INDIVIDUAL BIOLOGICAL ASSESSMENT REPORT

Site Name/Facility: Jamacha Channel Emergency Maintenance

Master Program

Map No.: 115

Date: February 16, 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 Jamacha Channel (Attachment 2 - MMP Maps 115; Figure 3) 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 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 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, 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 Jamacha channel is an unnamed tributary to South Chollas Valley and part of Hydrologic Unit Basin Number 8.22. This emergency maintenance area is generally located east of the Interstate 5 freeway and south of CA-94 in National City. The channel is located on the west side of 69th St. just after the 69th St. and Jamacha Rd. intersection and 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.

The entire length of the channel has an earthen bottom and just over half of the length channel that stretches east to west between 69th St. and 68th St. was cleared as part of the emergency maintenance. The channel has an average bottom width of approximately 15 feet. The maintenance area began just east of the 69th St. culvert outlet and continued 277 feet west. Land covers and vegetation removed included 0.04 acres of natural flood channel, 0.05 acres of disturbed wetland (Arundo dominated), and 0.01 acres of disturbed wetland. Total impacts to jurisdictional areas were 0.10 acres (277 linear feet) of wetland and non-wetland waters of the U.S. Within the emergency maintenance area, the City's assessment determined that sediment and exotic vegetation (primarily Arundo) had accumulated and constricted flows in the channel and resulted in significantly reduced channel capacity. One section near the center of the maintenance area had been completely blocked by Arundo and Storm Water Engineers estimated that the channel was at 50% capacity. Removing the vegetation and sediment restored the minimum necessary capacity to the channel to prevent residential properties adjacent to the channel from being under imminent threat of severe damage from storm events and the predicted strong El Nino storm season.

Survey Methods and Date

Biological Survey and Site Assessment

Dudek conducted the biological survey and site assessment on December 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

January 3, 2016: Biologist Scott Gressard arrived at 6847 Jamacha Rd., San Diego CA at 7:00 am on Sunday January 3, 2016. The City crew began working on removing vegetation and sediment on the west end of the maintenance area within the channel. The mini Excavator worked within the channel and piled vegetation and sediment near the Gradall, which was staged outside of the channel. The Gradall also removed vegetation and sediment within the area that it was able to reach from outside the channel. The material was loaded into dump trucks and taken to the Miramar Landfill during the first part of the day. As dump trucks became less available due to travel time, the crews began stockpiling vegetation in the disturbed land just south of the channel. No sandbag berms or pumping equipment were used during maintenance as the channel remained dry during all work. Following maintenance, fiber rolls were installed surrounding the stockpile to prevent any runoff back into the channel until the crews could return to remove the material. All work was monitored by a qualified biologist and 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. Sand bags were not installed during this maintenance.

Biological Resources:	Stream Type: Perennial	Intermittent ${f X}$	Ephemeral \Box

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, only vegetation or land covers within the emergency maintenance area are described below. A total of three vegetation communities and one land cover type were identified during this assessment: disturbed wetland, disturbed wetland (Arundo-dominated), and natural flood channel.

Vegetation acreages within the survey area are summarized in Table 1 below:

Table 1. Existing Waters of the U.S./State in the Emergency Maintenance Area

Vegetation Community or Land Cover Type	City MSCP Habitat Tier	Acreage
Disturbed Wetland	Wetland	0.01
Disturbed Wetland (Arundo dominated)	Wetland	0.05
Natural Flood Channel	Wetland	0.04
Total		0.10

Habitat within the emergency channel maintenance area is described below:

Disturbed Wetland

Where habitat is mapped as disturbed wetland, the channel had areas of accumulated sediment that were covered by a mixture of castor bean (*Ricinis communis*) and small patches of other mostly non-native wetland species and grasses. This area was cleared as part of the maintenance, but it does continue offsite downstream in the section that was not considered part of the minimum necessary maintenance area.

Disturbed Wetland (Arundo dominated)

Where habitat is mapped as disturbed wetland (arundo dominated), the maintenance area is dominated entirely by giant reed (*Arundo donax*). All of this habitat within the emergency removal area was removed as part of the maintenance.

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.

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

Black Phoebe

Mourning Dove

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 X No \square

If yes, describe the influence:

Anthropogenic disturbances include the large patches of invasive weed species brought into the earthen channel, which have spread through landscaping, foot traffic along the channel, 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 a	<u>any conservation (</u>	easements which	have been	previously	recorded	within the i	<u>naintenance a</u>	<u>area?</u>
Yes 🗆	No X							
If yes, desc	ribe them and their	purpose:						

Jurisdictional Areas [TOTAL STUDY AREA]

ACOE/RWQCB/CDFW/City

For the Master Maintenance Program, a program-level jurisdictional delineation was not conducted within subject storm water facility channels and sedimentation basins with results categorized by HUs. Mapping was conducted along this segment of the channel (Attachment 2 - MMP Map 115; Figure 3). State, Federal, and City jurisdictional areas within the study area consisted of disturbed wetland, disturbed wetland (Arundo dominated), and natural flood channel.

A site-specific formal jurisdictional delineation of "waters of the United States," was not conducted for the maintenance area. A visual assessment of likely jurisdictional areas was completed to support emergency permit applications.

For purposes of this IBA, the channel maintenance area is assumed to be within the defined limits of the earthen banks of the channel, and therefore ACOE, RWQCB, CDFW, and City jurisdictions are the same.

The emergency maintenance impacted the full area within the channel. The impacts to Waters of the U.S., including to wetlands, and the corresponding impacts to City wetlands are shown in Table 2.

Table 2. Impacts to Waters of the U.S./City

	Jurisdictional A RWQCB, CDF		
Vegetation Community or Land Cover Type	Wetland Waters of the U.S.	Non-Wetland Waters of the U.S.	Total Impact Acreage
Disturbed Wetland	0.01	0	0.01
Disturbed Wetland (Arundo-dominated)	0.05	0	0.05
Natural Flood Channel	0	0.04	0.04
Total	0.06	0.04	0.10

Sensitive* Plant Species Observed:	Sensitive* Animal Species Observed/Detected:			
Yes \(\subseteq \text{No X} \)	Yes \(\subseteq \text{No X} \)			
If yes, what species were observed and where? If yes,	If yes, what species were observed/detected and where?			
complete a California Native Species Field Survey	If yes, complete a California Native Species Field			
Form and submit it to the California Natural Diversity	Survey Form and submit it to the California Natural			
Database.	Diversity Database.			
*Sensitive species shall include those listed by state or	*Sensitive species shall include those listed by state or			
federal agencies as well as species that could be	federal agencies as well as species that could be			
considered sensitive under Sections 15380(b) and (c)	considered sensitive under Sections 15380(b) and (c)			
and 15126(c) of the CEQA Guidelines.	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 \(\subseteq \text{No X} \)	species to occur in or adjacent to the impact area.			
I ES L. NO A				
If yes, which species (check all that apply) and describe				
whether those species could occur within the maintenan	ce area:			
☐ Least Bell's vireo	☐ Riverside fairy shrimp			
☐ Southwester willow flycatcher	☐ California least tern			
☐ Arroyo toad	☐ Light-footed clapper rail			
l <u> </u>				
Coastal California gnatcatcher	Western snowy plover			
☐ San Diego fairy shrimp	Other:			
Attach documentation supporting the determination of the	he presence or absence of listed animal species with a			
moderate or high potential to occur (e.g. California Natu	ral Diversity Database records searches).			
No potential for Least bell's vireo – there is no willow h	abitat within the channel: all non-native vegetation			
No potential for willow flycatcher – there is no willow habitat within the channel; all non-native vegetation				
No potential for Arroyo toad –vegetation very dense with steep banks and disturbed areas adjuacent.				
No potential for California gnatcatcher – no upland habitat consisting of California sagebrush (<i>Artemisia californica</i>), California buckwheat (<i>Eriogonum fasciculatum</i>), Laurel sumac (<i>Malosma Laurina</i>),				
No potential for fairy shrimp species – No vernal pools				
No potential for California least tern –No open sandy be				
channel. Non-native vegetation in the channel is extrem				
No potential for Light footed clapper rail-more likely to				
within the channel. Non-native vegetation in the channel	el is extremely dense.			
No potential for Western snowy plover- more likely to b	be found in bays, shores and estuaries. No habitat exists			
within the channel. Non-native vegetation in the channel				
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Is there moderate or high potential for a listed plant species to occur in or adjacent to the impact area? Yes \square 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 \square No X
If yes, discuss which habitat could be impacted and how:
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 X No \square
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 it is dominated by non-native vegetation (i.e. Arundo). The maintenance area is small and, while there is some open habitat upstream of the project east of 69 th St., it has little connectivity to native communities. The surrounding upland vegetation is primarily disturbed land dominated by non-native grasses such as foxtail brome (<i>Bromus madritensis ssp. rubens</i>).
MAINTENANCE IMPACTS
Emergency Maintenance Methodology:
In the emergency maintenance section located east of the 69 th St. culvert, San Diego CA (Attachment 2 - MMP Map 115; Figure 3), all sediment, vegetation, and debris were excavated from the channel. A mini Excavator and Gradall were the primary tools used to remove material. The equipment accessed the channel from the access and staging area adjacent to 69th St. as shown on Attachment 2 - MMP Map 115; Figure 3. Once the material was loaded into dump trucks, it was either taken to a temporary stockpiling location within the access area or taken directly to Miramar Landfill for disposal. Proper BMPs (i.e., fiber rolls) were installed around the stockpiled material from the channel. No sandbag berms or pumping equipment were used during maintenance as the channel remained dry during all work.

	ork was monitored by a qualified biological pletion of work.	st and all equipment and ma	terials were removed following	
Vege	tation Impacts:	2 Vacatation Immedia		
	Vegetation Community or Land Cover Type	3. Vegetation Impacts City MSCP Habitat Tier	Acreage	
	Disturbed Wetland	Wetland	0.01	
1	Disturbed Wetland (Arundo dominated)	Wetland	0.05	
ŗ	Total		0.06	
Is there a moderate or high potential for maintenance to impact an MHPA? Yes □ No X 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 \square No X				
If yes	s, which species (check all that apply):			
□ Least Bell's vireo □ Riverside fairy shrimp □ Southwester willow flycatcher □ California least tern □ Arroyo toad □ Light-footed clapper rail □ Coastal California gnatcatcher □ Western snowy plover □ San Diego fairy shrimp □ Other:				

MITIGATION

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 resprouting is observed during an inspection. If resprouting 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 miti	igation measure	es:			
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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 channel. Vegetation communities that were removed as part of this maintenance included 0.05 acres of disturbed wetland (Arundo dominated), 0.04 acres of natural flood channel, and 0.01 acres of disturbed wetland.

USACE/RWOCB/CDFW Jurisdictional Wetlands:

The USACE authorized the maintenance on January 19, 2016 through issuance of a Regional General Permit 63 Authorization (SPL-2015-00944-RAG). Given that all impacts 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. The USACE will ultimately determine if compensatory mitigation is required.

Based on email correspondence from Alan Monji of the RWQCB on January 14, 2016, "the City of San Diego will be required to provide compensatory mitigation for permanent impacts that result in a loss of functions in the amount of 2:1 (area mitigated:area impacted) in wetland enhancement for the removal of disturbed wetland. No compensatory mitigation will be required for the removal of vegetation or sediment from the disturbed wetland (Arundo dominated) or natural flood channel." As such, a subsequent mitigation plan or purchase of approved mitigation credits totaling 0.02 ac are required to be submitted to the San Diego RWQCB for impacts to 0.01 acres of disturbed wetland. Contact information and details regarding the mitigation site/credits will be provided to the San Diego RWQCB. It should be noted that since the San Diego RWQCB has required mitigation for "permanent impacts" of the project, the City requests that the San Diego RWQCB provide written acknowledgment that the required mitigation is adequate to mitigate any future maintenance of this channel that results in similar loss of functions (i.e., vegetation and sediment removal within the same maintenance footprint).

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. The CDFW will ultimately determine if compensatory mitigation is required.

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)."

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 the loss of 0.04 acre of natural flood channel and 0.01 acres of disturbed wetlands. Alternately, the City may choose to mitigate for the permanent loss of natural flood channel and disturbed wetland at the appropriate ratios (i.e., a total mitigation requirement of 0.10 ac), such that when routine, ongoing maintenance is authorized, one-time mitigation will have been provided.

Mitigation Description/Location

The mitigation site/bank location is yet to be determined. At a minimum, in accordance with the SDP, 0.05 acre of mitigation will be implemented or secured within nine months of the impact (i.e., by October 3, 2016). The San Diego RWQCB has not indicated a timing requirement associated with the 2:1 mitigation required under their authorization of RGP 63.

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

Photograph 1: Photo looking east toward the 69th St. culvert outlet within the channel at sediment and vegetation build-up.

Photograph 2: Photo taken pre-construction during staging, looking northeast toward 69th St. from the disturbed land south of the channel.





(January 3, 2016; 07:02 AM)

Photograph 3: Photo looking north at the Gradall and mini Excavator removing vegetation and sediment and the loading debris into dump trucks.

(January 3, 2016; 09:24 AM)

Photograph 4: Photo looking northeast of a dump truck unloading debris to a temporary stockpiling area before debris is taken to Miramar Landfill for disposal.

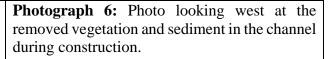




(January 3, 2016; 10:17 AM)

(January 3, 2016; 11:38 AM)

Photograph 5: Photo looking east at the mini-excavator in the channel removing vegetation and sediment within the channel.







(January 3, 2016; 01:21 PM)

(January 3, 2016; 01:21 PM)

Photograph 7: Photo taken from 69th St. looking west at the Gradall removing vegetation and sediment from the channel and unloading debris into a temporary stockpile.

Photograph 8: Photo taken from 69th St. looking southwest at the BMPs around the stockpile area (i.e. fiber rolls). This material was taken to the Miramar Landfill post-construction.





(January 3, 2016; 03:38 PM)

(January 3, 2016; 04:23 PM)

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.

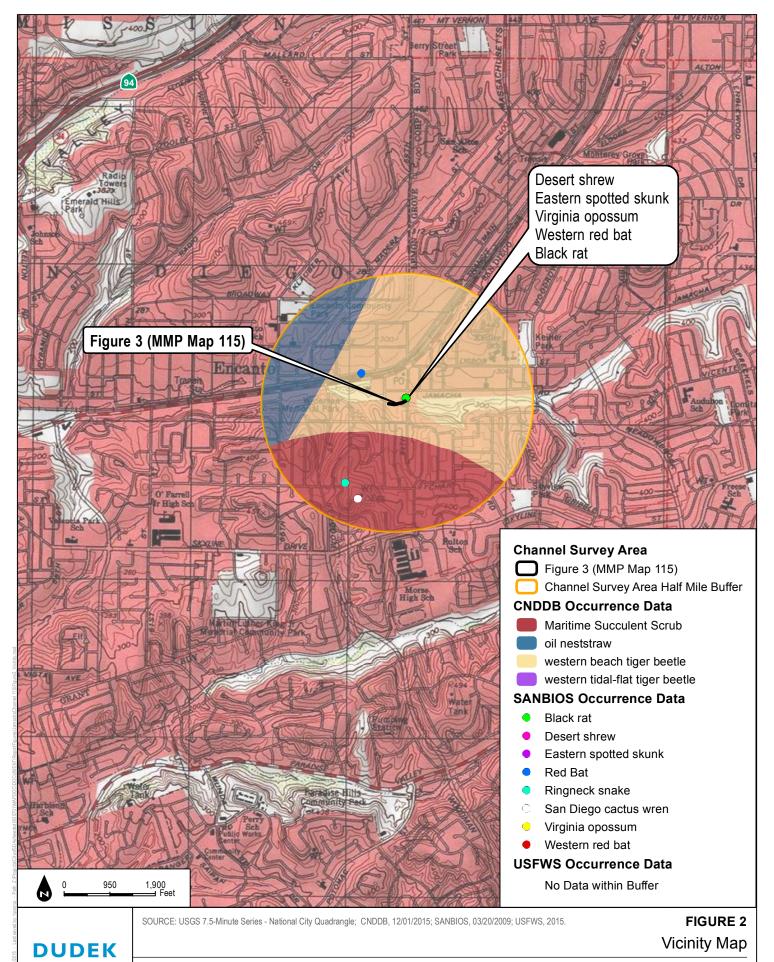
- Invasive non-native plant species shall not be introduced into areas adjacent to the MHPA. Landscape plans shall contain non-invasive native species adjacent to sensitive biological areas, as shown on the approved maintenance plan.
- All lighting adjacent to, or within, the MHPA shall be shielded, 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

Attachment 2



Jamacha Channel (MMP Map 115) - Emergency Channel Maintenance



Jamacha Channel (MMP Map 115) - Emergency Channel Maintenance

