

## INDIVIDUAL BIOLOGICAL ASSESSMENT REPORT

**Site Name/Facility:** Auburn Creek Channel Emergency Maintenance  
**Master Program**  
**Map No.:** 67&68  
**Date:** February 26, 2016  
**Biologist Name/Cell**  
**Phone No.:** Scott Gressard (858-997-6874)

### EXISTING CONDITIONS

The City of San Diego (City) has developed the Master Storm Water System Maintenance Program (MMP, Master Maintenance Program) (City of San Diego 2011) to govern channel operation and maintenance activities in an efficient, economic, environmentally and aesthetically acceptable manner to provide flood control for the protection of life and property. This document provides a summary of the Individual Biological Assessment (IBA) for emergency maintenance activities within the Auburn Creek Channel (MMP Maps 67&68; Figures 3a & 3b) in order to comply with the MMP's Programmatic Environmental Impact Report (PEIR) (Attachment 1). IBA procedures under the MMP provide the guidelines for a site-specific inspection of the proposed maintenance activity site including access routes, and temporary spoils storage and staging areas. A qualified biologist determined whether or not sensitive biological resources could be affected by the proposed maintenance and potential ways to avoid impacts in accordance with the measures identified in the Mitigation, Monitoring and Reporting Program (MMRP) of the PEIR and the MMP protocols. This IBA provides a summary of the biological resources associated with the storm water facility, quantification of impacts to sensitive biological resources, and the nature of mitigation measures required to mitigate for those impacts, if any found.

It should be noted that, since this channel work was conducted as emergency maintenance, certain requirements in the MMP could not be directly adhered to in order to conduct the work as quickly as possible and reduce the existing threat from flooding to adjacent properties.

#### **Project Location and Description**

The Auburn Creek channel (MMP Maps 67&68; Figures 3a & 3b) is an unnamed tributary to Chollas Creek and part of Hydrologic Unit Basin Number 8.22. The emergency maintenance area within this section of Auburn Creek is generally located east of the Interstate 15 freeway and south of University Avenue in the Chollas Creek neighborhood in the City of San Diego. There were two sections of the channel that were cleared as part of this maintenance: the first is located north of Wightman Street (MMP Map 67; Figure 3a) and is approximately 427 feet in length with an average bottom width of approximately 10 feet; the second is located directly south of Wightman Street (MMP Map 68; Figure 3b) and is approximately 274 feet in length with an average bottom width of approximately 12 feet. A third section of Auburn Creek was originally planned to be included in this emergency maintenance effort, however it was later discovered that this section is located on private property where the City does not have an easement and so no maintenance was conducted in this section and it is not considered in this assessment. The maintenance area in Auburn Creek is not within or adjacent to the City's Multiple Species Conservation Program (MSCP) Multi-Habitat Planning Area (MHPA) or the City's Coastal Overlay Zone.

Assessments by City staff and engineers were conducted for each of the three sections of concern during the week of November 16th, 2015. In the first section (MMP Map 67; Figure 3a), the City's assessment determined that accumulated sediment and non-native vegetation had accumulated upstream of Wightman Street has constricted capacity into a single box culvert (5' x 8') under Wightman St. Erosive impacts from past storms

likely involving backwater effects were evident within the existing cobble and non-native vegetation and erosion impacts from flooding were visible along the adjacent slope (Attachment A), which supports a residential parking lot to the west. Based on recent communication with residents, it appears that 5015 and 5017 Wightman had flooded recently.

The City's assessment in the second channel section (MMP Map 68; Figure 3b), which is located directly south of Wightman Street and fed from the single box culvert that carries water under the roadway, determined that sediment build up has aggravated the narrow channel conditions and diminished capacity further exacerbating a "bottle-necking" effect. This effect caused flows to back-up upstream further exaggerating the imminent flood risk to adjacent residences (3785 and 3775 50th Street) and also contributed to the flooding threats discussed in the first section north of Wightman Street.

Emergency maintenance of the channel included the removal of all existing vegetation and sediment within the two focused sections as necessary to alleviate the emergency flood risk (MMP Maps 67 & 68; Figures 3a & 3b). Land covers impacted by removal activities include 0.07 acres of developed concrete-lined channel and 0.09 acres of natural flood channel. Total impacts to ACOE/CDFW/RWQCB jurisdictional areas were 0.16 acres (701 linear feet) of non-wetland waters of the U.S. An additional 0.05 acre (no additional linear feet) of riparian habitat (Arundo-dominated disturbed wetland), located above the Ordinary High Water Mark, under CDFW-jurisdiction only was also removed. No native vegetation communities were impacted as part of the proposed maintenance.

## **Survey Methods and Date**

### **Biological Survey and Site Assessment**

Dudek conducted the biological survey and site assessment on November 11, 2015. The survey was conducted on foot and the assessment was made from the channel bank. Vegetation was mapped based on site observations and interpretation of aerial photographic signatures (scale 1"=50'), according to the R.F. Holland system (1986) as modified for San Diego County, in accordance with the City's "Guidelines for Conducting Biological Surveys" (2002). Areas on site that supported less than 20% native plant species cover were mapped as disturbed habitat and areas that supported at least 20% native plant species, but fewer than 50% native cover were mapped as a disturbed native vegetation community (e.g., disturbed freshwater marsh). All plant and animal species detected by sight, calls, tracks, scat, or other signs were recorded. Any observed sensitive species were documented and potential for sensitive species occurrence was evaluated based on site conditions. Representative photographs taken during the surveys and monitoring are provided in this report. Protocol-level surveys were not conducted as a part of this site assessment. A site-specific jurisdictional delineation was not performed as a part of this site assessment.

### **Monitoring of Emergency Maintenance**

Biologists Shelley Lawrence and Alicia Omlid were the primary monitors during the Auburn Creek emergency channel maintenance work, which was conducted in nine work days between December 15, 2015 and January 12, 2016. Crews did not work during rain events or when there were flows within the emergency maintenance area. The biologists were onsite at all times during work. They ensured that crews stayed within the approved limits of work during maintenance and documented all construction activities. The crews used a Gradall, Trackhoe, and Bobcat to clear invasive species (primarily Arundo) from the channel and channel banks. Crews also cleared cobble and sediment and used cobble and material from the channel to reshape the channel where necessary in order to restore the as-built conditions and capacity of the channel and ensure that cobble bottom was restored where it existed prior to maintenance. Crews (Urban Corps) also used hand tools to clear invasive vegetation along the banks of the channel. Material removed from the channel was loaded into dump trucks and taken to the Miramar Landfill. Following several rain events, pumping equipment was used to bypass water out of the work area and allow work to continue. All equipment was removed from the site at the end of the project.

### **Status of Channel Flows**

The earthen channel did not have any standing water present during work. Pumps were used to bypass water

out of the work area and create dry work conditions.

**Biological Resources:**

**Stream Type:** Perennial  Intermittent **X** Ephemeral

The channel is likely to have intermittent flows during normal climactic conditions. Collected sediments and areas with unmanaged vegetation and large exotic plant growth occurring in some portions of the channel have impeded normal surface flow through obstruction/retention/impoundment of storm water during storm related events.

**Vegetation**

For purposes of this IBA, all vegetation communities or land covers impacted by the emergency maintenance area are described below. A total of two land cover types and one vegetation community were identified during this assessment: developed concrete-lined channel, natural flood channel, and disturbed wetland (Arundo-dominated).

Land cover acreages considered Waters of the U.S. within survey area are summarized in Table 1 below:

**Table 1. Existing Vegetation and Land Covers in the Emergency Maintenance Area**

Vegetation Community or Land Cover Type	City MSCP Habitat Tier	Acreage
Non-Native Grassland	IIIB	0.01
Disturbed Land	IV	0.11
Developed Land	IV	0.03
Developed Concrete-lined Channel	IV*	0.07
Natural Flood Channel	Wetland	0.09
Disturbed Wetland (Arundo dominated)	Wetland	0.05
<b>Total</b>		0.36

\*Although described in Appendix D, Section 3.1.2 of the PEIR as a Tier IV upland community, concrete-lined channels are considered waters of the U.S. and as such are subject to regulation by the ACOE, CDFW, and RWQCB).

Habitat impacted during the emergency channel maintenance is described below:

**Non-Native Grassland**

A small portion of the western bank of the channel on Map 67, north of Wightman, supported a predominance of non-native grasses, such as bromes (*Bromus* spp.). This area is too small to be considered habitat for raptor foraging or other special-status species uses (e.g., burrowing owl).

**Disturbed Land**

The staging area on Map 67, north of Wightman, is mapped as disturbed land based on extensive use a de facto recreation area. While the site supports some non-native trees (e.g., pepper trees), grasses, and weeds, large portions of the site support bare ground and due to extensive use, the area is does not support sufficient cover of non-native grasses to be considered a non-native grassland.

**Developed**

The project involved utilization of some developed roadways and upland structures to access the channel

maintenance areas.

***Developed Concrete-lined Channel***

Where the study area is mapped as disturbed concrete-lined channel, the channel is almost completely clear of any vegetation except for scattered individuals of exotic grass species, such as African fountain grass (*Pennisetum setaceum*).

***Natural Flood Channel***

Where the study area is mapped as natural flood channel, the channel is almost completely clear of any vegetation and consists of sediment and cobble streambed.

***Disturbed Wetland (Arundo dominated)***

Where habitat is mapped as disturbed wetland (arundo dominated), the maintenance area is dominated entirely by giant reed (*Arundo donax*). This habitat is located outside of the OHWM and is under CDFW-jurisdiction only. It was removed using hand and machine tools and was also treated with herbicide to try to prevent future recruitment.

**Wildlife Value**

Due to the dominance of non-native species and isolated nature of the habitats within the emergency channel maintenance area, its value to wildlife is low.

***Wildlife Observed***

- American Crow
- Yellow-rumped warbler
- Black Phoebe
- Anna's hummingbird
- Mourning Dove
- Rock dove
- House sparrow
- House finch

No nests were identified and the work was conducted outside the breeding season of any sensitive or avian species.

**Are there current level of anthropogenic influences on habitat with the project footprint (e.g., homeless encampment, illegal dumping)?** Yes  No

If yes, describe the influence:

Anthropogenic disturbances include small trash items and large patches of invasive weed species brought into the earthen channel, which have spread through landscaping, highway projects, and etc., have led to an abundance of exotics including Arundo. This habitat on site is not suitable for rare wildlife and rare plant species.

Crews removed trash from the sides of the channel and within the channel.

**Are there any conservation easements which have been previously recorded within the maintenance area?** Yes  No

If yes, describe them and their purpose:

**Jurisdictional Areas [TOTAL STUDY AREA]**

**ACOE/RWQCB/CDFW/City**

For the Master Maintenance Program, a program-level jurisdictional delineation was conducted within subject storm water facility channels and sedimentation basins with results categorized by HUs. Mapping was conducted along the two main segments of the channel (MMP Maps 67&68; Figures 3a&3b). State, Federal, and City jurisdictional areas within the study area consisted of developed concrete-lined channel, natural flood channel, and disturbed wetland (Arundo dominated).

A site-specific formal jurisdictional delineation of “waters of the United States,” was not conducted for the proposed maintenance area. A visual assessment of likely jurisdictional areas was completed to support emergency permit applications. The well-defined limits of the earthen and concrete-lined banks of the channel were considered under the joint jurisdiction of ACOE, RWQCB, and CDFW. An additional 0.05 acre (no additional linear feet) of riparian habitat (Arundo-dominated disturbed wetland), located above the OHWM, was considered to be under CDFW-jurisdiction only.

The emergency maintenance impacted the full area within the two sections of channel. A third section, downstream in MMP Map 68; Figure 3b, was originally proposed to be maintained as part of this effort. However, it was later discovered that this section is located on private property where the City does not have an easement and so no maintenance was conducted in this section and it is not considered in this assessment. The impacts to Waters of the U.S. are shown in Table 2; refer to Table 1 for impacts to City wetlands.

**Table 2. Impacts to Jurisdictional Waters/Streambed/CDFW Riparian Habitat**

<b>Vegetation Community or Land Cover Type</b>	<b>ACOE, RWQCB, and CDFW Jurisdictional Acreage; Non-Wetland Waters of the U.S.</b>	<b>CDFW Jurisdictional Acreage; Riparian Habitat</b>	<b>Total Impact Acreage</b>
Developed Concrete-lined Channel	0.07	0.00	0.07
Natural Flood Channel	0.09	0.00	0.09
Disturbed Wetland (Arundo-dominated)	0.00	0.05	0.05
<b>Total</b>	<b>0.16</b>	<b>0.05</b>	<b>0.21</b>

**Sensitive\* Plant Species Observed:**

Yes  No

If yes, what species were observed and where? If yes, complete a California Native Species Field Survey Form and submit it to the California Natural Diversity Database.

\* Sensitive species shall include those listed by state or federal agencies as well as species that could be considered sensitive under Sections 15380(b) and (c) and 15126(c) of the CEQA Guidelines.

**Sensitive\* Animal Species Observed/Detected:**

Yes  No

If yes, what species were observed/detected and where? If yes, complete a California Native Species Field Survey Form and submit it to the California Natural Diversity Database.

\* Sensitive species shall include those listed by state or federal agencies as well as species that could be considered sensitive under Sections 15380(b) and (c) and 15126(c) of the CEQA Guidelines.

**Is any portion of the maintenance activity within an MHPA?** Yes  No X

If yes, describe which portions are within an MHPA:

**Is there moderate or high potential for listed animal species to occur in or adjacent to the impact area?**

Yes  No X

If yes, which species (check all that apply) and describe any surveys which should be undertaken to determine whether those species could occur within the maintenance area:

- |   |  |
|---|--|
| <input type="checkbox"/> Least Bell's vireo             | <input type="checkbox"/> Riverside fairy shrimp    |
| <input type="checkbox"/> Southwester willow flycatcher  | <input type="checkbox"/> California least tern     |
| <input type="checkbox"/> Arroyo toad                    | <input type="checkbox"/> Light-footed clapper rail |
| <input type="checkbox"/> Coastal California gnatcatcher | <input type="checkbox"/> Western snowy plover      |
| <input type="checkbox"/> San Diego fairy shrimp         | <input type="checkbox"/> Other: _____              |

Attach documentation supporting the determination of the presence or absence of listed animal species with a moderate or high potential to occur (e.g. California Natural Diversity Database records searches).

No potential for Least bell's vireo – there is no willow habitat within the maintenance area; all non-native vegetation

No potential for willow flycatcher – there is no willow habitat within the maintenance area; all non-native vegetation

No potential for Arroyo toad –steep banks and disturbed areas adjacent.

No potential for California gnatcatcher – no upland habitat consisting of California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), Laurel sumac (*Malosma Laurina*),

No potential for fairy shrimp species – No vernal pools exist or mud puddles with potential for cysts

No potential for California least tern –No open sandy beach habitat or mudflats. No habitat exists within the channel. Non-native vegetation in the channel is extremely dense.

No potential for Light footed clapper rail-more likely to be found in bays with cordgrass. No habitat exists within the channel.

No potential for Western snowy plover- more likely to be found in bays, shores and estuaries. No habitat exists within the channel.

**Is there moderate or high potential for a listed plant species to occur in or adjacent to the impact area?**

Yes  No X

If yes, identify which species may occur and describe any surveys which should be undertaken to determine whether those species could occur within the maintenance area:

Attach documentation supporting the determination of the presence or absence of listed animal species with a moderate or high potential to occur (e.g. California Natural Diversity Database records searches).

**Could maintenance disrupt the integrity of an important habitat (i.e., disruption of a wildlife corridor and/or an extensive riparian woodland:** Yes  No X

If yes, discuss which habitat could be impacted and how:

**Could work be conducted during the avian breeding season (January 15 – August 31) without the need for pre-construction nesting surveys:** Yes  No

If yes, provide justification:

A wildlife survey was performed before each day of work commenced and all wildlife are listed above. No roosting/nesting opportunities occur within and immediately surrounding the project boundary. The maintenance was conducted outside the avian breeding season.

**Is it anticipated that maintenance activities would generate noise in excess of 60 dB(A)  $L_{eq}$ ?**

Yes  No

If yes, what measures should be taken to avoid adverse impacts on avian bird breeding within or adjacent to the maintenance?

The maintenance was conducted outside the avian breeding season.

**Biological Resource Conditions (vegetation communities present, including adjacent uplands; general habitat quality/level of disturbance):**

There are no native habitat communities within the channel, and vegetation within and adjacent to the channel is dominated by non-native vegetation (i.e. exotic grasses, *Arundo*, etc.). The maintenance area is small and, it has little connectivity to native communities. The areas surrounding the maintenance section is primarily composed of developed residential homes with some disturbed land dominated by non-native grasses such as foxtail brome (*Bromus madritensis ssp. rubens*) east of MMP Map 67; Figure 3a.

#### MAINTENANCE IMPACTS

##### Emergency Maintenance Methodology:

As part of this emergency maintenance, all sediment and vegetation that had accumulated within each of the two channel sections was removed. In the first section located directly north of Wightman Street (MMP Map 67; Figure 3a), all materials were excavated from the channel segments by a Gradall (i.e., excavating-type equipment with an extended arm) and Trackhoe. The Gradall was staged outside and above the channel within the disturbed Access/Staging area to the. A Pole Saw and chainsaws were also used to remove a large exotic tree on the southwestern end of this section.

In the second section located directly south of Wightman Street (MMP Map 68; Figure 3b), a Gradall was used to lower a Trackhoe and Bobcat into the channel. The Trackhoe and Bobcat pushed vegetation and sediment to a location that it could be removed by the Gradall, which was staged outside and above the channel at the north end (Wightman Street). Some vegetation and sediment within and adjacent to the channel were also removed using hand tools and chainsaws.

The materials removed were loaded into dump trucks and hauled offsite to an approved dumpsite (the Miramar Landfill). All work was monitored by a qualified biologist and all equipment and materials were removed following completion of the work.

##### Vegetation Impacts:

A total of 0.05 acres of disturbed wetland (*Arundo*-dominated), located above the OHWM and under the jurisdiction of CDFW only, was removed during this maintenance. All other impacts within the streambed were to unvegetated natural flood channel.

Upland portions of the site may have also been impacted, including up to 0.01 acre of non-native grassland

and 0.11 acre of disturbed land.

**Jurisdictional Impacts:**

(See Table 2 above)

**Is there a moderate or high potential for maintenance to impact an MHPA?** Yes  No

If yes, discuss the potential impacts that could occur from the portion within or adjacent to that MHPA.

The site is not within or adjacent to the City's MHPA.

**Is there moderate or high potential for listed animal species to be impacted?** Yes  No

If yes, which species (check all that apply):

- |   |  |
|---|--|
| <input type="checkbox"/> Least Bell's vireo             | <input type="checkbox"/> Riverside fairy shrimp    |
| <input type="checkbox"/> Southwester willow flycatcher  | <input type="checkbox"/> California least tern     |
| <input type="checkbox"/> Arroyo toad                    | <input type="checkbox"/> Light-footed clapper rail |
| <input type="checkbox"/> Coastal California gnatcatcher | <input type="checkbox"/> Western snowy plover      |
| <input type="checkbox"/> San Diego fairy shrimp         | <input type="checkbox"/> Other: _____              |



**MITIGATION**

**Applicable Maintenance Protocols (list the applicable maintenance protocols based on the biological resources occurring or likely to occur on site – include any special protocols required):**

The following maintenance protocols from section 4 of the MMP have been/will be implemented:

Bio-1 Restrict vehicles to access designated in the master program plan.

Bio-2 Flag and delineate all sensitive biological resources to remain within or adjacent to the maintenance area prior to initiation of maintenance activities in accordance with the site specific Individual Biology Assessment (IBA), Individual Hydrology and Hydraulic Assessment (IHHA) and/or Individual Maintenance Plan (IMP).

Bio-3 Conduct a pre-maintenance meeting on-site prior to the start of any maintenance activity that occurs within or adjacent to sensitive biological resources. The pre-maintenance meeting shall include the qualified biologist, field engineer/planner, equipment operators/superintendent and any other key personnel conducting or involved with the channel maintenance activities. The qualified biologist shall point out or identify sensitive biological resources to be avoided during maintenance, flag/delineate sensitive resources to be avoided, review specific measures to be implemented to minimize direct/indirect impacts, and direct crews or other personnel to protect sensitive biological resources as necessary. The biologist shall also review the proposed erosion control methods to confirm that they would not pose a risk to wildlife (e.g., non-biodegradable blankets which may entangle wildlife).

Bio-4 Avoid introduction of invasive plant species with physical erosion control measures (e.g., fiber mulch, rice straw, etc.).

Bio-6 Remove arundo through one, or a combination of, the following methods : (1) foliar spray (spraying herbicide on leaves and stems without cutting first) when arundo occurs in monotypic stands, or (2) cut and paint (cutting stems close to the ground and spraying or painting herbicide on cut stem surface) when arundo is intermixed with native plants. When sediment supporting arundo must be removed, the sediment shall be excavated to a depth sufficient to remove the rhizomes, wherever feasible. Following removal of sediment containing rhizomes, loose rhizome material shall be removed from the channel and disposed offsite. After the initial treatment, the area of removal shall be inspected on a quarterly basis for up two years, or until no re-sprouting is observed during an inspection. If re-sprouting is observed, the cut and paint method shall be applied to all resprouts.

**Applicable PEIR mitigation measures:**

General Mitigation 1, 2, 3, and 4;

Biological Resources 4.3.1, 4.3.5, 4.3.6, 4.3.7, 4.3.8, 4.3.9, 4.3.10, 4.3.13, 4.3.16, 4.3.18, 4.3.19, 4.3.20, 4.3.25\*;

Land Use 4.1.6 and 4.1.7.

Applicable PEIR Mitigation Measures have been included in their entirety in Attachment A.

\*It should be noted that, since this channel work was conducted as emergency maintenance, some requirements in the PEIR could not be directly adhered to due to the need to conduct the work in as quickly a manner as possible in order to reduce the existing threat from flooding to adjacent properties.

**Other mitigation measures:**

None

**Environmental Mitigation Requirements (including wetland enhancement, restoration, creation, and/or purchase of wetland credits in a mitigation bank; off-site upland habitat acquisition/payment into the City’s habitat acquisition fund):**

All work was limited to sediment and vegetation within the earthen and concrete-lined channels in the two maintenance sections. Vegetation communities and land covers that were removed as part of this maintenance included 0.09 acres of natural flood channel, 0.07 acres of developed concrete-lined channel, 0.05 acres of disturbed wetland (Arundo dominated), 0.01 acre of non-native grassland, and 0.11 acre of disturbed land.

**USACE/RWQCB/CDFW Jurisdictional Wetlands:**

The USACE authorized the approved maintenance on December 14, 2015 through issuance of a Regional General Permit 63 Authorization (SPL-2015-00862-RAG). Given that all wetland impacts to are limited to non-native vegetation, no compensatory mitigation is proposed. This report will be provided to the USACE as a post-maintenance report, pursuant to RGP 63.

RWQCB staff verbally requested that areas of streambed that supported a cobble bottom prior to maintenance, be returned to cobble bottom following maintenance. Biological monitors ensured that each section with cobble bottom prior to maintenance was restored to cobble bottom following maintenance.

While CDFW requires notification of activities within earthen channels, it typically does not require compensatory mitigation for impacts to non-native vegetation communities. This report will be provided to the CDFW as a post-maintenance report, pursuant to emergency Streambed Alteration Agreement requirements.

**City Wetlands:**

The City regulates wetland impacts and requires compensatory mitigation pursuant to the mitigation ratios specified in Site Development Permit (SDP) 1134892 for the MMP. The SDP incorporates mitigation language from the Coastal Development Permit (CDP) 714392. Special Condition 9 of the CDP states that wetlands mitigation shall “result in a no-net-loss of function and values and be in-kind habitat to the fullest extent possible. All wetland mitigation shall occur within nine months of impact and either be located on-site or within the same watershed. All wetland impacts shall be mitigated at a ratio of 1:1 for temporary impacts, 2:1 for natural flood channel, and 4:1 for disturbed wetland (removal of giant reed (Arundo) and other exotic, invasive and nonnative vegetation is not considered an impact to wetlands requiring mitigation).” The SDP, however, does allow for mitigation to be implemented in one year and not the nine months the CDP requires.

Given that the emergency maintenance conducted is a one-time authorization, impacts are considered temporary and mitigation is required at a 1:1 ratio for impact to 0.09 acre of natural flood channel. City crews, under supervision of the monitoring biologist and in compliance with the RWQCB requirement, provided 1:1 in-kind mitigation for impacts to natural flood channel by restoring the cobble bottom of the channel following maintenance. This onsite restoration resulted in no-net-loss of functions and values and is considered adequate 1:1 mitigation, in accordance with SDP requirements.

**Uplands:**

Impacts to uplands are limited to an isolated, urban patch of non-native grassland. The City’s Biology Guidelines do not require mitigation for impacts to less than 1.0 acre of non-native grassland in urban environments, such as is the case with this project area. Disturbed and developed land are Tier IV land covers and no mitigation is required for impacts to those areas. Therefore no mitigation is required for impacts to upland areas.

**Mitigation Description/Location**

Mitigation for one-time temporary impacts to natural flood channel is provided onsite within the areas mapped as natural flood channel.

## ADDITIONAL COMMENTS OR RECOMMENDATIONS

### Attachments

Attachment 1: Applicable PEIR Mitigation Measures

### References

Developmental Services Department (DSD) Notice of Exemption (NOE); Emergency Project (Section 21080(b)(4); 15269(b) &(c)

Regional Water Quality Control Board (RWQCB) Attachments D&E

Army Corps of Engineers (ACOE) Regional General Permit 63 Emergency; SPL-2015-00900-WSZ

California Dept. of Fish and Wildlife (CDFW) Lake or Streambed Alteration Agreement (1600); Notification of Emergency Work

City of San Diego. 2000. San Diego Municipal Code Land Development Code Biology Guidelines. San Diego, California: June 2000.

City of San Diego. 2002. Guidelines for Conducting Biological Surveys. San Diego, California: October 1998, revised July 2002.

City of San Diego. 2011a. Master Storm Water Maintenance Program. San Diego, California: October 2011

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, California.

**SITE PHOTOS**

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Photo Point	Lat	Long
1	32.74820N	-117.08558W
2	32.74820N	-117.08558W
3	32.74814N	-117.08587W
4	32.74815N	-117.08589W
5	32.74790N	-117.08622W
6	32.74787N	-117.08617W
7	32.74757N	-117.08644W
8	32.747330N	-117.086380W
9	32.74681N	-117.08698W
10	32.74699N	-117.08699W
11	32.746913N	-117.086849W
12	32.746935N	-117.086746W
13	32.747211N	-117.086511W
14	32.747048N	-117.086654W

## Pre-Maintenance Photograph Log

**Photograph 1:** Photo Point 3 approximately 100 feet west of the outlet culvert in Auburn Creek Map 67, facing upstream, prior to work beginning (bearing 58 NE, 32.74814N, -117.08587W).



(December 15, 2015)

**Photograph 2:** Photo Point 6 on Auburn Creek Map 67, facing downstream, prior to work beginning (bearing 210N, 32.74787N, -117.08617W).



(December 15, 2015)

**Photograph 3:** Photo Point 7 on Auburn Creek Map 67, facing upstream (bearing 6N, 32.74757N, -117.08644W). Taken from the top of the outlet culvert prior to work beginning.



(December 15, 2015)

**Photograph 4:** Photo Point 7 showing the area of removed Brazilian peppertree (*Schinus terebinthifolius*) across the channel from the date palm (*Phoenix dactylifera*) on Auburn Creek Map 67 (upstream, 32.747570N, -117.086442W).



(December 17, 2015)

**Photograph 5:** Photo Point 9 at southwest part of Auburn Creek Map 68 prior to work beginning (bearing 15 N @ 32.74681N, -117.08698W).



(December 18, 2015)

**Photograph 6:** Photo Point 8 above inlet culvert prior to work beginning on Auburn Creek Map 68 (bearing 190 SW, 32.747330N, -117.086380W).



(December 19, 2015)

## During Maintenance Photograph Log

**Photograph 7:** Photo Point 3 showing the Gradall excavating sediment from Auburn Creek Map 67 (bearing 58 NE, 32.74814N, -117.08587W).



(December 18, 2015)

**Photograph 8:** Photo Point 8 showing the Bobcat and Gradall being used to remove vegetation from the channel at the end of the day on Auburn Creek Map 68 (bearing 190 SW, 32.747330N, -117.086380W).



(December 21, 2015)



**Photograph 7:** Photo Point 11 showing Urban Corps crew using saw to cut giant cane (*Arundo donax*) on Auburn Creek Map 68 (upstream, 32.746913N, -117.086849W).



(December 19, 2015)

**Photograph 8:** Photo Point 9 showing crew pumping water from downstream work area through the channel outlet culvert (bearing 15 N, 32.746809N, -117.086978W).



(December 21, 2015)

**Photograph 9:** Photo Point 9 showing water upstream of the outlet culvert on Auburn Creek Map 68 (bearing 15N, 32.746809N, -117.086978W).



(December 23, 2015)

**Photograph 10:** Just west of Photo Point 14 showing the progress of giant cane clearing near the end of the day on Auburn Creek Map 68 (upstream, 32.747048N, -117.086654W).



(December 28, 2015)

**Photograph 11:** Northeast of Photo Point 7 showing the sandbagging of the outlet culvert on Auburn Creek Map 67 (downstream).



(December 29, 2015)

**Photograph 12:** Photo Point 9 showing the small excavator working in the channel (bearing 15 N, 32.746809N, -117.086978W).



(December 29, 2015)

## Post-Maintenance Photograph Log

**Photograph 13:** Photo Point 4 showing Map 67 area of Auburn Creek following completion of work (bearing 226 SW, 32.74815N, -117.08589W).



(December 18, 2016)

**Photograph 14:** Photo Point 12 showing the channel at the end of the work day (downstream, 32.746935N, -117.086746W).



(January 12, 2016)

**Photograph 13:** Photo Point 13 showing Map 67 area of Auburn Creek following completion of work (downstream, 32.747211N, -117.086511W).



(January 12, 2016)

**Photograph 14:** Photo Point 9 showing the channel at the end of the work day (upstream, 32.746809N, -117.086978W).



(January 12, 2016)



**Attachment 1**  
**Applicable PEIR Mitigation Measures**

**GENERAL**

**General Mitigation 1:** Prior to commencement of work, the Assistant Deputy Director (ADD) Environmental Designee of the Entitlements Division shall verify that mitigation measures for impacts to biological resources (Mitigation Measures 4.3.1 through 4.3.20), historical resources (Mitigation Measures 4.4.1 and 4.4.2), land use policy (Mitigation Measures 4.1.1 through 4.1.13), paleontological resources (Mitigation Measure 4.7.1), and water quality (Mitigation Measures 4.8.1 through 4.8.3) have been included in entirety on the submitted maintenance documents and contract specifications, and included under the heading, "Environmental Mitigation Requirements." In addition, the requirements for a Pre-maintenance Meeting shall be noted on all maintenance documents.

**General Mitigation 2:** Prior to the commencement of work, a Pre-maintenance Meeting shall be conducted and include, as appropriate, the MMC, SWD Project Manager, Biological Monitor, Historical Monitor, Paleontological Monitor, Water Quality Specialist, and Maintenance Contractor, and other parties of interest.

**General Mitigation 3:** Prior to the commencement of work, evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

**BIOLOGICAL RESOURCES**

**Mitigation Measure 4.3.1:** Prior to commencement of any activity within a specific annual maintenance program, a qualified biologist shall prepare an IBA for each area proposed to be maintained. The IBA shall be prepared in accordance with the specifications included in the Master Program.

**(Mitigation Measure 4.3.2 not applicable)**

**(Mitigation Measure 4.3.3 not applicable)**

**(Mitigation Measure 4.3.4 not applicable)**

**Mitigation Measure 4.3.5:** Prior to commencing any activity that could impact wetlands, evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

**Mitigation Measure 4.3.6:** Prior to commencing any activity where the IBA indicates significant impacts to biological resources may occur, a pre-maintenance meeting shall be held on site with the following in attendance: City's SWD Maintenance Manager (MM), MMC, and Maintenance Contractor (MC). The biologist selected to monitor the activities shall be present. At this meeting, the monitoring biologist shall identify and discuss the maintenance protocols that apply

to the maintenance activities. At the pre-maintenance meeting, the monitoring biologist shall submit to the MMC and MC a copy of the maintenance plan (reduced to 11”x17”) that identifies areas to be protected, fenced, and monitored. This data shall include all planned locations and design of noise attenuation walls or other devices. The monitoring biologist also shall submit a maintenance schedule to the MMC and MC indicating when and where monitoring is to begin and shall notify the MMC of the start date for monitoring.

**Mitigation Measure 4.3.7:** Within three months following the completion of mitigation monitoring, two copies of a written draft report summarizing the monitoring shall be prepared by the monitoring biologist and submitted to the MMC for approval. The draft monitoring report shall describe the results including any remedial measures that were required. Within 90 days of receiving comments from the MMC on the draft monitoring report, the biologist shall submit one copy of the final monitoring report to the MMC.

**Mitigation Measure 4.3.8:** Within six months of the end of an annual storm water facility maintenance program, the monitoring biologist shall complete an annual report which shall be distributed to the following agencies: the City of San Diego DSD, CDFG, RWQCB, USFWS, and Corps.

At a minimum, the report shall contain the following information:

- Tabular summary of the biological resources impacted during maintenance and the mitigation;
- Master table containing the following information for each individual storm water facility or segment which is regularly maintained;
- Date and type of most recent maintenance;
- Description of mitigation which has occurred; and
- Description of the status of mitigation which has been implemented for past maintenance activities.

**Mitigation Measure 4.3.9:** Wetland impacts resulting from maintenance shall be mitigated in one of the following two ways: (1) habitat creation, restoration, and/or enhancement, or (2) mitigation credits. The amount of mitigation shall be in accordance with ratios in Table 4.3-10 unless different mitigation ratios are required by state or federal agencies with jurisdiction over the impacted wetlands. In this event, the mitigation ratios required by these agencies will supersede, and not be in addition to, the ratios defined in Table 4.3-10. No maintenance shall commence until the ADD Environmental Designee has determined that mitigation proposed for a specific maintenance activity meets one of these two options.

Mitigation locations for wetland impacts shall be selected using the following order of preference, based on the best mitigation value to be achieved:

1. Within impacted watershed, within City limits.
2. Within impacted watershed, outside City limits on City-owned or other publicly-owned land.
3. Outside impacted watershed, within City limits.
4. Outside impacted watershed, outside City limits on City-owned or other publically-owned land.

In order to mitigate for impacts in an area outside the limits of the watershed within which the impacts occur, the SWD must demonstrate to the satisfaction of the ADD Environmental Designee in consultation



with the Resource Agencies that no suitable location exists within the impacted watershed.

**Mitigation Measure 4.3.10:** Whenever maintenance will impact wetland vegetation, a wetland mitigation plan shall be prepared in accordance with the Conceptual Wetland Restoration Plan contained in Appendix H of the Biological Technical Report, included as Appendix D.3 of the PEIR.

Mitigation which involves habitat enhancement, restoration or creation shall include a wetland mitigation plan containing the following information:

- Conceptual planting plan including planting zones, grading, and irrigation;
- Seed mix/planting palette;
- Planting specifications;
- Monitoring program including success criteria; and
- Long-term maintenance and preservation plan.
- Mitigation which involves the use of mitigation credits shall include the following:
- Location of the mitigation bank;
- Description of the credits to be acquired including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact; and
- Documentation that the credits are associated with a mitigation bank which has been approved by the appropriate Resource Agencies.

**Mitigation Measure 4.3.11:** Not applicable

**Mitigation Measure 4.3.12:** Not applicable

**Mitigation Measure 4.3.13:** Prior to commencing any maintenance activity which may impact sensitive biological resources, the monitoring biologist shall verify that the following actions have been taken, as appropriate:

- Fencing, flagging, signage, or other means to protect sensitive resources to remain after maintenance have been implemented;
- Noise attenuation measures needed to protect sensitive wildlife are in place and effective; and/or
- Nesting raptors have been identified and necessary maintenance setbacks have been established if maintenance is to occur between January 15 and August 31. The designated biological monitor shall be present throughout the first full day of maintenance, whenever mandated by the associated IBA. Thereafter, through the duration of the maintenance activity, the monitoring biologist shall visit the site weekly to confirm that measures required to protect sensitive resources (e.g., flagging, fencing, noise barriers) continue to be effective. The monitoring biologist shall document monitoring events via a Consultant Site Visit Record. This record shall be sent to the MM each month. The MM will forward copies to MMC.

**Mitigation Measure 4.3.14:** Not applicable

**Mitigation Measure 4.3.15:** Not applicable

**Maintenance Measure 4.3.16:** Maintenance activities shall not occur within the following areas:

- 300 feet from any nesting site of Cooper's hawk (*Accipiter cooperii*);
- 1,500 feet from known locations of the southern pond turtle (*Clemmys marmorata pallida*);
- 900 feet from any nesting sites of northern harriers (*Circus cyaneus*);
- 4,000 feet from any nesting sites of golden eagles (*Aquila chrysaetos*); or
- 300 feet from any occupied burrow or burrowing owls (*Athene cunicularia*).

**Mitigation Measure 4.3.17:** Not applicable

**Mitigation Measure 4.3.18:** If a subject species is not detected during the protocol survey, the qualified biologist shall submit substantial evidence to the ADD Environmental Designee and an applicable resource agency which demonstrates whether or not mitigation measures such as noise walls are necessary between the dates stated for each species. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

**Mitigation Measure 4.3.19:** If the SWD chooses not to do the required surveys, then it shall be assumed that the appropriate avian species are present and all necessary protection and mitigation measures shall be required as described in Mitigation Measure 4.3.21.

**Mitigation Measure 4.3.20:** If no surveys are completed and no sound attenuation devices are installed, it will be assumed that the habitat in question is occupied by the appropriate species and that maintenance activities would generate more than 60dB(A) $L_{eq}$  within the habitat requiring protection. All such activities adjacent to protected habitat shall cease for the duration of the breeding season of the appropriate species and a qualified biologist shall establish a limit of work.

**Mitigation Measure 4.3.21:** Not applicable

**Mitigation Measure 4.3.22:** Not applicable

**Mitigation Measure 4.3.23:** Not applicable

**Mitigation Measure 4.2.24:** Not applicable

**Mitigation Measure 4.2.25:** In order to avoid impacts to nesting avian species, including those species not covered by the MSCP, maintenance within or adjacent to avian nesting habitat shall occur outside of the avian breeding season (January 15 to August 31) unless postponing maintenance would result in a threat to human life or property.

## LAND USE

**Mitigation Measure 4.1.1:** Not applicable

**Mitigation Measure 4.1.2:** Not applicable

**Mitigation Measure 4.1.3:** Not applicable

**Mitigation Measure 4.1.4:** Not applicable

**Mitigation Measure 4.1.5:** Not applicable

**Mitigation Measure 4.1.6:** A pre-maintenance meeting shall be held with the Maintenance Contractor, City representative and the Project Biologist. The Project Biologist shall discuss the sensitive nature of the adjacent habitat with the crew and subcontractor. Prior to the pre-maintenance meeting, the following shall be completed:

- The Storm Water Division (SWD) shall provide a letter of verification to the Mitigation Monitoring Coordination Section stating that a qualified biologist, as defined in the City of San Diego Biological Resources Guidelines, has been retained to implement the projects MSCP monitoring Program. The letter shall include the names and contact information of all persons involved in the

Biological Monitoring of the project. At least thirty days prior to the pre-maintenance meeting, the qualified biologist shall submit all required documentation to MMC, verifying that any special reports, maps, plans and time lines, such as but not limited to, revegetation plans, plant relocation requirements and timing, MSCP requirements, avian or other wildlife protocol surveys, impact avoidance areas or other such information has been completed and updated.

- The limits of work shall be clearly delineated. The limits of work, as shown on the approved maintenance plan, shall be defined with orange maintenance fencing and checked by the biological monitor before initiation of maintenance. All native plants or species of special concern, as identified in the biological assessment, shall be staked, flagged and avoided within Brush Management Zone 2, if applicable.

**Mitigation Measure 4.1.7:** Maintenance plans shall be designed to accomplish the following.

- Invasive non-native plant species shall not be introduced into areas adjacent to the MHPA. Landscape plans shall contain non-invasive native species adjacent to sensitive biological areas, as shown on the approved maintenance plan.
- All lighting adjacent to, or within, the MHPA shall be shielded, unidirectional, low pressure sodium illumination (or similar) and directed away from sensitive areas using appropriate placement and shields. If lighting is required for nighttime maintenance, it shall be directed away from the preserve and the tops of adjacent trees with potentially nesting raptors, using appropriate placement and shielding.
- All maintenance activities (including staging areas and/or storage areas) shall be restricted to the disturbance areas shown on the approved maintenance plan. The project biologist shall monitor maintenance activities, as needed, to ensure that maintenance activities do not encroach into biologically sensitive areas beyond the limits of work as shown on the approved maintenance plan.
- No trash, oil, parking or other maintenance-related activities shall be allowed outside the established maintenance areas including staging areas and/or storage areas, as shown on the approved maintenance plan. All maintenance related debris shall be removed off-site to an approved disposal facility.
- Access roads through MHPA-designated areas shall comply with the applicable policies contained in the “Roads and Utilities Construction and Maintenance Policies” identified in Section 1.4.2 of the City’s Subarea Plan.

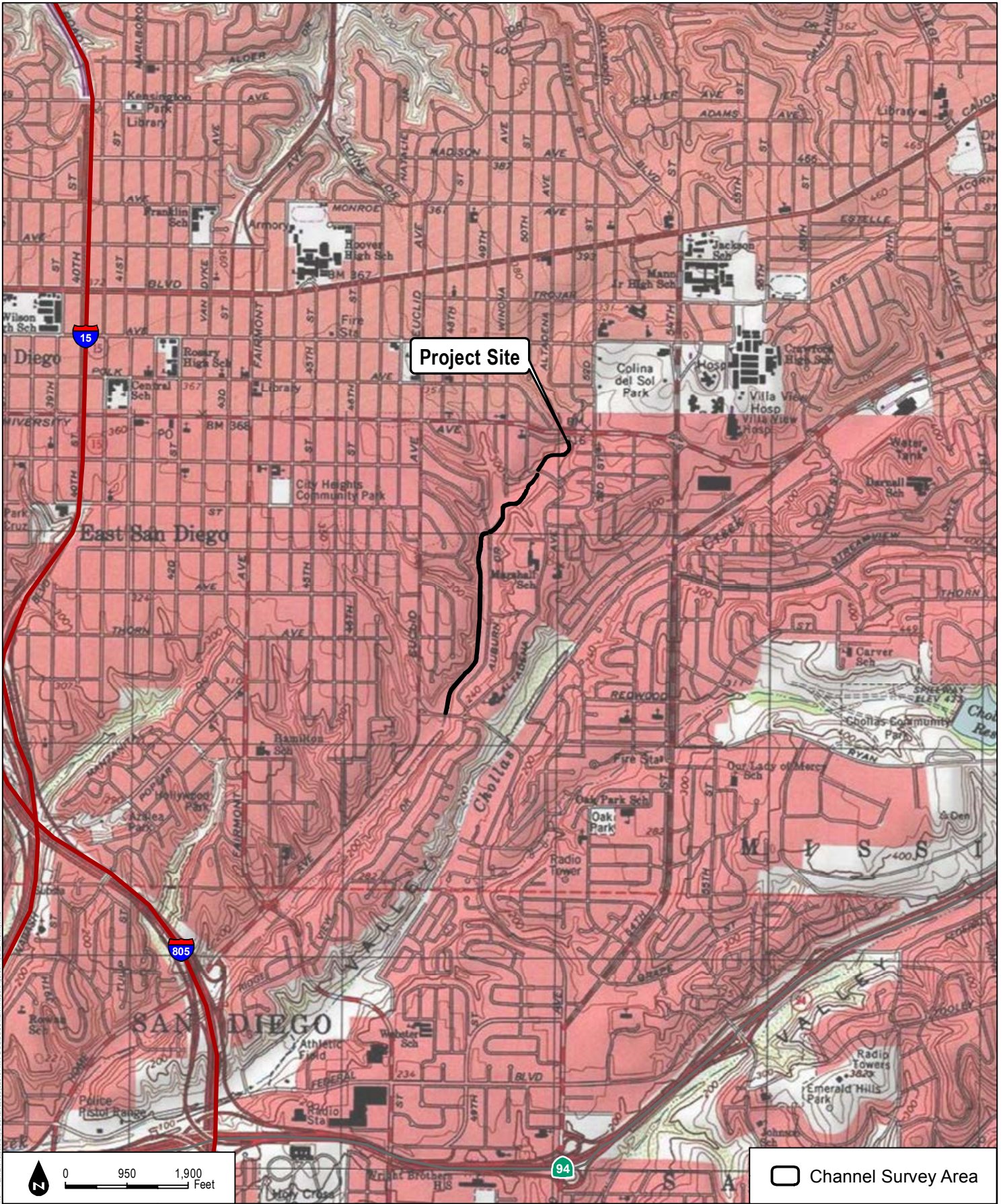
**Mitigation Measure 4.1.8:** Not applicable



Auburn Creek (MMP Map 67 & 68) - Emergency Channel Maintenance

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**FIGURE 1**  
**Regional Map**



Project Site

Channel Survey Area

SOURCE: USGS 7.5-Minute Series - National City Quadrangle.

**FIGURE 2**  
Vicinity Map

**DUDEK**

Auburn Creek (MMP Map 67 & 68) - Emergency Channel Maintenance



- Channel Survey Area
- Photo Points
- Impacts**
- Channel Maintenance Impact Area: Section 1
- Channel Maintenance Impact Area: Section 2
- Access/Staging Areas
- Jurisdictional Delineation**
- ACOE/RWQCB/CDFW
- CDFW Only
- Vegetation Communities
- CSS, Diegan Coastal Sage Scrub
- CSS\_BS, Coastal Sage Scrub (Baccharis Dominated)
- DEV, Developed
- DEV\_CC, Developed (Concrete Channel)
- DL, Disturbed Lands
- DW, Disturbed Wetland
- DW\_ARU, Disturbed Wetland (Arundo-dominated)
- EUC, Eucalyptus Woodland
- NFC, Natural Flood Channel
- NNG, Non-Native Grassland
- ORN, Ornamental Plantings
- RS\_MFS, Riparian Scrub (Mulefat Scrub)
- RS\_SWS, Riparian Scrub (Southern Willow Scrub)
- RS\_dMFS, Riparian Scrub (Disturbed Mulefat Scrub)
- dCSS, Disturbed Coastal Sage Scrub
- dCSS\_BS, Disturbed Coastal Sage Scrub (Baccharis Dominated)

SOURCE: SANDAG Imagery 2015; Helix 2015; City of San Diego 2015

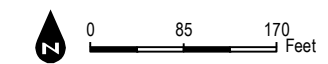


Auburn Creek (MMP Map 67 & 68) - Emergency Channel Maintenance

MMP Map 67; Figure 3a  
Biological Resources and Impacts



- Channel Survey Area
- Photo Points
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- Channel Maintenance Impact Area: Section 1
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SOURCE: SANDAG Imagery 2015; Helix 2015; City of San Diego 2015



Auburn Creek (MMP Map 67 & 68) - Emergency Channel Maintenance

MMP Map 68; Figure 3b  
Biological Resources and Impacts