INDIVIDUAL BIOLOGICAL ASSESSMENT REPORT

Site Name/Facility:	**Chollas Creek Channel Emergency Maintenance**
Master Program Map No.:	**71**
Date:	**June 27, 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 Chollas Creek Channel (also referred to as Rolando Boulevard Channel) (Chollas Memo - MMP Map 71; 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 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 Chollas Creek Channel (Map 71) is located east of the Interstate 15 freeway, south of University Avenue, west of 6523 University Avenue, and north of Vista Grande Drive (Chollas Memo - Figures 1 and 2). The channel is located on the northeast corner of the intersection of Rolando Boulevard and Vista Grande Drive 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.

This channel segment has an earthen bottom and mostly earthen sides, although portions of the bank on the west end of the channel consist of rip rap and a section on the east end of the channel has concrete-lined banks. Two large diameter box culverts empty into the channel from the east and the channel conveys flows between commercial properties on the north side and residential properties on the south side down to a double box culvert underneath Rolando Boulevard

Emergency work consisted of a single earthen channel segment approximately 800 linear feet in length (MMP Map 71; Figure 3). The section west of and Rolando Boulevard is concrete-lined and was not included as part of this emergency channel work. The maintenance area began just west of 6523 University Ave. and continued west the entire length of the channel, with an average bottom width of approximately 15 feet, ending at the inlet that that carries flows west under Rolando Boulevard (MMP Map 71; Figure 3).

Land covers and vegetation impacted during maintenance included 0.02 acres of riparian scrub (disturbed southern willow scrub), 0.06 acres of natural flood channel, and 0.11 acres of disturbed wetland (palm dominated). Total impacts to jurisdictional areas are 0.19 acres (800 linear feet) of wetland waters of the U.S. channel. An additional 0.21 acre of disturbed wetland (palm dominated), 0.02 acre of disturbed land and 0.04 acre of riparian scrub (disturbed southern willow scrub) above the Ordinary High Water Mark (OHWM) under CDFW jurisdiction only was also removed.

Within the proposed emergency maintenance section (MMP Map 71; Figure 3), the City of San Diego's (City's) assessment has determined that sediment and vegetation have accumulated significantly along the entire length of the Chollas Creek Channel (MMP Map 71) and that the volume of sediment and vegetation poses an imminent flood threat to properties adjacent to the channel from constriction and slowing of downstream flows as well as from potential clogging of the downstream culvert if large amounts of vegetation and debris are dislodged during heavy flows.

Access was taken from the staging area adjacent to the Rolando Boulevard and Vista Grande and down the southern bank of the channel. A Gradall, and Excavator were the primary tools used to clear material within the channel. The Excavator worked within the channel and staging area in the vacant lot west of 4181 Vista Grande Dr. and moved sediment and debris towards the west end of the channel where it was loaded into dump trucks for removal. This process began by using the excavator to remove the large palm trees along the banks of the channel, the dragged them to the staging area to be sawed down and removed. Once the debris was loaded into dump trucks, it was taken to the Miramar Landfill for disposal. All work was monitored by a qualified biologist and equipment will be removed from the site at the end of the project.

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 (Site Photos). 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 Shana Carey, Janice Wondelleck, Sean Harris, Monique O'Connor, and Shelley Lawrence monitored the work at 4151 Vista Grande Dr. San Diego, CA 92115 from January 12 to April 22, 2016. Anton's Service (the construction company sub-contracted by the city to conduct this channel maintenance) began by removing vegetation and palm trees along the channel from the western end of the maintenance area using chain saws. After large trees were felled within the channel, the Excavator was used to transport the trees to the staging area where the trunks were sawed into smaller segments using a chainsaw so that they could be more easily loaded into the dump trucks. Crew members removed smaller vegetation and debris from the channel. Access to the channel was gained in the form of a sediment ramp built from the staging area on the west end of the channel as well as from the dirt lot on the south east side of the maintenance area into the channel. then repaired and replaced the rip rap at the southeastern end of the channel. The material removed from the channel was loaded into dump trucks and taken to the Miramar Landfill. All work was monitored by a qualified biologist and equipment was removed from the site at the end of the project on April 28, 2016.

Status of Channel Flows

Initially, during low flows, sandbags were used at the upstream culvert to prevent water from entering the maintenance area. The earthen channel did have any standing water present during some of the work as a result of groundwater that seeped up from the earthen substrate within the maintenance area, but this water was not flowing downstream. Sand bags were installed at the downstream end of the channel just west of Rolando Boulevard in order to prevent any sediment from being carried out of the maintenance area. When flows coming from upstream increased such that the sand bag berm was not able to contain them, a diversion pump system was installed at the eastern end of the Chollas channel segment (MMP Map 71) to divert these flows around the maintenance area. The onsite biologist monitored flows downstream of the work area to ensure they were free of sediment.

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 along the length 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: riparian scrub (disturbed southern willow scrub), natural flood channel, and disturbed wetland (palm dominated).

In addition, areas surrounding the emergency maintenance area include areas of ornamental vegetation, disturbed, and developed land. These areas were not affected by the maintenance and therefore are not discussed in this IBA, but are illustrated on Figure 3.

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

Table 1. Vegetation in the Emergency Maintenance Area

Vegetation Community or Land Cover Type	City MSCP Habitat Tier	Acreage
Riparian scrub (disturbed southern willow scrub)	Wetland	0.06
Natural Flood Channel	Wetland	0.06
Disturbed Wetland (palm-dominated)	Wetland	0.32
Disturbed Land	Tier IV	0.02
Total		0.46

Habitat within the emergency channel maintenance area is described below:

Riparian Scrub (disturbed Southern Willow Scrub)
Where habitat is mapped riparian scrub (disturbed southern willow scrub), the channel has 40% cover by Arroyo willows (*Salix lasiolepis*) with patches of bare ground, other non-native wetland species, and grasses. This was an area located near the western culvert outlet and was cleared 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.

Disturbed Wetland (palm-dominated; concrete-lined)
Where habitat is mapped as disturbed wetland (palm dominated), the channel was dominated by Mexican fan

palms that were at least 6 ft in height. These trees were anchored either to the earthen channel bottom (ACOE/RWQCB/CDFW/City Jurisdiction) or on the adjacent bank, above the Ordinary High Water Mark (CDFW Jurisdiction only).

Disturbed Land
The upper banks of the channel support a mixture of non-native herbaceous species including grasses and forbs, as well as bare ground. Non-native grass cover is less than 30% overall. Only one area of the channel bank was affected by the project; the location of the access ramp. This area supported mostly bare ground and scattered exotic annuals. This area had been previously utilized as an access location for this channel.

Wildlife Value

Due to the isolated nature of maintenance area and the limited native habitats within the channel maintenance area, its value to wildlife is considered low.

Wildlife Observed
Anna's hummingbird (*Calypte anna*)
American crow (*Corvus brachyrhynchos*)
Red-shouldered hawk (*Buteo lineatus*)
Yellow-rumped Warbler (*Setophaga coronata*)
Lesser goldfinch (*Spinus psaltria*)

A nesting bird survey was conducted on the first day of monitoring (March 4, 2016). No nests or nesting activity were observed during the survey.

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

If yes, describe the influence:

Anthropogenic disturbances include invasive annual and perennial species brought into the banks of the earthen channel, which have spread through landscaping, roadway projects, etc., and have led to an abundance of exotics on the banks of the channel. This habitat on site is not suitable for rare wildlife and rare plant species.

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

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 channel (MMP Map 77; Figure 3).

Prior to the emergency, a site-specific formal jurisdictional delineation of "waters of the United States," was not conducted, however a visual assessment of likely jurisdictional areas was completed with reference to the programmatic delineation. The emergency maintenance impacted the full width of the channel in the maintenance area from the upstream culvert outfall to the culvert inlet under Rolando Boulevard and removed all vegetation along the channel banks (Figure 3). The impacts to Waters of the U.S. and the corresponding impacts to CDFW/City wetlands are shown in Table 2.

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

Vegetation Community or Land Cover Type	Wetland Waters of the U.S. (ACOE, RWQCB, CDFW, and City)	Non-Wetland Waters of the U.S. (CDFW and City)	Total (acres)
Riparian Scrub (disturbed southern willow scrub)	0.02	0.04	0.06
Disturbed Wetland (palm-dominated	0.11	0.21	0.32
Natural Flood Channel	0.06	0	0.06
Total	0.19	0.25	0.44

Sensitive* Plant Species Observed:
Yes ☐ No X
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 X
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:

☐ Least Bell's vireo
☐ Southwester willow flycatcher
☐ Arroyo toad
☐ Coastal California gnatcatcher
☐ San Diego fairy shrimp
☐ Riverside fairy shrimp
☐ California least tern
☐ Light-footed clapper rail
☐ Western snowy plover
☐ 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 limited willow habitat and the channel is isolated from other natural areas. All willow habitat was removed prior to the start of the Least bell's vireo nesting season.
No potential for willow flycatcher – there is limited willow habitat and the channel is isolated from other natural areas. All willow habitat was removed prior to the start of the willow flycatcher nesting season.
No potential for Arroyo toad –vegetation very dense with 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.
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 X

If yes, provide justification:
A general wildlife/nesting bird survey was performed prior to each day of work. No roosting/nesting opportunities occur within or immediately surrounding the project boundary.

Is it anticipated that maintenance activities would generate noise in excess of 60 dB(A) L_{eq}?
Yes X No ☐

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

All suitable habitat was removed prior to the start of relevant sensitive avian species' nesting seasons (i.e. Least Bell's vireo and willow flycatcher). Nesting surveys were conducted for raptors daily prior to all work and no nests were observed.

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

Within the channel, the only native vegetation community is the riparian scrub (disturbed southern willow scrub). This habitat is small and isolated within the channel limits with no connectivity to other native habitats. The surrounding land cover includes ornamental vegetation, disturbed land, and urban/developed land cover, which consists of paved City streets and commercial development.

MAINTENANCE IMPACTS

Emergency Maintenance Methodology:

In the emergency maintenance area depicted in Chollas Memo-Figure 3, all sediment, vegetation, and debris were excavated from the channel. Access was taken from the staging area adjacent to and northeast of the intersection of Rolando Boulevard and Vista Grande Drive and down the southern bank of the channel as well as from the southeast end of the maintenance area. The City emergency contractor used the Excavator and Tracksteer/Bobcat as the primary tools to clear the vegetation and sediment from within the channel. At the start of maintenance, the Excavator reached into the channel on the downstream end of the maintenance area from the staging area (located west of 4181 Vista Grande Dr.) to clear sediment and palm trees that were constricting channel capacity. The Excavator then entered the channel and began removing vegetation and sediment upstream in the channel. The channel was cleared to its as-built capacity. Large palm trees that were removed from the channel were deposited in the staging area at the corner of Rolando Boulevard and Vista Grande Dr. where chain saws were then used to cut the trees into smaller sections that could be loaded into dump trucks and taken to the approved disposal location (Miramar Landfill). All work was monitored by a qualified biologist and equipment was removed from the site at the end of the project.

Vegetation Impacts:

A total of 0.06 acre of riparian scrub (disturbed southern willow scrub) and 0.32 acre of disturbed wetland (palm-dominated) was removed during this maintenance.

All other impacts were to unvegetated natural flood channel and disturbed land.

Jurisdictional Impacts:
(See Table 2 above)

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 ☐ No X

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

☐ Least Bell's vireo
☐ Southwester willow flycatcher
☐ Arroyo toad
☐ Coastal California gnatcatcher
☐ San Diego fairy shrimp
☐ Riverside fairy shrimp
☐ California least tern
☐ Light-footed clapper rail
☐ Western snowy plover
☐ 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 mitigation measures:

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 and adjacent to the earthen channel. The vegetation communities and land covers impacted during maintenance included 0.02 acres of riparian scrub (disturbed southern willow scrub), 0.06 acres of natural flood channel, and 0.11 acres of disturbed wetland (palm dominated). Total impacts to jurisdictional areas are 0.19 acres (800 linear feet) of wetland waters of the U.S. channel. An additional 0.21 acre of disturbed wetland (palm dominated), 0.02 acre of disturbed land and 0.04 acre of riparian scrub (disturbed southern willow scrub) above the Ordinary High Water Mark (OHWM) under CDFW jurisdiction only was also removed.

USACE/RWQCB/CDFW Jurisdictional Wetlands:

The USACE authorized the proposed maintenance on December 29, 2016 through issuance of a Regional General Permit 63 Authorization (SPL-2015-00924-MG). No compensatory mitigation is required under the authorization. This report will be provided to the USACE as a post-maintenance report, pursuant to RGP 63.

The San Diego RWQCB acknowledged the Army Corps of Engineer's RGP 63 authorization for the project in an email from Lisa Honma dated March 17, 2016. The email states: "Consistent with the San Diego Water Board's approach in certifying routine channel maintenance projects and in accordance with section VI of Clean Water Act Section 401 Water Quality Certification for U.S. Army Corps of Engineers Reauthorization of Regional General Permit 63 for Repair and Protection Activities in Emergency Situations, SB13006IN (RGP-63 Certification), 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 rehabilitation and 1:1 in wetland enhancement for the removal of 0.11 acre southern willow scrub and 0.02 acre of wetland. No compensatory mitigation will be required for the removal of sediment from unvegetated stream channel (natural flood channel) or disturbed land."

It should be noted that the acreages of impacts to riparian scrub (disturbed southern willow scrub) and disturbed wetland (palm dominated) were switched in the RWQCB's approval email. Impacts proposed in the pre-maintenance Attachment D notification were to 0.02 acre of riparian scrub (disturbed southern willow scrub) and 0.11 acre of disturbed wetland (palm dominated). As such, a subsequent mitigation plan or purchase of approved mitigation credits totaling 0.04 ac are required to be submitted to the San Diego RWQCB for impacts to 0.02 acres of riparian scrub (disturbed southern willow scrub). It is assumed that, although impacts to disturbed wetland were addressed in the RWQCB approval email, that these impacts will not require mitigation as they are to an exotic (palm) dominated wetland community. Contact information and details regarding the mitigation site/credits will be provided to the San Diego RWQCB.

Since the San Diego RWQCB has required mitigation for "permanent impacts" of the project, the City requests that the San Diego RWQCB provide written confirmation of the assumptions described above for mitigation of vegetation communities impacted as well as that the total required mitigation reported in this document are 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 emergency channel maintenance activities, it typically does not require compensatory mitigation for these activities. This report will be provided to the CDFW as a post-maintenance report, pursuant to emergency Streambed Alteration Agreement requirements.

City Wetlands:

Mitigation is required for impacts to 0.06 acre of natural flood channel and 0.06 acre of riparian scrub (disturbed southern willow scrub). The City regulates wetlands, even in urban situations such as this project, and requires compensatory mitigation for wetland impacts 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 impacts shall be mitigated at a ratio of 1:1 for temporary impacts, 2:1 for Natural flood channels, 3:1 for impacts to Riparian habitat…"

Given that the emergency maintenance conducted is a one-time authorization, impacts could be considered as either temporary or permanent under the SDP requirements. If impacts are considered temporary, mitigation would be required at a 1:1 ratio for impact to 0.06 acre of natural flood channel and 0.03 acre of riparian scrub (disturbed southern willow scrub). The impacts to natural flood channel are considered to be restored in-place, at a 1:1 ratio, as the sediment/cobble substrate of the channel is substantially similar to pre-emergency conditions. This onsite restoration resulted in no-net-loss of functions and values and is considered adequate 1:1 mitigation, in accordance with SDP requirements. An additional 0.06 acre of mitigation would be required for temporary impacts to riparian scrub (disturbed southern willow scrub).

As an alternative, the City may choose to provide mitigation for permanent impacts, such that future maintenance within this area would not require additional mitigation. Under this alternative, the City would mitigate for the permanent loss of riparian scrub (disturbed southern willow scrub) at a 3:1 ratio (i.e., a total mitigation requirement of 0.18 ac). The impacts to natural flood channel would still be considered temporary under this alternative since the earthen-bottom channel was returned to pre-maintenance conditions at the end of maintenance, therefore the City would be required to mitigate for impacts to this land cover at a ratio of 1:1 (i.e. a total mitigation requirement of 0.04 acre), for a project total of 0.24 acre of mitigation, such that when routine, ongoing maintenance is authorized, one-time mitigation will have been provided.

Uplands:
Impacts to uplands are limited to disturbed land used for access to the channel. The City's Biology Guidelines do not require mitigation for these Tier IV land cover types. Therefore, no mitigation is required for impacts to upland areas.

Mitigation Description/Location

The mitigation site/bank location is yet to be determined.

ADDITIONAL COMMENTS OR RECOMMENDATIONS

Attachments

Attachment 1: Applicable PEIR Mitigation Measures

References

Development 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 Point 1 (32.754070W, -117.057860N) looking upstream from the north side of the channel at vegetation (exotic) growing up in the channel prior to maintenance (MMP Map 71; Figure 3).	**Photograph 2:** Photo Point 2 (32.754396W, -117.055708 N) looking into the channel from the east end of the maintenance area prior to the start of work at vegetation build up (MMP Map 71; Figure 3).
	
(November 19, 2015; 1:34pm)	(November 19, 2015; 1:47pm)

Photograph 3: Photo Point 3 (32.754146W, -117.056850N) Looking east from within the channel prior to clearing MMP Map 71; Figure 3.

(January 16, 2016; 8:37am)

Photograph 4: Photo Point 4 (32.753933W, -117.058237N) Looking east into the channel from Rolando Boulevard at the maintenance area within the disturbed wetland (palm-dominated) in MMP Map 71; Figure 3 at the start of maintenance.

(January 16, 2016; 8:37am)

Photograph 5: Photo Point 4 (32.753933W, -117.058237N) Looking upstream from the east end of the maintenance and staging area at the cleared section within the channel (MMP Map 71; Figure 3).

(January 19, 2016; 2:03pm)

Photograph 6: Photo Point 1 (32.754070W, -117.057860N) looking east from the north side of the channel at cleared channel section in MMP Map 71; Figure 3.

(January 20, 2015)

Photograph 7: Photo Point 3 (32.754146W, -117.056850N) looking east upstream from the north side of the channel as the Excavator works to clear vegetation and sediment from the channel (MMP Map 71; Figure 3).

(January 23, 2016)

Photograph 8: Photo Point 2 (32.754396W, -117.055708) looking into the channel from the east end of the maintenance area at the upstream outlet following maintenance (MMP Map 71; Figure 3).

(January 26, 2016)

Photograph 9: Photo Point 2 (32.754396W, -117.055708) looking into the channel from the east end of the maintenance area near the conclusion of maintenance at the diversion pump inlet where downstream flows are being collected and carried downstream of the work area (MMP Map 71; Figure 3).

(April 25,2016; 9:19am)

Photograph 10: Photo Point 3 (32.754146W, -117.056850N) looking east upstream from the south side of the channel after maintenance was completed (MMP Map 71; Figure 3).

(April 25, 2016; 1:16pm)

Photograph 11: Photo Point 1 (32.754070W, -117.057860N) looking southwest from the north side of the channel at cleared channel section in MMP Map 71; Figure 3.  (April 25,2016; 10:34am)	**Photograph 12**: Photo Point 4 (32.753933W, -117.058237N) looking upstream from Rolando Boulevard at the cleared channel following maintenance (MMP Map 71; Figure 3).  (April 28, 2016; 7:58am)

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