

INDIVIDUAL BIOLOGICAL ASSESSMENT REPORT

Site Name/Facility: Smythe Channel Emergency Maintenance
Master Program
Map No.: 130
Date: June 14, 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 Smythe Channel (MMP Map 130; 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 Smythe channel (MMP Map 130; Figure 3) is an unnamed tributary to the Tijuana River (Hydrologic Unit Basin Number 11.11) and is generally located south of CA-905, north of the Shooting Star Dr., west of the Picador Blvd., and east of Del Sur Blvd. in the San Ysidro community planning area within the City of San Diego. This length of channel is an earthen-bottom channel (MMP Map 130; Figure 3). There is a single, linear length of channel proposed for emergency maintenance that extends from the east end of the channel from a three-box culvert under Picador Blvd. west approximately 1,392 feet downstream with an average bottom width of approximately 20 feet and an average top width of 47 feet. The Smythe channel emergency maintenance area 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 the earthen maintenance area of the channel during the week of November 13th and December 17th, 2015. The City's assessment determined that accumulated sediment, freshwater marsh, and riparian scrub (southern willow scrub) vegetation had accumulated throughout the length of the channel and were contributing to flood risk and reduced capacity of the channel (MMP Map 130, Figure 3). Prior to maintenance, City engineers estimated the pre-maintenance capacity of the channel was at a 2-year storm capacity, whereas the as-built condition is 25-year capacity.

Emergency maintenance of the channel included the removal of all existing sediment and vegetation (MMP Map 130; Figure 3). Land covers and vegetation impacted by the project included 0.39 acres of riparian scrub

(southern willow scrub) and 0.20 acres of freshwater marsh. Total impacts to ACOE/RWQCB/CDFW jurisdictional areas was 0.59 acre (1,392 linear feet) of wetland waters of the U.S. within the proposed emergency maintenance section. There was an additional 0.38 acre of riparian scrub (southern willow scrub) removed that was above the Ordinary High Water Mark (OHWM) and under CDFW jurisdiction only. In addition to these jurisdictional impacts, 0.59 acre of disturbed land, 0.08 acre of ornamental/non-native vegetation, and 0.03 acre non-native grassland (non-jurisdictional uplands) were cleared to access and re-establish the channel. As a result of maintenance activities, the channel was restored to its 25-year storm, as-built capacity, which is the minimum necessary capacity for this channel in order to prevent damage from flooding of properties adjacent to this channel.

Survey Methods and Date

Biological Survey and Site Assessment

Dudek conducted the biological survey and site assessment on November 13, 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 land 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, Ryan Layden, Sean Harris, and Alicia Omlid were the primary monitors during the Smythe channel emergency maintenance work, which began on February 3, 2016 and ended on April 21, 2016. Crews did not work during rain events or if 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 Tracksteer/Bobcat, Loader, Gradall/Excavator, extended-arm Gradall, chainsaws, and dump trucks were the primary tools used to remove material from the channel. An earthen berm was built directly downstream of the three box culvert outlet on the east end of the channel in order to stop downstream flows from entering the work area. Then a pump diversion system was installed to allow these flows to be diverted along the channel bank and downstream of the maintenance. The Loader began by clearing vegetation from the access road along the north bank of the channel. Hand crews entered and began cutting down the trees and vegetation along the bottom and banks of the channel. The Gradall/Excavator and extended-arm Gradall then worked from the northern bank access road and reached into the channel to clear sediment, remaining vegetation, and debris and loaded it directly into dump trucks. Once the material was loaded into dump trucks, it was taken directly to Miramar Landfill for disposal.

Following initial sediment and vegetation removal from the channel, a contractor was hired by the City to remove debris from the upstream three-box culvert using hand tools and tractor trucks. Prior to the end of the 90-day RGP 63 authorization period, the Contractor conducted final minor grading to create positive downstream flow in the east end of the channel from the three-box culvert outlet to the first grade control structure (concrete energy-dissipator). All work was monitored by a qualified biologist. Native American and archaeological monitors were also on-site, as needed. All equipment was removed from the site at the end of the project.

Biological Resources:

Stream Type: Perennial Intermittent Ephemeral

The channel is likely to have intermittent flows during normal climactic conditions. Collected sediments and areas with unmanaged vegetation and a combination of large exotic and native plant growth occurring within 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 three land cover type and four vegetation communities were identified during this assessment: developed land, developed land (energy dissipator), disturbed land, non-native vegetation / ornamental plantings, non-native grassland, freshwater marsh (earthen), riparian scrub (southern willow scrub). The staging and access area was located within existing disturbed lands and developed areas north of the maintenance area (not listed in Table 1).

Vegetation community acreages within the 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
Developed Land	IV	0.02
Developed Land (Energy Dissipator)	IV	<0.001
Disturbed Land	IV	0.59
Non-Native Vegetation / Ornamental Plantings	IV	0.08
Non-native Grassland	IIIB	0.03
Freshwater Marsh (earthen)	Wetland	0.2
Riparian Scrub (southern willow scrub)	Wetland	0.77
Total		1.69

These habitats and land covers are described below:

Developed Land

Developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape. Typically, this land cover type is unvegetated or contains maintained landscaping. Urban/developed land is not regulated by the environmental resource agencies and are included within the disturbed category according to the City’s Biology Guidelines (City of San Diego 2012). This land cover is ranked as Tier IV and is not considered special status under the City’s Subarea Plan. Within the maintenance area, this land cover consists of the downstream culvert at the west end of the channel and its supporting structure.

Developed Land (Energy Dissipator)

Developed land (energy dissipator) represents three specific areas along the length of the maintenance area that were constructed along in order to control flow velocities within the channel. This land cover type is unvegetated and has a limited area. This land cover type is not regulated by the environmental resource agencies and falls within the disturbed category in the City’s Biology Guidelines (City of San Diego 2012). This land cover is ranked as Tier IV and is not considered special status under the City’s Subarea Plan.

Disturbed Land

Disturbed land is mapped intermittently along the northern and southern banks of the Smythe channel, which include an access road and also 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%. The areas of disturbed land impacted by emergency maintenance area supported mostly bare ground and scattered exotic annuals. The access road had been previously utilized as an access location for the channel. Disturbed land is not regulated by the

environmental resource agencies and are included within the disturbed category according to the City's Biology Guidelines (City of San Diego 2012). This land cover is ranked as Tier IV and is not considered special status under the City's Subarea Plan. Impacts to disturbed land does not require mitigation.

Non-Native Vegetation / Ornamental Plantings

The non-native vegetation / ornamental plantings section is mapped along the south bank in the east end of the channel. This land cover represents areas where non-native ornamental species and landscaping schemes have been installed and maintained. In the areas mapped, this land cover is dominated by Mexican fan palm (*Washingtonia robusta*) Ornamental plantings are not regulated by the environmental resource agencies and are included within the disturbed category according to the City's Biology Guidelines (City of San Diego 2012). This land cover is ranked as Tier IV and is not considered special status under the City's Subarea Plan. Impacts to these areas do not require mitigation.

Non-Native Grassland

The community mapped as non-native grassland is a small portion of the northern bank of the channel on the western end of the channel that supported a predominance of exotic grasses, such as bromes (*Bromus* spp.). This vegetation community is ranked as Tier IIIB according to the City's Biology Guidelines (City of San Diego 2012). This area is completely surrounded by urban development and too small to be considered habitat for raptor foraging or other special status species uses (e.g. burrowing owl).

Freshwater Marsh (earthen)

Where habitat was mapped as freshwater marsh (earthen), the channel had areas of accumulated sediment with a dominant (>70%) cover of Cattails (*Typha latifolia*) with very few other species mixed in. This vegetation community is considered a Wetland by the City's Biology Guidelines (City of San Diego 2012) and impacts to it require mitigation This habitat occurs intermittently across the entire maintenance section (MMP Map 130; Figure 3).

Riparian Scrub (Southern Willow Scrub)

Where habitat is mapped as riparian scrub (southern willow scrub), the channel canopy cover was approximately 70% black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), or narrowleaf willow (*Salix exigua*). This vegetation community is considered a Wetland by the City's Biology Guidelines (City of San Diego 2012) and impacts to it require mitigation. This is the dominant vegetation community and exists throughout the emergency maintenance area (Figure 3).

Wildlife Value

Although the habitats within the emergency channel maintenance area are isolated by existing development, they do have the potential to serve a moderate value to wildlife due to the continuous wetland (i.e. willow) habitat present.

Wildlife Observed

California towhee
Red-shouldered hawk
Yellow warbler
American crow
Turkey vulture
Bushtit
Black Phoebe
Anna's hummingbird
Mourning Dove
Rock dove
House sparrow
Song 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, trails, and patches of invasive weed species brought into the earthen channel, which have spread through landscaping, highway projects, etc., and have led to the establishment of patches of exotics, including himalayan blackberry (*Rubus discolor*). This habitat on site is not suitable for rare plant species.

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

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 main segment of the channel (MMP Map 130; Figure 3). 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 banks of the channel containing wetland vegetation were considered under the joint jurisdiction of ACOE, RWQCB, CDFW, and City. Additional wetland vegetation was located above the defined limits of the channel and was considered CDFW and City jurisdictional wetland only.

The emergency maintenance impacted the full 47-foot width within the maintenance area in order to restore the as-built conditions of the channel and this included some non-jurisdictional upland areas. The impacts to jurisdictional areas are described in Table 2 below.

Table 2. Impacts to Jurisdictional Wetland Habitat

Vegetation Community or Land Cover Type	ACOE, RWQCB, CDFW, and City Jurisdictional Acreage; Wetland Waters of the U.S.	CDFW/City Only Jurisdictional Acreage; Wetlands	Total Impact Acreage
Freshwater Marsh (earthen)	0.2	0	0.2
Riparian Scrub (southern willow scrub)	0.39	0.38	0.77
Total	0.59	0.38	0.97

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

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

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 checked="" 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"/> Ridgeway's 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).

Moderate potential for Least bell's vireo – there was willow habitat within the maintenance area; however it was isolated by surrounding urban development making presence of the species unlikely. No Least bell's vireo were detected during the maintenance.

No potential for willow flycatcher – the willow habitat within the maintenance area was not large enough for this species to occur

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 muddy open channel areas that could provide suitable foraging for California least tern.

No potential for Ridgeway's rail- this species typically prefers bays with cordgrass. No suitable habitat is present.

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

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:

No listed plant species were observed during the biological site assessment.

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

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. Nesting surveys were also conducted concurrently prior to all work and no nests or sensitive species nesting behavior

were observed.

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?

Nesting surveys were conducted 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 native vegetation communities are freshwater marsh and riparian scrub (southern willow scrub) and riparian scrub (disturbed mulefat scrub). These habitats are small and isolated within the channel limits with little to no connectivity to downstream native habitats. The surrounding land cover includes urban/developed land cover, which consists of paved City streets and commercial development.

MAINTENANCE IMPACTS

Emergency Maintenance Methodology:

In the emergency maintenance section located adjacent to 3684 Shooting Star Dr. San Diego, CA (MMP Map 130, Figure 3), all sediment, vegetation, and debris were removed from the channel in order to restore the as-built condition. The Tracksteer/Bobcat, Loader, Gradall/Excavator, extended-arm Gradall, chainsaws, and dump trucks were the primary tools used to remove material from the channel. The Loader began by clearing vegetation from the access road along the north bank of the channel. Hand crews entered and began cutting down the trees and vegetation along the bottom and banks of the channel. The Gradall/Excavator and extended-arm Gradall then worked from the northern bank access road and reached into the channel to clear sediment, remaining vegetation, and debris and loaded it directly into dump trucks. Once the material was loaded into dump trucks, it was taken directly to Miramar Landfill for disposal. An earthen berm was built directly downstream of the three box culvert outlet on the east end of the channel in order to stop downstream flows from entering the work area. Then a pump diversion system was installed to allow these flows to be diverted along the channel bank and downstream of the maintenance.

Following the initial debris and vegetation removal, a storm event washed material downstream into the culvert under Picador Blvd. Crews re-entered the channel and removed this debris from within the three-box culvert at the upstream end of the channel. Prior to the end of the 90-day RGP 63 authorization period, the Contractor also conducted a final minor grading to remove a small layer of sediment within the eastern section of the earthen channel in order to create positive downstream flows below the culvert outlet to the first grade control structure.

All work was monitored by a qualified biologist. Native American and archaeological monitors were on-site, as needed. All equipment was removed from the site at the end of the project.

Vegetation Impacts:

(See Table 1 above)

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

While there was a moderate potential for Least bell's vireo to occur within the work area, this species was not detected during the any of the full days of biological monitoring observations conducted prior to and during maintenance activities. The loss of habitat within this highly urbanized area would not significantly impact this species, as it does not have connectivity to any other native habitats and is therefore not suitable for breeding or foraging.

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 primary maintenance section. Vegetation communities and land covers that were removed as part of this maintenance were 0.39 acres of riparian scrub (southern willow scrub) and 0.20 acres of freshwater marsh. Total impacts to ACOE/RWQCB/CDFW jurisdictional areas was 0.59 acre (1,392 linear feet) of wetland waters of the U.S. within the proposed emergency maintenance section (MMP Map 130; Figure 3). There was also 0.38 acre of riparian scrub (southern willow scrub) removed that was above the Ordinary High Water Mark (OHWM) and under CDFW jurisdiction only. In addition to these jurisdictional impacts, 0.59 acre of disturbed land, 0.08 acre of ornamental/non-native vegetation, and 0.03 acre non-native grassland (non-jurisdictional uplands) were cleared to access and re-establish the channel.

USACE/RWQCB/CDFW Jurisdictional Wetlands:

The USACE authorized the proposed maintenance on January 22, 2016 through issuance of a Regional General Permit 63 Authorization (SPL-2015-00942-RAG). Non-Discretionary Special Condition #4 of the authorization states that the "To mitigate for impacts to [0.59] acre of wetland waters of the U.S., the Permittee shall purchase mitigation credits at a Corps-approved mitigation bank at a minimum of 3 to 1 ratio (i.e. [1.77] acre). Prior to purchasing the credits, the Permittee must receive approval of the mitigation bank and credit type proposed to be purchased. If credits are not available at a Corps-approved mitigation bank in the service area of the project and with the correct type of credit the Permittee shall provide a draft Habitat Mitigation and Monitoring Plan (HMMP) outlining the proposed mitigation within 90 days. The draft HMMP shall meet all the requirements outlined in 33 CFR 332, including providing justification for the site selection and how the mitigation addresses the needs of the watershed. The credits proposed for purchase or the draft HMMP must be submitted to the Corps within 45 days of project completion." A subsequent mitigation plan or purchase of approved mitigation credits totaling 1.77 acre was provided to the USACE and San Diego RWQCB.

It should be noted that since the USACE 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 emergency maintenance activities, it typically does not require compensatory mitigation for these activities.

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, 3:1 for riparian habitat, and 4:1 for freshwater marsh and 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 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 0.2 acre of freshwater marsh and 0.77 acre of riparian scrub (southern willow scrub). A total of 0.97 acres of mitigation is required to mitigate for these one-time temporary impacts. 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. Mitigation for permanent impacts would total 3.11 acres (0.8 ac freshwater marsh and 2.31 acres of riparian scrub (southern willow scrub).

Mitigation Description/Location

The mitigation site/bank location is located within the Tijuana River Valley in San Diego, CA. The nearest cross streets are Hollister St. and Monument Rd. At a minimum, in accordance with the SDP, 0.97 acres of mitigation will be implemented or secured within one year of the impact (i.e., by February 3, 2017). The San Diego RWQCB has not indicated a timing requirement associated with the 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-2015-00887-RAG

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

City of San Diego. 2012. San Diego Land Development Code Biology Guidelines. Amended April 23, 2012 by Resolution No. R-307376.

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

SITE PHOTOS

Photograph Log

Photograph 1: Looking downstream from the eastern end of the channel above the Picador Blvd. culvert outlet at vegetation build up in the channel and on the access road prior to maintenance (MMP Map 130; Figure 3).



(November 15, 2015, 8:42am)

Photograph 2: Looking east from the downstream end of the channel near Del Sur Blvd. at vegetation and sediment build up prior to maintenance (MMP Map 130; Figure 3).



(November 15, 2015, 11:36am)

Photograph 3: Looking downstream from the eastern end of the channel above the Picador Blvd. culvert outlet as the Excavator breaks down large vegetation within the channel. The bypass pump is also pictured above the channel (MMP Map 130; Figure 3).



(February 3, 2016)

Photograph 4: Looking west from the east end of the channel as the Tracksteer/Bobcat clears vegetation and debris from the access road north of the channel (MMP Map 130; Figure 3).



(February 3, 2016)

Photograph 5: Looking downstream from the eastern end of the channel above the Picador Blvd. culvert outlet after the majority of the vegetation had been cleared from the east end of the channel (MMP Map 130; Figure 3).



(February 3, 2016)

Photograph 6: Looking east upstream from the north side of the channel just above one of the concrete energy dissipator near the center of the maintenance area at the cleared section of the channel (MMP Map 130; Figure 3).



(February 10, 2016; 11:42am)

Photograph 7: Looking upstream from the north bank in the west end of the channel as Urban Corps crews clear the remaining vegetation from within the channel by hand (MMP Map 130; Figure 3).



(February 10, 2016; 1:05pm)

Photograph 8: Looking downstream from the eastern end of the channel above the Picador Blvd. culvert outlet at the completed channel following the removal of all vegetation and sediment (MMP Map 130; Figure 3).



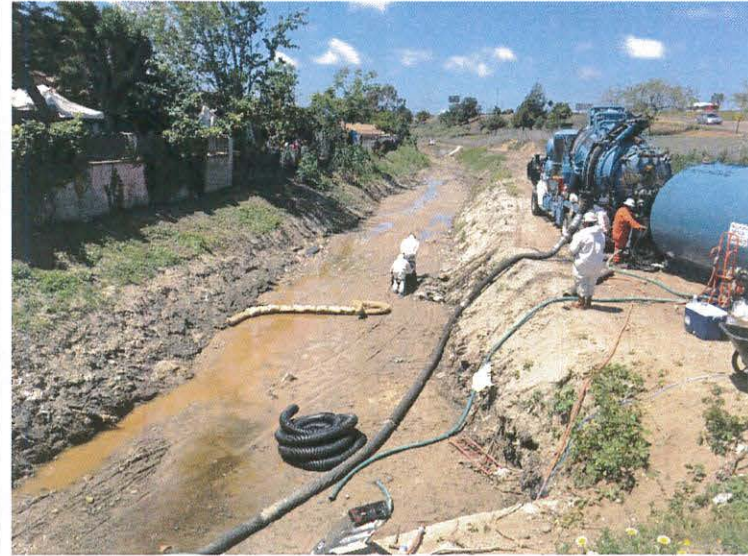
(February 16, 2016; 2:41pm)

Photograph 9: Looking downstream from the west end of the channel at the culvert inlet that carries flows under Del Sur Blvd. after the completion of the maintenance (MMP Map 130; Figure 3).



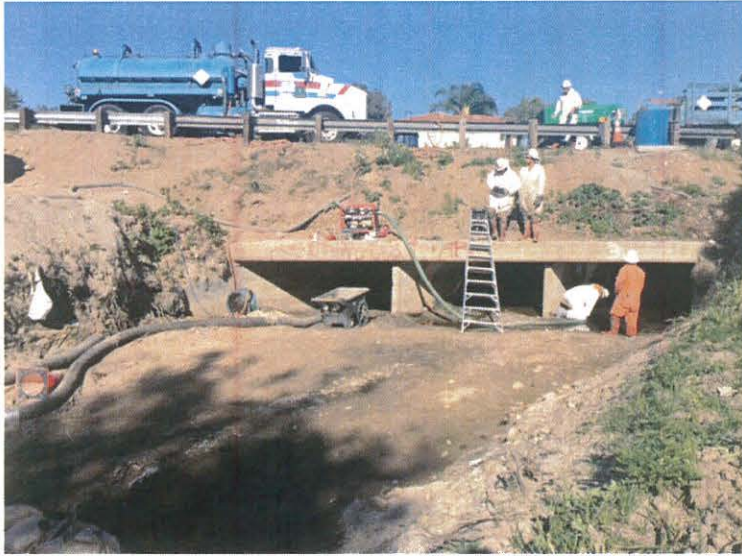
(February 16, 2016; 2:20pm)

Photograph 10: Looking downstream from the eastern end of the channel above the Picador Blvd. culvert outlet as crews re-enter the channel in order to access and clear debris and sediment from the culvert outlet itself (MMP Map 130; Figure 3).



(April 12, 2016; 12:39pm)

Photograph 11: Looking upstream at the three-box culvert outlet under Picador Blvd. as crews clear sediment and debris from within the culvert itself (MMP Map 130; Figure 3).



(April 19, 2016; 4:40pm)

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: Upland impacts shall be mitigated through payment into the City's Acquisition Fund, acquisition and preservation of specific land, or purchase of mitigation credits in accordance with the ratios identified in Table 4.3-11. Upland mitigation shall be completed within six months of the date the related maintenance has been completed. The mitigation ration identified for Non-native Grassland is 0.5:1 since impacts occurred outside of the MHPA.

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)_{Leq} 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