Rank		
TYPHACEAE - CATTAIL FAMILY					
Typha domingensis	southern cattail		OBL		
USFWS: U.S. Fish and Wildlife Service; CDFW: Ca California Invasive Plant Council	lifornia Department of Fish and Wildlife; CRPR: Ca	ilifornia Rare Plar	nt Rank; Cal-IPC:		
LEGEND: * = Non-native species cf. = appears similar to, species cannot be confirmed	100% due to phenological condition				
Special Status:					
FE = Endangered SE FT = Threatened ST	ate (CDFW): = Endangered = Threatened R = Rare				
CRPR – California Rare Plant Rank 1A. Presumed extirpated in California and either rare 1B. Rare, Threatened, or Endangered in California ar 2A. Presumed extirpated in California, but more comr 2B. Rare, Threatened, or Endangered in California, b 3. Plants about which we need more information - a re 4. Plants of limited distribution - a watch list	nd elsewhere non elsewhere ut more common elsewhere				
Threat Code Extensions None Plants lacking any threat information .1 Seriously threatened in California (over 80% of occ .2 Moderately threatened in California (20–80% of occ .3 Not very threatened in California (<20% of occurre Special status designations updated on 12/21/2014	currences threatened/moderate degree and immedia	acy of threat)	eats known)		

ATTACHMENT D

WILDLIFE COMPENDIUM (SEPTEMBER 2013–SEPTEMBER 2015)

WILDLIFE COMPENDIUM (SEPTEMBER 2013 – SEPTEMBER 2015)

Species (Verte	brates): 88 Total Native Species	Special Status	2013	2014	2015
	AMPHIBIANS				
	AMPHIBIA – AMPHIBIANS				
	HYLIDAE – TREEFROGS				
Pseudacris hypochondriaca	Baja California treefrog				Х
	REPTILES				1
	LEPIDOSAURIA – LIZARDS AND SNA	KES			
	PHRYNOSOMATIDAE – SPINY LIZAR	DS			
Sceloporus occidentalis	western fence lizard		Х	Х	Х
Uta stansburiana	common side-blotched lizard		Х	Х	Х
	TEIIDAE – WHIPTAIL LIZARDS				
Aspidoscelis tigris	tiger whiptail		Х	Х	Х
	COLUBRIDAE – COLUBRID SNAKE	S			
Coluber lateralis	striped racer			Х	Х
	VIPERIDAE – VIPERS AND PITVIPE	RS			
Crotalus oreganus	western rattlesnake				Х
	BIRDS				
	AVES – BIRDS				
	ANATIDAE – SWAN, GOOSE, AND DUCK	FAMILY			
Branta canadensis	Canada goose				Х
	ODONTOPHORIDAE - NEW WORLD QUAI	FAMILY			
Callipepla californica	California quail			Х	Х
	ARDEIDAE – HERONS				
Ardea herodias	great blue heron				Х
	CATHARTIDAE – NEW WORLD VULTU	RES			
Cathartes aura	turkey vulture			Х	Х
ŀ	ACCIPITRIDAE – HAWKS, KITES, EAGLES, A	ND ALLIES	-	-	1
Accipiter cooperii	Cooper's hawk		Х	Х	Х
Buteo jamaicensis	red-tailed hawk		Х	Х	Х
	CHARADRIIDAE – PLOVERS	-	-	-	1
Charadrius vociferus	killdeer		Х	Xa	Х
	COLUMBIDAE – PIGEONS AND DOV	ES			1
Patagoienas fasciata	band-tailed pigeon				Х
Streptopelia decaocto*	Eurasian collared-dove				Х
Zenaida macroura	mourning dove		Х	Х	Х
	APODIDAE – SWIFTS	1	r	r	
Aeronautes saxatalis	white-throated swift			Х	Х
	TROCHILIDAE – HUMMINGBIRDS		r	r	1
Archilochus alexandri	black-chinned hummingbird				Х
Calypte anna	Anna's hummingbird		Х	Х	Х
Calypte costae	Costa's hummingbird				Х
Selasphorus rufus	rufous hummingbird				Х
Selasphorus sasin	Allen's hummingbird		Х	Х	Х
Selasphorus sp.	Allen's/rufous hummingbird			Х	Х

WILDLIFE COMPENDIUM (S	EPTEMBER 2013 – SEPTEMBER 2015)
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Species (Verte	brates): 88 Total Native Species	Special Status	2013	2014	2015
	PICIDAE – WOODPECKERS				
Melanerpes lewis	Lewis's woodpecker		Х	Х	
Melanerpes formicivorus	acorn woodpecker			Xa	Xa
Picoides nuttallii	Nuttall's woodpecker				Х
Picoides pubescens	downy woodpecker				Х
Colaptes auratus	northern flicker			Х	Х
	FALCONIDAE – FALCONS	-			
Falco sparverius	American kestrel			Х	Х
Falco columbarius	merlin			Х	
	PSITTACIDAE – PARROTS			1	
Amazona viridigenalis*	red-crowned parrot				Х
	TYRANNIDAE – TYRANT FLYCATCH	ERS			
Contopus sordidulus	western wood-pewee				Х
Empidonax traillii	willow flycatcher				Х
Empidonax difficilis	Pacific-slope flycatcher				Х
Sayornis nigricans	black phoebe		Х	Х	X
Sayornis saya	Say's phoebe			X	X
Myiarchus cinerascens	ash-throated flycatcher			X	X
Tyrannus vociferans	Cassin's kingbird			X	X
Tyrannus verticalis	western kingbird			X	X
	VIREONIDAE – VIREOS			~	Χ
Vireo gilvus	warbling vireo				Х
viieo giivas	CORVIDAE – JAYS AND CROWS				~
Aphelocoma californica	western scrub-jay	,	х	Х	X
Corvus brachyrhynchos	American crow		^	^	X
Corvus brachymynchos Corvus corax			Х	Х	X
Corvus corax	common raven HIRUNDINIDAE – SWALLOWS		^	^	^
Stalaidantan waarrinannia				X	V
Stelgidopteryx serripennis	northern rough-winged swallow barn swallow			^	X X
Hirundo rustica					^
	AEGITHALIDAE – BUSHTITS		V	V	V
Psaltriparus minimus			Х	Х	Х
0.1.1.1.1.1	TROGLODYTIDAE – WRENS		1	X	V
Salpinctes obsoletus	rock wren			X	Х
Catherpes mexicanus	canyon wren			X	
Troglodytes aedon	house wren		X	X	X
Thryomanes bewickii	Bewick's wren		Х	Х	Х
	POLIOPTILIDAE – GNATCATCHERS AND GI	NATWRENS	1		1
Polioptila caerulea	blue-gray gnatcatcher			Х	
	REGULIDAE – KINGLETS		r	1	1
Regulus calendula	ruby-crowned kinglet			Х	Х
	SYLVIIDAE – SYLVIID WARBLERS	8	1	1	1
Chamaea fasciata	wrentit			Х	Х
	TURDIDAE – THRUSHES AND ROB	INS		1	I
Sialia mexicana	western bluebird			Х	Х
Catharus guttatus	hermit thrush				Х

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Turdus migratorius	American robin			Х	Х
	MIMIDAE – THRASHERS				
Mimus polyglottos	northern mockingbird		Х	Х	Х
	STURNIDAE – STARLINGS				
Sturnus vulgaris*	European starling				Х
	MOTACILLIDAE – PIPITS				
Anthus rubescens	American pipit		Х		
	BOMBYCILLIDAE – WAXWINGS				
Bombycilla cedrorum	cedar waxwing				Х
	PTILOGONATIDAE – SILKY-FLYCATCH	ERS			
Phainopepla nitens	phainopepla			Х	
	PARULIDAE – WOOD-WARBLERS				
Oreothlypis celata	orange-crowned warbler				Х
Geothlypis tolmiei	MacGillivray's warbler				Х
Geothlypis trichas	common yellowthroat		Х	Xa	
Setophaga petechia	yellow warbler				Х
Setophaga coronata	yellow-rumped warbler		Х	Х	Х
Setophaga occidentalis	hermit warbler				Х
Cardellina pusilla	Wilson's warbler				Х
	EMBERIZIDAE – SPARROWS				
Pipilo maculatus	spotted towhee		Х	Х	Х
Aimophila ruficeps	rufous-crowned sparrow			Х	
Melozone crissalis	California towhee		Х	Х	Х
Chondestes grammacus	lark sparrow				Х
Melospiza melodia	song sparrow		Х	Х	Х
Melospiza lincolnii	Lincoln's sparrow			Х	
Zonotrichia leucophrys	white-crowned sparrow		Х	Х	Х
Junco hyemalis	dark-eyed junco				Х
CA	ARDINALIDAE – CARDINALS, GROSBEAKS, A	AND ALLIES			
Piranga ludoviciana	western tanager				Х
Pheucticus melanocephalus	black-headed grosbeak			Х	
Passerina caerulea	blue grosbeak				Х
Passerina amoena	lazuli bunting				Х
	ICTERIDAE – BLACKBIRDS				
Sturnella neglecta	western meadowlark			Х	
Molothrus ater	brown-headed cowbird				Х
Icterus cucullatus	hooded oriole			Х	Х
lcterus bullockii	Bullock's oriole			Х	Х
	FRINGILLIDAE – FINCHES	•			
Carpodacus mexicanus	house finch		Х	Х	Х
Carduelis pinus	pine siskin				Х
Carduelis psaltria	lesser goldfinch		Х	Х	Х
Carduelis lawrencei	Lawrence's goldfinch				Х
Carduelis tristis	American goldfinch			Х	Х

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PASSERIDAE – OLD WORLD SPARROWS					
Passer domesticus*	house sparrow				Х
	ESTRILDIDAE – WAXBILLS AND MANNI	KINS			
Lonchura punctulata*	nutmeg mannikin		Х	Х	
	MAMMALS				
	MAMMALIA – MAMMALS				
	SCIURIDAE – SQUIRRELS				
Otospermophilus beecheyi	California ground squirrel			Х	Х
URSIDAE – BEARS					
Ursus americanus*	black bear			Х	
	CERVIDAE – DEER				
Odocoileus hemionus	southern mule deer		Х	Х	Х
*Introduced Species	•		•	•	
^a Species observed nesting of	on the site				