SAWA ANNUAL REGULATORY REPORT

COVERING THE SANTA ANA WATERSHED ASSOCIATION MITIGATION PROJECTS FOR THE REPORTING PERIOD OF JULY 1ST 2015 – JUNE 30TH, 2016

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Santa Ana Watershed Association

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RLC Alessandro

ABOUT SAWA

The Santa Ana Watershed Association is a 501 c 3 non-profit corporation, comprised of five member special districts serving the Santa Ana River watershed. Those five special districts are Temecula Elsinore Anza Murrieta, Inland Empire, Riverside Corona, and San Jacinto Basin Resource Conservation Districts and the Orange County Water District. For 20 years, the Santa Ana Watershed Association (SAWA) and its partners have been promoting a healthy Santa Ana River watershed for the wildlife and the people who inhabit it. The watershed spans approximately 2,800 square miles and ranges in elevation from 11,500 feet to sea level through five distinctive life zones. The watershed lies in one of Earth's 25 Biodiversity Hotspots—areas rich in flora and fauna that are threatened by human activity.

A major goal of SAWA is to restore the natural functions of the watershed through the enhancement and restoration of the native riparian community. This is accomplished by the removal of exotic plant species and the management of existing resources, including both habitat and wildlife species. The largest threat to the riparian habitat within the Santa Ana Watershed is the spread of invasive plant species, notably *Arundo donax*. This exotic plant is highly aggressive and has invaded much of the

watershed, out-competing native vegetation, consuming water disproportionate to that of native plant species and having adverse impacts on the wildlife. Removing *Arundo* is difficult and complex, requiring multiple treatments and intensive monitoring. This past year, SAWA has undertaken tracking the advancement of the "shot-hole" beetle which has infested trees throughout the watershed.

SAWA's comprehensive eradication efforts include identification and mapping of exotic plant species, initial biomass removal, post treatment, and intensive biological surveying during all stages of eradication. Most importantly, SAWA monitors the removal areas long after the *Arundo* has been eradicated to ensure that native vegetation and wildlife are recovering and that there is no return of the invasive plant species. These intensive monitoring efforts are required to prevent re-growth that can lead to total re-infestation over time and to prevent any impacts to native species. Active restoration and enhancement is often employed when natural succession is not sufficient to ensure recovery of native habitat.

To date, SAWA has removed nearly 4,700 acres of Arundo and other invasive plants throughout the watershed.

COLLABORATION

SAWA conducts environmental management projects, working collaboratively with governmental agencies, conservation organizations, and private citizens. SAWA implements facets of the Santa Ana River Watershed Program, continuously restoring natural functions and resources of the river and its tributaries.

The most notable collaborating agencies include the U.S. Army Corps of Engineers (USACE), U.S. Fish & Wildlife Service (USF&WS), California Department of Fish and Wildlife (CDFW), U.S. Forest Service (USFS), California Department of Water Resources (DWR), Natural Resource Conservation Service, Riverside County Flood and Water Conservation District, Riverside Parks and Open Space District and the Regional Water Quality Control Board (RWQCB).

The Watershed Program formally began in 1995, with the signing of a landmark agreement between the OCWD, USACE, and the U.S. Department of Interior for the U.S. Fish and Wildlife Service. This agreement allowed OCWD to conserve water behind Prado Dam but also recognized the need for watershed restoration by allowing a portion of the project mitigation to occur in the upper Santa Ana River watershed, many miles from the project site.

ARUNDO TREATMENT AT IRVINE LAKE. 1

Habitat restoration, primarily through invasive plant species control, is the current focus of the Watershed Program because most of the funding obtained was earmarked for *Arundo* control. The work with endangered species and other wildlife is necessary for compliance with the regulatory permits to do the invasive plant species work. Funds are obtained from grants and mitigation of projects which have an adverse impact on Santa Ana Watershed

habitat, and the Watershed Program took on the funds and the mitigation responsibilities.

Mitigation projects are designated and approved by the SAWA Board of Directors. This plan is carried out with a focus on ongoing maintenance and enhancement of river system function, eventually leading to whole watershed health. The work plan develops projects that further these goals.

This report reflects the 12 month period from July 1, 2015 to June 30, 2016, and supplements many other reports produced throughout the period. The next report will be issued in September 2017, and will cover the period July 1st, 2016 through June 30, 2017.

In 2015/16, SAWA worked on 36 project locations in the Watershed under CDFW permits. The following project site reports reflect the work performed under SAWA's California Department of Fish and Wildlife programmatic permit.

REGION 6

CDFW, USACE, RWQCB

CDFW REPORTS: HWY 71 EUCALYPTUS 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 26-A site. This project originally began in 2002. Since 2006 an expansion of 14-A was added to initiate control over non-native vegetation. Plant species targeted in this project include giant reed (*Arundo donax)*, *Eucalyptus spp.*, tree tobacco (*Nicotiana glauca*), saltcedar (*Tamarix ramosissima*), perennial pepperweed (*Lepidium latifolium*), bull thistle (*Cirsium vulgare*) and milk thistle (*Silybum marianum*). The original 12-A project included re-vegetation of native plants, but the last installation occurred in 2010. This project is located in the Prado Basin, just east of Highway 71.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: No enhancement activities were conducted during this reporting period, due to mitigation file review.

Conservation Activities: A bioassessment survey occurred on 9/11/15, 6/9/16, 6/16/16, & 6/22/16 to measure overall conditions on this project site. A total of 7.5 hours were spent on conservation activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site. Mitigation files are in the review process to determine the restoration requirements that have yet to be fulfilled.

Current site conditions: Height class and percent cover were determined using a modified rapid assessment method. Shrub height class is 5-10 m. Dominant native plant species include 1-5% black willow (*Salix gooddingii*), >25-50% mulefat (*Baccharis salicifolia*), 1-5% black elderberry (*Sambucus caerulea nigra*) and >5-15% common sunflower (*Helianthus annuus*). Non-native species include >5-15% *Eucalyptus sp.*, >5-15% mustard (*Brassica* sp.)>15-25% perennial pepperweed, >1-5% milk thistle, and >50-75% non-native annual grasses.

Wildlife species: Species detected during the bioassessment survey included House Finch (*Haemorhous mexicanus*), Bullock's Oriole (*Icterus bullockii*), Spotted Towhee (*Pipilo maculatus),* Common Yellowthroat (*Geothlypis trichas*), Nuttall's Woodpecker (*Picoides nuttallii*), and Bushtit (*Psaltriparus minimus*),. The Yellow Warbler (*Setophaga petechia*), a California species of special concern, was detected on site. In addition, OCWD monitors and records the presence/absence of the endangered least Bell's vireo (*Vireo bellii pusillus*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Removal activities were not conducted during this reporting period.

The amount removed and/or treated: Not conducted during this reporting period.

The frequency and timing of removal/treatment: Treatments will be scheduled once mitigation files have been reviewed and success criteria are established.

Disposal specifics: No biomass was actively removed from the project site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: This project was initiated in 2002 and SAWA staff is reviewing the files to determine the amount of Eucalyptus that was removed and the amount of mitigations that were placed. Staff is drafting a working plan to ensure that the mitigations placed are accurately tracked going forward. The plan will determine success criteria and establish a timeline to reach those goals.

PHOTOS – GPS PHOTO POINTS

Photos taken 6/16/16.
Photo point 1 - 439943, 3753373 heading 255 W

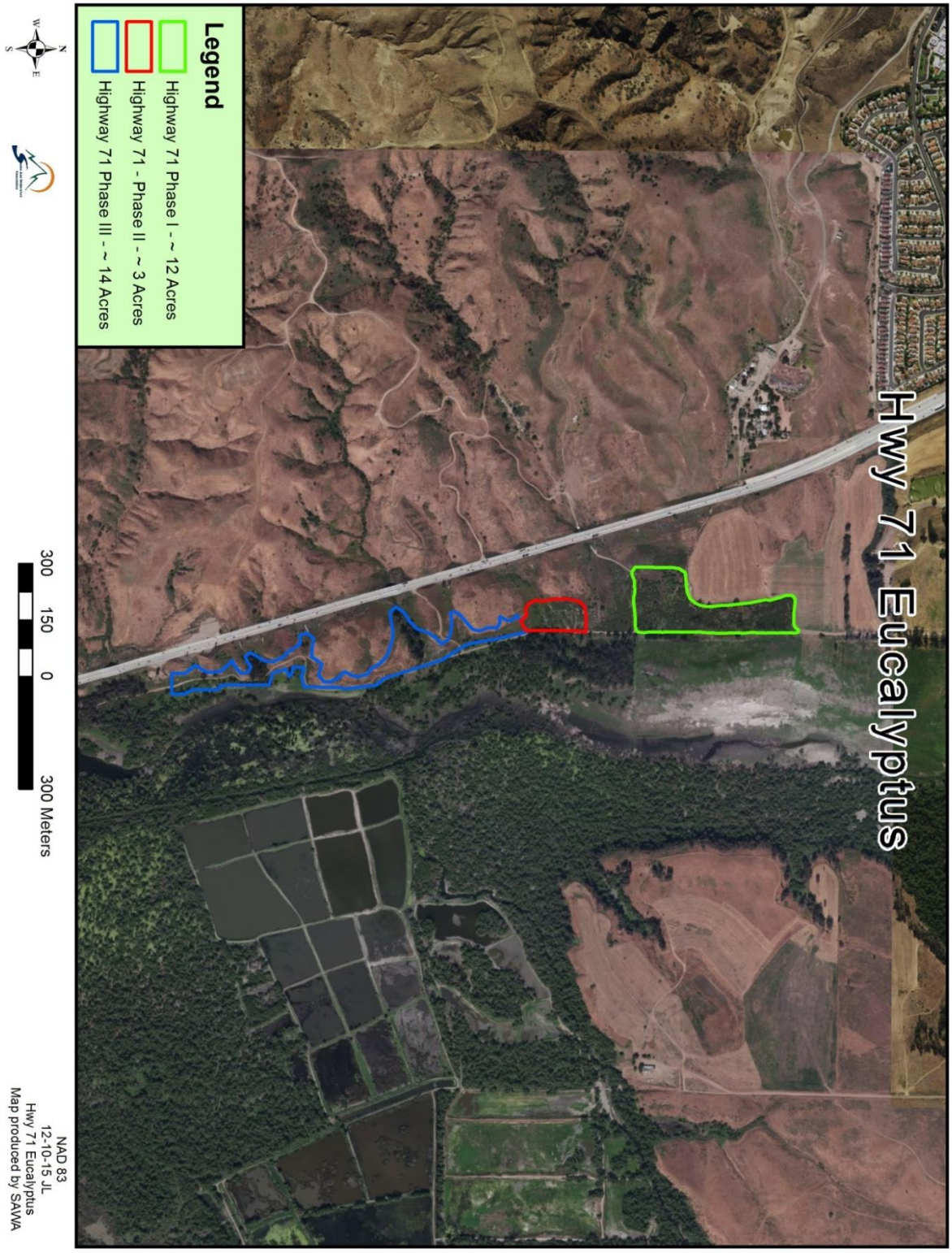
Photo point 2 – 439944, 3753772 heading 250 W

HWY 71 EUCALYPTUS FINANCIAL SUMMARY

Hwy 71 Eucalyptus Project - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2004-0116-R6 USACE #200401866-CLM	Residential development	Centex Homes	$10,500	9/26/2005	0.07	0.21	Restoration
CDFW #1600-2005-0092-R6 USACE #2005-01337-SJH RWQCB #332012-07	Discharging fill into waters of US for residential development	Century American Corp	$376,000	2/28/2008	0.19	7.52	Restoration Creation
		DKN Holdings, Murrieta Hot Springs Rd Development	$50,000	1/27/2006		1.0	Eucalyptus removal
USACE #2008-312-SLP RGP 63 Emergency Permit #2008-312-G5	Emergency BNSF impacts in Cajon Wash	Tom Dodson BNSF Railway Co.	$125,000	7/13/2010		1.0	Wetland creation
Totals			***$561,500***			***9.73***	

7-1-15 to 6-30-16 Cost Breakdown	
Herbicide	$0
Staff Time	$544.43
Mileage	$0
Total	***$544.43***

MAP


Hwy 71 Eucalyptus
Legend
Highway 71 Phase I - ~ 12 Acres
Highway 71 - Phase II - ~ 3 Acres
Highway 71 Phase III - ~ 14 Acres
300
150
0
300 Meters
NAD 83
12-10-15 JL
Hwy 71 Eucalyptus
Map produced by SAWA

CDFW REPORTS: MOCKINGBIRD CANYON MCB 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 11.28-A Mockingbird Canyon Mitigation site, and are indicated in the included map as demonstrated by locations of invasive vegetation removal, photo documentation, and general site monitoring.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: There were a total of three treatments performed to non-native vegetation on 8/12/15, 3/21/16, 5/12/16. The herbicide application was conducted by SAWA's ISR crew using a foliar application with back pack sprayers. The herbicide application was performed on mostly non-native herbaceous weeds such as: perennial pepperweed (*Lepidium latifolium),* black mustard *(Brassica nigra),* and wild radish (*Raphanus raphanistrum).* A total of 11.5 ounces of Cayuse/Quest water conditioner mixed at 1%, 9 ounces of Rodeo, 8 ounces of Round Up Pro Max mixed at 3% and 8 ounces of Monterrey Super 7 surfactant mixed at 2% solution were utilized to control the non-native vegetation. A total of 52.5 hours were spent on herbicide application and surveys during this reporting period.

Conservation Activities: Activities associated with general preservation of property took place along a significant portion of this 11.28-A site, consisting of bioassessment surveys, established photo points and general bio-monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles.

Specific conservation activities took place on 12/22/15, 5/2/16, and 5/12/16. The annual bioassessment survey was conducted on 5/2/16. Biological monitoring activities occurred during the migratory bird breeding season. A total of 34.75 SAWA staff hours were spent during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: Riparian forest co-dominated by black and arroyo willow (*Salix gooddingii* and *S. lasiolepis*) with cottonwood (*Populus fremontii*) as a sub-dominant. The trees are approximately >10-15 m in height, and shrubs are approximately >2-5 m in height. The dominant natives are nettle (*Urtica dioica*) at >15-25%, elderberry (*Sambucus caerulea nigra*) at >5-15% and mulefat (*Baccharis salicifolia*) at >5-15%. Non-natives are well controlled with sparse cover. Dominant non-native vegetation includes perennial pepperweed at <1% and horehound (*Marrubium vulgare*) at >1-5%.

Wildlife species: Wildlife species observed during the bioassessment survey include Western fence lizard (*Sceloporus occidentalis*), California ground squirrel (*Oteospermophilus beecheyi*), Northern Mockingbird (*Mimus polyglottos*), California Scrub-jay (*Aphelocoma californica*), Black-headed Grosbeak (*Pheucticus*

melanocephalus), House Finch (*Haemorhous mexicanus*), Bushtit (*Psaltriparus minimus*), Nuttall's Woodpecker (*Picoides nuttallii*), Bewick's Wren (*Thryomanes bewickii*), Anna's Hummingbird (*Calypte anna*), California Thrasher (*Toxostoma redivivum*), White-crowned Sparrow (*Zonotrichia leucophrys*), Lesser Goldfinch (*Spinus psaltria*), Mourning Dove (*Zenaida macroura*), Cliff Swallow (*Petrochelidon pyrrhonota*), Audubon's cottontail rabbit (*Sylvilagus audubonii*), Hooded Oriole (*Icterus cucullatus*), Red-tailed Hawk (*Buteo jamaicensis*), Turkey Vulture (*Cathartes aura*), coyote (*Canis latrans*), and side-blotched lizard (*Uta stansburiana*). The Yellow Warbler (*Setophaga petechia*), a California species of special concern), was also detected on site. In 2015 the state and federally listed endangered Least Bell's Vireo (*Vireo* bellii pusillus) was detected on the site. The species was not detected on the project area during the 2016 breeding season, but was detected nearby.

Restoration activities consisted of spraying non-native vegetation within the Mockingbird Canyon Conservation Easement. No watering was conducted during this reporting period due to the fact that the natives have gotten large enough that they are established and don't require supplemental watering.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Three separate herbicide applications were conducted during this reporting period. Herbicide applications have been on-going since 2011 and there is less than 1% cover of non-native vegetation. Along the disturbed dirt road on the boundary of the easement there is ~3% cover of black mustard and tocolote (*Centaurea melitensis)*.

The amount removed and/or treated: A total of <1-A was re-treated, consisting of perennial pepperweed, black mustard, and tocolote.

The frequency and timing of removal/treatment: All treatments were conducted prior to the vegetation setting viable seed. When conducted during migratory bird season a permitted biologist cleared and flagged any sensitive areas within the treatment boundary. Future treatments will again focus on treating the non-native vegetation prior to viable seed set to ensure that over time the seed bank is exhausted, thus allowing the natives to re-establish the area.

Disposal specifics: Due to the small size of the biomass all vegetation that was treated was allowed to die and decompose on the property. If any of the non-native species had viable seed the vegetation was hand pulled and disposed of at a landfill.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been effective. In addition, we have found that 10 foot pole cuttings often have a high survival rate and require less watering. The initial costs to plant the site is higher due to the hiring of an augur to augur the holes, however long term costs are dramatically cheaper. Future monitoring and treatments will be necessary to ensure that the non-native annual weeds aren't able to re-infest the project site.

PHOTOS – GPS PHOTO POINTS

Photos taken 8/5/13 and 5/2/16, respectively.

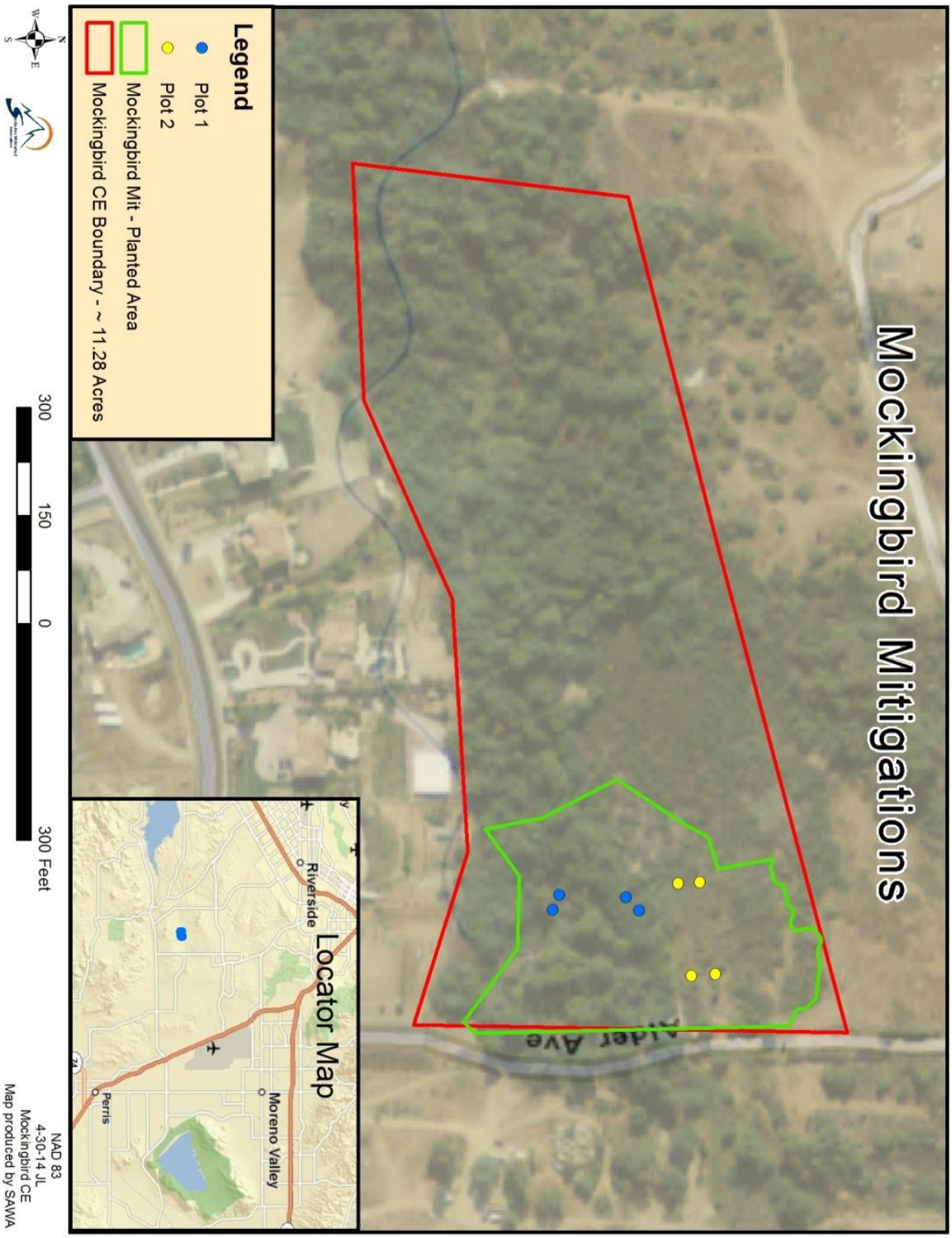
Photos taken 8/5/13 and 5/2/16, respectively.

MOCKINGBIRD CANYON FINANCIAL SUMMARY

Mockingbird MCB - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW Op Law Letter 9/6/2008 USACE #SPL-2008-00254-YLC	North Town Housing Project	North Town Housing	$35,000	11/8/2008 & 7/7/2009	0.5	0.5	Removal and Restoration
CDFW #1600-2007-0106-R6 USACE #SPL-2007-00874-JPL RWQCB Cert 12/4/2007	Discharging fill into .03 acres of waters of the US	AT&T Partners	$60,000	1/27/2009	0.03	1	Initial Removal and ongoing restoration
CDFW #1600-2004-0145-R6	Alteration to Quincy Channel to widen Cottonwood Ave. for residential development in Moreno Valley	Thirty-Seven Moreno Valley LLC	$75,000	3/23/2009	0.41	1	Initial Removal and ongoing restoration
CDFW #1600-2008-0096-R6 USACE #SPL-2008-0923 RWQCB Cert 5/13/09	Discharging fill into unnamed drainage in Moreno Valley near Alessandro	City of Moreno Valley (Kitching Street)	$75,000	6/18/2009	0.183	0.183	Initial Removal and ongoing restoration
CDFW #1600-2008-0105-R6 USACE #SPL-2008-00814-SLP	Impacts of pipeline and outfall in Agua Mansa Rd. area of Colton	AMB Property Corp.	$112,500	12/17/2009	0.05	0.54	Removal and ongoing restoration and 1 cowbird trap for five years.
CDFW #1600-2009-0009-R6 USACE #SPL-2009-00122-SLP RWQCB #R8-2009-0003	Impacts to 0.21 acres of riparian habitat due to Demens Canyon Road Project.	Southern California Edison (Demens Canyon taken over by IERCD)	$26,300	3/10/2010	0.01	0.45	Removal and Active Restoration
Totals			**$383,800**		**1.183**	**3.673**	

7-1-15 to 6-30-16 Cost Breakdown	
Mileage	$92.39
Staff Time	$4,075.63
Herbicide	$9.27
Total	***$4,177.29***

MAP


Mockingbird Mitigations
Legend
Plot 1
Plot 2
Mockingbird Mit - Planted Area
Mockingbird CE Boundary - ~ 11.28 Acres
300
150
0
300 Feet
Alder Ave
Locator Map
Riverside
Moreno Valley
Perris
NAD 83
4-30-14 JL
Mockingbird CE
Map produced by SAWA

CDFW REPORTS: QUAIL RUN PHASE II
7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 23-A Quail Run Phase II site, and are indicated in the included map as demonstrated by locations of invasive vegetation removal, photo documentation, and general site monitoring.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatments occurred on 12/9/15, 12/15/15, 12/16/15, 12/17/15, and 5/16/16. Target species include giant reed (*Arundo donax)* and castor bean (*Ricinus communis)*. A total of 117 hours were spent on enhancement activities.

Conservation Activities: Activities associated with general preservation consisted of establishing photo points, contractor monitoring and general bio-monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. The annual bioassessment survey took place 5/2/16. A total of 20 hours were dedicated to conservation activities during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: Riparian habitat consisting mainly of willow and sycamore forest with mulefat (*Baccharis salicifolia*) and willow (*Salix spp.*) understory. The habitat is patchy and surrounded by sparse coastal sage scrub. Habitat is within a retention basin and surrounded by residential development. Average tree height of >15-20 m and average shrub height of >2-5 m. Dominant native species include mulefat at >15-25% cover, brittlebush (*Encelia farinose*) at >15-25%, Western sycamore (*Platanus racemosa*) at >5-15%, elderberry (*Sambucus caerulea nigra*) at >5-15%, cottonwood (*Populus fremontii*) at >5-15%, and black willow (*Salix gooddingii*) at >5-15%. Dominant non-native plants include giant reed at >5-15%, pepper trees (*Schinus molle*) at >5-15%, castor bean at >5-15%, and saltcedar (*Tamarix* sp.) at >1-5%. New native plant growth is starting to fill in the understory.

Wildlife species: Observed wildlife species consist primarily of riparian and coastal sage scrub species, including Song Sparrow (*Melodia melospiza*), House Finch (*Haemorhous mexicanus*), Lesser Goldfinch (*Spinus psaltria*), Spotted Towhee (*Pipilo maculatus*), Anna's Hummingbird (*Calypte anna*), Nuttall's Woodpecker (*Picoides nuttallii*), California Towhee (*Melozone crissalis*), Phainopepla (*Phainopepla nitens*), Greater Roadrunner (*Geococcyx californianus*), Bushtit (*Psaltriparus minimus*), Northern Mockingbird (*Mimus polyglottos*), Tree Swallow (*Tachycineta bicolor*), Mourning Dove (*Zenaida macroura*), Black Phoebe (*Sayornis nigricans*), Mallard (*Anas platyrhynchos*), Western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), Baja California tree frog (*Pseudacris hypochondriaca*), Audubon's cottontail (*Sylvilagus audubonii*), California ground squirrel

(*Oteospermophilus beecheyi*), coyote (*Canis latrans*), and raccoon (*Procyon lotor*). Several California species of special concern occur on site, including the Yellow Warbler (*Setophaga petechial*) and orange-throated whiptail (*Aspidoscelis hyperythra*). One territory for the state and federally listed endangered Least Bell's Vireo (*Vireo* bellii pusillus) was detected on the project.

The native pole cuttings planted in the last reporting period are helping re-establish the areas that were previously dominated by giant reed.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of giant reed, perennial pepperweed *(Lepidium* latifolium), tree of heaven (*Ailanthus altissima)*, castor bean, and saltcedar were done using a foliar application with 4 gallon back pack sprayers. Herbicide applications were conducted by SAWA's ISR crew. Due to the close proximity to a perennial stream all herbicides used were approved for aquatic use by the Environmental Protection Agency. The herbicide selected for treatments to non-native vegetation was EPA aquatically approved glyphosate at a 5% solution in water.

The amount removed and/or treated: A total of ~ 1.46-A was re-treated, consisting primarily of giant reed and castor bean.

The frequency and timing of removal/treatment: All treatments are conducted when re-growth reaches a height range of 2-4 feet.

Disposal specifics: All treated biomass is left on site and allowed to decompose and dry in place.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been proven to be effective. The ideal time to apply herbicides to perennial plants is in the fall when translocation is moving from the above ground biomass into the roots. Applying herbicide to the above ground biomass is then translocated into the root zone thus causing mortality to the roots. In addition, the planting of native pole cuttings should assist the habitat in returning back to a native dominated system.

PHOTOS – GPS PHOTO POINTS

Photos taken 9/17/13 and 5/2/16, respectively.
Photo point 1 – 470439, 3757468, heading 184 S


Photo point 2 – 470497, 3757468, heading 137 S

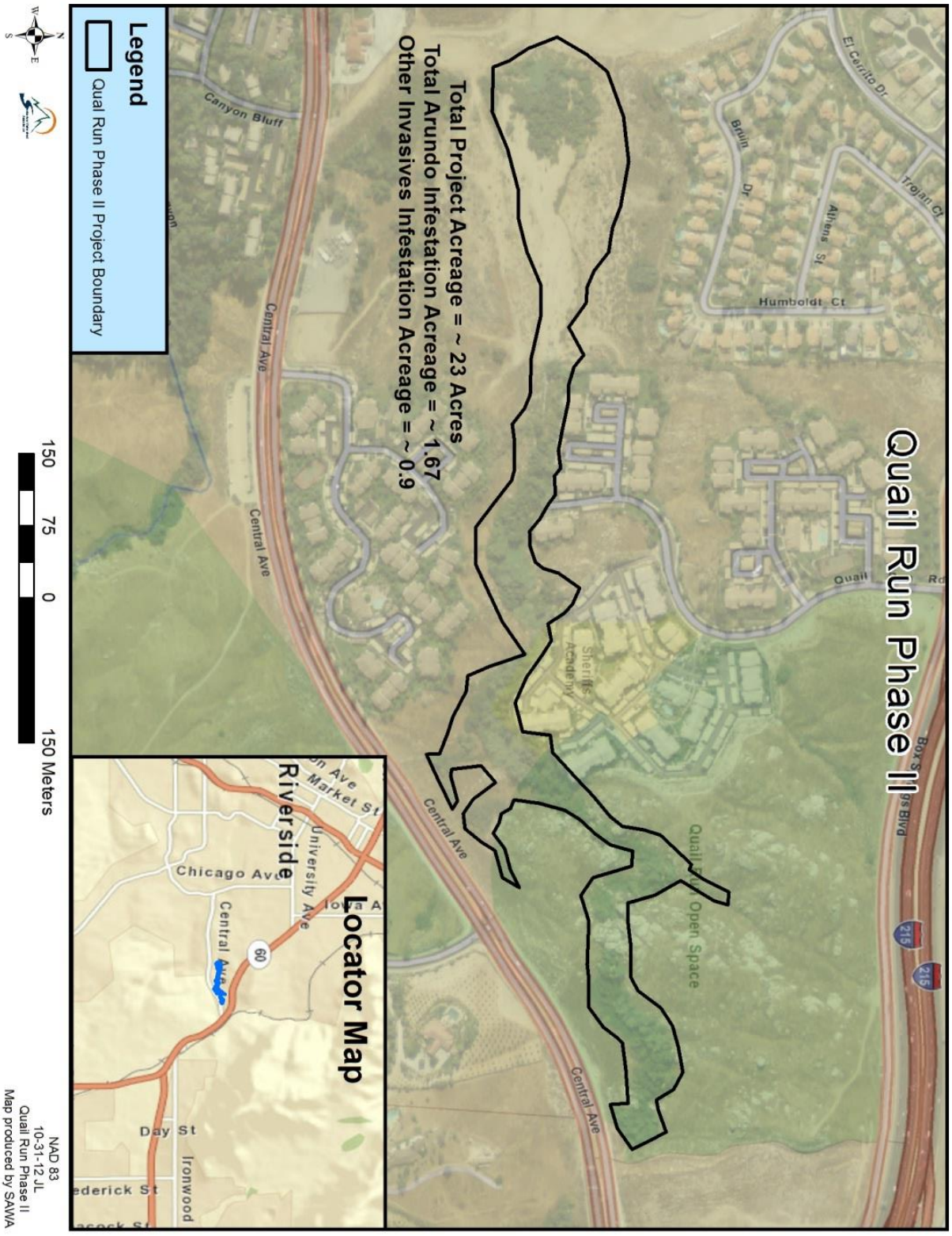

Photo point 3 – 470593, 3757438, heading 123 SE


QUAIL RUN PHASE II FINANCIAL SUMMARY

Quail Run Phase II - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2004-0009-R6 USACE #200400654-GS RWQCB #36-2004-04-DGW	Upgrade to existing reservoir seepage collection system	Department of Water Resources	$33,000	12/14/10	0.06	0.25	Removal and Enhancement
CDFW #1600-2004-0045-R6 USACE #SPL-2004-899-WJC USACE #SPL-2004-00898	Alteration to Potrero Creek and tributary for road improvements	City of Beaumont	$25,000	5/22/2010	0.15	0.15	Ongoing restoration
CDFW #1600-2007-0148-R6 USACE #SPL-2007-01094-FBV RWQCB Cert	Construction of a community park	City of Corona	$50,000	1/6/2006	0.17	0.48	Removal
CDFW #1600-2009-0010-R6 USACE #SPL-2009-00139-VCC RWQCB #332009-02 RWQCB #332009-23	Storm drain improvements of existing perimeter drainage ditch	Countryside Marketplace	$33,000	7/20/10	0.431	0.974	Removal
CDFW #1600-2009-0138-R6 USACE #SPL-2009-00750-JPL RWQCB #R8-2010-054	Construction and installation of offsite street improvements	Hemet Hospitality Investments	$62,000	11/22/2010	0.24	0.48	Removal and ongoing restoration
CDFW #1600-2010-0089-R6	Filling of on- and off-site drainages in associated with construction	Bundy I-15	$33,000	1/19/12	0.07	0.14	Removal
CDFW #1600-2010-0123-R6 USACE #SPL-2007-00128-SLP RWQCB #362008-08	Repair and maintenance to City Creek channel	County of San Bernardino	$25,000	3/30/11	0.97	0.25	Removal and ongoing restoration
CDFW #1600-2011-0007-R6 USACE #SPL-2011-00236 RWQCB #332011-12	Construction of revetment wall and permanent geotextile mattress	Kinder Morgan Energy	$25,000	10/12/2011	0.117	0.25	Removal and ongoing restoration
Totals			**$286,000**		**2.208**	**2.974**	

7-1-15 to 6-30-16 Cost Breakdown	
Mileage	$76.34
Staff Time	$5,979.37
Herbicide	$151.31
Total	***$6,207.02***

MAP


Quail Run Phase II
Total Project Acreage = ~ 23 Acres
Total Arundo Infestation Acreage = ~ 1.67
Other Invasives Infestation Acreage = ~ 0.9
Legend
Qual Run Phase II Project Boundary
Locator Map
Riverside
Chicago Ave
University Ave
Market St
Central Ave
Day St
Ironwood
60
Canyon Bluff
Humboldt Ct
Trojan Ct
Athens St
Bruin Dr
El Cerrito Dr
Quail
Sheriffs Academy
Quail Run Open Space
Box Springs Blvd
215
150
75
0
150 Meters
NAD 83
10-31-12 JL
Quail Run Phase II
Map produced by SAWA

CDFW REPORTS: SBVCD–SAN BERNARDINO
7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the ~ 43-A San Bernardino Valley College District mitigation located along the Santa Ana River just upstream from the 10/215 interchange in San Bernardino. The enhancement and conservation activities are indicated in the included map as demonstrated by locations of invasive vegetation removal, photo documentation, and general site monitoring.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: The SAWA crew performed herbicide applications with 4 gallon back pack sprayers. One treatment occurred on 6/14/16. A total of 20 hours were spent on enhancement activities during this reporting period.

Conservation Activities: Activities associated with the general preservation of the project took place along the entire project, consisting of established photo points and general bio-monitoring for the presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping. The annual bioassessment survey took place on 6/13/16. A total of 11.25 hours of staff time were spent treating and taking GPS photo points.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: This site is composed of primarily riparian vegetation with a tree height class is 10-15 meters. The dominant native species include Fremont's cottonwood (*Populus fremontii*) at >25-50% cover, black willow (*Salix gooddingii*) at >15-25%, and wild grape (*Vitis girdiana*) at >15-25%. Documented non-native species include tree tobacco (*Nicotiana glauca*) at <1% cover, giant reed (*Arundo donax*) at <1%, mustard (*Brassica* sp.) at <1%, and *Eucalyptus* sp. at <1%.

Wildlife species: Wildlife detected on site include Bewick's Wren (*Thryomanes bewickii*), Common Yellowthroat (*Geothlypis trichas*), Song Sparrow (*Melospiza melodia*), Allen's Hummingbird (*Selasphorus sasin*), Lesser Goldfinch (*Spinus psaltria*), Cooper's Hawk (*Accipiter cooperii*), and Spotted Towhee (*Pipilo maculatus*), The Yellow Warbler (*Setophaga petechia*), a California species of special concern, was also detected on site, and two territories of the state and federally listed endangered Least Bell's Vireo (*Vireo* bellii pusillus) were documented.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of giant reed, perennial pepperweed *(Lepidium latifolium*), tree of heaven (*Ailanthus altissima)*, castor bean (*Ricinus communis),* and saltcedar *(Tamarix*

ramosissima) were done using a foliar application with 4 gallon back pack sprayers. Herbicide applications were conducted by SAWA's ISR crew.

The amount removed and/or treated: A total of ~1.09-A was re-treated, consisting mostly of giant reed and castor bean.

The frequency and timing of removal/treatment: All treatments are conducted when re-growth reaches a height range of 2-4 feet.

Disposal specifics: All treated biomass is left on site and allowed to decompose and dry in place.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been proven to be effective. The ideal time to apply herbicides to perennial plants is in the fall when translocation is moving from the above ground biomass into the roots. Applying herbicide to the above ground biomass is then translocated into the root zone thus causing mortality to the roots. Treatments have been effective and as a result non-native cover is now >3%.

PHOTOS – GPS PHOTO POINTS

Photos taken 6/13/16.

Photo point 2 – 473341, 3769809, heading N

Photo point 4 – 473468, 3769851, heading N

Photos taken 11/29/11 and 6/13/16, respectively.

Photo point 1– 473341, 3769809, heading N

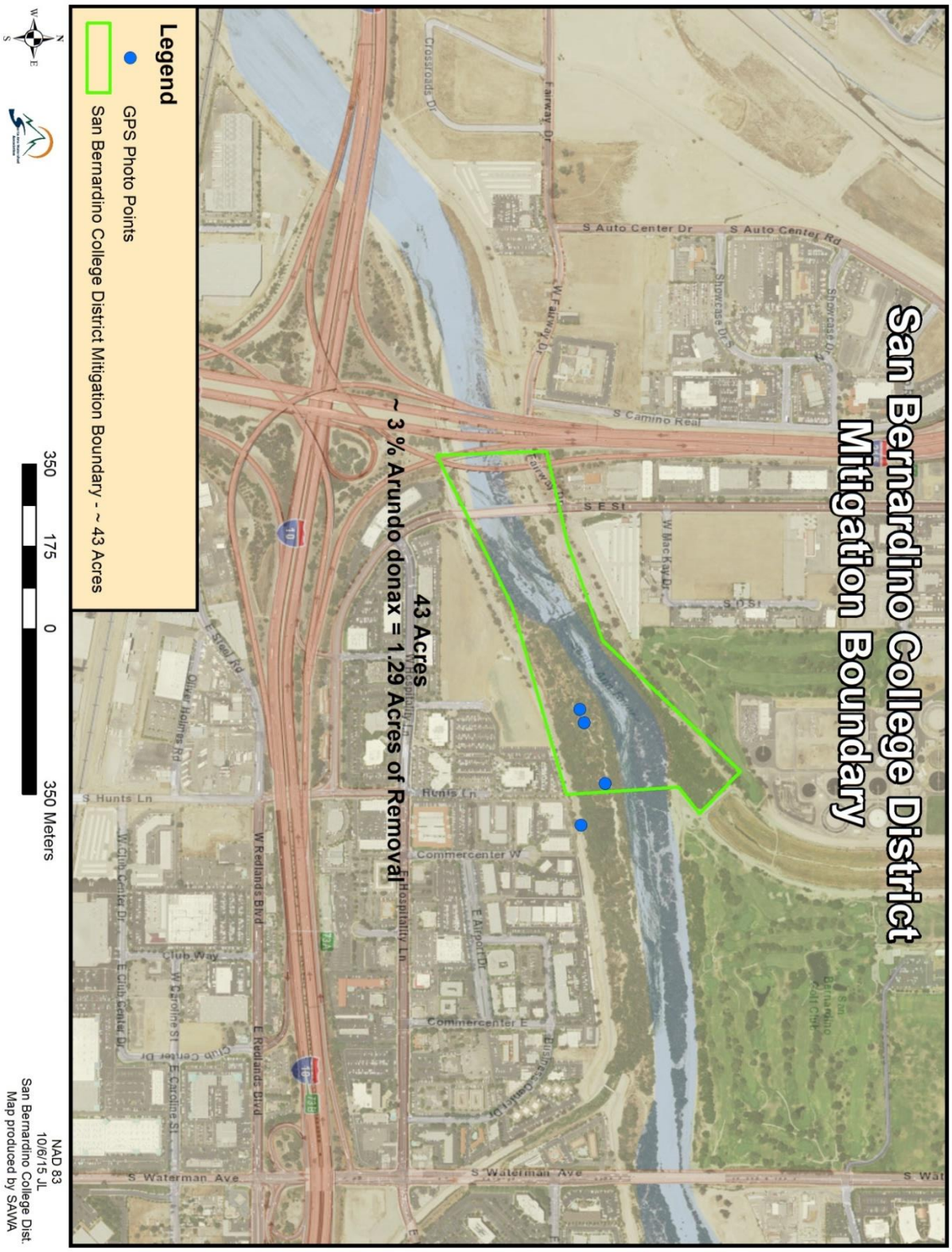
Photo point 3 – 473223, 3769759, heading NE

SBVCD SAN BERNARDINO FINANCIAL SUMMARY

SBVCD San Bernardino Project - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2007-0039-R6 USACE #2007-379-SLP RWQCB Cert. 8/13/07	Impacts from Phase I of Crafton Hills Master Plan	San Bernardino Community College	$300,000	3/27/2008		3.75	Restoration
Totals			***$300,000***			***3.75***	

7-1-15 to 6-30-16 Cost Breakdown	
Herbicide	$14.08
Staff Time	$1,688.07
Mileage	$61.36
Total	***$1,763.51***

MAP


San Bernardino College District
Mitigation Boundary
~ 3 % Arundo donax = 1.29 Acres of Removal
43 Acres
Legend
GPS Photo Points
San Bernardino College District Mitigation Boundary - ~ 43 Acres
350
175
0
350 Meters
NAD 83
10/6/15 JL
San Bernardino College Dist.
Map produced by SAWA
S Auto Center Dr
S Auto Center Rd
S Camino Real
S E St
S Hunts Ln
Commercenter W
Commercenter E
E Airport Dr
W Redlands Blvd
E Redlands Blvd
Club Way
S Waterman Ave

CDFW REPORTS: SUNNYSLOPE 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 9.28-A Sunnyslope site, and are indicated in the included map as demonstrated by locations of invasive vegetation removal, photo documentation, and general site monitoring.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Site assessment and manual treatment occurred on 7/1/15. Targeted species included giant reed and tamarisk. A total of 9 hours were spent on enhancement activities during this reporting period.

Conservation Activities: Activities associated with general preservation of property took place along Sunnyslope which consisted of established photo points and general bio-monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. The annual bioassessment survey took place on 5/9/16. A total of 7.25 hours were dedicated to conservation activities during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: This site occurs in a drainage channel made up of dense riparian habitat, with a canopy cover greater than 75%. The trees throughout the project are about 10-15 meters in height and shrubs about 2-5 meters in height. The following native species were documented on site: >15-25% black willows (*Salix gooddingii*), >5-15% red willow (*Salix lasiandra*), >5-15% cottonwood (*Populus fremontii*), and >5-15% sycamore (*Platanus racemose*). The following non-native species were documented on site: <1% tree tobacco (*Nicotiana glauca*) and <1% saltcedar (*Tamarix ramosissima*), and <1% giant reed (*Arundo don*ax).

Wildlife species: Sunnyslope Channel has many common avian species and riparian birds including but not limited to: Bewick's Wren (*Thryomanes bewickii*), House Finch (*Haemorhous mexicanus*), California Towhee (*Melozone crissalis*), Red-tailed Hawk (*Buteo jamaicensis*), Lesser Goldfinch (*Spinus psaltria*), Western Kingbird (*Tyrannus verticalis*), Greater Roadrunner (*Geococcyx californianus*), Bushtit (*Psaltriparus minimus*), Black-headed Grosbeak (*Pheucticus melanocephalus*), Acorn Woodpecker (*Melanerpes formicivorus*), Western Bluebird (*Sialia mexicana*), desert cottontail (*Sylvilagus audubonii*), and California ground squirrel (*Oteospermophilus beecheyi*). Other California species of special concern found on this site include the Yellow Warbler (*Setophaga petechial*). This site also hosts the state and federally-listed endangered Least Bell's Vireo (*Vireo bellii pusillus*). The creek also provides a breeding site for federally-listed endangered Santa Ana sucker (*Catostomus santaanae*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in July of this reporting period.

The amount removed and/or treated: The entire 9.28-A site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was <1% non-native cover. That brings the treated area to ~0.0928-A.

The frequency and timing of removal/treatment: All removal activities were conducted prior to Santa Ana Sucker spawning activities and prior to the migratory bird season to ensure that impacts would be minimized. On-going treatments were conducted when biomass reached a height range of 2 to 4 feet.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been very effective thus far. SAWA has experienced a high level of success in controlling the non-native species along Sunnyslope Creek and will continue to utilize the same methods into the future. With each year of treatment eradication will optimally be reached by the end of 2018.

PHOTOS – GPS PHOTO POINTS

GPS Photo Points during removal on 1/29/13 and post-removal 5/9/16, respectively.
Photo point 2 – 460044, 3759244, heading 41 degrees NE

Photos taken 5/9/16.
Photo point 3 – 459937, 3758994, heading 147 SE

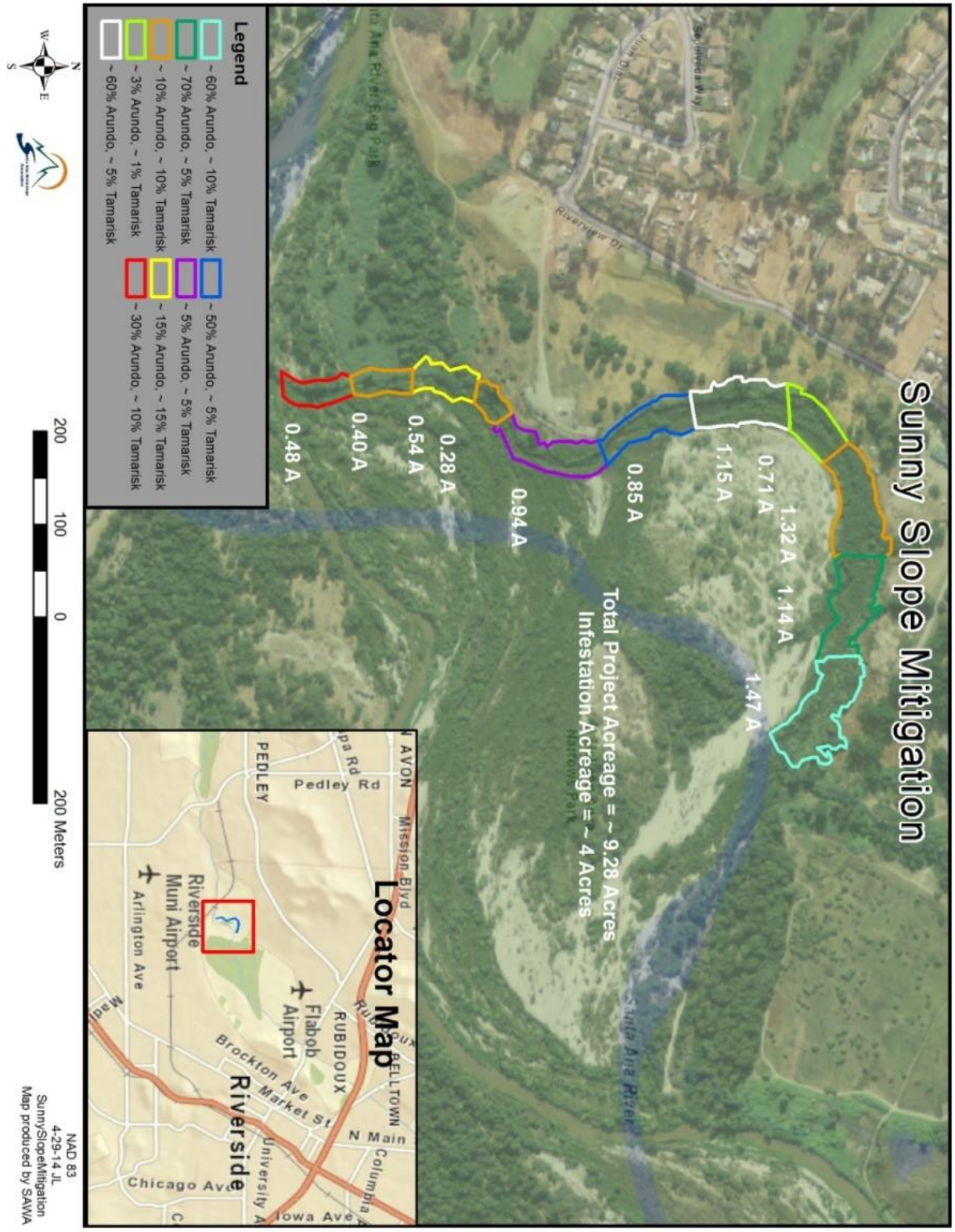
Photo point 4 – 460077, 3759303, heading 170 S

SUNNYSLOPE FINANCIAL SUMMARY

Sunnyslope Project - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2011-0165-R6 USACE #SPL-2011-00570-SME Amended RWQCB #33-2011-07	Impacts from the North Norco Channel Construction	Riverside County Flood Control	$82,500.00	6-5-2013 (trans from Norco City)	2.2	1.1	Active Restoration with removal
CDFW #1600-2007-0213-R6 (Op Law Letter) USACE #SPL-2008-00242 RWQCB #33-2007-43	Construction of Walgreen's at Arlington and Van Buren in Riverside CA	Arlington/Van Buren Investors	$156,000.00	2/24/2010	0.54	2.08	Removal and ongoing restoration
CDFW #1600-2008-0040-R6USACE #SPL-2008-00358-FBV	Discharge of fill into non-wetland waters in Temescal Wash near City of Corona	Starfield Sycamore Investors	$33,000.00	2/10/2010	0.15	0.15	Removal and ongoing restoration
Totals			***$271,500.00***		***2.89***	***3.33***	

7-1-15 to 6-30-16 Cost Breakdown	
Mileage	$48.38
Staff Time	$897.13
Herbicide	$0.00
Total	***$945.51***

MAP


Sunny Slope Mitigation
Total Project Acreage = ~ 9.28 Acres
Infestation Acreage = ~ 4 Acres
1.32 A
1.14 A
0.71 A
1.47 A
1.15 A
0.85 A
0.94 A
0.28 A
0.54 A
0.40 A
0.48 A
Legend
~ 60% Arundo, ~ 10% Tamarisk
~ 70% Arundo, ~ 5% Tamarisk
~ 10% Arundo, ~ 10% Tamarisk
~ 3% Arundo, ~ 1% Tamarisk
~ 60% Arundo, ~ 5% Tamarisk
~ 50% Arundo, ~ 5% Tamarisk
~ 5% Arundo, ~ 5% Tamarisk
~ 15% Arundo, ~ 15% Tamarisk
~ 30% Arundo, ~ 10% Tamarisk
200
100
0
200 Meters
Locator Map
Riverside
Pedley Rd
PEDLEY
AVON
Mission Blvd
RUBIDOUX
BELLTOWN
N Main
Flabob Airport
Riverside Muni Airport
Arlington Ave
Brockton Ave
Market St
Chicago Ave
Iowa Ave
NAD 83
4-29-14 JL
SunnySlopeMitigation
Map produced by SAWA

CDFW REPORTS: TEMESCAL WASH 3M 2.86-ACRE 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 10.96-A Temescal Wash 3M site, and are indicated in the included map as demonstrated by locations of invasive vegetation removal, photo documentation, and general site monitoring.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatments occurred on 8/10/15 and 8/11/15. Targeted species included giant reed (*Arundo donax*), tamarisk *(Tamarix ramosissima)*, castor bean *(Ricinus communis)*, mustard *(Brassica spp.)*, and perennial pepperweed *(Lepidium latifolium)*. A total of 60 hours were dedicated to enhancement activities during this reporting period.

Conservation Activities: Activities associated with general preservation of property took place on this site which consisted of established photo points and general bio-monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. The annual bioassessment survey was conducted on 5/25/16. A total of 9.5 hours were dedicated to conservation activities during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: The tree height class is 10-15 meters and the shrub height class is 2-5 meters. The following native species were documented on site: >1-5% black willow (*Salix gooddingii*), >5-15% blue elderberry (*Sambucus nigra*), >1-5% western stinging nettle (*Hesperocnide tenella*), >1-5% western sycamore (*Platanus racemosa*), >1-5% Coast live oak (*Quercus agrifolia*), and >11-5% California brittlebush (*Encelia californica*). The following non-native species were documented on site: >5-15%. Peruvian pepper tree (*Schinus molle*), >1-5% giant reed, >5-15% perennial pepperweed, <1% fan palm (*Washingtonia robusta*), <1% tree tobacco (*Nicotiana glauca*), >50-75% London rocket (*Sisymbrium irio*), and >1-5% black mustard (*Brassica nigra*).

Wildlife species: Many common wildlife species were observed on site, including Turkey Vulture (*Cathartes aura*), Red-tailed Hawk (*Buteo jamaicensis*), Greater Roadrunner (*Geococcyx californianus*), Nuttall's woodpecker (*Picoides nuttallii*), Black Phoebe (*Sayornis nigricans*), Northern Rough-winged Swallow (*Stelgidopteryx serripennis*), Bewick's Wren (*Thryomanes bewickii*), Phainopepla (*Phainopepla nitens*), California Towhee (*Melozone crissalis*), Song Sparrow (*Melospiza melodia*), White-crowned sparrow (*Zonotrichia leucophrys*), Black-headed Grosbeak (*Pheucticus melanocephalus*), Hooded Oriole (*Icterus cucullatus*), House Finch (*Haemorhous mexicanus*), Lesser Goldfinch (*Spinus psaltria*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Oteospermophilus beecheyi*), and coyote

(*Canis latrans*). In addition, SAWA biologists documented the endangered Least Bell's Vireo (*Vireo bellii pusillus*) and California Gnatcatcher (*Polioptila californica*) at this site during the bioassessment survey.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in August of this reporting period.

The amount removed and/or treated: The entire 10.96-A site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately 25% non-native cover. That brings the treated area to ~2.74-A.

The frequency and timing of removal/treatment: On-going treatments were conducted when biomass reached a height range of 2 to 4 feet.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been effective thus far. In order to ensure success active monitoring and treatments need to occur prior to non-native weeds setting seed.

PHOTOS

Photo taken 5/25/16.
Photo point 1 – 452640, 3744704, heading 207 SW

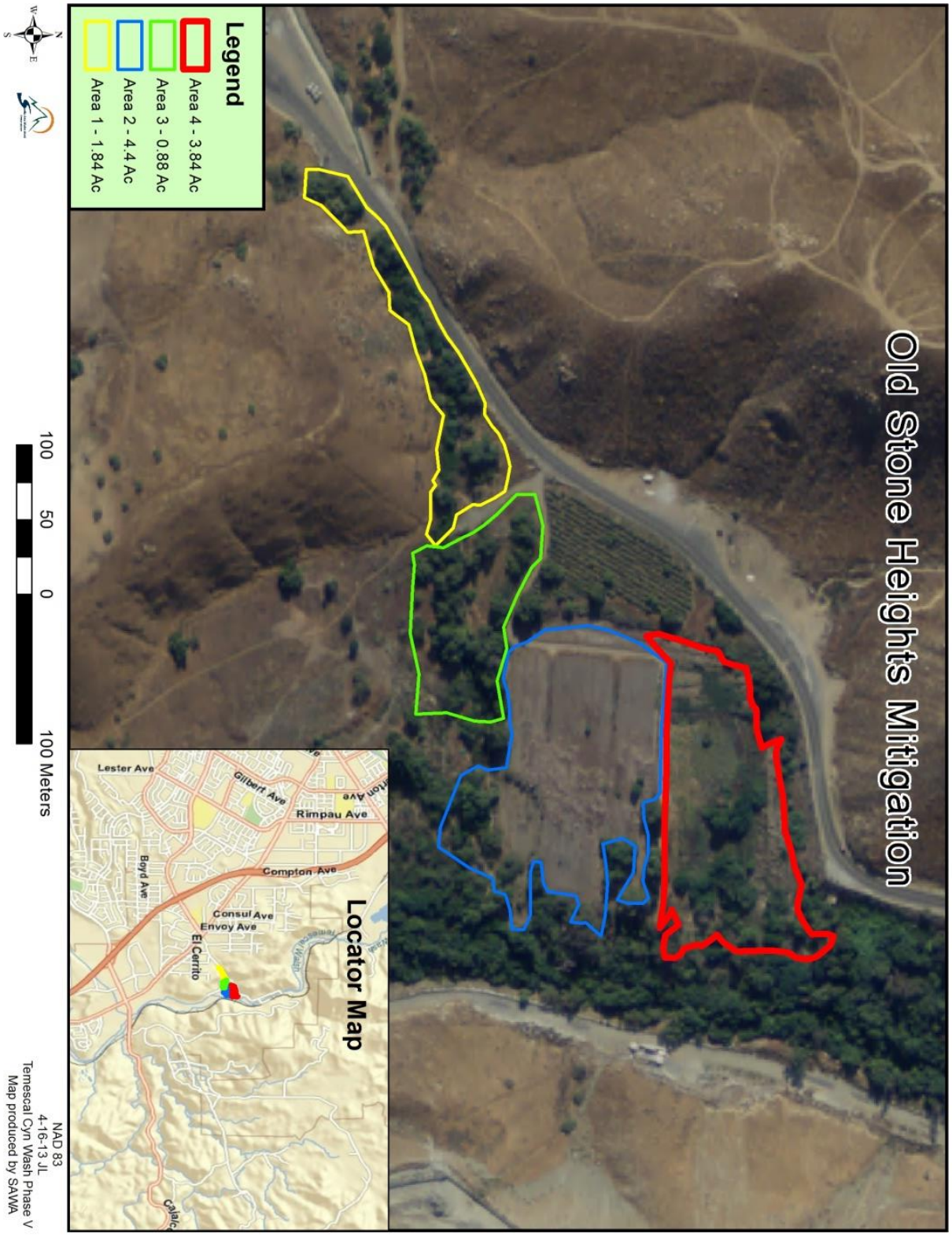
Photos pre- and post-removal, taken on 3/10/15 and 6/2/15, respectively.

TEMESCAL WASH 3M FINANCIAL SUMMARY

Temescal Wash 3M Project - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2010-0149-R6 (Op Law) USACE #SPL-2010-00522-CLD RWQCB #332010-29	Discharge of dredged material	Temescal office Partners, LP	$66,510.44	6/28/2012	0.018	0.27	Enhancement
Totals			***$66,510.44***		***0.018***	***0.27***	

7-1-15 to 6-30-16 Cost Breakdown	
Herbicide	$154.70
Staff Time	$3,052.43
Mileage	$31.86
Total	***$3,238.99***

MAP


Old Stone Heights Mitigation
Legend
Area 4 - 3.84 Ac
Area 3 - 0.88 Ac
Area 2 - 4.4 Ac
Area 1 - 1.84 Ac
100
50
0
100 Meters
Locator Map
Lester Ave
Gilbert Ave
Rimpau Ave
Compton Ave
Boyd Ave
Consul Ave
Envoy Ave
El Cerrito
NAD 83
4-16-13 JL
Temescal Cyn Wash Phase V
Map produced by SAWA

CDFW REPORTS: WOLFSKILL GILMAN 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 23-A Wolfskill-Gilman site, and are indicated in the included map as demonstrated by locations of invasive vegetation removal, photo documentation, and general site monitoring.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide applications occurred on 7/30/15, 8/3/15, 8/17/15, 12/22/15, 12/23/15, 3/29/16, 3/30/16, 4/6/16, 4/19/16, 6/1/16, 6/15/16, and 6/16/16. Treatments were conducted by SAWA's ISR crew. The species targeted during applications were mostly non-native annual weeds such as black mustard (*Brassica nigra)*. Saltcedar (*Tamarix ramosissima)* control has been extremely effective with less than 3% re-growth observed in this reporting period. A total of 264.5 SAWA staff hours were spent doing herbicide applications, site monitoring, project implementation, and documentation tasks.

Conservation Activities: Activities associated with general preservation of property took place along a significant portion of this large site, consisting of established photo points and general monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. SAWA and RCA's efforts to prevent OHV access has been mostly successful with minimal OHV activity observed in this reporting period. Due to the numerous trails located around the project site evidence of OHV activity is still present, mostly occurring near the upper reaches of the project. During periods of high winds trash (mostly plastic bags) has been observed blowing into the site from the adjacent dump. When the bags are encountered they are collected. RCA is currently researching a solution to the issue. Specific conservation activities took place on 12/21/15, 12/22/15, 2/18/16, 3/14/16, 3/15/16, 3/29/16, 3/30/16, 4/19/16, 5/1/16, 6/1/16, 6/15/16, and 6/16/16 (SAWA ISR department and biologist). The annual bioassessment survey took place 6/16/16. A total of 154.25 SAWA staff hours were spent in this reporting period on conservation activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: The canopy layer at this site has a height class of >5-10 m and shrub height class of 0.5-1 m. Dominant native species include 1-5% mulefat (*Baccharis salicifolia*), 1-5% California buckwheat (*Eriogonum fasciculatum*), <1% horseweed (*Erigeron canadensis*), and <1% cottonwood (*Populus fremontii*). Non-native species encountered were 1-5% Russian thistle (*Salsola tragus*) and <1% stink net (*Oncosiphon piluliferum*).

Wildlife species: Observed wildlife species include Spotted Towhee (*Pipilo maculatus*), Nuttall's Woodpecker (*Picoides nuttallii*), House Finch (*Haemorhous mexicanus*), California Quail (*Callipepla californica*), Bewick's Wren (*Thryomanes bewickii*), Black-headed Grosbeak (*Pheucticus melanocephalus*), Mourning Dove (*Zenaida macroura*), California Towhee (*Melozone, crissalis*), California Thrasher

(*Toxostoma redivivum*), Northern Mockingbird (*Mimus polyglottos*), Phainopepla (*Phainopepla nitens*), Western fence lizard (*Sceloporus occidentalis*), and side-blotch lizard (*Uta stansburiana*). One species of special concern, the Cactus Wren (*Campylorhynchus brunneicapillus*), was observed just outside the mitigation area.

Restoration activities consisted of: The only restoration activities that occurred during this reporting period were the on-going weeding around the natives that were planted. All watering activities for this site have ceased due to the fact that the natives have become established and don't require additional watering.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Treatments were conducted to the saltcedar in the fall in order to take advantage of the higher translocation rates toward the root zone that occur in fall. A basal bark treatment using either a 25% solution of Garlon 4 Ultra Herbicide and water or a 25% solution of Habitat Herbicide and water were used to treat the saltcedar. Re-growth was very minimal and most of the treatments targeted non-native annual weeds, such as black mustard (*Brassica nigra*), Russian thistle, and tocolote (*Centaurea melitensis)*. On-going monitoring and treatments will be necessary to ensure that these non-native annual weeds aren't allowed to grow to the point of setting viable seed. It is anticipated that with each year of treatments less non-native annuals will persist due to the exhaustion of the non-native seed bank.

The amount removed and/or treated: A total of ~ 8 small re-sprouts of saltcedar were treated throughout the site in this reporting period. It is estimated that ~1.15-A of non-native annual weeds were treated throughout the project site. None of the non-native weed infestations at this point can be considered eradicated, however the control on the saltcedar is estimated to be 99% effective.

The frequency and timing of removal/treatment: All treatments on saltcedar were conducted in the fall, outside of nesting season. The non-native annual weed treatments occurred before the plants reached the viable seed stage. Treatments occurred on: 7/30/15, 8/3/15, 8/17/15, 12/22/15, 12/23/15, 3/29/16, 3/30/16, 4/6/16, 4/19/16, 6/1/16, 6/15/16, and 6/16/16.

Disposal specifics: Due to the small size of the biomass all non-natives sprayed were allowed to decompose on the property.

Summary of the general successes and failures or overall failure of the nonnative removal plan: The basal bark treatment method used to control the saltcedar was highly effective and SAWA plans to use for all future *Tamarix* treatments during the fall. The foliar applications made using either back pack sprayers or our 75 gallon tank mounted with reels to our Polaris were effective. Unfortunately it is anticipated that these annual weeds will continue to grow from the long lived seed bank. This will require on-going monitoring and maintenance to ensure that over time the seed bank will be eradicated and the presence of these non-native annual weeds will cease to exist within the project boundary. The control efforts on the gophers have been effective and there is minimal morality to native plants due to gopher predation. SAWA has been discussing with RCA the future possibility of removing feral pigs, but no concrete plans have been set to date.

PHOTOS – GPS PHOTO POINTS

I-215 widening mitigation, photos taken 10/4/12 and 6/16/16, respectively.
Photo point 2 – 498111, 3747960, heading 55


Ironwood Ave mitigation, photos taken 11/27/12 and 6/16/16, respectively.
Photo point 11 – 497983, 3749253, heading 318

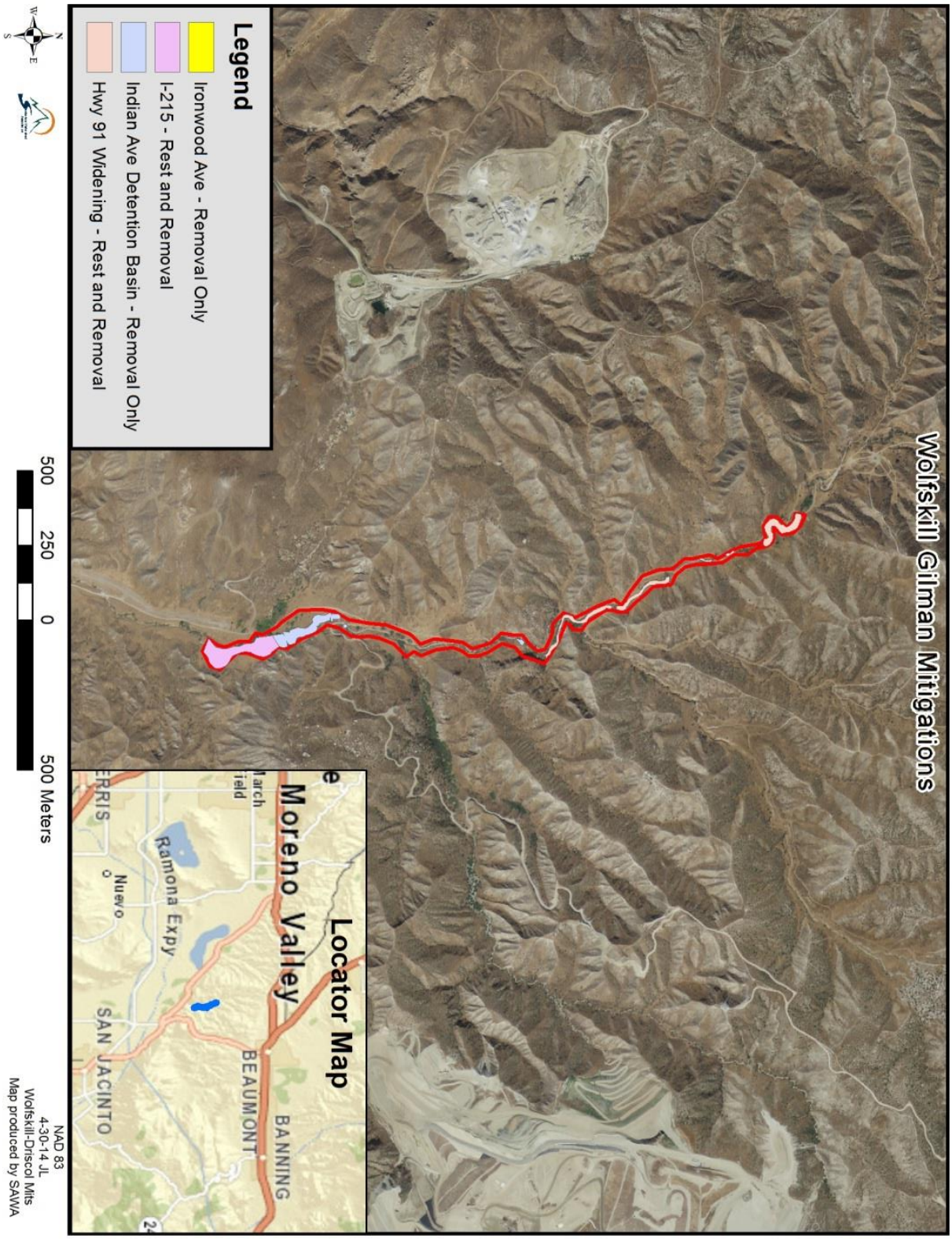

C A-91 widening mitigation, photos taken 11/16/12 and 6/16/16, respectively.
Photo point 12 – 497901, 3749404, heading 149


WOLFSKILL-GILMAN FINANCIAL SUMMARY

Wolfskill Gilman - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2009-0060-R6	Discharge of fill into tributaries of Box Springs Creek	City of Moreno Valley -- Ironwood Ave.	$33,000.	6/30/2010	0.08	0.25	Initial Removal and on-going maintenance
CDFW #1600-2009-0115-R6	Permanent fill of portion of Bale Creek, Indian Ave.	City of Moreno Valley -- Indian Ave.	$148,500	6/28/2010	0.74	1.98	Initial Removal and on-going maintenance
CDFW #1600-2012-0024-R6 USACE #SPL-2010-00944-SCH RWQCB #302012-05	Impacts from widening of Highway 215	Riverside County Transportation Commission	$310,478	Payment to SJBRCD - 12/14/2012	2.144	2.988	Initial Removal and on-going maintenance
CDFW #1600-2008-0138-TR6 USACE #SPL-2008-00269-SCH RWQCB #30-2008-28	Highway 91 Widening	California Department of Transportation	$234,000	Payment to SJBRCD - 12/1/2011	1.633	2.66	Initial Removal and Active Restoration
Totals			***$725,978***		***4.597***	***7.878***	

7-1-15 to 6-30-16 Cost Breakdown	
Herbicide	$1,347.34
Staff Time	$18,062.24
Mileage	$372.88
Total	***$19,782.46***

MAP


Wolfskill Gilman Mitigations
Legend
Ironwood Ave - Removal Only
I-215 - Rest and Removal
Indian Ave Detention Basin - Removal Only
Hwy 91 Widening - Rest and Removal
500
250
0
500 Meters
Locator Map
Moreno Valley
BEAUMONT
BANNING
Ramona Expy
SAN JACINTO
NAD 83
4-30-14 JL
Wolfskill-Driscol Mits
Map produced by SAWA

CDFW REPORTS: WOLFSKILL 1.47 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 1.47-A Wolfskill site, and are indicated in the included map as demonstrated by locations of invasive vegetation removal, photo documentation, and general site monitoring.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide applications occurred on 8/3/15, 12/23/15, 3/31/16, 4/6/16, 6/15/16, and 6/16/16. These treatments primarily targeted saltcedar (*Tamarix ramosissima*). A total of 70.5 SAWA staff hours were spent doing herbicide applications, site monitoring, project implementation, and documentation tasks.

Conservation Activities: Activities associated with general preservation of property took place throughout the site, consisting of established photo points and general monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. SAWA and RCA's efforts to prevent OHV access has been mostly successful with minimal OHV activity observed in this reporting period. Due to the numerous trails located around the project site evidence of OHV activity is still present, mostly occurring near the upper reaches of the project. During periods of high winds trash (mostly plastic bags) has been observed blowing into the site from the adjacent dump. When the bags are encountered they are collected. RCA is currently researching a solution to the issue. Specific conservation activities took place on 7/9/15, 8/3/15, 8/19/15, 12/21/15, 12/22/15, 2/17/16, 2/18/16, 3/16/16, 3/31/16, 4/7/15, 6/15/16, and 6/16/16 (SAWA ISR department and biologists). The annual bioassessment survey was conducted on 6/16/16. A total of 120.5 SAWA staff hours were spent in this reporting period on conservation activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: Canopy height class is >1-2 m and shrub height class is >1-2 m. Native species observed on site include 1-5% fourwing saltbush (*Atriplex canescens*), 1-5% mulefat (*Baccharis salicifolia*), 1-5% California buckwheat (*Eriogonum fasciculatum*), and 1-5% elderberry (*Sambucus caerulea nigra*). Non-native species observed on site include >25-50% Russian thistle (*Salsola tragus*) and 1-5% saltcedar.

Wildlife species: Wildlife species observed on site include Bewick's Wren (*Thryomanes bewickii*), Bullock's Oriole (*Icterus bullockii*), House Finch (*Haemorhous mexicanus*), California Towhee (*Melozone crissalis*), Spotted Towhee (*Pipilo maculatus*), Western Kingbird (*Tyrannus verticalis*), Black-headed Grosbeak (*Pheucticus melanocephalus*), and Western fence lizard (*Sceloporus occidentalis*).

Restoration activities consisted of: The only restoration activities that occurred during this reporting period were the on-going watering events conducted by Washburn Grove Management to ensure that the natives planted continued to receive water in the hot summer months.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Treatments were conducted to the saltcedar in the fall in order to take advantage of the higher translocation rates toward the root zone that occur in fall. A basal bark treatment using a 25% solution of Garlon 4 Ultra Herbicide, Competitor (methylated seed oil) and water were used to treat the saltcedar. Re-growth of saltcedar was very minimal and most of the treatments targeted non-native annual weeds, such as black mustard (*Brassica nigra),* Russian thistle, and tocolote (*Centaurea melitensis)*. On-going monitoring and treatments will be necessary to ensure that these non-native annual weeds aren't allowed to grow to the point of setting viable seed. It is anticipated that with each year of treatments less non-native annuals will persist due to the exhaustion of the non-native seed bank.

The amount removed and/or treated: A total of 10 small re-sprouts of saltcedar were treated throughout the site in this reporting period. It is estimated that ~ 0.5-A of non-native annual weeds were treated throughout the project site. None of the non-native weed infestations at this point can be considered eradicated, however the control on the saltcedar is estimated to be 98% effective.

The frequency and timing of removal/treatment: All treatments on saltcedar were conducted in the fall, outside of nesting season. The non-native annual weed treatments occurred before the plants reached the viable seed stage. Treatments occurred on: 8/3/15, 12/23/15, 3/31/16, 4/6/16, 6/15/16, and 6/16/16.

Disposal specifics: Due to the small size of the biomass all non-natives sprayed were allowed to decompose on the property.

Summary of the general successes and failures or overall failure of the nonnative removal plan: The basal bark treatment method used to control the saltcedar was highly effective and SAWA plans to use for all future *Tamarix* treatments during the fall. The foliar applications made using either back pack sprayers or our 75 gallon tank mounted with reels to our Kubota were effective. Unfortunately it is anticipated that these annual weeds will continue to grow from the long lived seed bank. This will require on-going monitoring and maintenance to ensure that over time the seed bank will be eradicated and the presence of these non-native annual weeds will cease to exist within the project boundary.

PHOTOS – GPS PHOTO POINTS

Photos taken pre and post-removal, on 1/13/15 and 6/16/16, respectively.

Photo point 1 – 498059, 3747665, heading 12

Photo point 2 – 498084, 3747648, heading 335

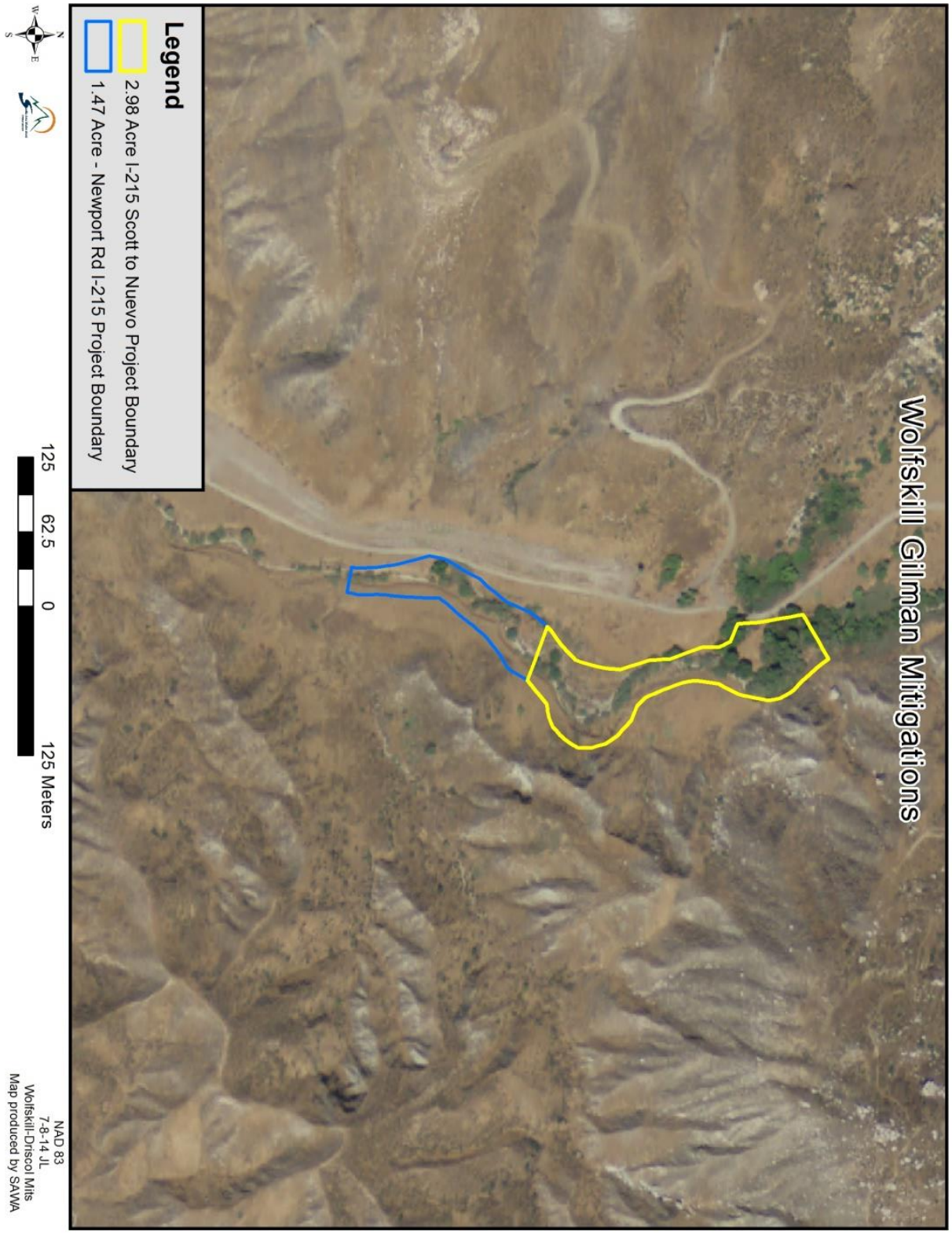
Photo point 3 – 498154, 3747822, heading 242

WOLFSKILL 1.47 FINANCIAL SUMMARY

Wolfskill 1.47 Project - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2012-0210-R6 (Op Law) USACE #SPL-2010-00446-NWP RWQCB #332012-36	Widening of the Newport Rd overcrossing and N I-215 bridge	Riverside County Transportation Department	$200,234.90		2.041	1.47	Active restoration
Totals			***$200,234.90***		***2.041***	***1.47***	

7-1-15 to 6-30-16 Cost Breakdown	
Herbicide	$555.16
Staff Time	$9,564.93
Mileage	$376.42
Total	***$10,496.51***

MAP


Wolfskill Gilman Mitigations
Legend
2.98 Acre I-215 Scott to Nuevo Project Boundary
1.47 Acre - Newport Rd I-215 Project Boundary
125
62.5
0
125 Meters
NAD 83
7-8-14 JL
Wolfskill-Driscol Mits
Map produced by SAWA

REGION 6

CDFW AND USACE

CDFW REPORTS: CALNEV PIPELINE 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 300-A CalNev Pipeline site, and are indicated in the included map as demonstrated by locations of invasive vegetation removal, photo documentation, and general site monitoring.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: There were a total of five removal/monitoring events conducted throughout the 7/1/15 – 6/30-16 reporting period, consisting of 8/20/15 (SAWA field ecologist), 10/06/15 (SAWA field ecologist plus one USFS field technician), 11/17/15 (SAWA Field Ecologist), 11/19/15 (SAWA Field Ecologist), and 12/17/2015 (SAWA Field Ecologist). The removals were performed over mixed stands of *Arundo donax,* and *Tamarix ramosissima* and involved a total of 48 crew hours for removal planning, implementation, and documentation tasks for enhancement.

Conservation Activities: Activities associated with general preservation of property took place along a significant portion of this large site, consisting of established photo points and general bio-monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. It also involved further refinement of removal calculation methods, creation of GIS maps, and other administrative activities required for ongoing project management.

CalNev Staff Time 7-1-15 Through 6-30-16			
Date	Staff Member	Hours	Notes
8/20/2015	SAWA Field Ecologist	8.5	Enhancement
10/06/2015	SAWA Field Ecologist	8.5	Enhancement
10/06/2015	USFS Field Tech	8.5	Enhancement
11/17/2015	SAWA Field Ecologist	6.5	Enhancement
11/19/2015	SAWA Field Ecologist	7.5	Enhancement
12/17/2015	SAWA Field Ecologist	8.5	Enhancement
Total Staff Hours		**48**	

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of *Arundo donax, Cortaderia selloana,* and *Tamarix ramosissima* were done using the cut-and-daub method of application of glyphosate. As this project occurs on Federal lands, it is covered by National Environmental Protection Act documentation which has specific standards for herbicide type and application, and the use of Rodeo as a 50% solution in water falls within the allowances of these documents.

The amount removed and/or treated: A total of .135-A was eradicated, consisting of .012-A of new removal and .024-A of re-treated areas. This brings the total for five years of removal of spotty populations of invasives over a large project area to .968-A. A total of .11-A are left to complete the 1.08-A requirement associated with the CalNev Pipeline Project.

Table : Treatment of Invasive Vegetation, July 1st 2015 – June 30th 2016

Species Treated	Removal Type	Total Acreage Removed
Arundo donax *Tamarix ramosissima*	New	.012-A
Arundo donax *Tamarix ramosissima*	Re-Treatment	.024-A
Totals		.135-A

Removal through 07_01_15	0.968-A
Removal Cumulative to 06-01-16	**1.004-A**

This is based on methodology established by SAWA, shown in the table below demonstrating quantifying total area treated adjusted by infestation:

Action	GIA (Gross Infested Acre)	NIA (Net Infested Acre)	# of Patches or Individuals of Invasive Plants Treated
Chemical Treatment	.022-A	0.012-A	31
Chemical Retreatment	.035-A	0.024-A	65

The frequency and timing of removal/treatment: All but one treatment were conducted outside of nesting season during the months of August, October, November, and December.

Disposal specifics: due to the small size of the biomass removed from the targeted species re-sprouts/new growth, it was removed from the riparian area and left to decompose on the property.

Summary of the general successes and failures or overall failure of the nonnative removal plan: the July 1st 2015 – June 30th 2016 reporting period represents the second half of year five and first half of year six of implementation of a six-year project. While this project has had challenges including but not limited to federal restrictions on invasive vegetation removal methods, general site access, and accurate representation of treatment/re-treatment areas, it has also been successful in terms of target species documented and removed through multiple annual visits since 2010. Since 2010, a total of 1.004-A of invasive species have been documented and removed over the 300-A project area, leaving .08-A to document and remove in the final .5 years of the project; additionally, ongoing involvement of multiple

partners and integration of remote and on-the-ground data collection in combination with careful tracking of removal areas has enabled execution of new treatments and re-treatments in a highly efficient manner.

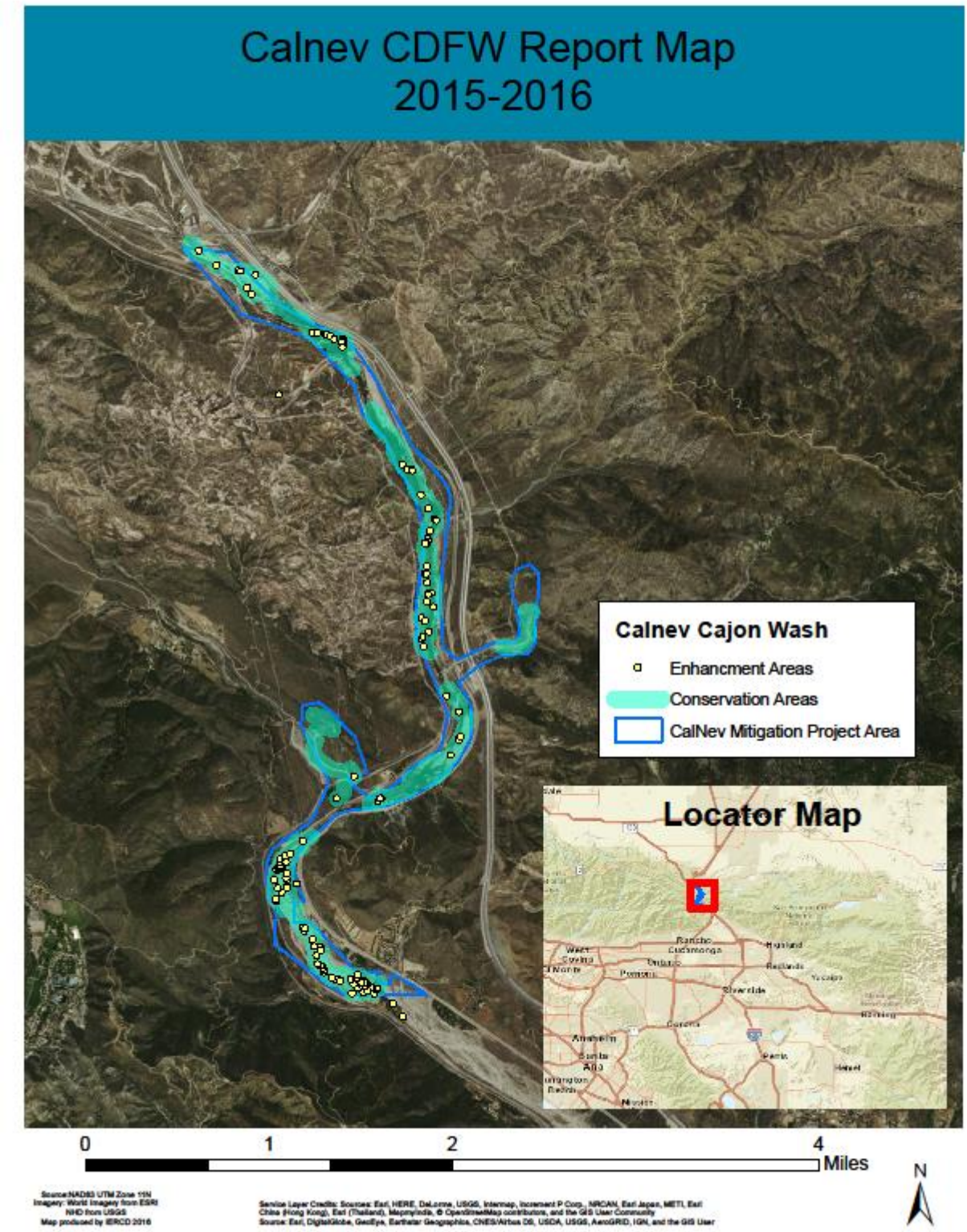
Planned July 1st 2016 – June 30th 2017 work including .08-A of treatment and re-treatment of target species, in addition to ongoing outreach to landowners adjacent to the project area to further the control of invasives in the Cajon Pass.

REPRESENTATIVE PROJECT PHOTOS

Above L: Treated/Removed *Arundo donax* 2015; Above R: Oak sapling recruiting through same patch 2016

Above: Removal/ Re-treatment of *Tamarix ramosissima*
Below: Initial treatment of *Tamarix ramosissima*

JULY 1ST 2015 – JUNE 30TH 2016 CDFW CALNEV PIPELINE WORK



CDFW REPORTS: CENTERPOINTE 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Overton Moore Properties contacted the IERCD concerning their mitigation needs in conjunction with impacts made in the creation of the Centerpointe Development in Moreno Valley. Right of first refusal for project implementation was given to the San Jacinto Basin RCD, who declined to facilitate the mitigation. Following their declination, the IERCD worked with non-profit Santa Ana Watershed Association (SAWA) to begin work required for mitigation facilitation

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Final assignment for projected impacts of .51-A associated with Overton Moore's planned development was 1.02-A of restoration and .44-A of enhancement. Work performed since the acceptance of these project responsibilities has focused on the Cienega property in San Timoteo Canyon owned by the Riverside Land Conservancy (RLC).

In the first year of project planning, significant coordination with project partners occurred in order to determine potential placement for responsibilities; once that was confirmed, pre-implementation data collection was performed including vegetation surveying which revealed 90% infestation of the site by exotic species, and soil surveying which revealed soil and groundwater levels capable of long-term support of riparian species. Unfortunately, of the two major properties considered for placement, both were unable to be selected as candidates for final mitigation funding application due to inability to secure perpetuity right to access the property to enable satisfaction of perpetuity maintenance/monitoring element of the site.

The 2015-16 reporting period included IERCD research into current invasive cover at pending City of Norco property, in addition to performance of hydrology study to demonstrate riparian characteristics of property. Ultimately, District staff was able to locate and reserve 1.02-A of restoration and .44-A of enhancement capable of being placed within this site, currently funded for minimal maintenance but no other money to address considerable issues with presence and ongoing spread of invasive vegetation. Once the District finalizes the terms of the easement, physical work for this project and others assigned to be placed there can begin. Additional work performed on behalf of multiple projects to be placed at the City of Norco has been billed is not reflected in the following hourly or financial summaries.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: No removal occurred during this reporting period.

The amount removed and/or treated: No removal occurred during this reporting period.

The frequency and timing of removal/treatment: No removal occurred during this reporting period.

Disposal specifics: No removal occurred during this reporting period.

Summary of the general successes and failures or overall failure of the nonnative removal plan: No removal occurred during this reporting period.

FINANCIAL SUMMARY

2015-16 Staff Time Summary: Centerpointe	
Category	*Category Hours*
General Admin	1.5
GIS	.75
Total Project Hours	**2.5**

Funds Management:

- **Received:**
  - Deposit I, $5,000 on 10/6/11

Centerpointe: 2015-16 Costs		
Category	Cost	Notes
Salaries	$ 118.23	
Total Project Costs, 2016	$118.23	

Total Expended to 12-31-15	$2,930.01
Total Expended to 12-31-16	$3,048.24

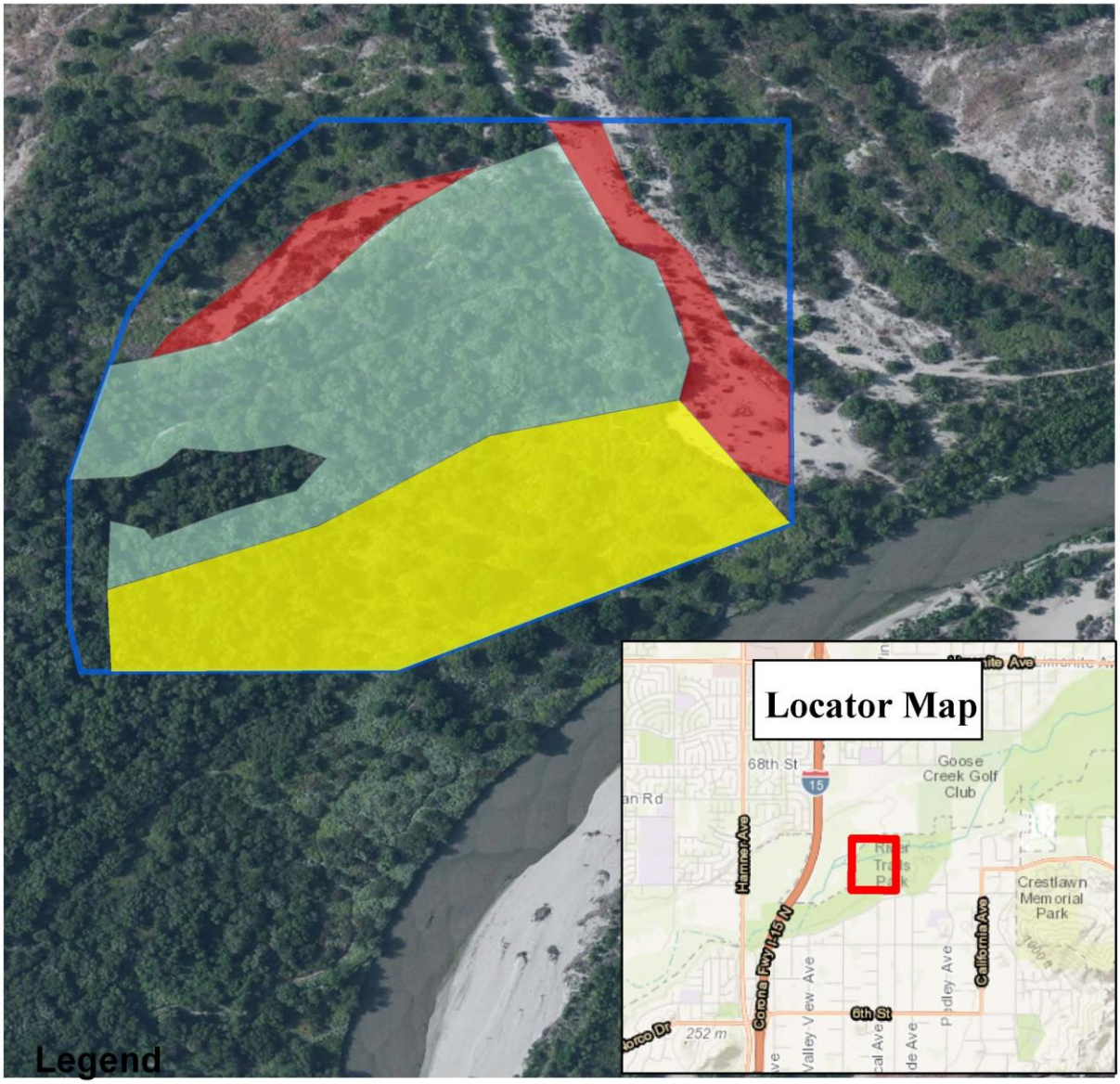
Deposit Balance as of 12-31-16		**$1,951.76**

PHOTOS

Final Centerpointe Placement:

21-A City of Norco minimally-funded conservation easement, located within Santa Ana River watershed, downstream from originally slated Centerpointe placement within San Timoteo Canyon sub-watershed. In the 2016 reporting period, the property was revisited for updated enhancement and restoration potential, in addition to conduction of a hydrology study to determine riparian characteristics of the site. Placement work in 2017 will include final mapped area within restoration/enhancement polygons, shown alongside other small mitigations and included in an RFP for site preparation and planting for winter 2017-18 implementation.

Combined City of Norco Mitigation Projects Proposal



CDFW REPORTS: HABITAT FOR HAMNER (HH)
7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the ~4.6-A Habitat for Hamner site, and are indicated in the included map as demonstrated by locations of invasive vegetation removal, photo documentation, and general site monitoring.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Initial biomass removal began in 2007. Funding for the project ended in 2008 and SAWA then placed the 2-acres of on-going restoration funding to maintain the site. The original species targeted for removal was giant reed (*Arundo donax*). After reviewing the mitigation requirement SAWA realized that it applied the 2 acres of on-going mitigation restoration to ~ 30 acres of enhancement. SAWA has determined that we over committed the funds and have since decreased the project acreage and are planning a active restoration project to comply with the original mitigation requirements. Site assessments have revealed other non-native vegetation recolonizing areas left by the eradicated giant reed. SAWA's ISR crew has been targeting not only the giant reed, but all other non-native vegetation throughout the ~4.6-A site. The primary species of invasive vegetation observed in 2016 was giant reed. No herbicide applications occurred during this reporting period. It is estimated that ~30% of the open space void left by eradicated giant reed has now been infested by non-native herbaceous vegetation. The areas now infested with non-native (mostly annual) weeds will be controlled and restored by SAWA.

Conservation Activities: Activities associated with general preservation consisted of established photo points and general bio-monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. The annual bioassessment survey took place 5/20/16. A total of 12 hours have been spent on all activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Currently working with property owner to identify areas where restoration including planting of native plant species should be undertaken.

Current site conditions: The canopy cover on this site has a height of >15-20 meters, and shrub height of >2-5 meters. Native species include >15-25% black willow (*Salix gooddingii*), >5-15% mulefat (*Baccharis salicifolia*), and >5-15% willow species (*Salix* sp.). Non-native species include >25-50% giant reed and >15-25% poison hemlock (*Conium maculatum*).

Wildlife species: Four territories of the state and federally-listed endangered Least Bell's Vireo (*Vireo bellii pusillus*) were documented on the annual bioassessment survey, including two fledglings. The SAWA biologist who regularly monitors this site documented six territories total. The Yellow Warbler (Setophaga petechial), a California species of concern, is also present on site. Other species include Common Raven (*Corvus corax*), Spotted Towhee (*Pipilo maculatus*), Song Sparrow (*Melospiza melodia*), Brewer's Blackbird (*Euphagus cyanocephalus*), Red-tailed Hawk (*Buteo jamaicensis*), and Anna's Hummingbird (*Calypte anna*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications did not occur during this reporting period.

The amount removed and/or treated: The site area south of the Santa Ana River was monitored and non-native vegetation cover was treated as it was encountered. Access issues prevented treatment on the north side of the river during this reporting period. SAWA is currently working on land owner access agreements with landowners. Once access is granted SAWA will conduct surveys and treatments to the entire site.

The frequency and timing of removal/treatment: All removal activities were conducted after the migratory bird season to ensure that impacts would be minimized. On-going treatments were conducted when biomass reached a height range of 2 to 4 feet.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been effective thus far. SAWA has experienced a high level of success in controlling the non-native species on this project site and will continue to utilize the same methods into the future. With each year of treatment eradication will optimally be reached by the end of 2018. In addition, SAWA will present its restoration plan to the regulatory agencies for approval.

PHOTOS

Photos taken 8/28/07 and 5/20/16, respectively.
Photo point 1 – 448286, 3756437, heading SW

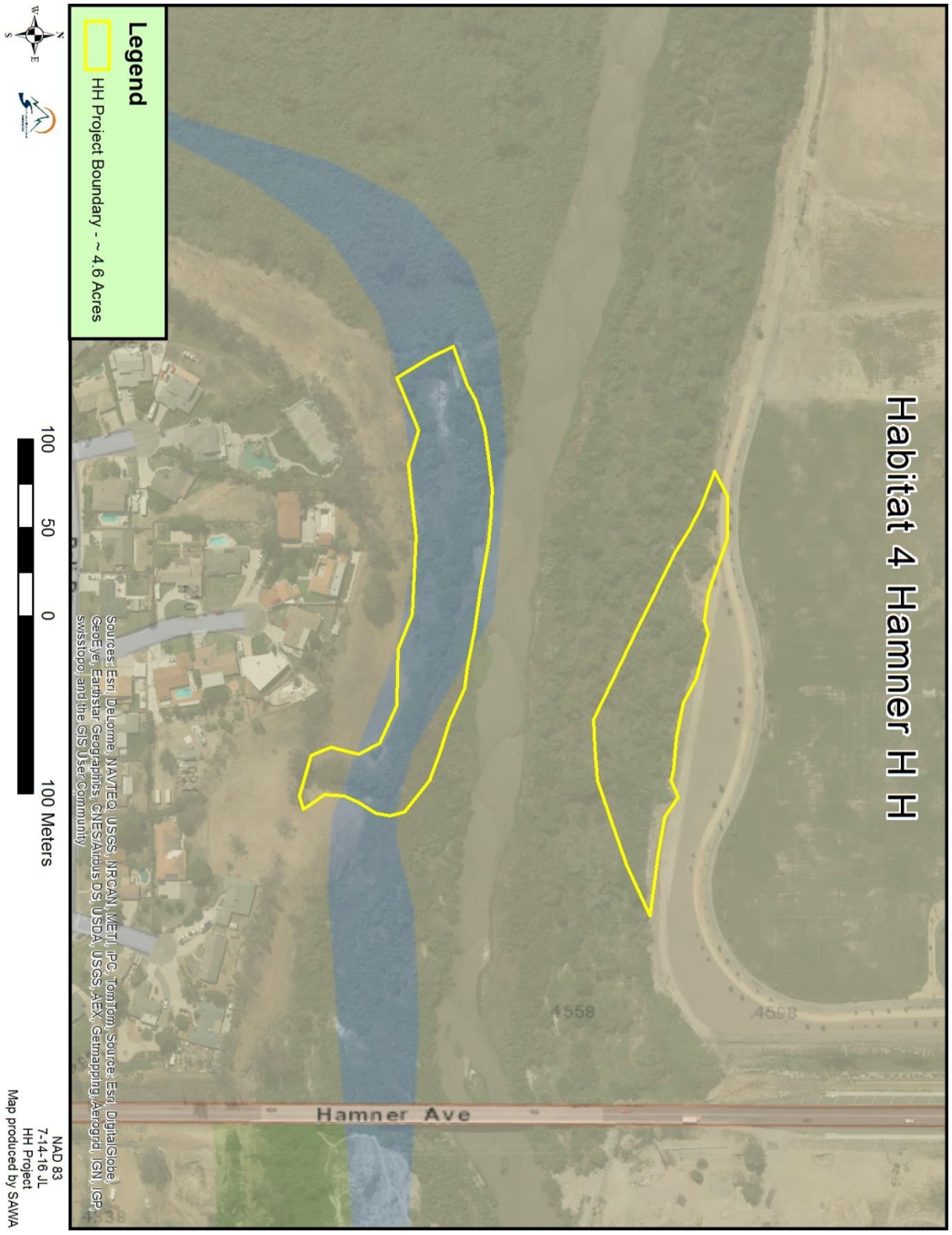
Photo point 3 – 448043, 3756475, heading SW

HABITAT FOR HAMNER FINANCIAL SUMMARY

Habitat for Hamner - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2008-0104-R6 USACE #SPL-2008-00784-JEM	Riprap along right bank of Santa Ana River for erosion control	Jurupa Community Services District	$120,000	1/13/09	0.841	2	Ongoing maintenance of former removal
Totals			**$120,000**		**0.841**	**2**	

7-1-15 to 6-30-16 Cost Breakdown	
Mileage	$18.29
Staff Time	$745.83
Herbicide	$0
Total	***$764.12***

MAP


Habitat 4 Hamner H H
Legend
HH Project Boundary - ~ 4.6 Acres
Hamner Ave
4558
4698
100
50
0
100 Meters
Sources: Esri, DeLorme, NAVTEQ, USGS, NRCAN, METI, iPC, TomTom, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
NAD 83
7-14-16 JL
HH Project
Map produced by SAWA

CDFW REPORTS: SAR I-210 TO INTERCHANGE 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the ~930-A project located along the Santa Ana River main stem from the I-210 overpass in Highland, downstream to the I-10/I-215 interchange in San Bernardino. The goal of this project is to control previously removed non-native invasive vegetation. Targeted species include, but are not limited to, giant reed (*Arundo donax*), perennial pepperweed (*Lepidium latifolium*), Spanish broom (*Spartium junceum*), saltcedar (*Tamarix ramosissima*), castor bean (*Ricinus communis*), bull thistle (*Cirsium vulgare*), and tree of heaven (*Ailanthus altissima*).

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatments occurred on 7/1/15, 5/3/16, 5/10/16, 5/25/16, 5/31/16, 6/2/16, 6/13/16, and 6/14/16. A total of 249 hours were spent on enhancement activities during this reporting period. Targeted species included, but are not limited to, giant reed, tamarisk, castor bean, and Spanish broom.

Conservation Activities: Activities associated with general preservation of property took place along the main stem, which consisted of established photo points and general bio-monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. Specific conservation activities took place on 5/2/16, 5/3/16, 5/10/16, 5/25/16, and 6/13/16. The annual bioassessment took place on 6/13/16. A total of 39.5 hours were dedicated to conservation activities during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred at this project.

Current site conditions: The tree height class is >5-10 meters and the shrub height class is >1-2 meters. Documented native species include >15-25% cottonwood (*Populus fremontii*), >5-15% black willow (*Salix gooddingii*), and 1-5% mulefat (*Baccharis salicifolia*). Non-native species include 1-5% castor bean, 1-5% tree tobacco (*Nicotiana glauca*), and 1-5% *Eucalyptus* sp.

Wildlife species: Two Least Bell's Vireos (Vireo bellii pusillus), a state and federally listed endangered species, and were documented within this project site. Other detected species include Spotted Towhee (Pipilo maculatus), Song Sparrow (Melodia melospiza), Common Yellowthroat (*Geothlypis trichas*), Common Raven (Corvus corax), and Yellow Warbler (Setophaga petechial), a California species of special concern.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in May, June, and July of this reporting period.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately ~2% non-native cover. That brings the treated area to ~18.6-A.

The frequency and timing of removal/treatment: On-going treatments were conducted when biomass reached a height range of 2 to 4 feet.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been very effective thus far. SAWA has experienced a high level of success in controlling the non-native species on this project site and will continue to utilize the same methods into the future. Tamarisk seed source upstream is causing new saplings to grow each year and will require on-going treatments year after year to ensure they aren't allowed to colonize.

PHOTOS

Photos taken 9/16/2015 and 6/13/16, respectively.
Photo point 3 – 477527, 3771409, heading NE

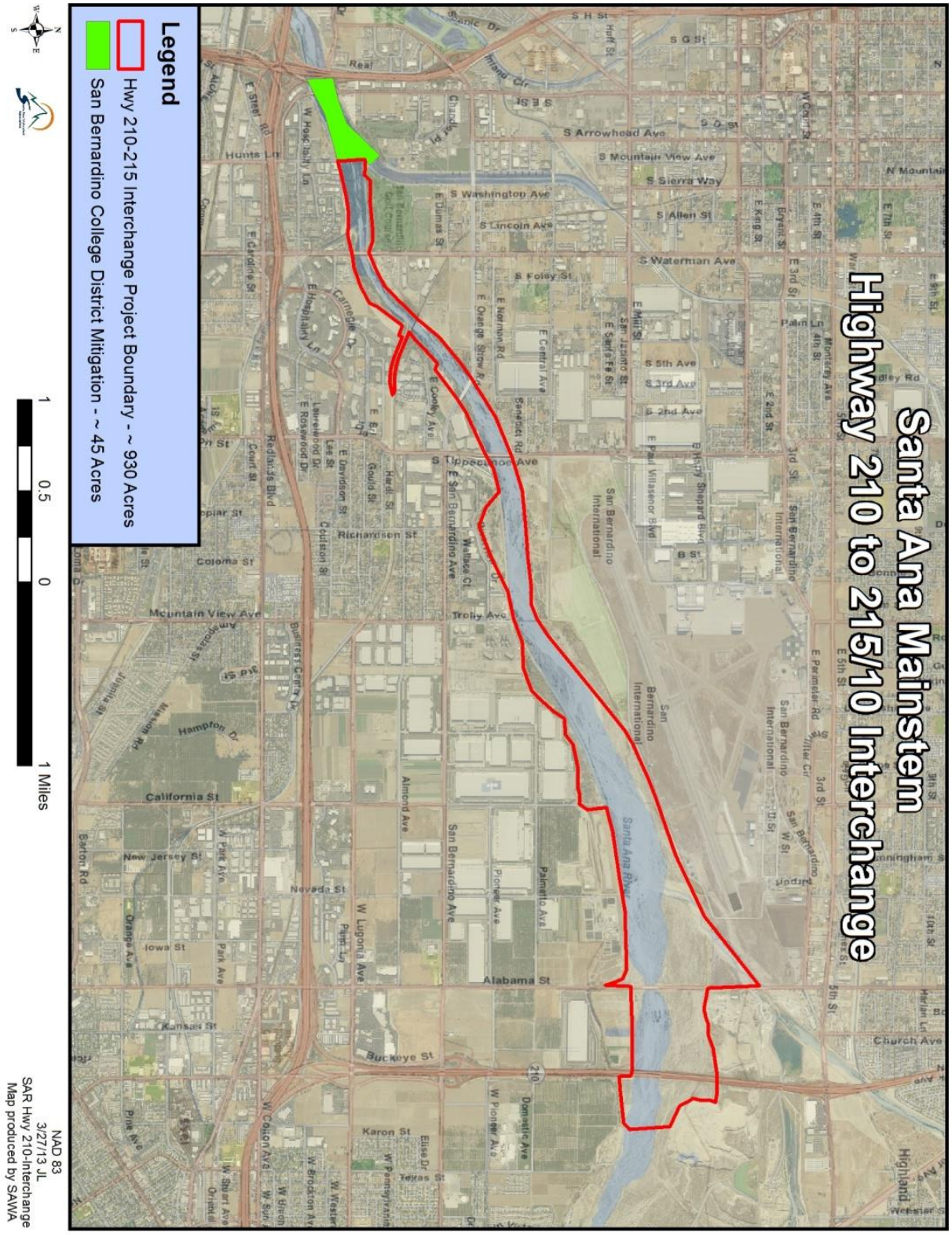
Photo point 4 – 480751, 3772655, heading E

SAR I-210 TO INTERCHANGE FINANCIAL SUMMARY

SAR I-210 to I-215 Interchange Project - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2005-0309-R5 USACE #2005-01214-CLM SPL-2008-0107-JEM	Impacts from school development	Friends Christian High School	$135,000	11/4/2009	2.4	2.4	On-going maintenance
Totals			***$135,000***		***2.4***	***2.4***	

7-1-15 to 6-30-16 Cost Breakdown	
Herbicide	$332.37
Staff Time	$13,395.35
Mileage	$258.89
Total	***$13,986.61***

MAP


Santa Ana Mainstem
Highway 210 to 215/10 Interchange
Legend
Hwy 210-215 Interchange Project Boundary - ~ 930 Acres
San Bernardino College District Mitigation - ~ 45 Acres
1
0.5
0
1 Miles
NAD 83
3/27/13 JL
SAR Hwy 210-Interchange
Map produced by SAWA

CDFW REPORTS: SAR LA CADENA TO RIX TREATMENT PLANT 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place along the Santa Ana River from La Cadena downstream to the Rix Treatment Plant (Rialto channel). The goal of this project is to control previously removed non-native vegetation. Targeted species include giant reed (*Arundo donax*), tree tobacco (*Nicotiana glauca*), saltcedar (*Tamarix ramosissima*), and castor bean (*Ricinus communis*).

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatment was conducted on 8/13/2015. A total of 30 hours were spent on enhancement activities during this reporting period. Target species included, but are not limited to, giant reed, saltcedar, castor bean, and Spanish broom (*Spartium junceum*).

Conservation Activities: The annual bioassessment survey took place 9/17/15. A total of 7 hours was dedicated to conservation activities during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: The tree height class is >10-15 m and shrub height class is >1-2 m. Native species documented on site include >25-50% cottonwood (*Populus fremontii*), >15-25% black willow (*Salix gooddingii*), and >5-15% mulefat (*Baccharis salicifolia*). Non-native species documented on site include 1-5% castor bean, 1-5% tree tobacco, <1% giant reed, and <1% salt cedar.

Wildlife species: The state and federally listed endangered Least Bell's Vireo (*Vireo* bellii pusillus) and the Yellow Warbler (*Setophaga petechia*), a California species of special concern, were documented on this project site. Other documented species include the Common Raven (*Corvus corax*), Mourning Dove (*Zenaida macroura*), California Towhee (*Melozone crissalis*), Common Yellowthroat (*Geothlypis trichas*), Barn Swallow (*Hirundo rustica*), California ground squirrel (*Oteospermophilus beecheyi*), and desert cottontail (*Sylvilagus audubonii*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in August of this reporting period..

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately ~1% non-native cover. That brings the treated area to ~1.36-A.

The frequency and timing of removal/treatment: Treatments are conducted annually.

Disposal specifics: No biomass was actively removed from the project site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: This project has been successful in controlling the non-native vegetation. Re-growth is sparse due to the long treatment period; however on-going monitoring and treatments are required to ensure the site isn't re-infested with non-native vegetation.

PHOTOS

Photos taken 6/1/16.

Photo point 1 – 467532, 3766719, heading NE

Photo point 4 – 471333, 3768578, heading NW

Photos were taken 7/23/15 and 6/1/16, respectively.

Photo point 2 – 468579, 3767504, heading NW

Photo point 3 – 470023, 3767104, heading N

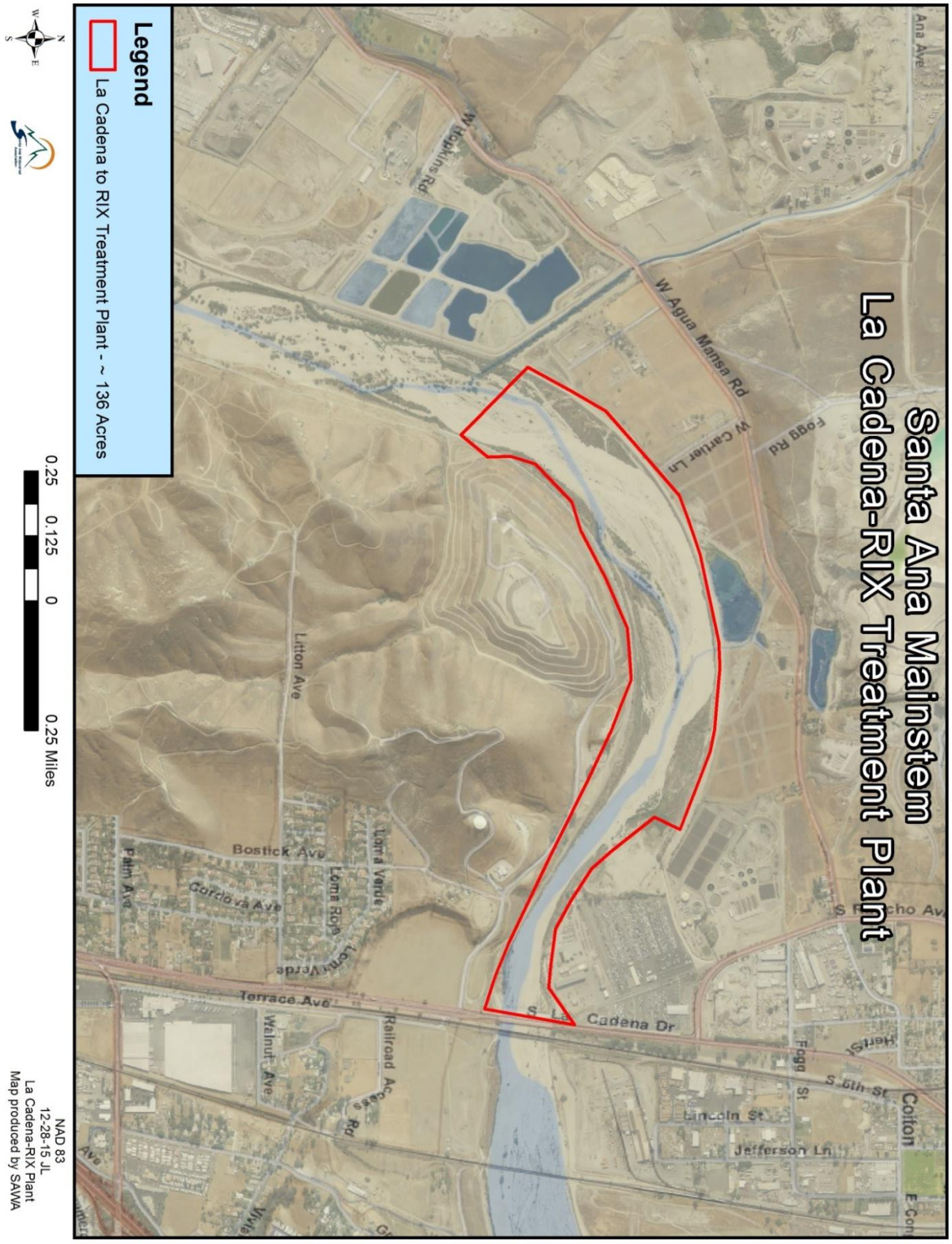
SAR I-215 LA CADENA TO RIX TREATMENT PLANT FINANCIAL SUMMARY

SAR La Cadena to Rix Treatment Plant Project - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
USACE #2006-00825-SHJ							
CDFW #6-2002-283	Impacts to channel	GFR Enterprises	$17,000	12/2002	0.24	1.0	Restoration
CDFW #6-008-98	Impacts to tributary	Forecast Homes	$35,000	9/2003	0.5	1.0	Restoration
CDFW	Impacts to detection basin	20-Menifee Development LLC	$8,500	10/13/2003	0.41	0.5	Restoration
RWQCB	Impacts to tributary	Cougar Ranch LLC	$54,000	1/21/2004	0.5	1.08	Restoration
CDFW #1600-2003-5111-R6	Drain improvement to unnamed tributary	Regency Cornerstone Investment LLC	$3,125	2/5/2004		0.25	Restoration
USACE #200301492-JPL		US Home	$11,250	5/27/2004		0.81	Restoration
USACE #2006-01404-JPL	Permanent impact to ephemeral drainage	Cottage Lane, LLC (WESCO Homes)	$25,000	12/15/2006	0.01	0.2	Restoration
CDFW #1600-2007-0073-R6 USACE #2007-00549-JPL	Van Buren Bridge Project	Co. of Riverside Transportation	$60,000	1/28/2008	0.29	0.87	Restoration
USACE #2006-01249-SJH	Impact to channels for I-215 improvements	State of California Caltrans	$50,000	2/14/2008	0.05	0.5	Restoration
CDFW #1600-2006-0175-R6 USACE #200601732-JPL RWQCB #362006-26APF	SAR Trails	San Bernardino Flood Control	$360,000	3/30/2007	5.75	5.75	Restoration (5 years)
USACE #20061265-JPL	Construction of medical building	Iowa Street Partners	$40,000	1/30/2007	0.56	1	Restoration
USACE #200500862-SJH	Replaced existing low-flow crossing with larger culvert to widen the roadway	KB Homes	$81,500	5/23/2005	1.63	1.63	Restoration
USACE #200500907-DPS	Discharge of fill due to construction of two outfall structures	Industrial Development International	$20,000	11/3/2005	0.4	1	Restoration
USACE #200501536-SJH	Discharge into San Jacinto River	ILF Cahan Perris	$21,240	5/30/2006	0.18	1	Restoration
USACE #200600313-CLM	Permanent fill	Pulte Homes	$60,000	9/5/2006	1.06	2.5	Restoration
USACE #200300727-DPS	Discharge into Canyon Lake	Granite Homes	$35,000	3/15/06	0.24	2.25	Restoration
USACE #200501187-DPS	Gabion slope protection-after fact	City of Riverside, Public Works	$50,000	12/26/06	0.3	1	Restoration
CDFW #1600-2004-0060-R5 USACE #200301477-DLC	Impacts to tributary of San Jacinto River	Chaparral Valley LLC	$68,000	1/7/2004	4	4	Restoration
Totals			***$999,615***		***14.47***	***21.7***	

*Permits contained in lightened cells are older mitigations for this project site, and are now closed out.

7-1-15 to 6-30-16 Cost Breakdown	
Herbicide	$20.48
Staff Time	$1,559.90
Mileage	$45.88
Total	***$1,626.26***

MAP


Santa Ana Mainstem
La Cadena-RIX Treatment Plant
Legend
La Cadena to RIX Treatment Plant - ~ 136 Acres
0.25 0.125 0 0.25 Miles
NAD 83
12-28-15 JL
La Cadena-RIX Plant
Map produced by SAWA
W Agua Mansa Rd
W Carter Ln
Foggy Rd
W Hopkins Rd
Ana Ave
Litton Ave
Bostick Ave
Cordova Ave
Loma Rica
Loma Verde
Terrace Ave
Walnut Ave
Railroad Access Rd
S La Cadena Dr
Fogg St
S 6th St
Lincoln St
Jefferson Ln
Colton

CDFW REPORTS: TEMESCAL CANYON 115-ACRE 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 115-A Temescal Canyon site. Work along this drainage to the Santa Ana River began in 2001 with the removal of giant reed (*Arundo donax*) and saltcedar (*Tamarix ramosissima*). In 2006 management for the project was turned over to SAWA for continued control and monitoring of non-native invasive plants.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide applications occurred on 8/12/15, 8/18/15, 8/20/15, 8/25/15, 9/2/15, 9/3/15, 9/8/15, 9/9/15, 9/10/15, 9/16/15, 9/21/15, 9/23/15, and 9/24/15. These treatments primarily targeted saltcedar and giant reed. A total of 370 SAWA staff hours were spent doing herbicide applications, site monitoring, project implementation, and documentation tasks.

Conservation Activities: Activities associated with general preservation of property took place throughout the site, consisting of established photo points and general monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. Specific conservation activities took place on 8/12/15, 8/18/15, 8/20/15, 8/25/15, 9/2/15, 9/3/15, 9/8/15, 9/9/15, 9/10/15, 9/16/15, 9/21/15, 9/23/15, 9/24/15, 12/10/15, and 5/25/16 (SAWA ISR department and biologists). The annual bioassessment survey took place 5/25/16. A total of 53 SAWA staff hours were spent in this reporting period on conservation activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: The canopy height class is >15-20 m. Native plants documented on this site include >50-75% black willow (*Salix gooddingii*), >15-25% cottonwood (*Populus fremontii*), >15-25% mulefat (*Baccharis salicifolia*), >5-15% red willow (*Salix laevigata*), and >5-15% arroyo willow (*Salix lasiolepis*). Documented non-native plants include 1-5% giant reed, 1-5% castor bean (*Ricinus communis*), 1-5% perennial pepperweed (*Lepidium latifolium*), <1% *Eucalyptus* sp., <1% fan palm (*Washingtonia robusta*), <1% saltcedar, <1% non-native grasses.

Wildlife species: Many and diverse common wildlife species were documented on site. These include the Turkey Vulture (*Cathartes aura*), Red-tailed Hawk (*Buteo jamaicensis*), Mourning Dove (*Zenaida macroura*), Greater Roadrunner (*Geococcyx californianus*), Black-chinned Hummingbird (*Archilochus alexandri*), Anna's Hummingbird (*Calypte anna*), Nuttall's Woodpecker (*Picoides nuttallii*), Northern

Flicker (*Colaptes auratus*), Pacific-slope Flycatcher (*Empidonax difficilis*), Black Phoebe (*Sayornis nigricans*), Ash-throated Flycatcher (*Myiarchus cinerascens*), Western Scrub-jay (*Aphelocoma californica*), American Crow (*Corvus brachyrhynchos*), Common Raven (*Corvus corax*), Northern Rough-winged Swallow (*Stelgidopteryx serripennis*), Bushtit (*Psaltriparus minimus*), House Wren (*Troglodytes aedon*), Bewick's Wren (*Thryomanes bewickii*), Wrentit (*Chamaea fasciata*), California Thrasher (*Toxostoma redivivum*), Phainopepla (*Phainopepla nitens*), Common Yellowthroat (*Geothlypis trichas*), Yellow-rumped Warbler (*Setophaga coronate*), Spotted Towhee (*Pipilo maculatus*), California Towhee (*Melozone crissalis*), Song Sparrow (*Melospiza melodia*), White-crowned Sparrow (*Zonotrichia leucophrys*), Black-headed Grosbeak (*Pheucticus melanocephalus*), Hooded Oriole (*Icterus cucullatus*), House Finch (*Haemorhous mexicanus*), Lesser Goldfinch (*Spinus psaltria*), Rock Wren (*Salpinctes obsoletus*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Oteospermophilus beecheyi*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), bobcat (*Lynx rufus*), mule deer (*Odocoileus hemionus*), and Western fence lizard (*Sceloporus occidentalis*). Domestic dogs (*Canis familiaris*) were also documented loose in the habitat. Several California species of special concern can be found on this site, including the Yellow Warbler (*Setophaga petechia*), Yellow-breasted Chat (*Icteria virens*), Rufous-crowned Sparrow (*Aimophila ruficeps*), and granite spiny lizard (*Sceloporus orcutti*). This site also supports the state and federally listed endangered Least Bell's Vireo (*Vireo bellii pusillus*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in August and September of this reporting period.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately ~6% non-native cover. That brings the treated area to ~6.9-A.

The frequency and timing of removal/treatment: On-going treatments were conducted when biomass reached a height range of 2 to 4 feet.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: This project has been successful in controlling the non-native vegetation. On-going monitoring and treatments will be necessary to ensure that non-natives don't re-infest the site.

PHOTOS – GPS PHOTO POINTS

Photos taken 5/25/16.

Photo point 1 – 452426, 3745825, heading 332 NW SSE

Photo point 3 – 452022, 3745703, heading 54

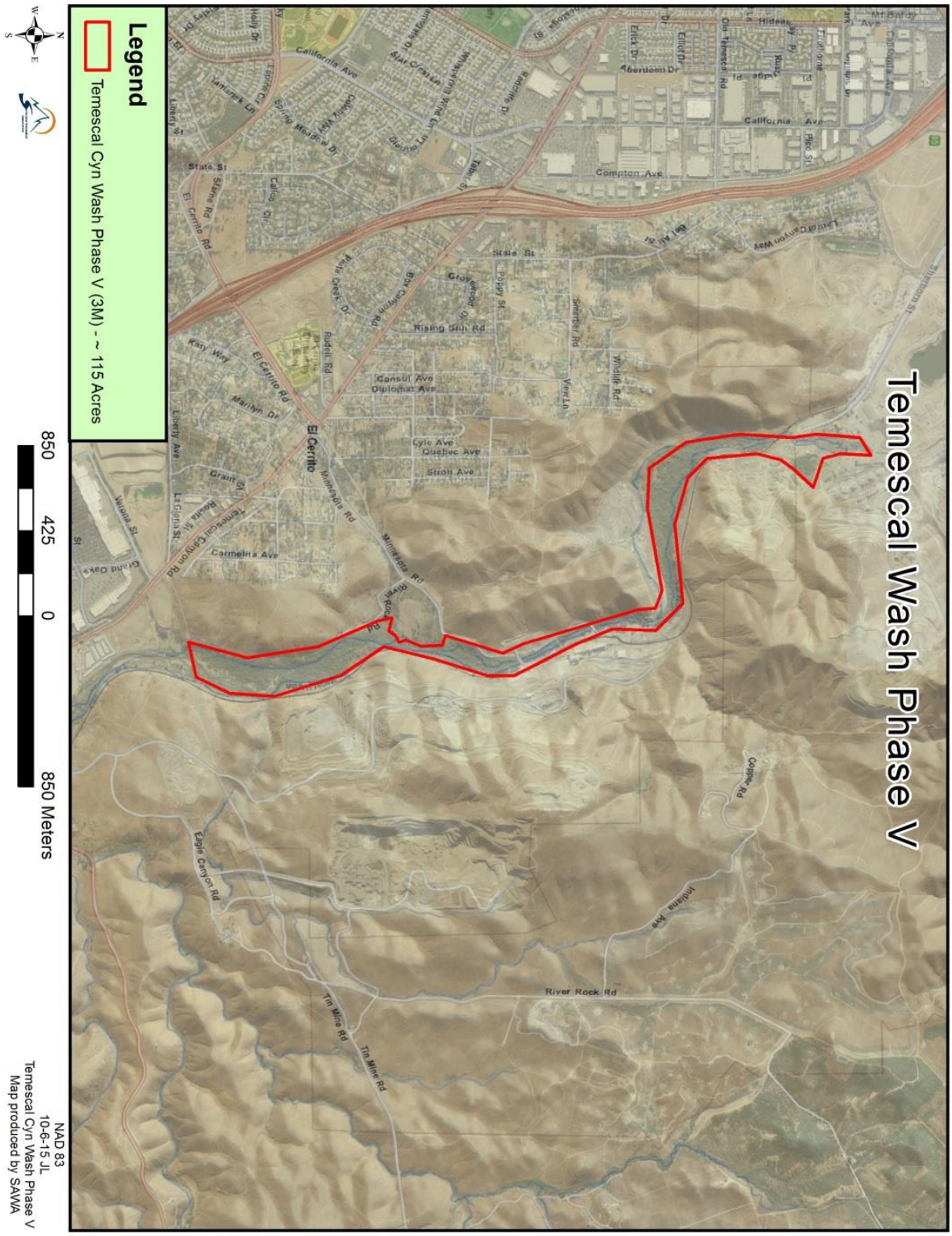
Treated non-native vegetation, taken 12/10/15.

TEMESCAL CANYON FINANCIAL SUMMARY

Temescal Canyon Project - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
USACE #200401-500-SMJ	Widening of Sycamore Canyon	Riverside County Transit Department	$3,125.00	11/1/2004	0.34	0.35	Restoration (3 years)
CDFW #1600-2005-0039-R6 USACE #2005-00978-DPS	Permanent impact	Shea Homes Fieldstone Comm. Ryland Homes	$25,000.00	1/23/2006	0.19	0.3	Restoration (6 years)
Totals			***$28,125***		***0.53***	***0.4***	

7-1-15 to 6-30-16 Cost Breakdown	
Herbicide	$475.55
Staff Time	$18,186.53
Mileage	$475.54
Total	***$19,137.62***

MAP


Temescal Wash Phase V
Legend
Temescal Cyn Wash Phase V (3M) - ~ 115 Acres
850
425
0
850 Meters
NAD 83
10-6-15 JL
Temescal Cyn Wash Phase V
Map produced by SAWA

REGION 6

CDFW ONLY

REGION 6

USACE ONLY

CDFW REPORTS: RACEWAY FORD 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 3.5-A project site. The purpose of this project is to maintain control over non-native vegetation such as giant reed (*Arundo donax*). This site is located along the railroad tracks near the I-215 and CA-60 interchange.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: This project is ~3.5 acres and is located off of Sycamore Canyon Road along an unnamed drainage. The SAWA crew did not perform any herbicide applications during this reporting period.

Conservation Activities: Activities associated with the general preservation of the project consist of established photo points and general bio-monitoring for the presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping. Specific conservation activities took place on 9/17/15, 12/22/15, and 4/27/16. The annual bio-assessment survey was conducted on 9/17/15. A total of 8 hours were spent on these activities during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: Bio assessments took place in September of 2015. The site is composed of 15-25% open space, the tree height class is >5-10 meters and the shrub height class is .5-1 meter. The following native species were documented on site, and have been recorded in percent cover using stratum categories from rapid assessment method: >50-75% black willow (*Salix gooddingii*), >5-15% California sagebrush (*Artemisia californica*), 1-5% California buckwheat (*Eriogonum fasciculatum*).

The following non-native species were documented on site, and have been recorded in percent cover using stratum categories from rapid assessment method: 1-5% tree tobacco (*Nicotiana glauca*), <1 % tree of heaven (*Ailanthus altissima*), < 1% Eucalyptus spp.

Wildlife species: Bird species detected during the survey were: Song Sparrow (*Melospiza melodia*), California Towhee (*Melozone crissalis),* Bewick's Wren (*Thryomanes bewickii)*, Bushtit (*Psaltriparus minimus)*, and European Starling (*Sturnus vulgaris*). Reptile species present were Western Fence Lizard (*Sceloporus occidentalis)*, and Side-blotched Lizard (*Uta stansburiana)*.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Removal activities were not conducted during this reporting period.

The amount removed and/or treated: No removal or treatment activities were conducted during this reporting period.

The frequency and timing of removal/treatment: Treatments did not occur during this reporting period.

Disposal specifics: Treated non-native vegetation is allowed to decompose in place. No biomass was actively removed from the project site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: This project has been successful in controlling the non-native vegetation. Non-native re-growth is minimal; however on-going monitoring and maintenance activities are necessary to prevent the site from becoming re-infested by non-native vegetation.

PHOTOS – GPS PHOTO POINTS

Photos taken 9/21/2015.

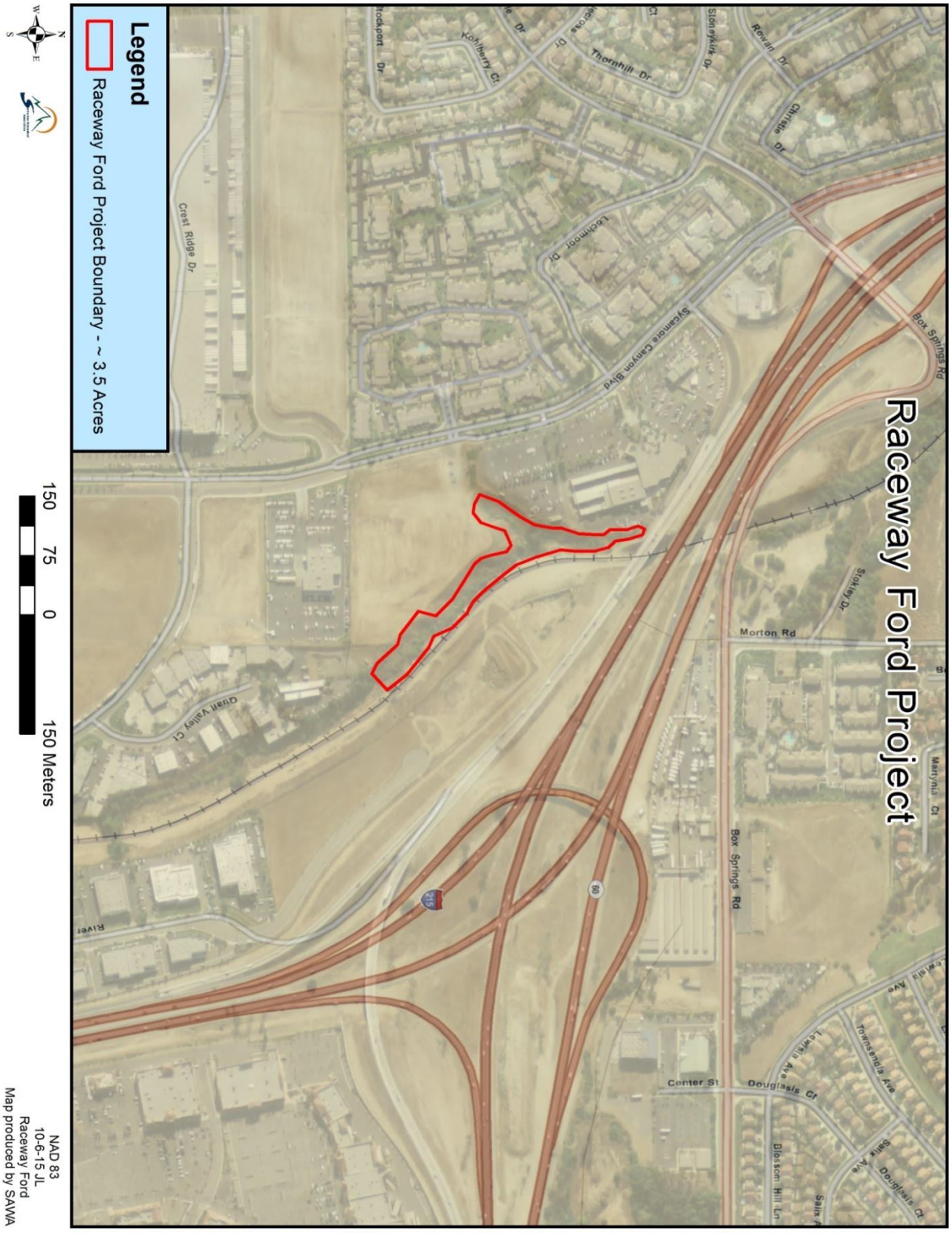
Photos taken 3/22/2011.

RACEWAY FORD FINANCIAL SUMMARY

Raceway Ford Project - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
USACE #2004-01044-DPS	Grading 8 acres of Sycamore Canyon	McCallan Properties, LLC	$25,000	11/7/2006	0.34	0.34	Enhancement
Totals			***$25,000***		***0.34***	***0.34***	

7-1-15 to 6-30-16 Cost Breakdown	
Herbicide	$0
Staff Time	$399.99
Mileage	$13.57
Total	***$413.56***

MAP


Raceway Ford Project
Legend
Raceway Ford Project Boundary - ~ 3.5 Acres
150 75 0 150 Meters
NAD 83
10-6-15 JL
Raceway Ford
Map produced by SAWA
Box Springs Rd
Morton Rd
Center St
Sycamore Canyon Blvd
Crest Ridge Dr
Quail Valley Ct
Stokley Dr
Box Springs Rd
Douglasia Ct
Townsend Ave
Douglasia Ct

CDFW REPORTS FOR PERMIT 1600-2012-0084-R6: REACH 3B JANUARY 1, 2016 – JUNE 30, 2016

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

The Reach 3B Project Area officially encompasses the entirely of the San Timoteo Creek sub watershed, which is approximately 126 square miles of land stretched across Calimesa, Redlands, Yucaipa, and unincorporated portions of San Bernardino and Riverside Counties. Properties under current management in association with this mitigation, listed by category include:

- *Restoration*: Cienega Property, west of Palmer Ave, owned by the Riverside Land Conservancy and Oak Valley Property, where restoration activities were conducted adjacent to existing Phase I and II restoration.
- *Enhancement*: Invasive vegetation management activities took place throughout the project area in the 2015-16 fiscal year over the following sites: Cienega Property, the garden air wash in Cherry Valley, the Norton Younglove Preserve, the Oak Valley Property, and Yucaipa Valley Water District Property in Yucaipa.
- *Conservation*: activities associated with general preservation of property took place along nearly the entirety of the San Timoteo Creek main stem and major tributaries throughout its 126 square mile watershed.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Habitat Restoration: in the 2016 reporting period, SAWA maintained the original 2-A phase I and 2-A phase II restoration area in addition to active implementation of the 2.5-A phase III restoration. These three phases represent 6.5-A of restoration of the 10-A of restoration required by USFWS in exchange for eliminating the original open space preservation requirement associated with this project. Phase III is a 2.5-A restoration effort facilitated within RLC's Cienega property, executed through significant project work consisting of data collection, archeological surveying and records research, communication with project partners, restoration plan creation, implementation of site preparation, sourcing and installation of 325 locally-collected pole cuttings, container plant installation, and ongoing active maintenance/monitoring by a qualified restoration contractor. In addition to the 2.5-A restoration, a 0.7 acre enhancement area will be maintained immediately west where a historical road easement is prohibitive to active restoration. All of these activities were initiated in 2014-15, and those requiring ongoing facilitation will continue through the following five years comprising the establishment period. All phases of the project are being monitored through vegetation plots to determine any differences in diversity of natural recruitment given the difference in design of the container stock/pole cutting combination characterizing Phase I and the strictly pole cutting palette for Phase II and the wetland plant palette for Phase III.

Pole Cutting Species List – Restoration Phase III

Species	Common Name	Amount Needed
Baccharis salicifolia	Mulefat	100
Populus fremontii	Fremont's cottonwood	25
Salix gooddingii	Gooding's willow	25
Salix Laevigata	Red willow	25
Salix lasiolepis	Arroyo willow	50
Salix exigua	Sandbar willow	100
Total		325

Native Herbaceous Species List – Restoration Phase III

Species	Common Name	Life form	Amount
Distichlis spicata	Salt grass	Perennial grass	300 plugs
Atriplex argentea	Silverscale saltbush	Annual herb	seed
Anemopsis californica	Yerba mansa	Perennial herb	150 half gallon /seed
Centromadia pungens ssp. laevis	Smooth tarplant	Annual herb	Seed
Sporobulus airoides	Alkali dropseed	Perennial grass	Natural recruitment/seed
Leptochloa uninervia	Mexican sprangletop	Annual grass	Natural recruitment/seed
Atriplex serenana	Saltscale	Annual herb	Natural recruitment/seed
Heliotropium curassavicum	Salt heliotrope	Annual herb	Natural recruitment/seed

Conservation Activities: A variety of conservation tasks were implemented throughout the Reach 3B project area in 2014-15; these include but are not limited to surveying of multiple sites for general species health/vigor, presence of trash and evidence of illegal trespass, mapping, data collection and analysis, performance of public education and outreach, and coordination of surveying

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Pre-Installation Data Collection:

- *Soil Surveying*: one Level I soil survey was conducted over the target restoration site
- *Piezometer Installation*: Four piezometers were installed in areas of current and planned restoration in San Tim, with two used directly in planning for the Cienega property removals. Data is recorded using an electrical pressure transducer which produces a water depth record every half hour, and this data is downloaded onsite quarterly. In addition to electronic data, water table depth data is also manually recorded using a water sounder every month as a safe check against data logger malfunction or miscalibration. Water table depth has shown to variation from approximately 2.5 to 7 feet within the year; however, as of June of 2015 the levels were closer to 3-4 feet despite the weather in combination with ongoing drought.
- *Wildlife Cameras:* In year 2015 two wildlife cameras were installed in San Timoteo Canyon; one on RCA's Oak Valley Property and the other on RLC's Cienega property. The cameras are triggered by motion sensor and will provide limited large wildlife presence information, as well

as a continuous record of plant growth/site function. In 2016 the Oak Valley Property Camera was stolen, however the Cienega camera continues to document wildlife presence.

Plant Monitoring:

- *Vegetation Plots:* a total of 5 vegetation plots were established throughout each phase of the project area to combined count of 15 plots. Annual Plot monitoring will take place in October, 2016.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL:

Yellow star-thistle, perennial pepperweed, milk thistle*:*

Method I: foliar treatment with either *glyphosate* or transline (*clopyralid*), while actively growing but prior to setting seed.

- *The frequency and timing of removal/treatment*: yellow start-thistle *(Centauria solstitialis*), perennial pepperweed (*Lepidium latifolium*), and milk thistle (*Silybum marianum*) were all treated in from the months of January -July. Treatments occurred using 1-2% glyphosate, during active growing but prior to setting seed.
- *Disposal specifics*: All annual biomass left on site to decompose.
- Several new populations of yellow star-thistle were located, mapped, and treated.
- *Summary of the general successes and failures or overall failure of the nonnative removal plan:* SAWA continues to make progress over controlling targeted populations of listed invasive vegetation in 2016. Larger-scale removals of the aforementioned target species are scheduled for the 2017 fiscal year.

Brown-headed Cowbird *(Molothrus ater):* Nine *M. ater* traps were deployed throughout the San Timoteo Creek project area in 2016, using SAWA protocols and under permit and authorization from the U.S. Fish and Wildlife Service (permit # TE839480-4). Since beginning trapping this species in the project area, over 2,219 birds have been captured and euthanized, which has brought corresponding benefits in the form of a reduction in nest parasitism for key species least Bell's vireo (*Vireo bellii pusillus*).

REPORT AREA V: WILDLIFE DATA

Least Bell's vireo (*Vireo bellii pusillus*) Data, 2004 – 2014		
Reporting Year	**Number of Documented Territories**	**Avg Functional Riparian Area Required for Pop Support**
2004	29	58 Acres
2005	43	86 Acres
2006	32	64 Acres
2007	56	112 Acres
2008	78	156 Acres
2009	105	210 Acres
2010	126	252 Acres
2011	116	232 Acres
2012	118	236 Acres
2013	131	262 Acres
2014	151	302 Acres

San Timoteo Winter Bird Survey, 2014			
Plot size: 30.3 ac/12.3 ha			
Common Name	**Scientific Name**	**# of Birds /100 acres**	**# of Birds /100 Hectares**
White-crowned Sparrow	*Zonotrichia leucophrys*	88.7	35.9
Song Sparrow	*Melospiza melodia*	70.5	28.5
Lesser Goldfinch	*Spinus psaltria*	68.5	27.7
Bushtit	*Psaltriparus minimus*	65.2	26.4
American Crow	*Corvus brachyrhynchos*	62.3	25.2
Yellow-rumped Warbler	*Setophaga coronata*	45.4	18.4
Bewick's Wren	*Thryomanes bewickii*	39.6	16
Spotted Towhee	*Pipilo maculatus*	33.4	13.5
California Towhee	*Melozone crissalis*	31.8	12.9
House Finch	*Haemorhous mexicanus*	29.3	11.9
American Robin	*Turdus migratorius*	28.5	11.5
Anna's Hummingbird	*Calypte anna*	27.6	11.2
Ruby-crowned Kinglet	*Regulus calendula*	23.5	9.5
Nuttall's Woodpecker	*Picoides nuttallii*	15.7	6.3
Northern Flicker	*Colaptes auratus*	13.6	5.5
Hermit Thrush	*Catharus guttatus*	8.3	3.3
Common Yellowthroat	*Geothlypis trichas*	8.3	3.3
Mourning Dove	*Zenaida macroura*	6.2	2.5
Oak Titmouse	*Baeolophus inornatus*	5.4	2.2
Western Bluebird	*Sialia mexicana*	5	2
Black Phoebe	*Sayornis nigricans*	4.5	1.8
American Goldfinch	*Spinus tristis*	2.9	1.2
House wren	*Troglodytes aedon*	2.1	0.8
Wrentit	*Chamaea fasciata*	2.1	0.8
European Starling	*Sturnus vulgaris*	2.1	0.8
Red-tailed Hawk	*Buteo jamaicensis*	1.7	0.7
Cooper's Hawk	*Accipiter cooperii*	1.2	0.5
Downy Woodpecker	*Picoides pubescens*	1.2	0.5
Hutton's Vireo	*Vireo huttoni*	1.2	0.5
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	1.2	0.5
Red-shouldered Hawk	*Buteo lineatus*	0.8	0.3
Cassin's Kingbird	*Tyrannus vociferans*	0.4	0.2
Blue-gray Gnatcatcher	*Polioptila caerulea*	0.4	0.2
Phainopepla	*Phainopepla nitens*	0.4	0.2
Ferruginous Hawk	*Buteo regalis*	0.4	0.2
Rock Wren	*Salpinctes obsoletus*	0.4	0.2

Table 8.3-2. San Timoteo Breeding Bird Survey, 2014			
Common Name	**Scientific Name**	**Breeding Territories**	**# Territories/100 A**
Song Sparrow	*Melospiza melodia*	22	72.6
Bewick's Wren	*Thryomanes bewickii*	17	56.1
Northern Rough-winged swallow	*Stelgidopteryx serripennis*	16	52.8
House Wren	*Troglodytes aedon*	15	49.5
Spotted Towhee	*Pipilo maculates*	14	46.2
California Towhee	*Pipilo crissalis*	13	42.9
Yellow Warbler*	*Setophaga petechia*	12	39.6
Least Bell's Vireo*	*Vireo belli pusillus*	11	36.3
Anna's Hummingbird	*Calypte anna*	10	33
Lesser Goldfinch	*Spinus psaltria*	10	33
Bushtit	*Psaltriparus minimus*	8	26.4
House Finch	*Haemorhous mexicanus*	6	19.8
Black-chinned Hummingbird	*Archilochus alexandri*	5	16.5
Common Yellowthroat	*Geothlypis trichas*	5	16.5
American Goldfinch	*Spinus tristis*	5	16.5
Nuttall's Woodpecker	*Picoides nuttallii*	3	9.9
Northern Flicker	*Colaptes auratus*	3	9.9
Oak Titmouse	*Baeolohus inornatus*	3	9.9
Wrentit	*Chamaea fasciata*	3	9.9
Yellow-breasted Chat*	*Icteria virens*	3	9.9
Black-headed Grosbeak	*Pheucticus melanocephalus*	3	9.9
Lawrence's Goldfinch	*Spinus lawrencei*	3	9.9
Mourning Dove	*Zenaida macroura*	2	6.6
Western Wood-Pewee	*Contopus sordidulus*	2	6.6
Black Phoebe	*Sayornis nigricans*	2	6.6
Ash-Throated Flycatcher	*Myiarchus cinerascens*	2	6.6
Western Bluebird	*Sialia mexicana*	2	6.6
California Thrasher	*Toxostoma redivivum*	2	6.6
Blue Grosbeak	*Passerina caerulea*	2	6.6
Bullock's Oriole	*Icterus bullockii*	2	6.6
Downy Woodpecker*	*Picoides pubescens*	1	3.3
Pacific-slope Flycatcher	*Empidonax difficilis*	1	3.3
American Crow	*Corvus brachyrhynchos*	1	3.3
Common Raven	*Corvus corax*	1	3.3
Phainopepla	*Phainopepla nitens*	1	3.3
Hooded Oriole	*Icterus cucullatus*	1	3.3
Cooper's Hawk*	*Accipiter cooperii*	0.5	1.7
Red-shouldered Hawk	*Buteo lineatus*	0.5	1.7
Total		**213**	**702.9**

8.6-1 Raptor Survey Results in San Timoteo Canyon, 2014		
COMMON NAME	SCIENTIFIC NAME	NUMBER OF SIGHTINGS (not individuals)
Red-tailed Hawk	*Buteo jamaicensis*	150
American Kestrel	*Falco sparverius*	46
Red-shouldered Hawk	*Buteo lineatus*	8
Ferruginous Hawk*	*Buteo regalis*	4
White-tailed Kite*	*Elanus leucurus*	2
Cooper's Hawk*	*Accipiter cooperii*	2
Osprey*	*Pandion haliateus*	1
Merlin*	*Falco columbarius*	1
TOTAL		**215**

Note: wildlife data for 2015 is not yet available, but will be included with the next annual report.

PHOTOS

Note: Due to the sheer size of Reach 3B, the number of photo points is prohibitive to inclusion; for that reason, photo highlights of January 1 2016 – June 30 2016 work are being included in this section.

L/*Restoration:* Piezometer Monitoring; R/*Restoration*: Pole Cutting Installation

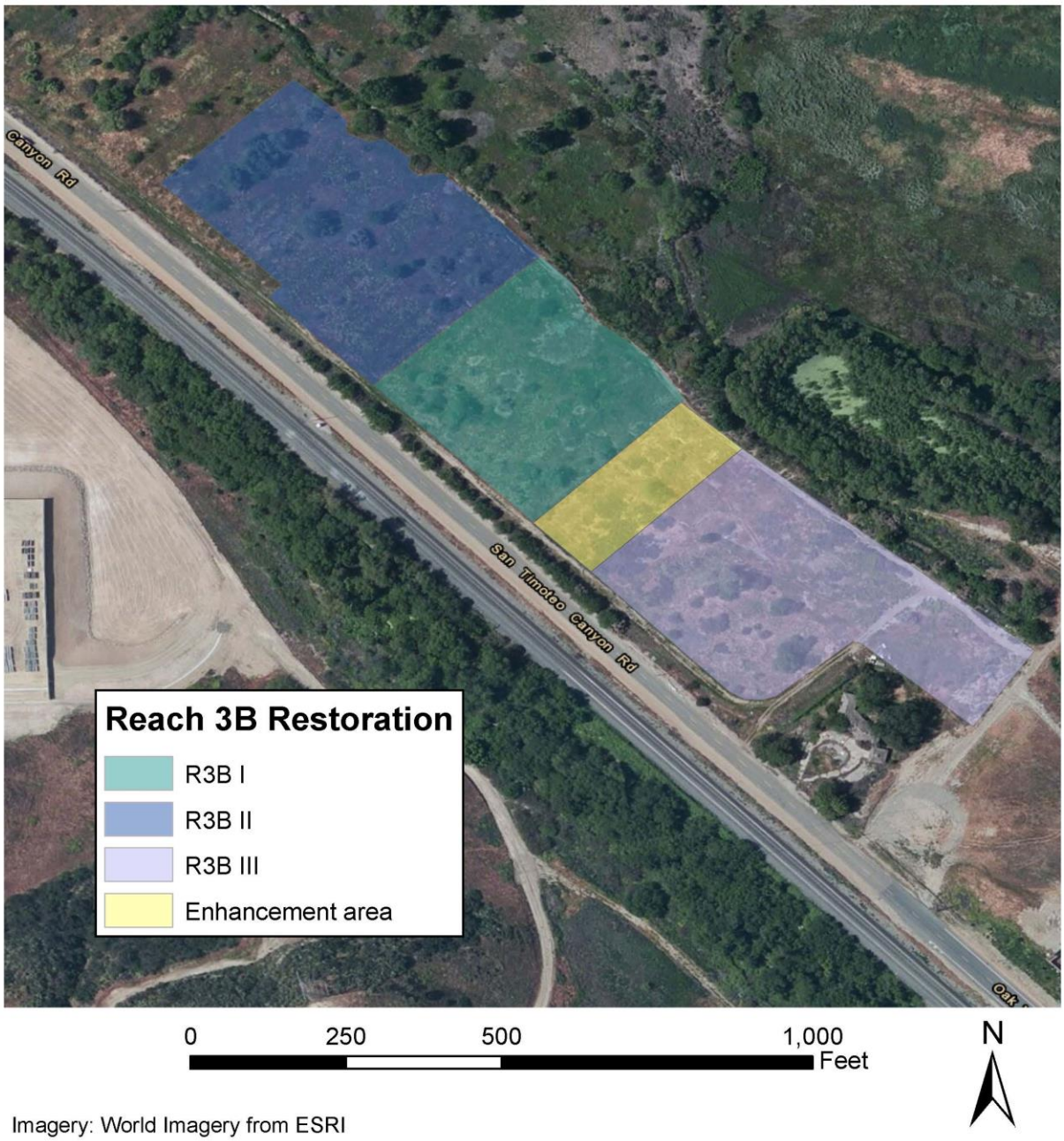
Above Left/*Restoration: Phase 3 Herbaceous Planting Zone*; Above Right/*Enhancement*: Aerial of Phase 3 Restoration

Above Left/*Restoration: Atriplex serenana and Willows in Phase 2 Restoration*; Above Right/*Enhancement*: YST Treatment, Yucaipa

REACH 3B PHASE I/II/III RESTORATION

INLAND EMPIRE RESOURCE CONSERVATION DISTRICT

Reach 3B
Phase I, II, & III



Imagery: World Imagery from ESRI

REGION 6

CONTRACT WORK

NO MITIGATIONS, NO ILF

CDFW REPORTS: CCIP I 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 75-A site, removing about 50-A of non-native plants, including giant reed (*Arundo donax*) and eucalyptus (*Eucalyptus sp.*). Removal began in 2011, and continued into March 2012. Treatment occurred in 2013 and 2014. This project is located in the Prado Basin along Mill Creek adjacent to Pigeon Hill.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Enhancement activities did not occur during this reporting period.

Conservation Activities: The annual bioassessment survey took place 6/9/16. No other conservation activities occurred during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: The tree height class is >10-15 m and shrub height class is >2-5 m. Documented native species include >50-75% black willow (*Salix gooddingii*), >5-15% arroyo willow (*Salix lasiolepis*), >5-15% mulefat (*Baccharis salicifolia*), and >5-15% hoary nettle (Urtica dioica). Documented non-native species include >15-25% poison hemlock (*Conium maculatum*), 1-5% black mustard (*Brassica nigra*), 1-5% Sahara mustard (*Brassica tournefortii*), 1-5% perennial pepperweed (*Lepidium latifolium*), <1% tree tobacco (*Nicotiana glauca*), <1% prickly lettuce (*Lactuca serriola*), and <1% giant reed.

Wildlife species: Species detected during the bioassessment survey include the Common Yellowthroat (*Geothlypis trichas*), Song Sparrow (*Melodia melospiza*), American Crow (*Corvus brachyrhynchos*), House Wren (*Troglodytes aedon*), Black Phoebe (*Sayornis nigricans*), House Finch (*Haemorhous mexicana*), Downy Woodpecker (*Picoides pubescens*), Spotted Towhee (*Pipilo maculatus*), Red-tailed Hawk (*Buteo jamaicensis*), Tree Swallow (*Tachycineta bicolor*), and Barn Owl (*Tyto alba*). California species of special concern detected during this survey include the Yellow Warbler (*Setophaga petechia*) and Yellow-breasted Chat (*Icteria virens*). The state and federally listed endangered Least Bell's Vireo (*Vireo bellii pusillus*) is also present on this site.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: No treatments occurred during this reporting period.

The amount removed and/or treated: No treatments occurred during this reporting period.

The frequency and timing of removal/treatment: No treatments occurred during this reporting period.

Disposal specifics: No treatments occurred during this reporting period..

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species consisted of foliar applications utilizing 4 gallon back pack sprayers. Treatments have been effective and non-native cover continues to decline. Native plantings occurred in 2012 and have assisted the habitat with recovery. Areas that were dominated by large patches of non-native giant reed are now filling in with native cover.

PHOTOS – GPS PHOTO POINTS

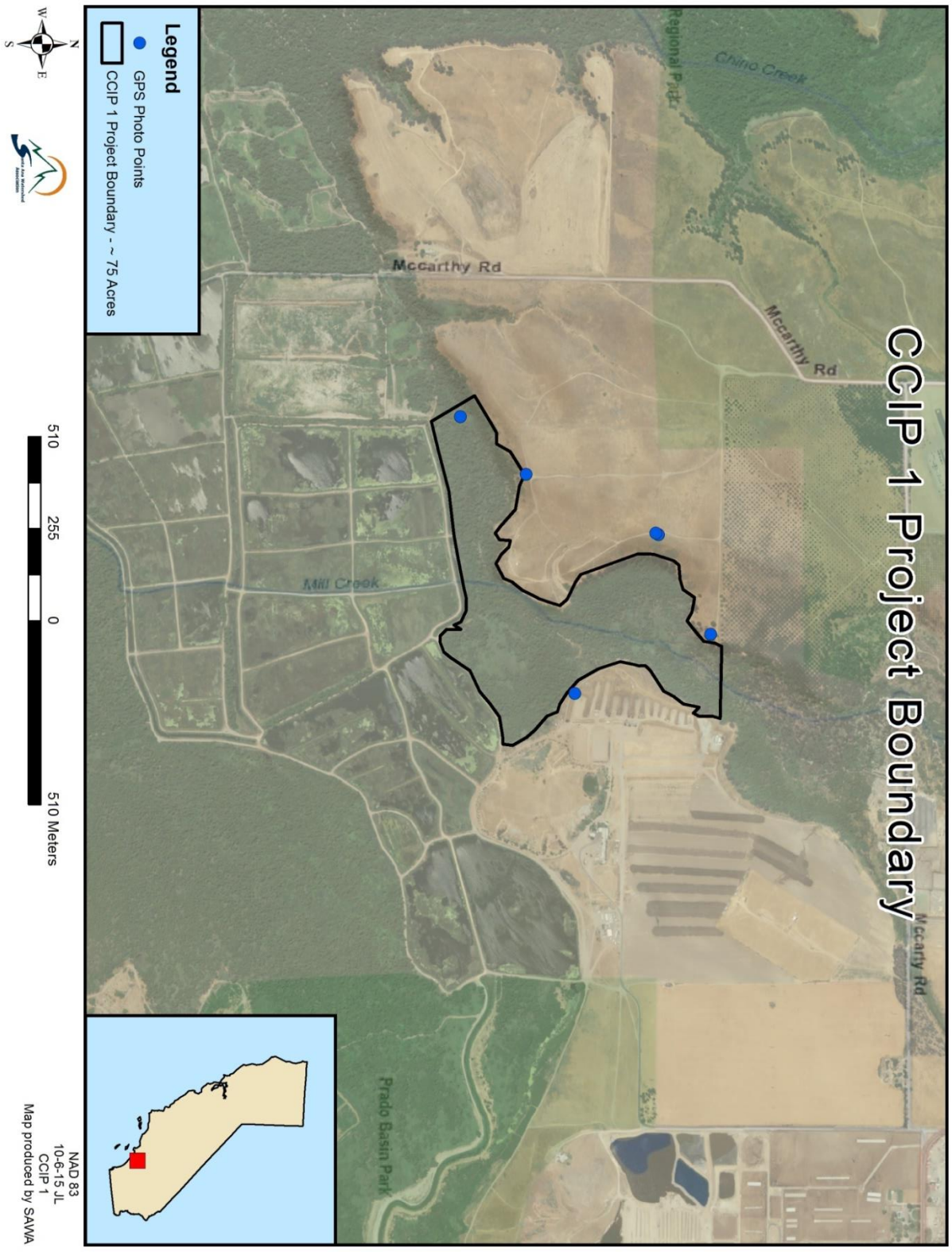
Photos were taken 7/11/12 and 6/16/16, respectively.

Photo point 1 – 442124, 3754175, heading 44 SSE

Photo point 4 – 441877, 3754027, heading 108 ESE

Photo point 5 – 441705, 3753649, 150 SE

MAP


CCIP 1 Project Boundary
Legend
GPS Photo Points
CCIP 1 Project Boundary - ~ 75 Acres
Mccarthy Rd
Mccarthy Rd
Chino Creek
Regional Park
Mill Creek
Prado Basin Park
510
255
0
510 Meters
NAD 83
10-6-15 JL
CCIP 1
Map produced by SAWA

CDFW REPORTS: CARBON CANYON FIRE SAFE COUNCIL 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

SAWA acted as a contractor on this project, and will only report on activities and impacts it performed under its agreement with Carbon Canyon Fire Safe Council.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatment occurred on 9/29/15, 9/30/15, 10/1/15, 10/13/15, 10/14/15, and 10/15/15. A total of 192 hours were spent on these activities. Targeted species included giant reed (*Arundo donax*).

Conservation Activities: Activities associated with the general preservation of the project took place along the entire project, consisting of general bio-monitoring for the presence of invasive vegetation and incidental wildlife. Specific conservation activities occurred on 10/13/15, 10/14/15, and 10/15/15. A total of 11.5 hours were spent on these activities.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Cut stump treatments were conducted on castor bean, tree tobacco, and other species on this project site. Herbicides used were Garlon, Rodeo, and Competitor.

The amount removed and/or treated: A total of about 50 castor bean and 5 large salt cedars were treated at this project site. Approximately 200 smaller invasive plants were hand weeded.

The frequency and timing of removal/treatment: Removal occurred in February to avoid nesting bird season.

Disposal specifics: Treated biomass was either chipped and left to decompose as soil mulch above the high water mark or was left in small piles above the high water mark to dry and decompose on-site. All piles left were small to ensure no fire risk was left on-site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: On-going monitoring and re-treatments are recommended to ensure that eradication is achieved.

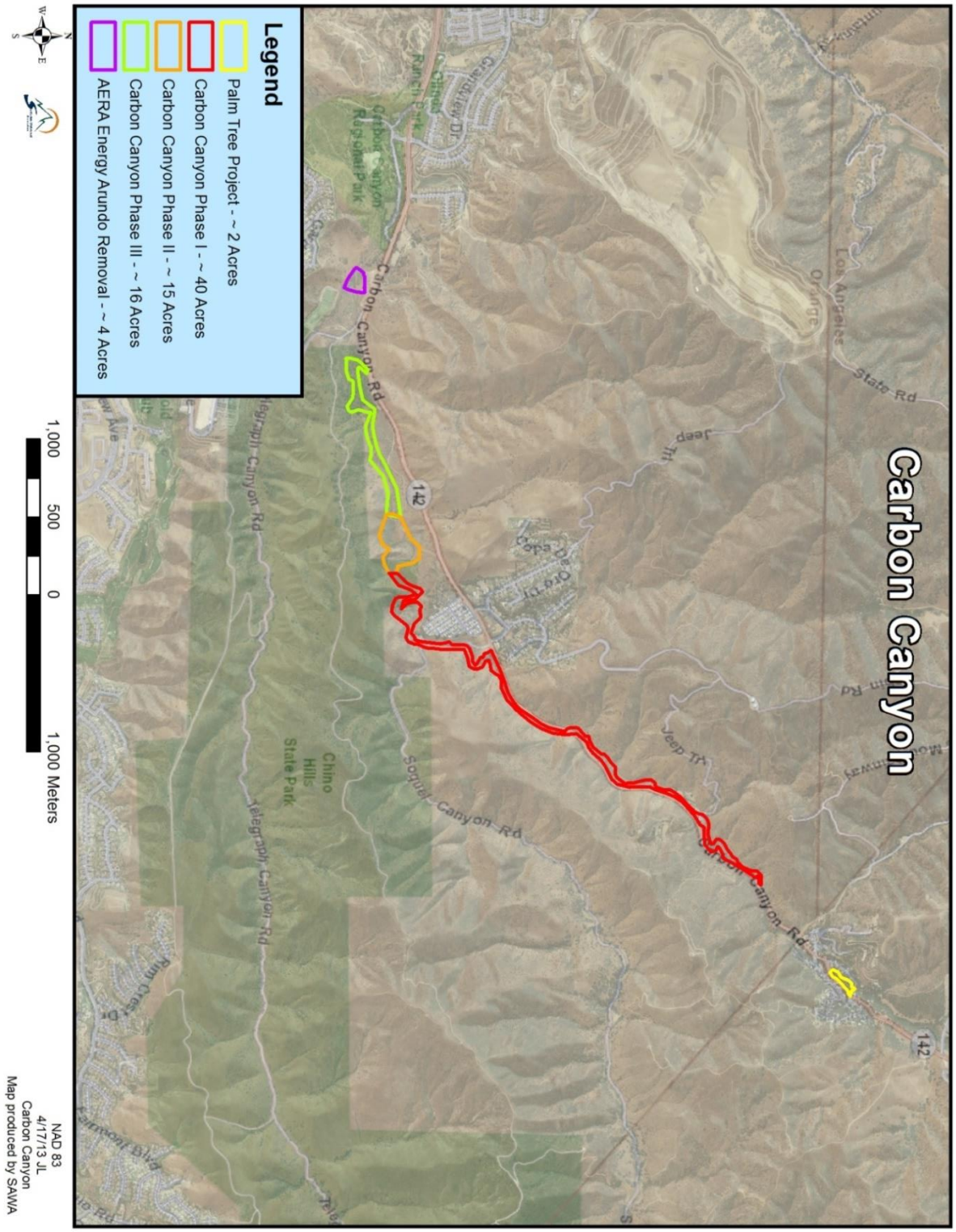
PHOTOS

Photos taken 10/13/15.




MAP

Carbon Canyon Fire Safe Council project encompasses the Phase I-III areas shown on this map.



CDFW REPORTS: BEAR CREEK MASTERS ASSOCIATION REPORT 1-1-15 THROUGH 12-31-15

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

SAWA acted as a contractor on this project, and will only report on activities and impacts performed by staff.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Prior to initiating work a site assessment was conducted by the Santa Ana Watershed Association's (SAWA) project manager. The goal of the project was to remove non-native plant species and remove dead plant biomass to lower the fire threat to the local community. SAWA's invasive species removal and restoration crew began biomass removal and herbicide applications on 11-30-2015. The biomass removal and treatments were conducted over a four day period: 11-30-2015, 12-1-2015, 12-2-2015 & 12-3-2015. The primary non-native species treated were saltcedar (*Tamarix ramosissima*) and pampas grass (*Cortaderia selloana*). Once the non-native biomass was removed an aquatically approved herbicide was applied to the cut-stumps. All biomass was hauled off-site and disposed of at an approved waste facility.

Conservation Activities: Conservation activities on-site included: general photo documentation and trash removal.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Treatments of non-native vegetation were conducted using the cut-stump method. An aquatically approved herbicide was applied to the cut stumps. Herbicide applications occurred in November and December of this reporting period.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately >1% non-native cover. That brings the treated area to ~0.02-A.

The frequency and timing of removal/treatment: There was only enough money in the contract to cover an initial treatment to the project area. All work was completed by 12-3-2015.

Disposal specifics: Treated biomass was cut and hauled off-site to be disposed of an approved waste facility.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been proven effective thus far. On-going treatments will be necessary to make sure non-native species don't re-invade the site.

PHOTOS

Photos were taken 12/3/15.

- This picture was taken heading due south. Saltcedar is growing at the toe of slope adjacent to the riparian vegetation. The salt cedar has since been removed and the cut-stump was treated using an aquatically approved triclophyr herbicide.

- This picture was taken from the east side of the drainage heading south. In the foreground the treated salt cedar stumps are blue.

MAP


EXHIBIT B
BEAR CREEK MASTER ASSOCIATION
Legend
Bear Creek Master Association Project Area ~ 2.2 Acres
50
25
0
50 Meters
NAD 83
10-5-15 JL
Bear Creek Master Assoc.
Map produced by SAWA

CDFW REPORTS: FAIRWAY ESTATES REPORT 1-1-15 THROUGH 12-31-15

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

SAWA acted as a contractor on this project, and will only report on activities and impacts performed by staff.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Prior to initiating work a site assessment was conducted by the Santa Ana Watershed Association's (SAWA) project manager. The goals of the project were to remove non-native plant species, limit erosion and remove dead plant biomass to lower the fire threat to the local community. SAWA's invasive species removal and restoration crew began biomass removal and herbicide applications on 12-7-2015. The biomass removal and treatments were conducted over a two day period: 12-7-2015 & 12-8-2015. The primary non-native species treated were saltcedar (*Tamarix ramosissima*) and palms (*Washingtonia ssp.* & *Phoenix ssp.*). Once the non-native biomass was removed an aquatically approved herbicide was applied to the cut-stumps. All biomass was hauled off-site and disposed of at an approved waste facility.

Conservation Activities: Conservation activities on-site included: general photo documentation and trash removal.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Treatments of non-native vegetation were conducted using the cut-stump method. An aquatically approved herbicide was applied to the cut stumps. Herbicide applications occurred in December of this reporting period.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately >1% non-native cover. That brings the treated area to ~0.003-A.

The frequency and timing of removal/treatment: There was only enough money in the contract to cover two days of an initial treatment to the project area. All work was completed by 12-8-2015.

Disposal specifics: Treated biomass was cut and hauled off-site to be disposed of an approved waste facility.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been proven effective thus far. On-going treatments will be necessary to make sure non-native species don't re-invade the site.

PHOTOS

Photos were taken 12/8/15.

- Salt cedar and palms prior to treatment.

- Creek bed post treatment after biomass removal of salt cedar and palms.

MAP


FAIRWAY ESTATES HOA
Legend
Fairway Estates Project Area ~ 0.3 Acres
40
20
0
40 Meters
NAD 83
10-5-15 JL
Fairway Estates HOA
Map produced by SAWA
EXHIBIT B

CDFW REPORTS: RIVERSIDE FLOOD CONTROL: SANTA ANA RIVER PROJECT 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

SAWA acted as a contractor on this project, and will only report on activities and impacts it performed under its agreement with Riverside County Flood Control District.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

***Current site conditions*:** Large portions of the project area were mowed by Riverside County Flood Control District personnel for flood control purposes. This removed a majority of the canopy cover that was previously in place. Of the remaining vegetation, the dominant species were cottonwood (*Populus fremontii*) and willow species (*Salix* spp.). Understory was composed primarily of mulefat (*Baccharis salicifolia*) and narrow-leaf willow (*Salix exigua*), interspersed were areas of California croton (*Croton californica*), California buckwheat (*Eriogonum fasciculatum*) and other species commonly associated with California sagebrush vegetation. Although not common, woolly star (*Eriastrum densifolium*) is also found in this section of the Santa Ana River. Following the Best Management Practices (BMPs), the area around the woolly star plants was flagged by the permitted on-site biologist, and work crews avoided crossing this boundary. In addition, riparian habitat was cleared by a permitted biologist prior to work crews entering riparian habitat.

Wildlife species: This project site has many common avian species and riparian birds including but not limited to: Red-tailed Hawk (*Buteo jamaicensis*), Cooper's Hawk (*Accipiter cooperii*), Great Egret (*Ardea albus*), Snowy Egret (*Egretta thula*), Song Sparrow (*Melodia melospiza*), Spotted Towhee (*Pipilo maculatus*), Bushtit (*Psaltriparus minimus*), Bewick's Wren (*Thryomanes bewickii*), House Wren (*Troglodytes aedon*), Lesser Goldfinch (*Spinus psaltria*), Mallard (*Anas platyrhynchos*), Common Yellowthroat (*Geothlypis trichas*), Western Scrub-jay (*Aphelocoma californica*), Northern Mockingbird (*Mimus polyglottos*), California Thrasher (*Toxostoma redivivum*), American Robin (*Turdus migratorius*), and Anna's Hummingbird (*Calypte anna*). Although not detected during this project, California species of special concern that have been previously detected on site include Yellow Warbler (*Setophaga petechia*) and Yellow-breasted Chat (*Icteria virens*), along with the endangered Least Bell's Vireo (*Vireo bellii pusillus*). Mammal species occupying this habitat include but are not limited to: Coyote (*Canis latrans*), Desert cottontail rabbit (*Sylvilagus audubonii*), California ground squirrel (*Oteospermophilus beecheyi*), and non-native feral pig (*Sus scrofa*). Several homeless encampments are located in the removal area with untethered dogs (*Canis lupus familiaris*). The following reptile and amphibian species were observed during the project: Western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), Blainville's horned lizard (*Phrynosoma blainvillii*), Western skink (*Plestiodon skiltonianus*), gopher snake (*Pituophis catenifer*), and Baja California tree frog (*Pseudacris hypochondriaca*). Starting in February Anna's Hummingbird and Bushtits were documented nesting in the project work areas. In accordance with project BMPs, a boundary was flagged around the nests to ensure no adverse impacts occurred to nesting avian bird species.

Enhancement Activities: Prior to herbicide applications and removal of non-native vegetation, Riverside County Flood Control District mowed areas under their maintenance agreement. After the mowing was conducted, SAWA in conjunction with the Orange County Conservation Corps (OCCC), began removing non-native vegetation in the flood plain. All biomass was cut and hauled into the open mowed areas where Riverside County Flood Control District then returned and mowed the piles per their permit conditions. Herbicide treatments occurred from the end of December 2015 through the 4th of March, 2016. Targeted species included primarily saltcedar (*Tamarix ramosissima*), giant reed (*Arundo donax*) and castor bean (*Ricinus communis*). The primary application method was a cut-stump treatment with an EPA aquatically approved triclopyr product. The other treatment method utilized on old pure stands of giant reed was a foliar application with an EPA aquatically approved glyphosate product.

Conservation Activities: The contract work issued by Riverside County Flood Control District to SAWA was to only cover the removal and treatment of non-native species. A bio-monitor was on-site and flagged sensitive areas to avoid. In addition, general photo documentation occurred on-site throughout the project.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Treatments of non-native vegetation were conducted using either foliar application with 4-gallon backpack sprayers or cut-stump treatments using small 50 ounce sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in December, January, February, and March of this reporting period.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. The non-native cover varied greatly by area and the total project area was ~ 458 acres. The total biomass removed and treated was ~35.88 acres. .

The frequency and timing of removal/treatment: Treatments occurred from project on-set until March 3rd, 2016. Migratory birds started nesting activities and it was determined to halt any more vegetation removal and treatment until after the migratory bird season concludes.

Disposal specifics: Treated biomass was staged in areas for Riverside County Flood Control to return and mow. All biomass was mowed prior to rain events or at the end of each work week.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been effective thus far. The timing of the treatments was not ideal, thus the mortality rate may be lower than typically experienced. The project was undertaken as a measure to limit/prevent damage from the El Nino flood events that were expected for 2016. Removing the biomass will positively affect the habitat going forward. Ideally future funding can be identified and used to treat re-growth. A recommendation will be made to the IRT seeking the use of mitigation funds for these treatment purposes.

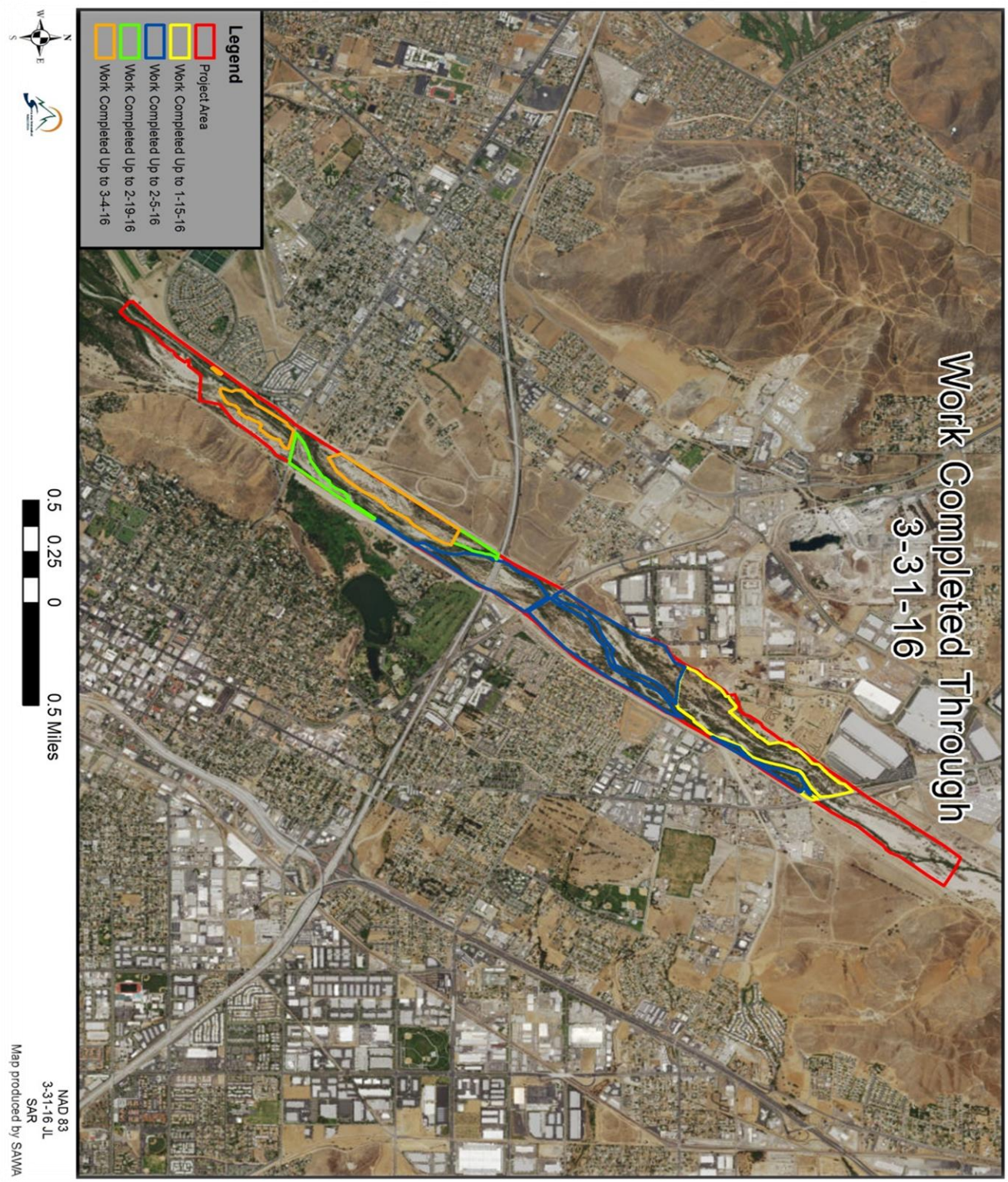
PHOTOS

Photos were taken 1/11/16.

Photos were taken 1/14/16.

Photos were taken 3/3/16.

MAP


Work Completed Through
3-31-16
Legend
Project Area
Work Completed Up to 1-15-16
Work Completed Up to 2-5-16
Work Completed Up to 2-19-16
Work Completed Up to 3-4-16
0.5 0.25 0 0.5 Miles
NAD 83
3-31-16 JL
SAR
Map produced by SAWA

CDFW REPORTS: RLC LA PRENDA 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

SAWA acted as a contractor on this project, and will only report on activities and impacts it performed under its agreement with Riverside Land Conservancy.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatment occurred on 2/9/16. A total of 18 hours were spent on these activities. Targeted species include castor bean (*Ricinus communis*), tree tobacco (*Nicotiana glauca*), and saltcedar (*Tamarix* sp.).

Conservation Activities: Activities associated with the general preservation of the project took place along the entire project, consisting of general bio-monitoring for the presence of invasive vegetation and incidental wildlife. Specific conservation activities occurred on 2/9/16. A total of 1.5 hours were spent on these activities.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Cut stump treatments were conducted on castor bean, tree tobacco, and other species on this project site. Herbicides used were Garlon, Rodeo, and Competitor.

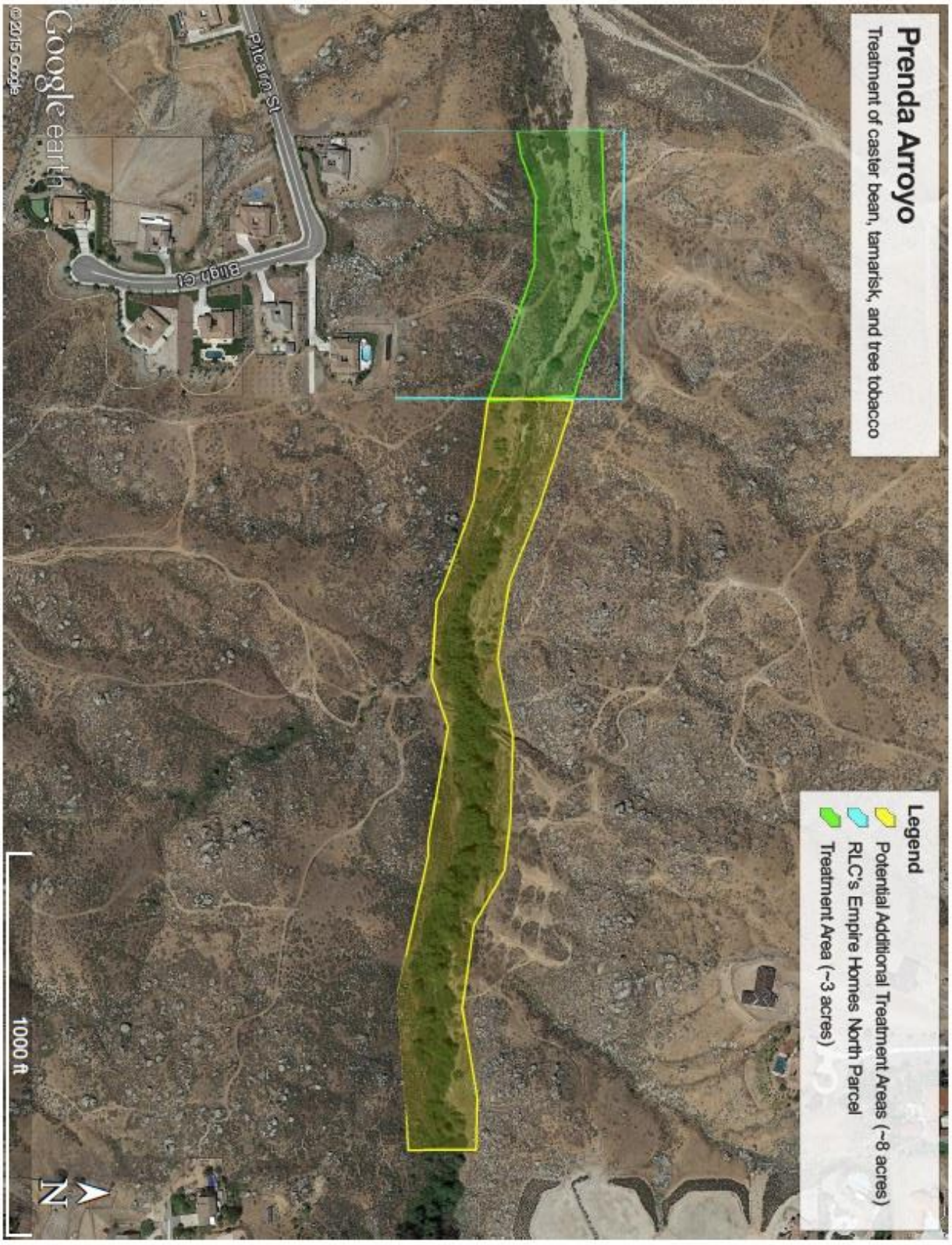
The amount removed and/or treated: A total of about 50 castor bean and 5 large salt cedars were treated at this project site. Approximately 200 smaller invasive plants were hand weeded.

The frequency and timing of removal/treatment: Removal occurred in February to avoid nesting bird season.

Disposal specifics: Treated biomass was piled above the high water mark and left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: On-going monitoring and re-treatments are recommended to ensure that eradication is achieved.

MAP


Prenda Arroyo
Treatment of caster bean, tamarisk, and tree tobacco
Legend
Potential Additional Treatment Areas (~8 acres)
RLC's Empire Homes North Parcel Treatment Area (~3 acres)
Google earth
© 2015 Google
Pitcairn St
Bligh Ct
1000 ft
N

CDFW REPORTS: RLC LA CIENEGA 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

SAWA acted as a contractor on this project, and will only report on activities and impacts it performed under its agreement with Riverside Land Conservancy.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatments occurred on 11/18/15 and 11/23/15. A total of 48 hours were spent on these activities. Targeted species included saltcedar (*Tamarix* sp.).

Conservation Activities: Conservation activities did not occur for this project.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Treatments of saltcedar were conducted using basal bark treatments, using 25% Habitat (Imazapyr), 25% Competitor (methylated seed oil), and 50% water solution.

The amount removed and/or treated: Approximately 60 saltcedars were treated on this project site.

The frequency and timing of removal/treatment: Treatment occurred in November to avoid nesting bird season.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: On-going monitoring and re-treatments are recommended to ensure that eradication is achieved.

CDFW REPORTS: RIVERSIDE PARKS LAND AGREEMENENT – HIDDEN VALLEY 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

SAWA acted as a contractor on this project, and will only report on activities and impacts it performed under its agreement with Riverside County Parks.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatments occurred on 4/4/16, 4/18/16, 5/2/16, 5/9/16, and 6/9/16. A total of 71 hours were spent on these activities. Targeted species included giant reed (*Arundo donax*), tamarisk (*Tamarix* sp.), perennial pepperweed (*Lepidium latifolium*), and summer cypress (*Kochia scoparia*).

Conservation Activities: Activities associated with the general preservation of the project took place along the entire project, consisting of established photo points and general bio-monitoring for the presence of invasive vegetation and incidental wildlife. Specific conservation activities occurred on 4/5/16 and 4/28/16. The annual bioassessment survey took place 4/28/16. A total of 19 hours were spent on these activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: The tree height class is >5-10 m and shrub height class is >2-5 m. Documented native species include >25-50% mulefat (*Baccharis salicifolia*), >15-25% narrow-leaf willow (*Salix exigua*), >25-50% fiddleneck (*Amsinckia* sp.), 1-5% cottonwood (*Populus fremontii*), and 1-5% arroyo willow (*Salix lasiolepis*). Documented non-native plants include >15-25% perennial pepperweed, >15-25% London rocket (*Sisymbrium irio*), >15-25% *Cotula* sp., >5-15% giant reed, >5-15% tamarisk, and >5-15% summer cypress.

Wildlife species: A variety of riparian species were documented during this survey. These include the Song Sparrow (*Melodia melospiza*), Spotted Towhee (*Pipilo maculatus*), Common Yellowthroat (*Geothlypis trichas*), Bushtit (*Psaltriparus minimus*), Red-tailed Hawk (*Buteo jamaicensis*), Red-winged Blackbird (*Icterus phoeniceus*), Pied-billed Grebe (*Podilymbus podiceps*), Sora (*Porzana carolina*), Lesser Goldfinch (*Spinus psaltria*), Western Kingbird (*Tyrannus verticalis*), House Finch (*Haemorhous mexicanus*), Horned Lark (*Eremophila alpestris*), Anna's Hummingbird (*Calypte anna*), cottontail (*Sylvilagus audubonii*), and side-blotched lizard (*Uta stansburiana*). The non-native feral pig (*Sus scrofa*) is also present on the site. California species of special concern on site include the Yellow Warbler (*Setophaga petechia*) and Yellow-breasted Chat (*Icteria virens*). The state and federally listed endangered Least Bell's Vireo (*Vireo bellii pusillus*) was also detected during this survey.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in April, May, and June of this reporting period. All treatments occurred after the areas were cleared and flagged by a biologist to avoid nesting birds.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately 45% non-native cover. That brings the treated area to ~36-A.

The frequency and timing of removal/treatment: On-going treatments were conducted when biomass reached a height range of 2 to 4 feet.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species consisted of foliar applications utilizing 4 gallon back pack sprayers. On-going monitoring and re-treatments are recommended to ensure that eradication is achieved.

PHOTOS – GPS PHOTO POINTS

Photos were taken 4/28/16.

Photo point 1 – 452963, 3758394, heading 14 N

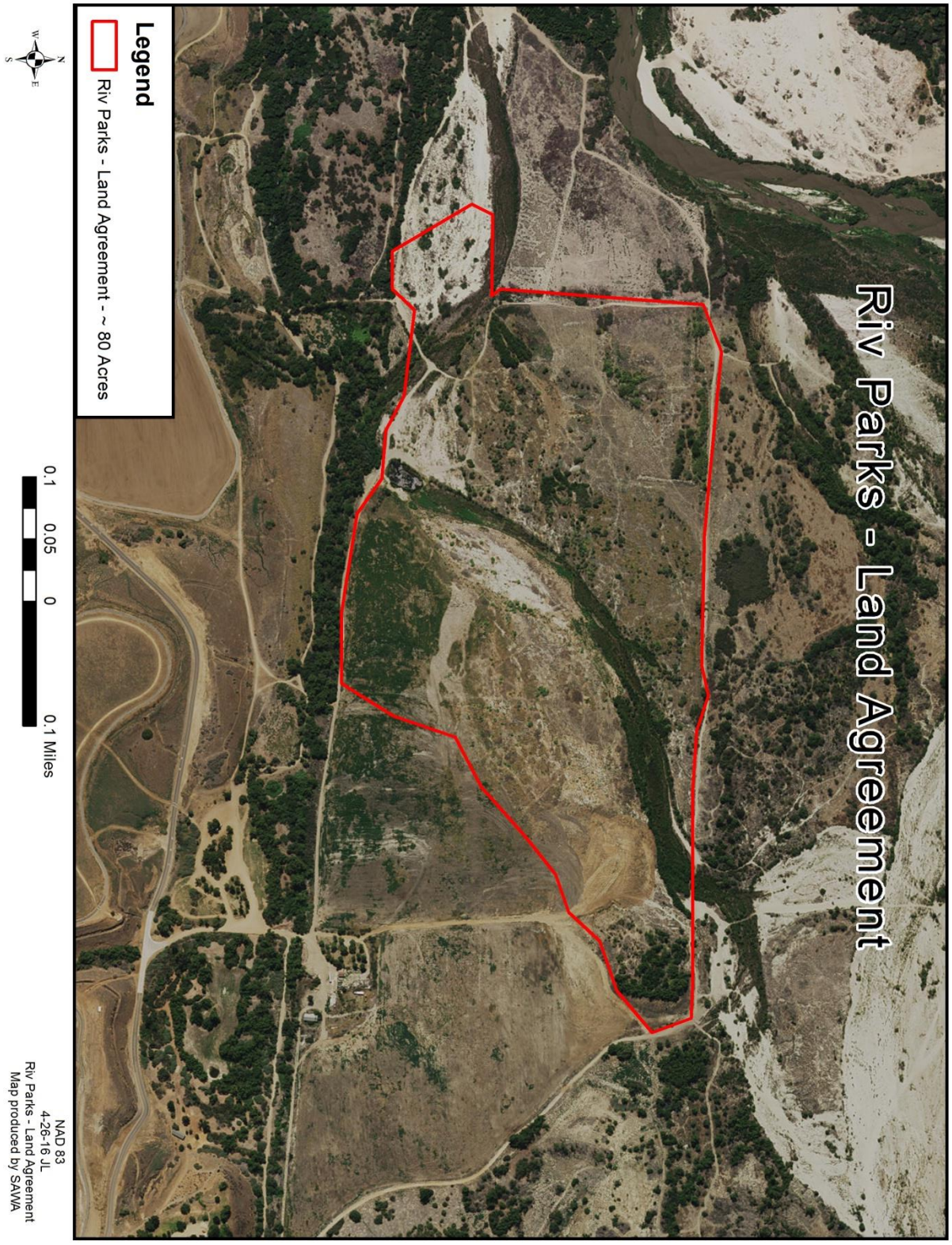
Photo point 2 – 452834, 3758463, heading 68 E

Photo point 3 – 452879, 3758779, heading 267 W

Photo point 4 – 453301, 375883, heading 197 S

Photo point 5 – 453460, 3758659, heading 17 N

MAP


Riv Parks - Land Agreement
Legend
Riv Parks - Land Agreement - ~ 80 Acres
0.1
0.05
0
0.1 Miles
NAD 83
4-26-16 JL
Riv Parks - Land Agreement
Map produced by SAWA

CDFW REPORTS: PRADO DIVERSION CHANNEL 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place along OCWD's diversion channel from River Rd to the groundwater recharge basins, to control the re-growth of previously removed non-native invasive plants. The area treated is ~ 100-A. Treated species include giant reed (*Arundo donax*), perennial pepperweed (*Lepidium latifolium*), castor bean (*Ricinus communis*), tree tobacco (*Nicotiana glauca*), saltcedar (*Tamarix* sp.), bull thistle (*Cirsium vulgare*), and milk thistle (*Silybum marianum*).

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: This project consists of ~ 100 acres along the OCWD diversion channel. The SAWA crew performed herbicide applications on the following dates: 7/28/15, 7/29/15, 8/5/15, 8/6/15, 3/24/16, 4/13/16, 4/25/16, 4/26/16, and 5/2/16. A total of 242 hours were spent on these activities. A total of 874 ounces of Cayuse water conditioner and 2226 ounces of round up pro max were used to treat this site. Treatments have been successful and re-growth of non-native vegetation is less than 10%.

Conservation Activities: Activities associated with the general preservation of the project took place along the entire project, consisting of established photo points and general bio-monitoring for the presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping. Specific conservation activities occurred on 7/28/15, 7/29/15, 8/5/15, 3/24/16, 4/25/16, 4/26/16, 4/27/16, and 5/2/16. The annual bioassessment survey took place on 4/27/16. A total of 19 hours were spent on these activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: The tree height class is >10-15 m and shrub height class is >2-5 m. Documented native species include >25-50% mulefat (*Baccharis salicifolia*), >5-15% cottonwood (*Populus fremontii*), and >5-15% black willow (*Salix gooddingii*). Documented non-native plants include >5-15% perennial pepperweed, >5-15% giant reed, 1-5% saltcedar, and 1-5% palms.

Wildlife species: A variety of riparian species were documented during this survey. These include the Song Sparrow (*Melodia melospiza*), Tree Swallow (*Tachycineta bicolor*), Hutton's Vireo (*Vireo huttoni*), Bewick's Wren (*Thryomanes bewickii*), Spotted Towhee (*Pipilo maculatus*), Common Yellowthroat (*Geothlypis trichas*), Bushtit (*Psaltriparus minimus*), Red-tailed Hawk (*Buteo jamaicensis*), Black Phoebe (*Sayornis nigricans*), Mallard (*Anas platyrhynchos*), Common Raven (*Corvus corax*), Nuttall's Woodpecker (*Picoides nuttallii*), House Wren (*Troglodytes aedon*), California Scrub-jay (*Aphelocoma californica*), California ground squirrel (*Oteospermophilus beecheyi*), coyote (*Canis latrans*), raccoon

(*Procyon lotor*), bobcat (*Lynx rufus*), long-tailed weasel (*Mustela frenata*), and side-blotched lizard (*Uta stansburiana*). The non-native feral pig (*Sus scrofa*) is also present on the site. California species of special concern on site include the Yellow Warbler (*Setophaga petechia*) and Yellow-breasted Chat (*Icteria virens*). The state and federally listed endangered Least Bell's Vireo (*Vireo bellii pusillus*) was also detected during this survey.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in March, April, May, July, and August of this reporting period.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately 10% non-native cover. That brings the treated area to ~10-A.

The frequency and timing of removal/treatment: On-going treatments were conducted when biomass reached a height range of 2 to 4 feet. Treatments occur mostly outside of the nesting season, however treatments have been conducted during season after a certified biologist has cleared and flagged areas available for treatment.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatments for this project are conducted with 4 gallon back pack sprayers in mixed stands of vegetation. In the large non-native stands an OHUV with a 70-gallon spray tank and reels is utilized to increase efficiency. Treatments have been successful and non-native percent cover is in the decline.

PHOTOS – GPS PHOTO POINTS

Photos were taken 3/27/2016.

Photo point 1 – 443275, 3753517, heading 90 E

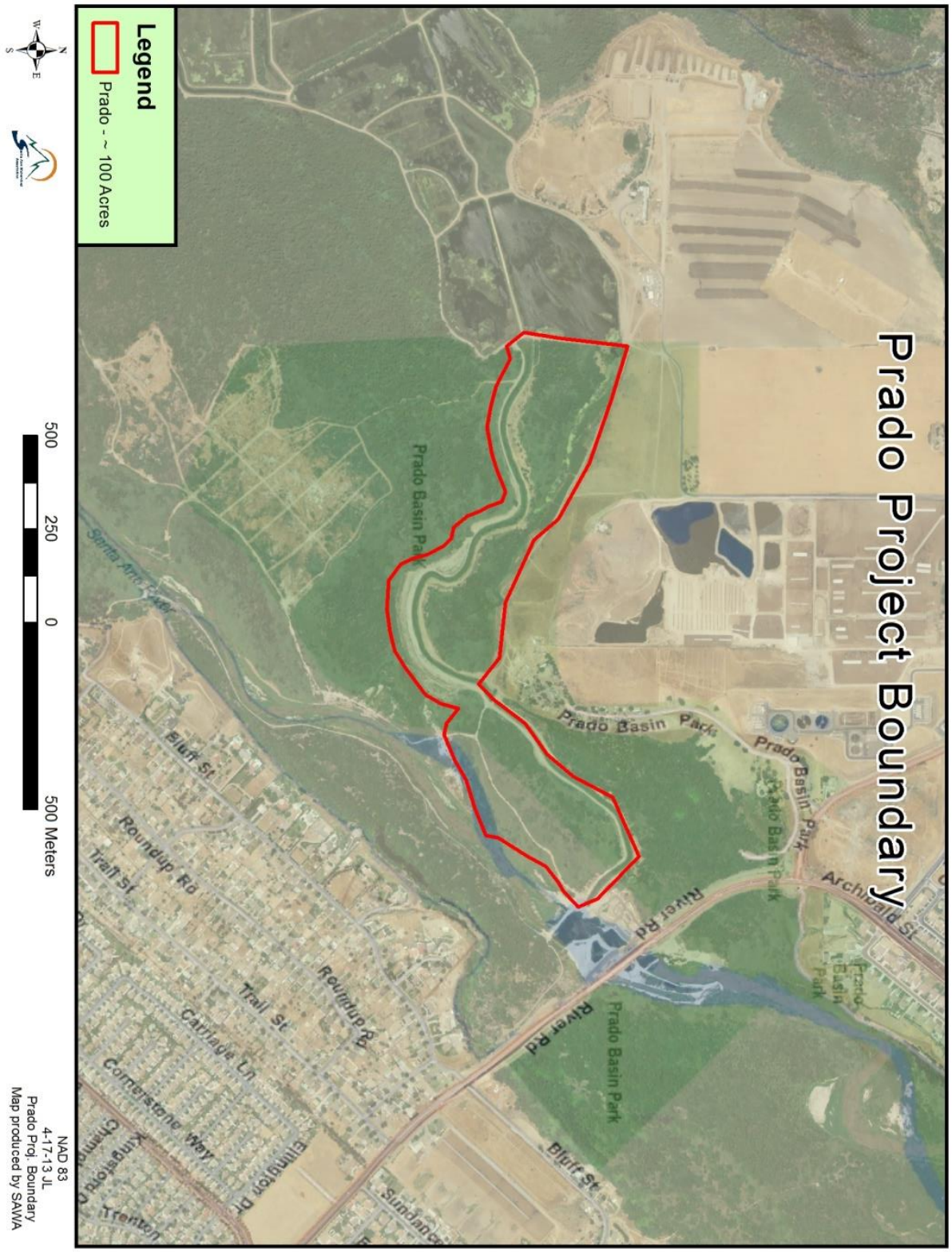
Photo point 2 – 443897, 3753288, heading 67 E

Photos were taken 30/30/2011 and 4/27/16, respectively.

Photo point 4 – 443685, 3753318, heading 336 N

Photo point 5 – 443556, 3753491, heading 327 NW

MAP


Prado Project Boundary
Legend
Prado - ~ 100 Acres
500
250
0
500 Meters
NAD 83
4-17-13 JL
Prado Proj. Boundary
Map produced by SAWA
Prado Basin Park
Bluff St
Roundup Rd
Trail St
River Rd
Archibald St
Cattlada Ln
Cornerstone Way
Ellington Dr
Sundance
Trenton

CDFW REPORTS: MILL CREEK PRADO 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 175-A Mill Creek site. Non-native vegetation was originally removed in 2003, and follow-up treatments occurred until 2009. Since then SAWA has treated the site to prevent re-infestation. Giant reed (*Arundo donax*) is the primary non-native plant targeted in this project. The project site is located along Mill Creek in the Prado Basin.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: This project consists of ~ 175 acres of riparian habitat along Mill Creek in the Prado Basin. The project starts at Hellman Avenue and runs downstream to the Riverside-Orange County Line. Herbicide treatments did not occur on this site during this reporting period.

Conservation Activities: Activities associated with the general preservation of the project took place along the entire project, consisting of established photo points and general bio-monitoring for the presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping. These activities were conducted on 6/23/16. The annual bioassessment survey took place 6/23/16. A total of 8.5 hours was spent on activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: Tree height class is >10-15 m and shrub height class is >2-5 m. Documented native plants include >25-50% black willow (*Salix gooddingii*), >5-15% mulefat (*Baccharis salicifolia*), 1-5% cottonwood (*Populus fremontii*), and 1-5% arroyo willow (*Salix lasiolepis*). Documented non-native plants include >5-15% *Eucalyptus* sp., 1-5% perennial pepperweed (*Lepidium latifolium*), 1-5% poison hemlock (*Conium maculatum*), <1% castor bean (*Ricinus communis*), <1% Russian thistle (*Salsola tragus*), <1% palms.

Wildlife species: A diverse list of species were detected during the bioassessment survey, including the Black-necked Stilt (*Himantopus mexicanus*), Mallard (*Anas platyrhynchos*), Killdeer (*Charadrius vociferus*), Barn Swallow (*Hirundo rustica*), White-faced Ibis (*Plegadis chihi*), Common Yellowthroat (*Geothlypis trichas*), Song Sparrow (*Melodia melospiza*), Lesser Goldfinch (*Spinus psaltria*), House Wren (*Troglodytes aedon*), Black Phoebe (*Sayornis nigricans*), Bewick's Wren (*Thryomanes bewickii*), House Finch (*Haemorhous mexicanus*), Nuttall's Woodpecker (*Picoides nuttalli*), Bushtit (*Psaltriparus minimus*), Red-tailed Hawk (*Buteo jamaicensis*), American Crow (*Corvus brachyrhynchos*), and Spotted Towhee (*Pipilo maculatus*). California species of special concern detected on site include the Yellow Warbler

(*Setophaga petechia*) and Yellow-breasted Chat (*Icteria virens*). The state and federally listed endangered Least Bell's Vireo (*Vireo bellii pusillus*) was also documented.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Removal activities were not conducted during this reporting period.

The amount removed and/or treated: Not conducted during this reporting period.

The frequency and timing of removal/treatment: Treatments did not occur during this reporting period.

Disposal specifics: The dead biomass was allowed to decompose on-site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: This site has been an overall success. SAWA staff has encountered very little giant reed re-growth the last couple years. The main species encountered this last year are castor bean (*Ricinus communis*) and perennial pepperweed. These species are treated as they are encountered, however a watershed wide approach must be developed to prevent introduction of seed from adjacent lands.

PHOTOS – GPS PHOTO POINTS

Photos were taken 2/12/2015 and 6/23/16, respectively.
Photo point 2 – 443155, 3756350, heading 35

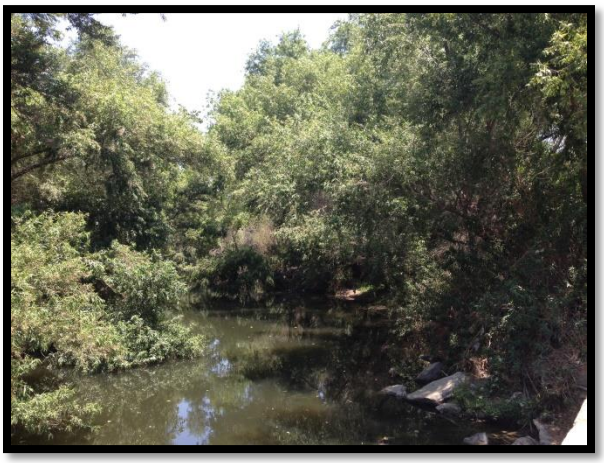
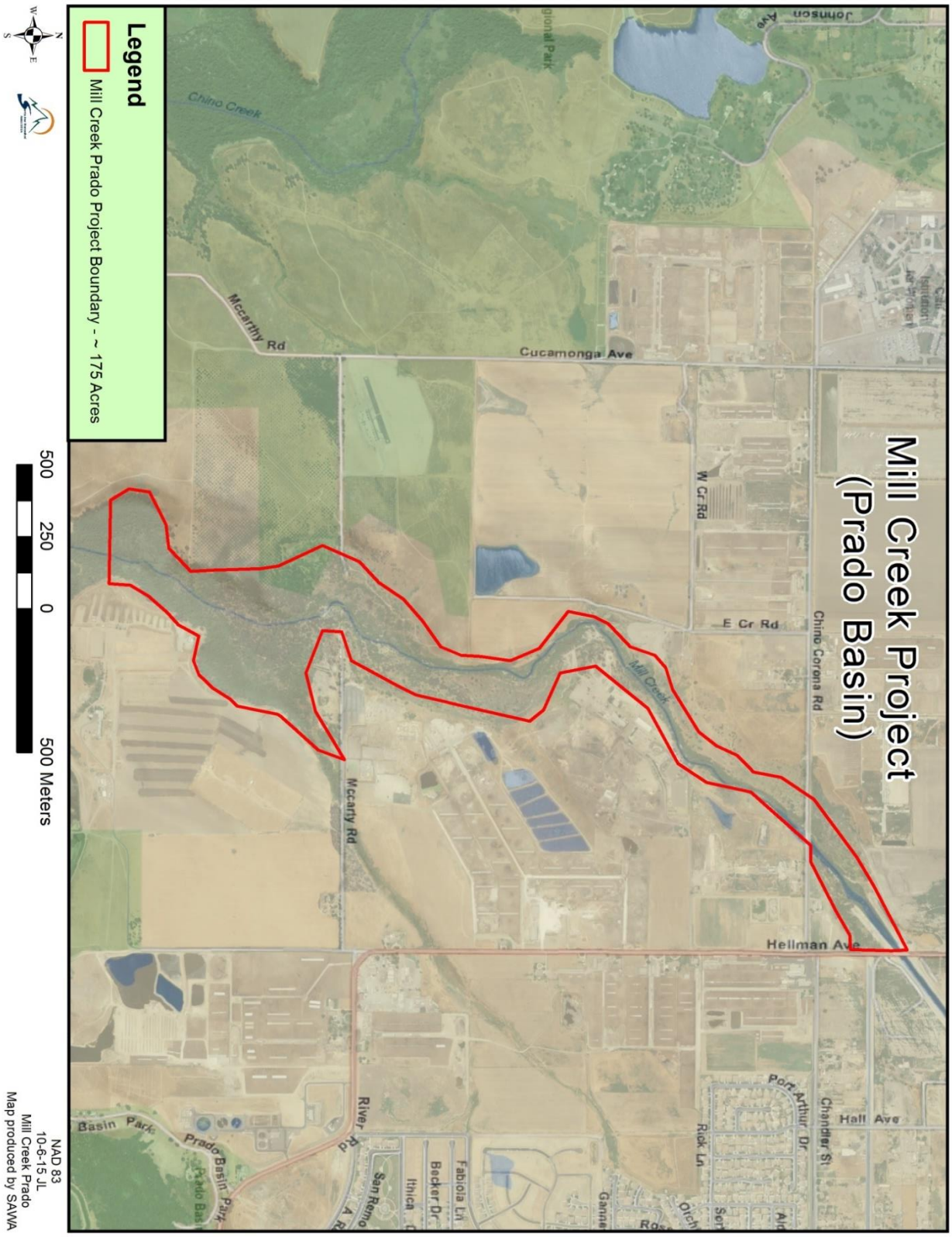


Photo point 4 – 443131, 3756334, heading 240

Photos taken 6/23/16.
Photo point 5 – 442333, 3755536, heading 87

Photo point 7 – 442202, 3754759, heading 67

MAP


Mill Creek Project
(Prado Basin)
Legend
Mill Creek Prado Project Boundary - ~ 175 Acres
500 250 0 500 Meters
NAD 83
10-6-15 JL
Mill Creek Prado
Map produced by SAWA
Chino Creek
Mccarthy Rd
Cucamonga Ave
W Cr Rd
E Cr Rd
Chino Corona Rd
Mill Creek
Mccarty Rd
Hellman Ave
Hall Ave
Port Arthur Dr
Chandler St
Rick Ln
Fabiola Ln
Becker Dr
Ithica
San Remo
River Rd
Basin Park
Prado Basin Park
Johnson Ave

CDFW REPORTS: PRADO RIVER ROAD 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 74.75-A site in the Prado Basin. The purpose of this project is to retain control over re-growth of giant reed (*Arundo donax*) that had previously been removed.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatments did not occur during this reporting period.

Conservation Activities: Activities associated with the general preservation of the project took place along the entire project, consisting of established photo points and general bio-monitoring for the presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping. These activities were conducted on 6/29/16. The annual bioassessment survey too place on 6/29/16. A total of 6.25 hour was spent on these activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: The tree height class is >10-15 m and shrub height class is >2-5 m. Documented native plant species include >50-75% black willow (*Salix gooddingii*), >5-15% wild grape (*Vitis girdiana*), and >5-15% mulefat (*Baccharis salicifolia*). Documented non-native species include 1-5% tree tobacco (*Nicotiana glauca*), 1-5% giant reed (*Arundo donax*), 1-5% *Eucalyptus* sp., 1-5% poison hemlock (*Conium maculatum*), and <1% palms.

Wildlife species: Wildlife species detected on site include the Black-headed Grosbeak (*Pheucticus melanocephalus*), Common Yellowthroat (*Geothlypis trichas*), Mourning Dove (*Zenaida macroura*), Song Sparrow (*Melodia melospiza*), Barn Swallow (*Hirundo rustica*), Anna's Hummingbird (*Calypte anna*), House Finch (*Haemorhous mexicanus*), Lesser Goldfinch (*Spinus psaltria*), Spotted Towhee (*Pipilo maculatus*), Hutton's Vireo (*Vireo huttoni*), and Western fence lizard (*Sceloporus occidentalis*). California species of special concern detected on site were Yellow Warbler (*Setophaga petechia*) and Yellow-breasted Chat (*Icteria virens*). In addition, the Orange County Water District monitors and records the presence/absence of the endangered Least Bell's Vireo (*Vireo bellii pusillus*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Removal activities were not conducted during this reporting period.

The amount removed and/or treated: Not conducted during this reporting period.

The frequency and timing of removal/treatment: Treatments did not occur during this reporting period.

Disposal specifics: No biomass was actively removed from the project site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: This project has been successful in controlling the non-native vegetation.

PHOTOS – GPS PHOTO POINTS

Photos taken 10/31/11 and 6/23/16, respectively.
Photo point 7 – 444739, 3753842, heading 198

Photos taken 6/23/16.
Photo point 1 – 444660, 3753349, heading 351

Photo point 2 - 444660, 3753349, heading 242

Photo point 3 – 443775, 3752496, heading 348

Photo point 4 – 443773, 3752509, heading 223

MAP


River Road
Legend
Water Con Mit Project Boundary - ~ 70 Acres
River Road Expansion Project Boundary - ~ 4.75 Acres
500
250
0
500 Meters
NAD 83
8-20-13 JL
River Road
Map produced by SAWA

CDFW REPORTS: SAR MISSION BLVD TO VAN BUREN BLVD 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place along the Santa Ana River from the Mission Blvd. to Van Buren Blvd. The goal of this project is to control previously removed non-native vegetation. Targeted species include giant reed (*Arundo donax*), perennial pepperweed (*Lepidium latifolium*), saltcedar (*Tamarix* sp.), and castor bean (*Ricinus communis*).

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatments occurred on 7/6/15, 7/7/15, 7/15/15, 7/16/15, 7/20/15, 7/21/15, 7/22/15, 7/23/15, 7/27/15, 6/20/16, 6/21/16, 6/27/16. A total of 337 hours were spent on these activities. Targeted species included giant reed, tamarisk, castor bean, perennial pepperweed, and tree tobacco.

Conservation Activities: Activities associated with the general preservation of the project took place along the entire project, consisting of established photo points and general bio-monitoring for the presence of invasive vegetation and incidental wildlife. Specific conservation activities occurred on 7/15/15, 7/20/15, 7/21/15, 7/22/15, 7/23/15, 7/27/15, 9/14/15, 9/15/15, 6/14/16, 6/16/16, 6/20/16, and 6/27/16. The annual bioassessment surveys took place on 6/14/16 and 6/16/16. A total of 38.5 hours were spent on these activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: Due to the stratification of this site, bio-assessments have been broken up into sections. From Mission Ave to the Tequesquite Landfill, the tree height class is >20-35 m and the shrub height class is >2-5 meters. Documented native plants include >25-50% cottonwood (*Populus fremontii*), >15-25% wild grape (*Vitis girdiana*), >15-25% black willow (*Salix gooddingii*), and >5-15% mulefat (*Baccharis salicifolia*). Documented non-native species include >25-50% giant reed (*Arundo donax*), >15-25% tree tobacco (*Nicotiana glauca*), >15-25% mustard (*Brassica* sp.), >5-15% tamarisk (*Tamarix* sp.), <1% palms, <1% tree of heaven (*Ailanthus altissima*), <1% cape ivy (*Delairea odorata*), and <1% stinknet (*Oncosiphon piluliferum*). From the Tequesquite Landfill downstream to Van Buren Blvd, documented native species include >15-25% arroyo willow (*Salix lasiolepis*), >15-25% wild grape (*Vitis girdiana*), >5-15% mulefat (*Baccharis salicifolia*), and >5-15% cottonwood (*Populus fremontii*). Documented non-native species in this section include 1-5% giant reed, 1-5% saltcedar, 1-5% Mexican fan palm (*Washingtonia robusta*), 1-5% tree tobacco (*Nicotiana glauca*), and <1% stinknet (*Oncosiphon piluliferum*).

Wildlife species: This project site has many common riparian wildlife species including the Bushtit (*Psaltriparus minimus*), Common Yellowthroat (*Geothlypis trichas*), Song Sparrow (*Melodia melospiza*), House Finch (*Haemorhous mexicanus*), Spotted Towhee (*Pipilo maculatus*), Phainopepla (*Phainopepla nitens*), Pacific-slope Flycatcher (*Empidonax difficilis*), Lesser Goldfinch (*Spinus psaltria*), Black-headed Grosbeak (*Pheucticus melanocephalus*), Nuttall's Woodpecker (*Picoides nuttalli*), Black Phoebe (*Sayornis nigricans*), Say's Phoebe (*Sayornis saya*), Red-tailed Hawk (*Buteo jamaicensis*), Blue Grosbeak (*Passerina caerulea*), Sharp-shinned Hawk (*Accipiter striatus*), Cooper's Hawk (*Accipiter cooperii*), California Towhee (*Melozone crissalis*), Acorn Woodpecker (*Melanerpes formicivorus*), Downy Woodpecker (*Picoides pubescens*), Mallard (*Anas platyrhynchos*), Anna's Hummingbird (*Calypte anna*), Hooded Oriole (*Icterus cucullatus*), American Kestrel (*Falco sparverius*), Greater Roadrunner (*Geococcyx californianus*), Mourning Dove (*Zenaida macroura*), Norther Rough-winged Swallow (*Stelgidopteryx serripennis*), Northern Flicker (*Colaptes auratus*), Bewick's Wren (*Thryomanes bewickii*), Northern Mockingbird (*Mimus polyglottos*), desert cottontail (*Sylvilagus audubonii*), Western fence lizard (*Sceloporus occidentalis*), California ground squirrel (*Oteospermophilus beecheyi*), and side-blotched lizard (*Uta stansburiana*). California species of special concern present on the site include the Yellow Warbler (*Setophaga petechia*) and Yellow-breasted Chat (*Icteria virens*), as well as the state and federally listed endangered Least Bell's Vireo (*Vireo bellii pusillus*). Non-native species documented on site include the American bullfrog (*Lithobates catesbeianus*) and feral pigs (*Sus scrofa*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide application occurred in June and July of this reporting period, and was focused on open areas to avoid nesting birds.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately 10% non-native cover. That brings the treated area to ~54.2-A.

The frequency and timing of removal/treatment: On-going treatments were conducted when biomass reached a height range of 2 to 4 feet. Treatments occur mostly outside of the nesting season, however treatments have been conducted during season after a certified biologist has cleared and flagged areas available for treatment.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: This project has been successful in controlling the non-native vegetation.

PHOTOS – GPS PHOTO POINTS

Santa Ana River from Mission Ave. to Tequesquite Landfill, taken 6/16/16.

Photo point 1 – 462852, 3759864, heading 182 S

Photo point 3 – 462744, 3759861, heading 86 E

Photo point 4 – 463011, 3759894, heading 293 W

Photo point 5 – 463172, 3760614, heading 274 W

Mission 4 Arundo Expansion, 2/4/13 and 6/14/16, respectively.

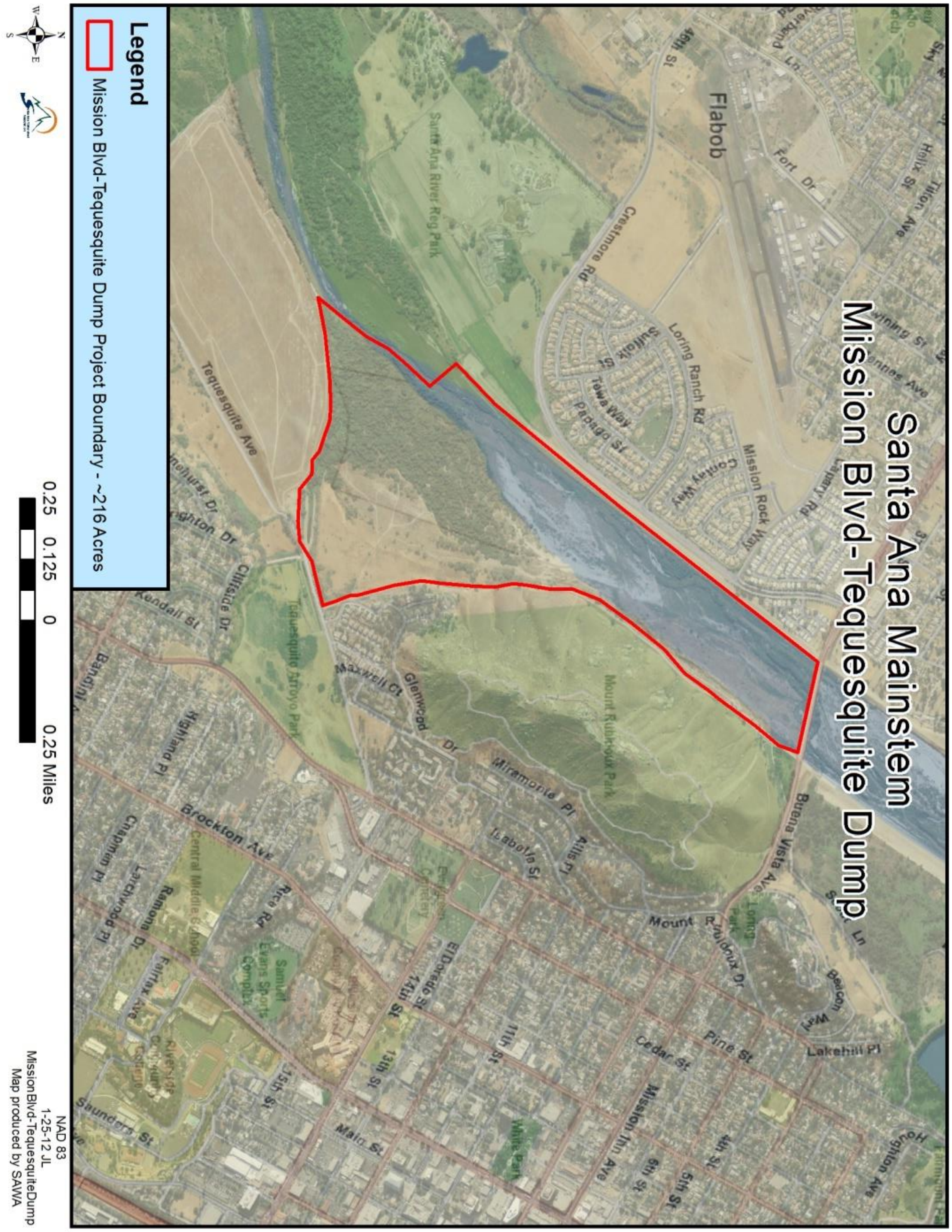
Photo point 1 – 459803, 3758708, heading N

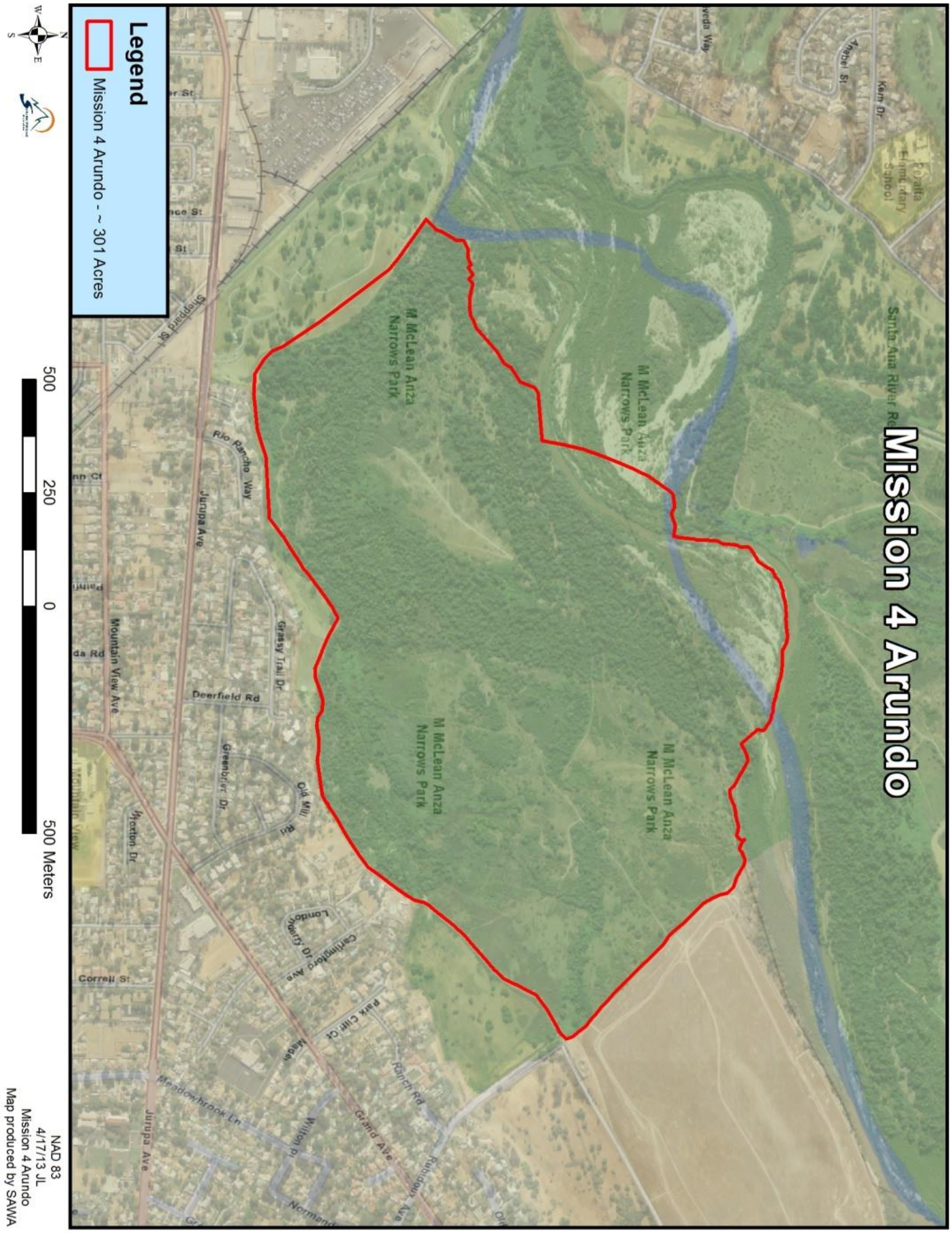
Photo point 2 – 459824, 3758692, heading 6 N

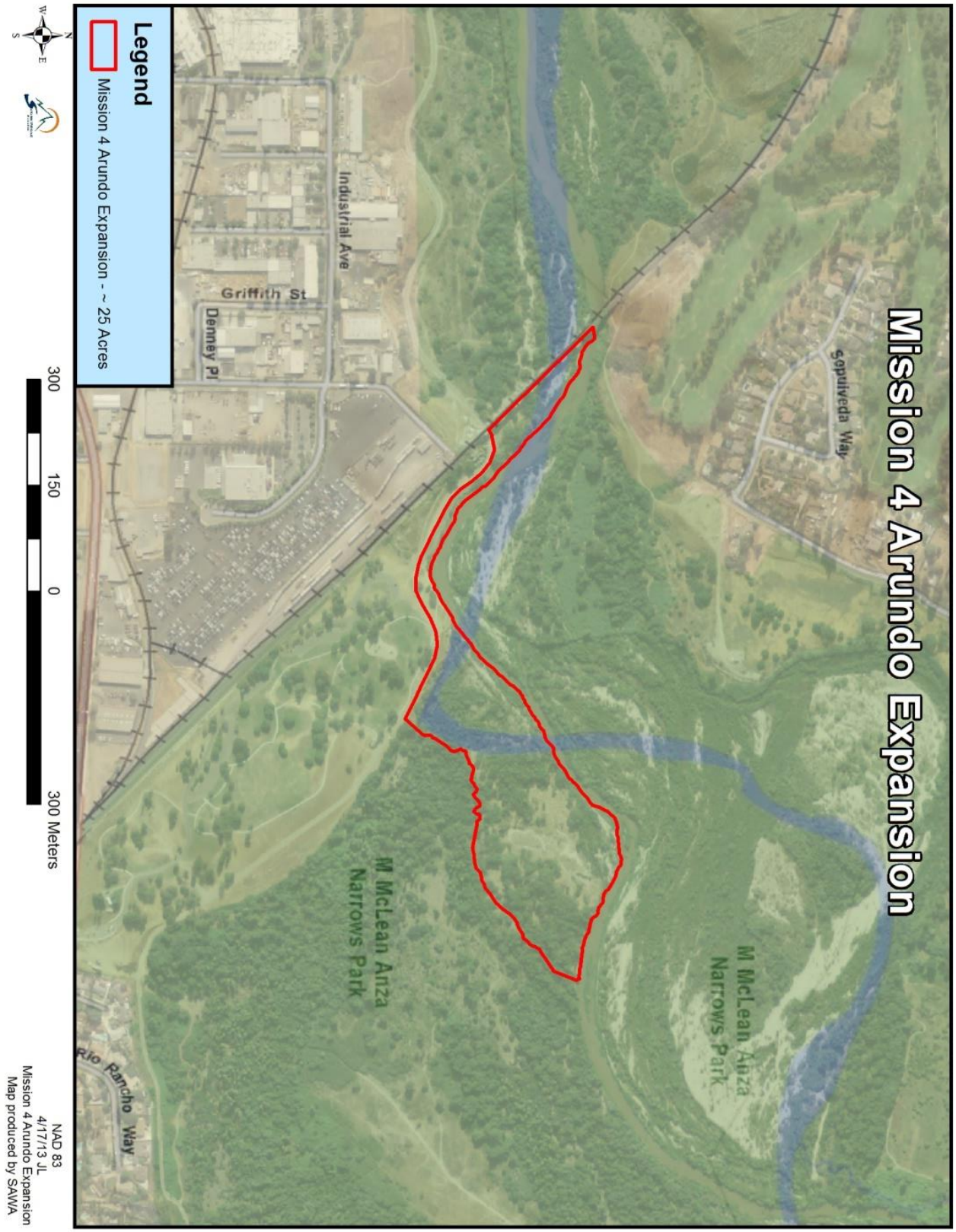
Mission 4 Arundo, 12/16/11 and 6/14/16, respectively.
Photo point 3 – 460306, 3758491, heading 37 NE

Photo point 4 – 460043, 3758610, heading 20 N

MAP


Santa Ana Mainstem
Mission Blvd-Tequesquite Dump
Legend
Mission Blvd-Tequesquite Dump Project Boundary - ~216 Acres
0.25 0.125 0 0.25 Miles
NAD 83
1-25-12 JL
MissionBlvd-TequesquiteDump
Map produced by SAWA


Mission 4 Arundo
Legend
Mission 4 Arundo - ~ 301 Acres
M McLean Anza Narrows Park
Santa Ana River
Jurupa Ave
Rio Rancho Way
Deerfield Rd
Mountain View Ave
Correll St
Grand Ave
500
250
0
500 Meters
NAD 83
4/17/13 JL
Mission 4 Arundo
Map produced by SAWA


Mission 4 Arundo Expansion
Legend
Mission 4 Arundo Expansion - ~ 25 Acres
Sepulveda Way
Industrial Ave
Griffith St
Denney Pl
M McLean Anza
Narrows Park
Rio Rancho Way
300
150
0
300 Meters
NAD 83
4/17/13 JL
Mission 4 Arundo Expansion
Map produced by SAWA

CDFW REPORTS: SAWPA PEPPERWEED (PRADO BASIN) 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement, conservation, and restoration activities took place throughout the 10.25-A SAWPA Pepperweed project site, and are indicated in the included map as demonstrated by locations of invasive vegetation removal, restoration planting, photo documentation, and general site monitoring.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatments occurred on 3/17/16, 4/5/16, 4/12/16 and 5/23/16. Non-native vegetation is currently less than 5% with the major non-natives consisting of mustard (*Brassica sp.*), perennial pepperweed (*Lepidium latifolium*), castor bean (*Ricinus communis*), and London rocket (*Sisymbrium irio*). A total of 124.5 hours were dedicated to enhancement activities during this reporting period.

Conservation Activities: Activities associated with general preservation of property took place throughout the year and consisted of taking established photo points, general bio-monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. The bioassessment survey occurred on 5/6/16. A total of 18 hours were dedicated to conservation activities during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: Riparian habitat consisting mainly of arroyo willow (*Salix lasiolepis*) forest with mulefat (*Baccharis salicifolia*) understory. Canopy cover is >75%, with tree height of 20-35 meters. Dominant species are: arroyo willow at >25-50% cover and mulefat at >25-50%. Dominant non-native species is mustard at 1-5% and palms at 1-5%.

Wildlife species: Observed wildlife species consist primarily of common riparian birds, including Song Sparrow (*Melodia melospiza*), House Finch (*Haemorhous mexicanus*), California Towhee (*Melozone crissalis*), Red-tailed Hawk (*Buteo jamaicensis*), and Western fence lizard (*Sceloporus occidentalis*). Two territories for the state and federally-listed endangered Least Bell's Vireo (*Vireo bellii pusillus*) were documented on site.

Restoration activities consisted of: In the previous reporting period pole cuttings were collected and installed. During this reporting period monitoring of the pole cuttings was conducted and it was found that over 90% of the installed planted cuttings have survived. The site has established a high presence of native species due to the restoration activities conducted on-site.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in March, April and May of this reporting period.

The amount removed and/or treated: The entire 10.25-A site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately 5% non-native cover (mostly around the newly planted cuttings). That brings the treated area to ~ 0.513-A.

The frequency and timing of removal/treatment: All treatments were conducted in coordination with anticipated seed setting of target species, to ensure minimal development/spread of viable seed. The treatments were conducted in March, April and May of this reporting period. Future monitoring and repeated herbicide applications over time are projected to exhaust the non-native seed bank. In addition, to the natives that were planted becoming established it is been documented that at the end of this reporting period the site will have less than 5% non-native cover.

Disposal specifics: Due to the small size of the biomass removed from the targeted species it was treated and left to decompose on the property. Any species that were suspected to have viable seed present were hand pulled and bagged to be disposed of at a landfill.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate the non-native herbaceous cover have been extremely effective. In 2011 the site was dominated by perennial pepperweed now there is less than 1% cover. Further review of the original site plan indicated unnecessary density in planned areas of native plant re-vegetation, particularly in light of limited ability to provide artificial irrigation. However, this large number of original plantings is projected to result in survivability beyond what was outlined in the project's HMMP.

PHOTOS – GPS PHOTO POINTS

Point 1: GPS Point located on the southern berm adjacent to the project. Photos taken on 9/29/2011 and 5/6/16, respectively.

Photo point 1 – 444461, 3750637, heading SW

Photos taken 5/6/16.

Photo point 2 – 444388, 3760638, heading SE

Photo point 3 – 444292, 444292, 3750638, heading SE

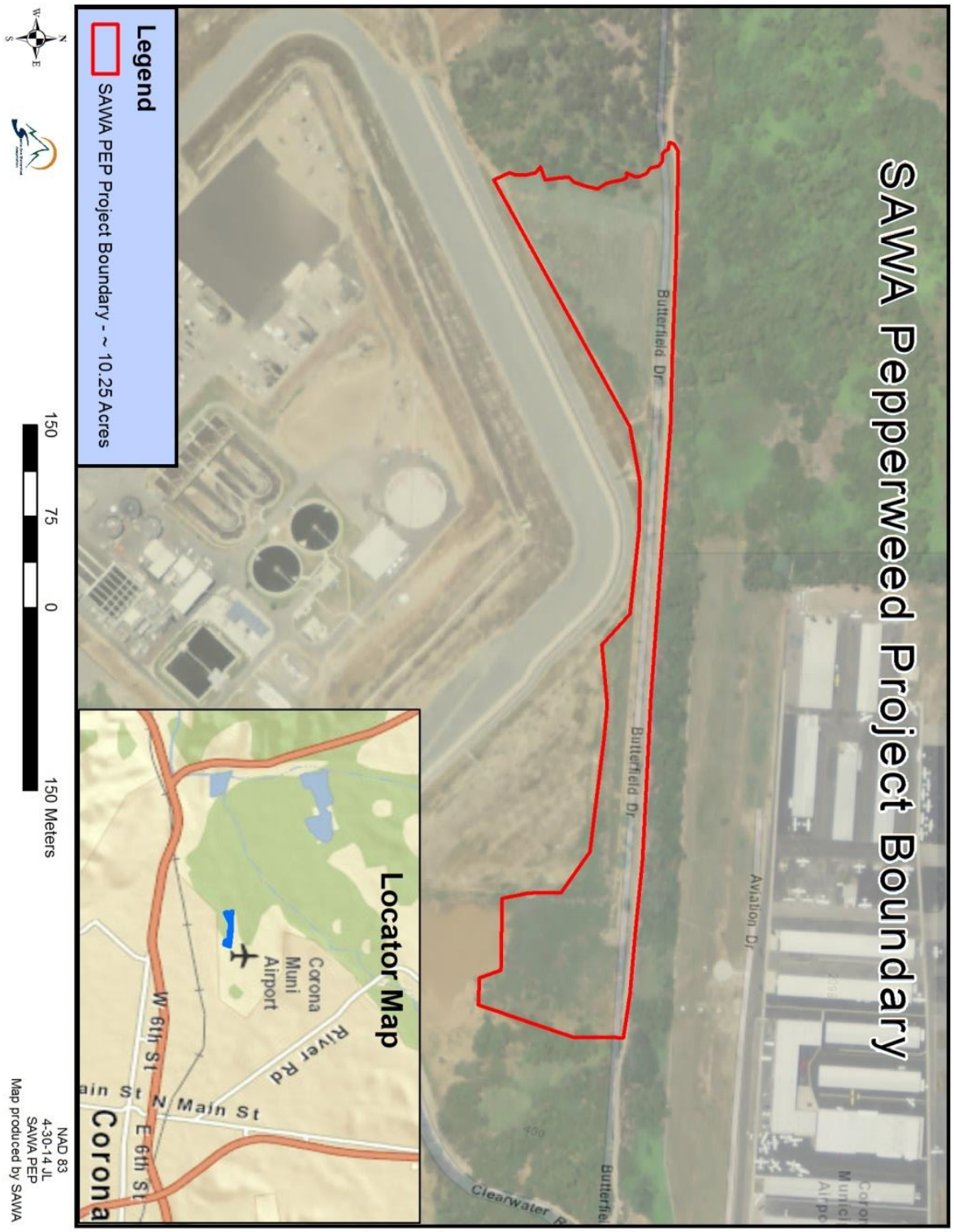
Non-GPS photo: Photos taken 5/6/16.

SAWPA PEPPERWEED FINANCIAL SUMMARY

SAWPA Pepperweed - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2008-0122-R6 Biological Opinion from USFWS FWS-WRIV/SAB-08B0804-11F0314	Brine Line Repairs for SAWPA	SAWPA	$244,000	3/16/2011		10.25	Restoration of 2.93-A
Totals			**$244,000.00**			10.25	

7-1-15 to 6-30-16 Cost Breakdown	
Mileage	$237.55
Staff Time	$5,981.04
Herbicide	$102.17
Contractor Costs	$0
Total Costs	***$6,320.76***

SAWPA PEPPERWEED PROJECT SITE MAP



CDFW REPORTS: SUNNYSLOPE OCWD 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

In 2010 OCWD and the Santa Ana Watershed Association (SAWA) prepared a feasibility study that identified potential native fish habitat restoration activities for Sunnyslope Creek. Measurements were taken along the creek to establish a baseline for habitat conditions. Starting in the spring of 2011 to present, OCWD and SAWA implemented habitat restoration activities along Sunnyslope Creek, including the removal of predatory fish from the deeper pools, filling holes in the creek bed with rock and gravel, removing sediment, trash and marsh blockages, and placing boulders, rocks and gravel along the creek where needed. These activities restored aquatic connectivity between the creek and river thereby greatly improving conditions for native fishes including suckers.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: There were a total of eight vegetation management events that occurred during the reporting period. These activities included the removal of vegetation blockages throughout the creek after storm events and removing previously cut/removed debris from the banks and chipping it out of the system.

Conservation Activities: Trash was collected from banks and in the creek whenever field crew was on site, but one trash collection yielding 39 of the 30 gallon trash bags was done in late 2015. In addition large items such as a mattress, tires, a car seat and other items were removed from Sunnyslope. Fallen trees that caused debris build up were also removed from the creek.

Electroshocking was conducted in October to remove exotic predators and simultaneously perform a native fish survey. No sucker were observed or caught during the native fish survey and 15 arroyo chub were captured and released.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site under this project.

Current site conditions: This site occurs in a drainage channel made up of dense riparian habitat with a canopy cover greater than 75%. The tree height is 10-15 meters and shrub height is 2-5 meters. The following native species were documented on site, and have been recorded in percent cover using stratum categories from rapid assessment method: >50-75% black and red willows (*Salix gooddingii* and *S. lucida ssp. lasiandra*), >5-15% mulefat (*Baccharis salicifolia*), and 1-5% common cattail (*Typha latifolia*). The presence of Polyphagous Shot Hole Borer (*Euwallacea* sp.) and Fusarium dieback (*Fusarium* sp.) was observed throughout the site.

The following non-native species were documented on site, and have been recorded in percent cover using stratum categories from rapid assessment method: <1% castor bean (*Ricinus communis*) and <1%

saltcedar (*Tamarix ramosissima*). While not a dominant non-native, there has been an emergence of <1% palm spp.

Wildlife species: Sunnyslope Channel has many common avian species and riparian birds including but not limited to: Song Sparrow (*Melodia melospiza*), Common Yellowthroat (*Geothlypis trichas*), Black-headed Grosbeak (*Pheucticus melanocephalus*), Spotted Towhee (*Pipilo maculatus*), Bewick's Wren (*Thryomanes bewickii*), Pacific-slope Flycatcher (*Empidonax difficilis*), Green Heron (*Butorides virescens*), Blue Grosbeak (*Passerina caerulea*), California Towhee (*Melozone crissalis*), Western wood-pewee (*Contopus sordidulus*), and Northern flicker (*Colaptes auratus*). Other California species of special concern found on this site include Yellow-breasted Chat (*Icteria virens*), Yellow Warbler (*Setophaga petechial*), and Cooper's hawk (*Accipiter cooperii*). This site also hosts the state and federally-listed endangered Least Bell's Vireo (*Vireo bellii pusillus*). This year the site had 3 Least Bell's Vireo territories, compared to 5 in 2015. Mammal species occupying this habitat include raccoons (*Procyon lotor*), skunks (*Mephitis mephitis*), opossums (*Didelphis virginiaia)*, coyotes (*Canis latrans*), and non-native feral pigs (*Sus scrofa*). The creek also provides a breeding site for federally-listed endangered Santa Ana sucker (*Catostomus santaanae*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Removal of non-native animal species was completed with electroshocking, USFWS 10(a) 1(b) TE 088609-0, seining and the use of crayfish traps.

The amount removed and/or treated: A total of 3,416 non-native individuals of 8 species were removed from the creek during the reporting period. Of these totals, it should be noted that 2,882 individuals were mosquitofish (*Gambusia affinis*).

The frequency and timing of removal/treatment: Non-native animal species removal is scheduled bi-annually for the winter and fall to avoid Santa Ana sucker spawning season.

Disposal specifics: Non-native animal species are terminated and discarded into vegetation for opportunistic and/or carrion species.

Summary of the general successes and failures or overall failure of the nonnative removal plan: This project has been successful in controlling the non-native animal species and has thus seen an increase in habitat suitability for the Santa Ana sucker.

REGION 5

CDFW, USACE, RWQCB

CDFW REPORTS: CARBON CANYON AERA 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 4-A Carbon Canyon AERA Energy site, and are indicated in the included map as demonstrated by locations of invasive vegetation removal, photo documentation, and general site monitoring. SAWA began treating giant reed (*Arundo* donax) in the canyon after a fire burned through Carbon Canyon in November 2008. There was a 2 acre infestation within a 4 acre area behind the State Parks Discovery Center. SAWA went forward with placing mitigation funding to remove and control the giant reed. Initial removal began in fall of 2012.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatment did not occur on this site during this reporting period.

Conservation Activities: Activities associated with general preservation of property took place along the main stem, which consisted of established photo points and general bio-monitoring for presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping such as the presence of trash or indication of use of property by off-highway vehicles. The annual bioassessment survey took place on 9/16/15. A total of 4 hours were dedicated to conservation activities during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: Bio-assessments took place in September. The site is composed of ~5-15% open space. The tree height class is 10-15 meters and the shrub height class is 2-5 meters. The following native species were documented on site, and have been recorded in percent cover using stratum categories from rapid assessment method: 15-25% mulefat (*Baccharis salicifolia),* and 1-5% Southern California black walnut (*Juglans californica*). The following non-native species were documented on site, and have been recorded in percent cover using stratum categories from rapid assessment method: 15-25% blue gum eucalyptus (*Eucalyptus globules*), 15-25% non-native grasses, and 5-15% poison hemlock (*Conium maculatum*).

Wildlife species: Species detected during the September visit were: California Scrub-jay *(Aphelocoma californica)*, Mourning Dove *(Zenaida macroura)*, Anna's Hummingbird *(Calypte anna)*, Song Sparrow *(Melospiza melodia)*, California Towhee *(Pipilo crissalis)*, California Thrasher *(Toxostoma redivivum)*, House Wren *(Troglodytes aedon)*, Phainopepla *(Phainopepla nitens)*, and Side-blotched Lizard *(Uta stansburiana)*.

Additional species not detected during the September survey, but that do occur in this area during the spring season are the endangered Least Bell's Vireo, and a California species of special concern, the Yellow Warbler.

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Removal activities were not conducted during this reporting period.

The amount removed and/or treated: Not conducted during this reporting period.

The frequency and timing of removal/treatment: Treatments did not occur during this reporting period.

Disposal specifics: The dead biomass was allowed to decompose on-site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods used to eradicate these target species have been very effective thus far. SAWA has experienced a high level of success in controlling the non-native species on this project site and will continue to utilize the same methods into the future.

PHOTOS – GPS PHOTO POINTS

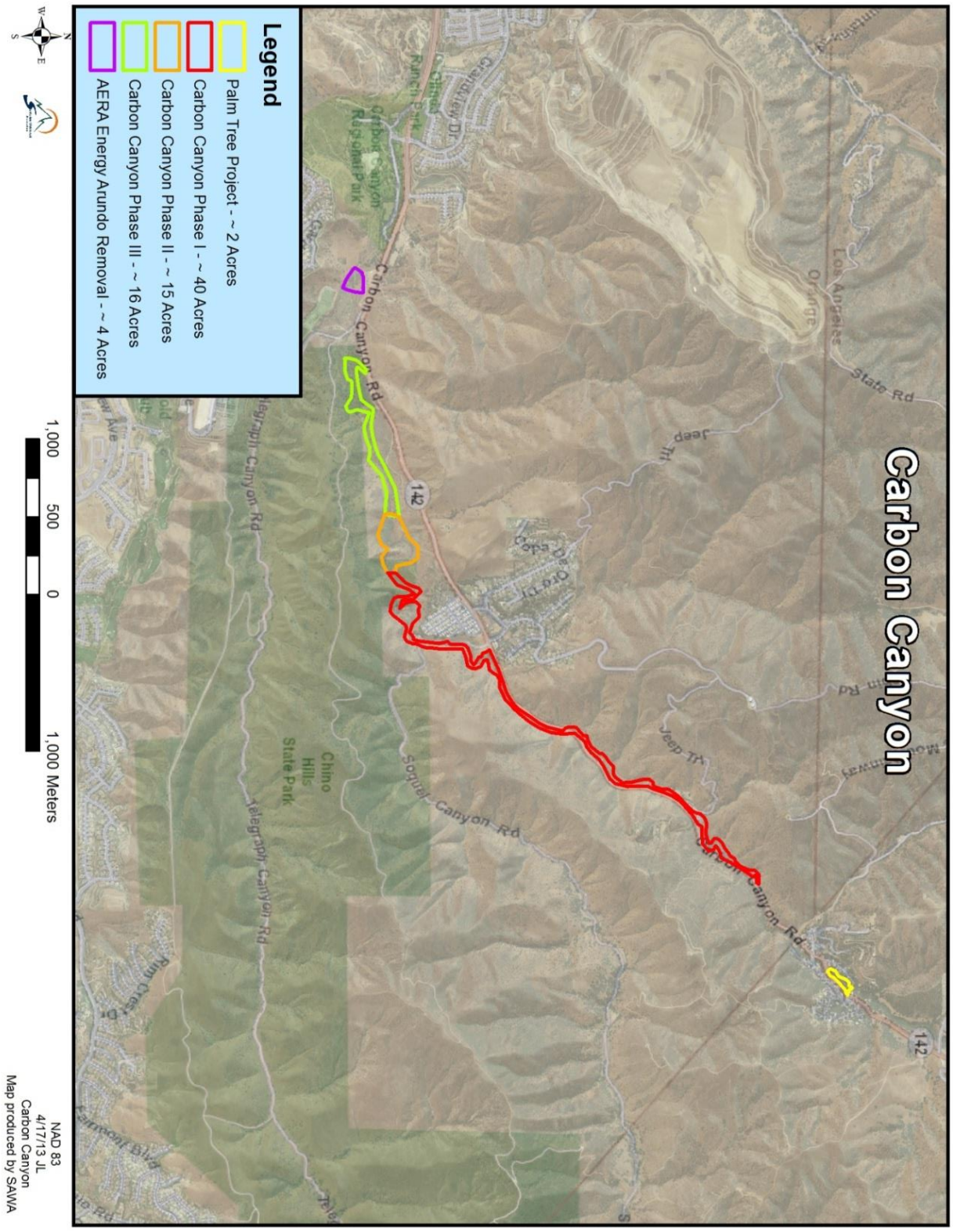
Photos were taken 10/28/12 and 6/9/15, respectively.

CARBON CANYON AERA FINANCIAL SUMMARY

Carbon Canyon AERA - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2009-0020-R5 USACE #SPL-2009-00292-JPL RWQCB Cert. 9/17/2009	Installation of culverted crossings over ephemeral streams	Metropolitan Water District	$75,000	12/4/2009	0.0296	0.7	Restoration
Totals			***$75,000***		***0.0296***	***0.7***	

July 1, 2015 to June 30, 2016 Cost Breakdown	
Mileage	$23.01
Staff Time	$306.66
Herbicide	$0
Total	***$329.67***

MAP


Carbon Canyon
Legend
Palm Tree Project - ~ 2 Acres
Carbon Canyon Phase I - ~ 40 Acres
Carbon Canyon Phase II - ~ 15 Acres
Carbon Canyon Phase III - ~ 16 Acres
AERA Energy Arundo Removal - ~ 4 Acres
1,000 500 0 1,000 Meters
NAD 83
4/17/13 JL
Carbon Canyon
Map produced by SAWA
Carbon Canyon Rd
State Rd
Jeep Tr
Soquel Canyon Rd
Telegraph Canyon Rd
Chino Hills State Park
142

CDFW REPORTS: IRVINE LAKE (SANTIAGO CREEK) 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the project site. The goal of this project was to remove 1.88-A of giant reed (*Arundo* donax) from the shores of the lake, and demonstrate this operation can be done safely at a critical drinking water reservoir with minimal pollution from herbicide and removal activities. Extensive management practices have been employed to ensure there is no measureable water pollution. Work began in 2012.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatment occurred on 9/29/15, for a total of 5 hours.

Conservation Activities: Conservation activities consisting of photo points and site visits occurred on 9/21/15 and 6/22/16. The annual bioassessment survey took place on 6/22/16. A total of 19.5 staff hours were spent conducting conservation activities during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: The vegetation cover and wildlife species described here is from the lake edge up to, but not including, the adjacent oak woodland hills. The tree height class is >50 m. Documented native species include >25-50% horseweed (*Erigeron canadensis*), >5-10% telegraph weed (*Heterotheca grandiflora*), 1-5% black willow (*Salix gooddingii*), and 1-5% mulefat (*Baccharis salicifolia*). Documented non-native species include >50-75% sweet clover (*Melilotus* sp.), >25-50% saltcedar (*Tamarix* sp.), >5-15% non-native grasses, 1-5% tree tobacco (*Nicotiana glauca*), 1-5% black mustard (*Brassica nigra*), <1% giant reed, <1% sweet fennel (*Foeniculum vulgare*), and <1% artichoke thistle (*Cynara cardunculus*).

Wildlife species: Documented wildlife species include the Mallard (*Anas platyrhynchos*), Pied-billed Grebe (*Podilymbus podiceps*), Western Grebe (*Aechomphorus occidentalis*), Snowy Egret (*Egretta thula*), Turkey Vulture (*Cathartes aura*), Red-tailed Hawk (*Buteo jamaicensis*), Mourning Dove (*Zenaida macroura*), Black Phoebe (*Sayornis nigricans*), Northern rough-winged Swallow (*Stelgidopteryx serripennis*), Cliff Swallow (*Petrochelidon pyrrhonota*), Common Yellowthroat (Geothlypis trichas), California Towhee (*Melozone crissalis*), Song Sparrow (*Melodia melospiza*), Black-headed Grosbeak (*Pheucticus melanocephalus*), House Finch (*Haemorhous mexicanus*), Lesser Goldfinch (*Spinus psaltria*), coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), and side-blotched lizard (*Uta stansburiana*). Two California species of special concern, the Yellow Warbler (*Setophaga petechia*) and the Yellow-

breasted Chat (*Icteria virens*) were detected on site, as well as the state and federally listed endangered Least Bell's Vireo (*Vireo bellii pusillus*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Removal activities were not conducted during this reporting period.

The amount removed and/or treated: Not conducted during this reporting period.

The frequency and timing of removal/treatment: Treatments did not occur during this reporting period.

Disposal specifics: The dead biomass was allowed to decompose on-site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: This project has been successful in controlling the giant reed. Cut stump applications have provided excellent control with no negative water test results.

PHOTOS – GPS PHOTO POINTS

Photos were taken 6/22/16.

Photo point 1 - 433760, 3736912, heading 120SE

Photo point 2 – 433760, 3736912, heading 205SW

Photo point 3 – 433760, 3736912, heading 280 W

Photo point 4 – 432689, 3738079, heading 53NE

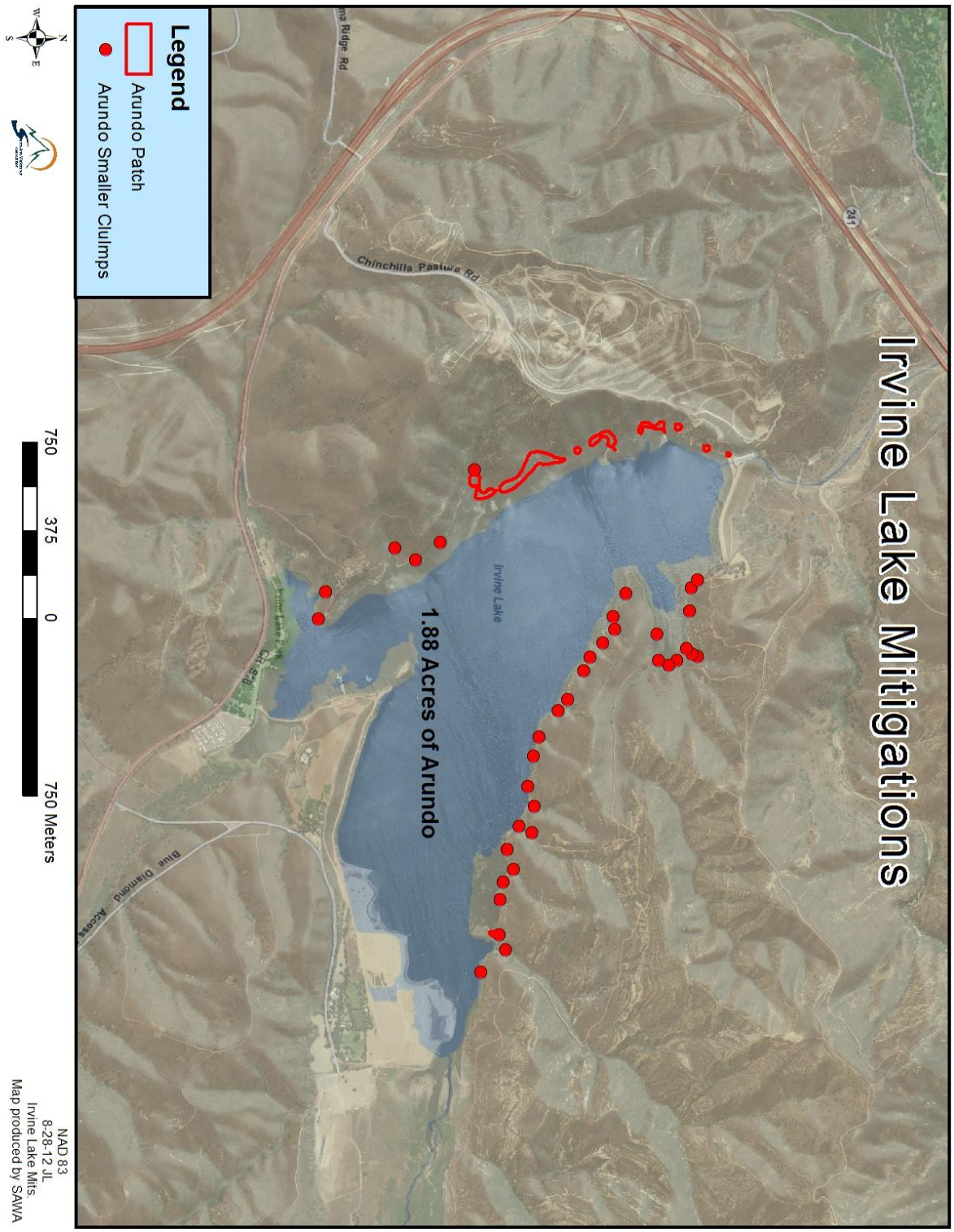
Photo point 5 – 432689, 3738079, heading 133 SE

IRVINE LAKE (SANTIAGO CREEK) FINANCIAL SUMMARY

Irvine Lake (Santiago Creek) - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2008-0314-R5 USACE #SPL-2008-01063-JPL	Discharging fill into waters of the US	Parson Brickerhoff Group (OCTA)	$19,000	4/1/2009	0.09	0.09	Restoration
USACE #2006-01866 RWQCB Cert. 7/22/09	Impacts from bridge replacement over creek	Union Pacific Railroad Company	$62,000	7/30/2009	0.404	0.404	Restoration
USACE #SPL-2009-00674-JPL RWQCB #R8-2009-0047	Discharges due to expansion of Olinda Landfill	County of Orange	$75,000	9/1/2009	1.0	1.0	Restoration
CDFW #1600-2008-0420-R5 USACE #SPL-2008-01145-MAS RWQCB Cert. 2/27/2009	Santiago Creek bike trail improvements	City of Orange	$75,000	10/1/2010	0.06	0.79	Restoration
Totals			***$183,900***		***1.554***	***2.284***	

July 1, 2015 to June 30, 2016 Cost Breakdown	
Mileage	$113.28
Staff Time	$2,108.63
Herbicide	$0
Total	***$2,221.91***

MAP


Irvine Lake Mitigations
Legend
Arundo Patch
Arundo Smaller Clulmps
1.88 Acres of Arundo
Irvine Lake
Chinchilla Pasture Rd
Blue Diamond Access
241
750
375
0
750 Meters
NAD 83
8-28-12 JL
Irvine Lake Mits
Map produced by SAWA

CDFW REPORTS: IRVINE PARK (SANTIAGO CREEK) 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place the project site. This project is made up of 8 different mitigations. These mitigations were managed by IERCD with assistance from SAWA, until 2012 when management was handed over to SAWA. The goal of this project is to monitor for emergent invasive plants at previously completed mitigation sites.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatments occurred on 7/8/15, 7/9/15, 7/13/15, 7/14/15, for a total of 120 hours.

Conservation Activities: Conservation activities consisting of GPS photo points and site visits occurred on 7/8/15, 7/9/15, 7/13/15, 7/14/15, 9/21/15, and 6/27/16. The annual bioassessment survey took place on 6/27/16. A total of 29.25 hours were spent on these activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: The canopy height class is >10-15 m. Documented native species include >15-25% mulefat (*Baccharis salicifolia*), >15-25% black willow (*Salix gooddingii*), >5-15% sycamore (*Platanus racemosa*), >5-15% red willow (*Salix laevigata*), and >5-15% arroyo willow (*Salix lasiolepis*). Documented non-native species include >5-15% tree tobacco (*Nicotiana glauca*), >5-15% mustard (*Brassica* sp.), 1-5% giant reed (*Arundo donax*), 1-5% castor bean (*Ricinus communis*), 1-5% *Eucalyptus* sp., and <1% palm sp.

Wildlife species: Documented wildlife species include the American Crow (*Corvus brachyrhynchos*), Lesser Goldfinch (*Spinus psaltria*), Hooded Oriole (*Icterus cucullatus*), House Finch (*Haemorhous mexicanus*), Nuttall's Woodpecker (*Picoides nuttallii*), Spotted Towhee (*Pipilo maculatus*), Song Sparrow (*Melodia melospiza*), Mourning Dove (*Zenaida macroura*), Black-headed Grosbeak (*Pheucticus melanocephalus*), Pacific-slope Flycatcher (*Empidonax difficilis*), Allen's Hummingbird (*Selasphorus sasin*), Anna's Hummingbird (*Calypte anna*), and California Towhee (*Melozone crissalis*). California species of special concern present on site include Yellow Warbler (*Setophaga petechial*), and Orange-throated Whiptail (*Aspidoscelis hyperythra*), as well as the state and federally-listed endangered Least Bell's Vireo (*Vireo bellii pusillus*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in March, April, May, July, and August of this reporting period.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately 15% non-native cover. That brings the treated area to ~3.9-A.

The frequency and timing of removal/treatment: On-going treatments were conducted when biomass reached a height range of 2 to 4 feet. Treatments occur mostly outside of the nesting season, however treatments have been conducted during season after a certified biologist has cleared and flagged areas available for treatment.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: This project has been successful in controlling the non-native vegetation. On-going annual treatments and monitoring will be required to ensure eradication is achieved.

PHOTOS – GPS PHOTO POINTS

Photos taken 6/27/16.

Photo point 1 – 430049, 3740294, heading 217 S

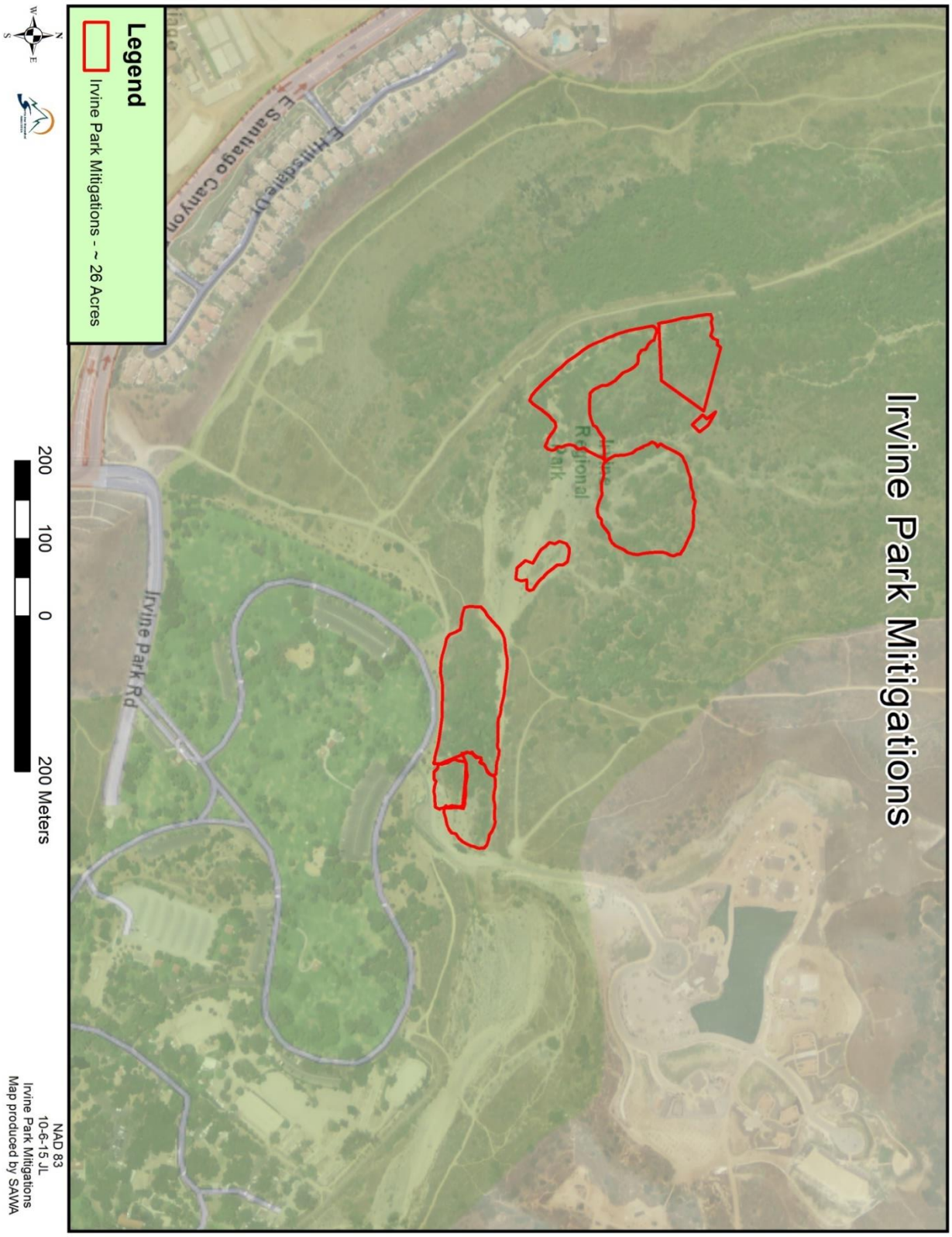
Photo point 2 – 429885, 3740204, heading 354N

Photos taken 8/11/06.

IRVINE PARK (SANTIAGO CREEK) FINANCIAL SUMMARY

Irvine Park (Santiago Creek) - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
n/a	Groundwater recharge project	Orange County Water District	$50,000	8/29/2001			Removal
USACE #199915117-YJC	183-unite development project	California Quartet	$100,000	6/1/2003		2	Removal
USACE #200300194-YJC	Bowerman Landfill Regional General Permit No. 63 Mudslide	County of Orange IWMD	$16,200	9/27/2004	0.324	0.324	removal
CDFW #1600-2004-0256-R5 USACE #200500154-JPL	Conversion of trapezoidal concrete channel	Caliber Motors Mercedes Benz	$5,000	12/28/2004	0.1	0.1	Removal
CDFW Op Law	Vegetation clearing for spillway	Metropolitan Water District of So. Cal	$25,000	2/1/2005	0.45	0.45	Removal
CDFW #5-028-00 USACE #200000736-YJC	Fill for 335 home development	Yorba Linda Heights, Pulte Homes	$162,500	2/1/2005	2.77	3.25	Enhancement
CDFW #1600-2004-0060-R5	Impact to stream and riparian habitat	So Cal Regional Rail Authority Metrolink	$75,000	7/24/2006	0.483	1.083	Restoration
Totals			***$433,700***		***4.127***	***7.207***	

MAP


Irvine Park Mitigations
Legend
Irvine Park Mitigations - ~ 26 Acres
E Santiago Canyon
E Hillsdale Dr
Irvine Park Rd
200
100
0
200 Meters
NAD 83
10-6-15 JL
Irvine Park Mitigations
Map produced by SAWA

REGION 5

CDFW, USACE

CDFW REPORTS: SANTIAGO CREEK PHASE I
7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place on this 260-A site. This site is mitigation for the creation of the Mountain Park Project, consisting of 2,500 dwelling units, a fire station, trial system, staging area, interpretative center, a school site, and adjacent community park, with other infrastructure. The mitigation was placed in 2006 for on-going control of non-native plant species. Targeted species include giant reed (*Arundo donax*), castor bean (*Ricinus communis*), tree of heaven (*Ailanthus altissima*), tree tobacco (*Nicotiana glauca*), and Spanish broom (*Spartium junceum*).

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatment occurred on 5/17/16 and 5/18/16 for a total of 90 hours.

Conservation Activities: Conservation activities consisting of GPS photo points and site visits occurred on 9/18/15, 6/10/16, and 6/13/16. The annual bioassessment survey took place on 6/10/16. A total of 11.75 staff hours were spent conducting conservation activities during this reporting period.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

No active restoration has taken place on this site, due to lack of original requirement to do so; accordingly, such data is not measured as active planting has never occurred on this property.

Current site conditions: The canopy height class is >15-20 m and shrub height class is >2-5 m. Documented native species include >5-15% red willow (*Salix laevigata*), >5-15% buckwheat (*Eriogonum fasciculatum*), 1-5% cottonwood (*Populus fremontii*), 1-5% black willow (*Salix gooddingii*), 1-5% white alder (*Alnus rhombifolia*), and 1-5% mulefat (*Baccharis salicifolia*). Documented non-native species include 1-5% *Eucalyptus* sp., 1-5% saltcedar (*Tamarix* sp.), <1% thistle, <1% giant reed, <1% tree tobacco, and <1% castor bean.

Wildlife species: Many common wildlife species occur on site, including the Spotted Towhee (*Pipilo maculatus*), Western Scrub-jay (*Aphelocoma californica*), Northern Mockingbird (*Mimus polyglottos*), House Finch (*Haemorhous mexicanus*), Bushtit (*Psaltriparus minimus*), Red-tailed Hawk (*Buteo jamaicensis*), Turkey Vulture (*Cathartes auratus*), Northern Rough-winged Swallow (*Stelgidopteryx serripennis*), Phainopepla (*Phainopepla nitens*), California Towhee (*Melozone crissalis*), Oak Titmouse (*Baeolophus inornatus*), Common Yellowthroat (*Geothlypis trichas*), Acorn Woodpecker (*Melanerpes formicivorus*), Costa's Hummingbird (*Calypte costae*), Say's Phoebe (*Sayornis saya*), Wrentit (*Chamaea fasciata*), Nuttall's Woodpecker (*Picoides nuttallii*), Anna's Hummingbird (*Calypte anna*), Blue-gray Gnatcatcher (*Polioptila caerulea*), Common Raven (*Corvus corax*), Pacific-slope Flycatcher (*Empidonax difficilis*), Mourning Dove (*Zenaida macroura*), California Thrasher (*Toxostoma redivivum*), Lesser

Goldfinch (*Spinus psaltria*), American Coot (*Fulica americana*), Western fence lizard (*Sceloporus occidentalis*), mule deer (*Odocoileus hemionus*), desert cottontail (*Sylvilagus audubonii*), side-blotched lizard (*Uta stansburiana*), and Western skink (*Plestiodon skiltonianus*). Several California species of special concern were detected, including the Yellow Warbler (*Setophaga petechia*), Yellow-breasted Chat (*Icteria virens*), and Rufous-crowned Sparrow (*Aimophila ruficeps canescens*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: Treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. Spanish broom was cut and stump treated. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in May of this reporting period.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately 5% non-native cover. That brings the treated area to ~13-A.

The frequency and timing of removal/treatment: On-going treatments were conducted when biomass reached a height range of 2 to 4 feet. Treatments occur mostly outside of the nesting season, however treatments have been conducted during season after a certified biologist has cleared and flagged areas available for treatment.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatments for this project are conducted with 4 gallon back pack sprayers in mixed stands of vegetation. In the large non-native stands an OHUV with a 70-gallon spray tank and reels is utilized to increase efficiency. Treatments have been successful and non-native percent cover is in the decline.
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Summary of the general successes and failures or overall failure of the nonnative removal plan: This project has been successful in controlling the non-native vegetation. There is minimal re-growth of Spanish broom Spanish broom (*Spartium junceum*).

PHOTOS

Photos take 9/5/13 and 6/10/16, respectively.
Photo point 1 – 437237, 3736070, heading 182 W


Photo point 3 – 437263, 3735729, heading 267 W

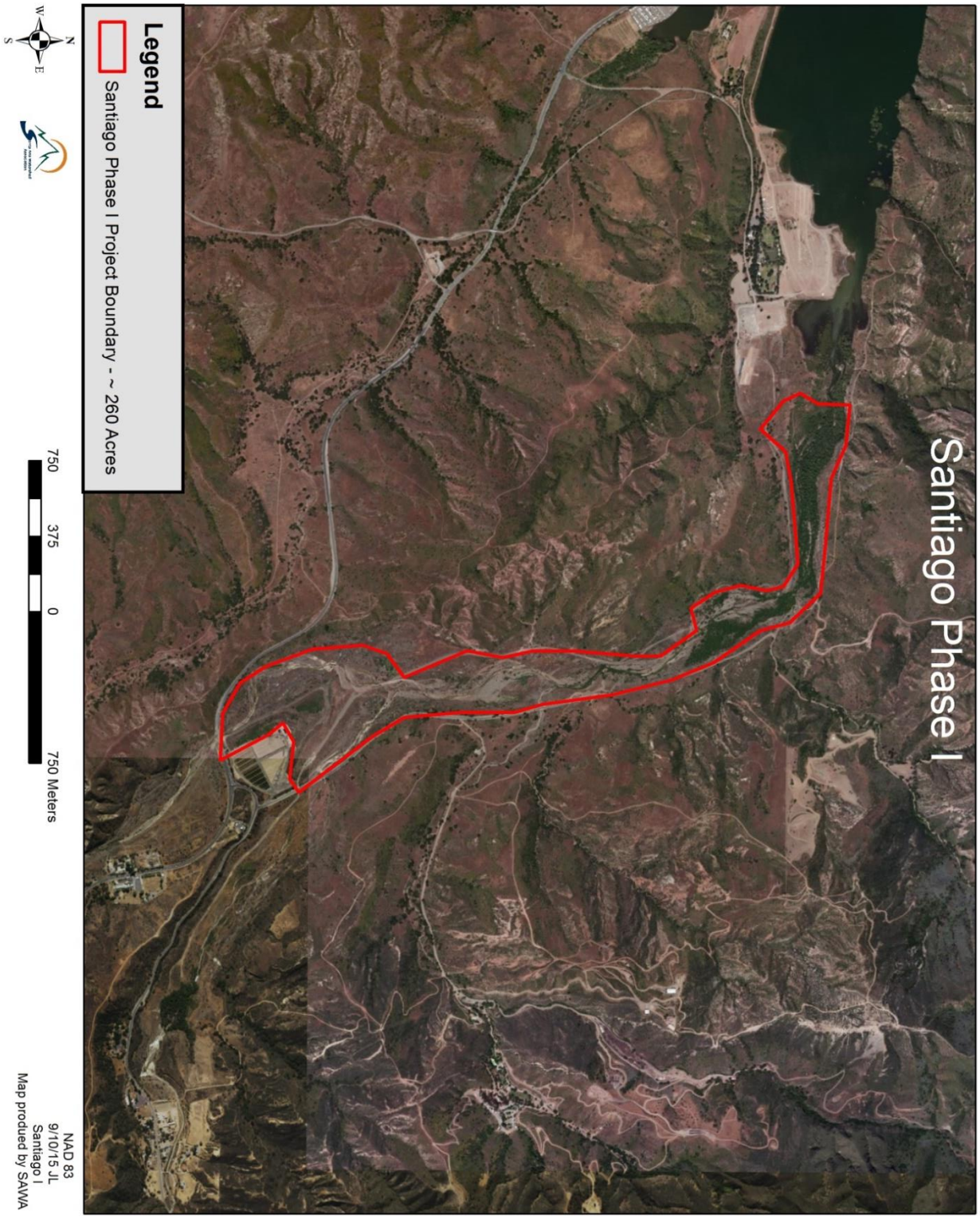

Photo point 4 – 437200, 3736242, heading W


SANTIAGO CREEK PHASE I FINANCIAL SUMMARY

Santiago Creek Phase I - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2005-0284-R5 USACE #2002-00505-DPS RWQCB Cert. 12/20/05	Construction of Mountain Park residential development	Irvine Comm. Develop.	$845,180	1/24/2006	5.7	18.8	restoration
Totals			***$920,180***		***5.7***	***19.883***	

July 1, 2015 to June 30, 2016 Cost Breakdown	
Mileage	$128.03
Staff Time	$5,467.44
Herbicide	$11.16
Total	***$5,606.63***

MAP


Santiago Phase I
Legend
Santiago Phase I Project Boundary - ~ 260 Acres
N
W
E
S
750
375
0
750 Meters
NAD 83
9/10/15 JL
Santiago I
Map produced by SAWA

CDFW REPORTS: SANTIAGO CREEK PHASE II 7-1-15 THROUGH 6-30-16

REPORT AREA I: LIST OF ALL HABITAT CREATION, RESTORATION, ENHANCEMENT, AND CONSERVATION PROJECT AREAS CURRENTLY BEING MANAGED BY PERMITTEE

Enhancement and conservation activities took place throughout the 19-A Santiago Creek Phase II site. This project includes several mitigations managed by SAWA. The project begins where the channelization of Santiago Creek ends (behind the St. Joseph Hospital off of Chapman Ave) and continues downstream to Chapman Ave. There has been minimal re-growth of giant reed (*Arundo donax*), however other non-native herbaceous species such as mustard have been observed throughout the project. On-going monitoring and maintenance activities are scheduled to ensure that these invasive are controlled.

REPORT AREA II: DESCRIPTION OF THE HABITAT RESTORATION, ENHANCEMENT, AND CONSERVATION ACTIVITIES PERFORMED WITHIN EACH PROJECT AREA

Enhancement Activities: Herbicide treatments occurred on 5/24/16. Targeted species included giant reed, tree tobacco (*Nicotiana* glauca) and castor bean (*Ricinus communis*). A total of 40 hours were spent on these treatments.

Conservation Activities: Activities associated with the general preservation of the project took place along the entire project, consisting of established photo points and general bio-monitoring for the presence of invasive vegetation, incidental wildlife, and any evidence of illegal dumping. The annual bioassessment survey took place on 6/10/16. A total of 16.25 hours were spent on these activities.

REPORT AREA III: CURRENT SITE CONDITIONS INCLUDING:

Current site conditions: The canopy height class is >10-15 m and shrub height class is >2-5 m. Documented native species include >5-15% mulefat (*Baccharis salicifolia*), 1-5% laurel sumac (*Malosma laurina*), 1-5% cottonwood (*Populus fremontii*), and 1-5% black willow (*Salix gooddingii*). Documented non-native species include >5-15% Brazilian pepper tree (*Schinus terebinthifolius*), 1-5% mustard (*Brassica* sp.), <1% blue gum eucalyptus (*Eucalyptus globules*), <1% thistle, <1% Mexican fan palm (*Washingtonia robusta*), <1% oleander (*Nerium oleander*), <1% bottle brush (*Callistemon* sp.), <1% giant reed, and <1% *Opuntia* sp.

Wildlife species: Documented wildlife species include the Mourning Dove (*Zenaida macroura*), Anna's Hummingbird (*Calypte anna*), Bushtit (*Psaltriparus minimus*), Brown-headed Cowbird (*Molothrus ater*), Northern Mockingbird (*Mimus polyglottos*), Scaly-breasted Munia (*Lonchura punctulata*), and Mallard (*Anas platyrhynchos*).

REPORT AREA IV: NON NATIVE PLANT AND ANIMAL SPECIES REMOVAL

The methods used for removal: All treatments of non-native vegetation were conducted using foliar applications with 4-gallon backpack sprayers. All herbicide applications were conducted by SAWA's ISR crew. Herbicide applications occurred in June of this reporting period.

The amount removed and/or treated: The site was monitored and non-native vegetation cover was treated as it was encountered. It is estimated that there was approximately 5% non-native cover. That brings the treated area to ~0.95-A.

The frequency and timing of removal/treatment: On-going treatments were conducted when biomass reached a height range of 2 to 4 feet.

Disposal specifics: Treated biomass is left to dry and decompose on site.

Summary of the general successes and failures or overall failure of the nonnative removal plan: Treatment methods utilizing foliar applications with 4 gallon back pack sprayers have been very effective thus far. SAWA has experienced a high level of success in controlling the non-native species on this project site and will continue to utilize the same methods into the future.

PHOTOS – GPS PHOTO POINTS

Photos were taken 6/1/10 and 6/10/16, respectively.
Photo point 1 – 423552, 3739284, heading 6 N


Photo point 2 – 423586, 3739304, heading 14 N

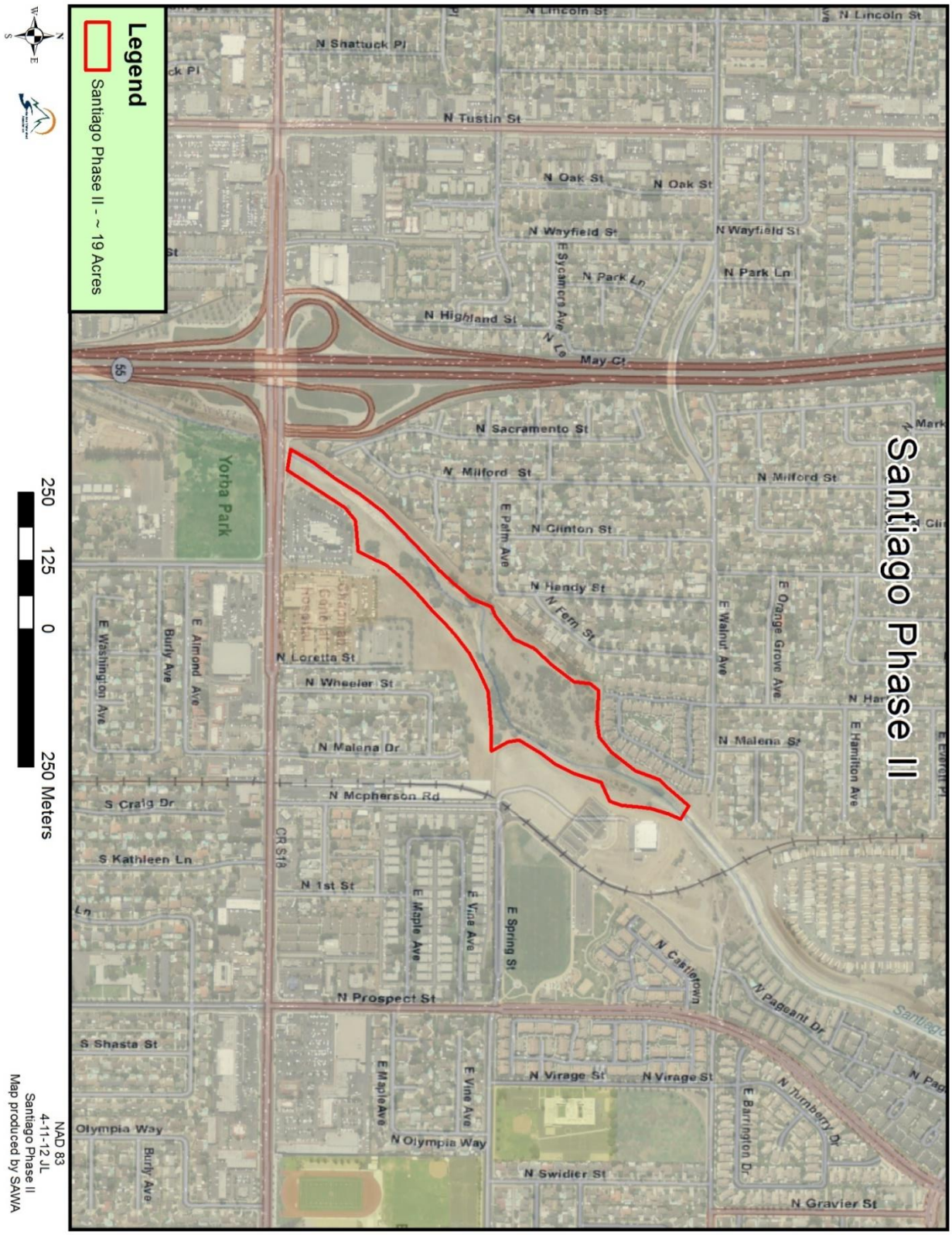

Photo point 5 – 423888, 3739692, heading 268 W


SANTIAGO CREEK PHASE II FINANCIAL SUMMARY

Santiago Creek Phase II - Mitigations Placed at Project							
Permit #'s	**Impact**	**Contributing Agency**	**Amount Received**	**Date Received**	**Impact Acreage**	**Mitigated Acreage**	**Purpose of Funds**
CDFW #1600-2004-0187-R6 USACE #200300640-WJC	Residential development project	KB Homes	$453,000	10/7/2005	2.45	9.06	Restoration
USACE #200301268-YJC	Permanent impacts to stream channel and riparian habitat	Boy Scouts of America	$50,000	6/6/2006	0.47	0.72	Enhancement
CDFW #1600-2003-5167-R5 R8-2005-0055	Discharge into stream channel	Orange County Transportation Authority	$25,500	6/2005	0.11	0.51	Enhancement
RWQCB #30-2005-32-DGW	Outfall structure for residential development	North Orange Del Rio	$35,000	1/24/2006	0.02	0.04	Enhancement
Totals			***$563,000***		***3.05***	***10.33***	

July 1, 2015 to June 30, 2016 Cost Breakdown	
Mileage	$109.74
Staff Time	$2,873.43
Herbicide	$25.02
Total	***$3,008.19***

MAP


Legend
Santiago Phase II - ~ 19 Acres
Santiago Phase II
250 125 0 250 Meters
NAD 83
4-11-12 JL
Santiago Phase II
Map produced by SAWA
N Lincoln St
N Shattuck Pl
N Tustin St
N Oak St
N Wayfield St
N Park Ln
N Highland St
May Ct
55
N Sacramento St
N Milford St
N Clinton St
N Handy St
N Fern St
N Loretta St
N Wheeler St
N Malena Dr
N Mcpherson Rd
S Craig Dr
S Kathleen Ln
N 1st St
N Prospect St
S Shasta St
Olympia Way
N Olympia Way
N Swidler St
N Gravier St
N Virage St
N Pageant Dr
N Castletown
E Spring St
E Maple Ave
E Vine Ave
E Walnut Ave
E Orange Grove Ave
E Hamilton Ave
E Palm Ave
E Sycamore Ave
E Washington Ave
E Almond Ave
Burly Ave
Yorba Park
CR St/a