THE CITY OF SAN DIEGO

# M E M O R A N D U M

DATE: July 7, 2018

TO: Myra Medel, Senior Planner- Transportation & Storm Water-MS 46

FROM: Helene Deisher, Development Project Manager, Development Services Department, MS - 302

SUBJECT: Montezuma Creek MMP 66 (SCR), Project Review, Project No. 608835 Department IO 21003732

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The Development Services Department has completed its first Substantial Conformance Review (SCR) for the above-mentioned project. The project proposes maintenance under the Master Storm Water System Maintenance Program (MMP), Amended Site Development Permit (SDP) No. 2034245 and Program Environmental Impact Report 42891/SCH 2004101032, to conduct maintenance activities in Reach 2 of Montezuma Creek. The project area is in the channel between 54th Street and Collwood Boulevard just east of the Collwood Villa Apartment Complex located at 4819-4899 Collwood Boulevard. The work will repair and protect the existing concrete lined and earthen bottom channel and reduce flooding hazards related to potential clogging of the downstream culvert. The work includes a new row of steel posts to catch debris; installation of a check dam consisting of steel posts and chain-link fence to slow water velocity and reduce erosion; removal of exotics with the stumps left in place to reduce flow velocity; and repair of damaged concrete.

The first review has determined that the proposed maintenance work under the MMP requires additional information be provided for the MSCP Reviewer to clarify the maintenance work and mitigation before an SCR can be determined or approved. Until these issues can be clarified the environmental processing timeline will be held in abeyance.

Please see the attached project comments. You may provide your answers via e-mail to me and copy the reviewers (MSCP and Environmental).

If you have any questions, please contact me at (619) 446-5223 or via e-mail at hmdeisher@sandiego.gov .

_____

Helene Deisher
Development Project Manager

Attachment:
1.) Cycle Issues Report No. 1 & 2

cc: Project File
Reviewing Staff

# Cycle Issues

THE CITY OF SAN DIEGO
Development Services Department
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

## Project Information

**Project Nbr:** 608835 **Title:** Montezuma Creek MMP 66 SCR
**Project Mgr:** Deisher, Helene (619) 446-5223 hmdeisher@sandiego.gov

## Review Information

| | | | | |
|---|---|---|---|---|
| **Cycle Type:** | 1 Submitted (Multi-Discipline) | **Submitted:** | 05/25/2018 | Deemed Complete on 05/25/2018 |
| **Reviewing Discipline:** | LDR-Planning Review | **Cycle Distributed:** | 05/25/2018 | |
| **Reviewer:** | **Brunette, Mark** | **Assigned:** | 06/06/2018 | |
| | **(619) 446-5379** | **Started:** | 06/12/2018 | |
| | MBrunette@sandiego.gov | **Review Due:** | 06/25/2018 | |
| **Hours of Review:** | 0.50 | **Completed:** | 06/12/2018 | **COMPLETED ON TIME** |
| **Next Review Method:** | Submitted (Multi-Discipline) | **Closed:** | 07/09/2018 | |

. The review due date was changed to 06/28/2018 from 06/28/2018 per agreement with customer.
. We request a 2nd complete submittal for LDR-Planning Review on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Last month LDR-Planning Review performed 116 reviews, 81.9% were on-time, and 31.5% were on projects at less than < 3 complete submittals.

### Cycle 1 - 6/12/18

#### SDP SCR

| Cleared? | Issue Num | Issue Text |
|---|---|---|
| ☒ | 1 | Proposed maintenance of Montezuma Creek Channel (MSWMP Map No. 66) is included in the scope of the Master Storm Water Maintenance Program (MSWMP). The scope of work described in the submitted project memo and maintenance plans substantially conforms to the requirements of SDP 1134892 for the MSWMP. LDR-Planning Review will defer to the Plan-MSCP and Plan-Environmental Review disciplines in terms of the project's consistency with the MSCP Subarea Plan and the requirements of CEQA. (New Issue) |

For questions regarding the 'LDR-Planning Review' review, please call Mark Brunette at (619) 446-5379. Project Nbr: 608835 / Cycle: 1

# Cycle Issues

THE CITY OF SAN DIEGO
Development Services Department
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

## Review Information

| | | | | |
|---|---|---|---|---|
| **Cycle Type:** | 1 Submitted (Multi-Discipline) | **Submitted:** | 05/25/2018 | Deemed Complete on 05/25/2018 |
| **Reviewing Discipline:** | Community Planning Group | **Cycle Distributed:** | 05/25/2018 | |
| **Reviewer:** | **Deisher, Helene** | **Assigned:** | 06/06/2018 | |
| | **(619) 446-5223** | **Started:** | 06/06/2018 | |
| | hmdeisher@sandiego.gov | **Review Due:** | 06/25/2018 | |
| **Hours of Review:** | 1.00 | **Completed:** | 06/06/2018 | **COMPLETED ON TIME** |
| **Next Review Method:** | Conditions | **Closed:** | 07/09/2018 | |

. The review due date was changed to 06/28/2018 from 06/28/2018 per agreement with customer.
. We request a 2nd complete submittal for Community Planning Group on this project as: Conditions.
. The reviewer has requested more documents be submitted.
. Your project still has 1 outstanding review issues with Community Planning Group (all of which are new).
. Last month Community Planning Group performed 77 reviews, 44.2% were on-time, and 28.9% were on projects at less than < 3 complete submittals.

## New Issue Group (3217265)

| Cleared? | Issue Num | Issue Text |
|---|---|---|
| ☐ | 1 | Please contact the Chair for the College Area Community Planning Board, (as identified in the assessment letter) to make arrangements to present your project for review at their next available meeting. This Community Plannig Group is officially recognized by the City as a representative of the community, and an advisor to the City in actions that would affect the community. The Development Services Department has notified the group of your request and has sent them a copy of your project plans and documents. (New Issue) |

For questions regarding the 'Community Planning Group' review, please call Helene Deisher at (619) 446-5223. Project Nbr: 608835 / Cycle: 1

# Cycle Issues

THE CITY OF SAN DIEGO
Development Services Department
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

## Review Information

| | | | | |
|---|---|---|---|---|
| **Cycle Type:** | 1 Submitted (Multi-Discipline) | **Submitted:** | 05/25/2018 | Deemed Complete on 05/25/2018 |
| **Reviewing Discipline:** | Plan Environmental | **Cycle Distributed:** | 05/25/2018 | |
| **Reviewer:** | **Morrison, Susan** | **Assigned:** | 06/01/2018 | |
| | **(619) 533-6492** | **Started:** | 06/01/2018 | |
| | SIMorrison@sandiego.gov | **Review Due:** | 06/28/2018 | |
| **Hours of Review:** | 4.00 | **Completed:** | 06/27/2018 | **COMPLETED ON TIME** |
| **Next Review Method:** | Submitted (Multi-Discipline) | **Closed:** | 07/09/2018 | |

. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: First Review Issues.
. We request a 2nd complete submittal for Plan Environmental on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 2 outstanding review issues with Plan Environmental (all of which are new).
. Last month Plan Environmental performed 1 reviews, 100.0% were on-time, and 100.0% were on projects at less than < 3 complete submittals.

## Env Review - 6/28/2018

| Cleared? | Issue Num | Issue Text |
|---|---|---|
| ☐ | 1 | WPCP - The last sentence in the Project Scope in Table 2 (p. 3) conflics with page 16 of the IHHA (Appendix D), which states that further studies will need to be performed to analyze the cost and feasibility of repairing missing and broken concrete at this location. In addition, the repair of this concrete in the downstream portion is not included as a project activity in the Memorandum or in any of the other appendicies. Table 2, Project Scope, also does not include the removal of the palm tree growing out of the crack in the concrete lining and repair of the crack. (New Issue) |
| ☐ | 2 | Plan Environmental is awaiting completion of MSCP's review and any comments before making an environmental determination regarding the SCR. (New Issue) |

For questions regarding the 'Plan Environmental' review, please call Susan Morrison at (619) 533-6492. Project Nbr: 608835 / Cycle: 1

# Cycle Issues

THE CITY OF SAN DIEGO
Development Services Department
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

## Project Information

**Project Nbr:** **608835** **Title:** Montezuma Creek MMP 66 SCR
**Project Mgr:** Deisher, Helene (619) 446-5223 hmdeisher@sandiego.gov

## Review Information

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|---|---|---|---|---|
| **Cycle Type:** | 2 Plan-MSCP (Submit) | **Submitted:** | 05/25/2018 | Deemed Complete on 06/28/2018 |
| **Reviewing Discipline:** | Plan-MSCP | **Cycle Distributed:** | 06/28/2018 | |
| **Reviewer:** | **Smit-Kicklighter, Holly** | **Assigned:** | 06/29/2018 | |
| | **(619) 236-6621** | **Started:** | 07/06/2018 | |
| | hsmit@sandiego.gov | **Review Due:** | 07/03/2018 | |
| **Hours of Review:** | 6.00 | **Completed:** | 07/09/2018 | **COMPLETED LATE** |
| **Next Review Method:** | Submitted (Multi-Discipline) | **Closed:** | 07/09/2018 | |

. The review due date was changed to 07/03/2018 from 07/27/2018 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: First Review Issues.
. We request a 2nd complete submittal for Plan-MSCP on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 8 outstanding review issues with Plan-MSCP (all of which are new).
. Last month Plan-MSCP performed 16 reviews, 6.3% were on-time, and 50.0% were on projects at less than < 3 complete submittals.

## MSCP 1st Revieew

| Cleared? | Issue Num | Issue Text |
|---|---|---|
| ☐ | 1 | MEMO & IBA Figure 4 - In the memo and IBA, please explain if the earthen ramp is existing or proposed & show location on figure 4. (New Issue) |
| ☐ | 2 | IBA - Tables 5 & 6 proposed wetland mitigation ratios (i.e. disturbed wetland and streambed mitigation of 1:1) does not match Table 11-1 Wetland Mitigation Ratios in the PEIR MMRP (wherein disturbed wetland & streambed is to be mitigated at 2:1). Please correct. Also the discretionary documents do not have different mitigation tables for City, state and federal impacts that you have here. Please correct discrepancies per direction in #4 below. (New Issue) |
| ☐ | 3 | IBA - Table 7 proposed wetland mitigation ratio (i.e. disturbed wetland 0:1 ratio) does not match Table 11-1 Wetland Mitigation Ratios in the PEIR MMRP (wherein disturbed wetland is to be mitigated at 2:1). Please correct discrepancies per direction in #4 below. (New Issue) |
| ☐ | 4 | IBA - Existing Conditions - The description of disturbed wetlands does not explain that it is palm dominated. Also palm dominated does not preclude any natives and the fact that disturbed wetland is considered a 2:1 mitigable habitat per the City's 2012 Biology Guidelines and the discretionary documents for the PEIR. Please revise to match Biology Guidelines and approved PEIR or refer back to the impact section wherein it is stated that only palms will be removed and other existing veg will be left in place as a reason for 0:1 ratio (i.e. work in that area is essentially restoration). (New Issue) |
| ☒ | 5 | IBA - Permanent impacts - using the term permanent implies that there could be temporary impacts. In this case since all impacts are considered permanent, why is the reference needed.<br>CLEARED AS INFORMATIONAL. (New Issue) |
| ☐ | 6 | IBA - Mitigation - WQ-2 - Remove erosion control features unless greater environmental impact would occur than leaving them in place. - Please consider specifying no plastic netting be left in place from fiber rolls or fiber rolls be covered in jute to avoid trapping small animals on-site. (New Issue) |
| ☐ | 7 | IBA- Mitigation BIO-6 measure - specify environmental hygiene for the equipment being used so no rhizome, seeds, etc will be tracked out to new sites on the equipment/shoes etc.<br>(New Issue) |
| ☐ | 8 | IBA Attachment A - Table 4.3-10 - Please add streambed/natural flood channel to the Table to make it consistent with Table 11-1 of the PEIR MMRP. (New Issue) |
| ☐ | 9 | For all the mitigation ratio comments above, make it clear that CDP condition 9e applies because only non-native elements of the disturbed wetland would be removed and therefore the ratio is consistent with the CDP and justifies why the SDP , the PEIR and the 2012 Biology Guideline inconsistency is justified. This info should also be included in the Memo's in a clear manner. Also explain why the CDP is applicable in a non-coastal zone.<br>(New Issue) |

For questions regarding the 'Plan-MSCP' review, please call Holly Smit-Kicklighter at (619) 236-6621. Project Nbr: 608835 / Cycle: 2

| | |
|---|---|
| **From:** | Medel, Mayra |
| **To:** | Smit-Kicklighter, Holly; Deisher, Helene; Morrison, Susan |
| **Cc:** | Herrmann, Myra; Nazareno, Angela; Rothman, Christine |
| **Subject:** | RE: Project Review Memo 7-7-18.pdf For Montezuma Creek MMP 66 PTS 608835 (NEEDS ASSIGNMENT) |
| **Date:** | Tuesday, July 17, 2018 4:44:00 PM |
| **Attachments:** | RE Project Review Memo 7-7-18.pdf For Montezuma Creek MMP 66 PTS 608835.msg |

Hi Helene and all,

It has come to my attention that there is a typo in the response memo I sent over via email on Friday, 7/13 (original email attached). The last sentence on page 2 states, "Condition 16 of the…" This a typo and should read, "Condition 15 of the…" Please accept this email as record of correction to that typo. Please let me know if you have any questions about this, and my apologies for any confusion.

Thank you,
Mayra Medel
(619) 527-3449

THE CITY OF SAN DIEGO

# MEMORANDUM

DATE: July 13, 2018

TO: Helene Deisher, Development Project Manager II, Development Services Department

FROM: Mayra Medel, Senior Planner, Transportation & Storm Water Department

SUBJECT: City of San Diego Master Storm Water System Maintenance Program (MMP) Substantial Conformance Review for Montezuma Creek Channel FY19 Routine Maintenance Project, MMP Map 66, PTS 608835 and I/O #: 21003732

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This memo provides Transportation & Storm Water Department's (T&SWD) formal written response to the issues identified in the Cycle 1 Issues Report No. 1 and 2 for the Montezuma Creek Channel FY19 Routine Maintenance Project (MMP Map 66) (PTS 608835) substantial conformance review (SCR) package. The Cycle 1 Issues Report No. 1 & 2 was provided to Mayra Medel July 10, 2018 via email.

**LDR – Planning Review**

*Issue Number 1*: Comment noted. We also acknowledge this comment has been cleared.

**Community Planning Group**

*Issue Number 1*: Comment noted. T&SWD staff contacted Mr. Jose Reynoso, Chair of the College Area Community Planning (CP) Board, to discuss the subject project on Friday, June 22, 2018. Mr. Reynoso sent T&SWD staff an email on Monday, June 25, 2018, stating that the College Area CP Board determined a presentation was not necessary and that the Board would vote to approve the project at its July 11, 2018 meeting. T&SWD staff provided email verification of this email exchange to Helene Deisher on Tuesday, June 26, 2018. T&SWD staff attended the College Area CP Board meeting on July 11, 2018, during which the Board voted unanimously to recommend approval of the project.

**Plan Environmental**

*Issue Number 1*: Comment noted. Table 2 of the Water Pollution Control Plan (WPCP) is intended to provide a summary of the project scope, not a full detailed project description. Table 2 of the WPCP in question intentionally references the Individual Hydrologic and Hydraulic Assessment (IHHA) prepared by Rick Engineering for the project because the IHHA is the document that contains the detailed maintenance recommendations. Furthermore, the WPCP includes as an attachment the

project's Individual Maintenance Plan (IMP), which is the engineering drawing that details out the specific project components. Although Table 2 of the WPCP broadly states that broken concrete would be repaired, our SCR application and supporting technical studies clearly state that the only concrete repair proposed by the project is to the small patch of concrete where the palm tree is currently growing out of. The Addendum Letter prepared by Rick Engineering included as part of the WPCP further reiterates that the WPCP is valid for the proposed Montezuma project, whose individual components are detailed in the attached IMP. This explanation was emailed to Susan Morrison on June 28, 2018, and was determined to be satisfactory.

*Issue Number 2*: Comment noted. Responses to MSCP's comments are provided below.

**MSCP**

*Issue Number 1*: The earthen ramp that will be used to enter and exit the channel is existing. As explained on page 13 of the Individual Biological Assessment (IBA), equipment will enter the channel from the access/loading area via an earthen ramp adjacent to the southwestern end of the channel reach. The access/loading area boundary is outlined in peach in Figures 2 and 3 of the IBA. The existing earthen ramp is along the northern boundary of the access/loading area where it meets the channel (shown as Reach 2 Maintenance Activities, outlined in burgundy). Figure 2 of the IBA and Jurisdictional Delineation memo has been revised to include an arrow pointing to the location of the existing earthen ramp (see Figure 2 in Attachment 1 to this email).

*Issue Number 2*: Tables 5 and 6 of the IBA reflect the mitigation ratios required by the U.S. Army Corps of Engineers/Regional Water Quality Control Board and California Department of Fish and Wildlife, respectively, for impacts to resources within their jurisdiction. These Regulatory Agencies are not subject to the mitigation ratios established in the MMP Program Environmental Impact Report (PEIR) Mitigation Monitoring and Reporting Program (MMRP). The Regulatory Agencies are independent federal and state jurisdictions that require mitigation ratios to be in accordance with their own respective regulations, including the Clean Water Act and the California Fish and Game Code. As indicated in Mitigation Measure 4.3.9 of the PEIR MMRP, included as Exhibit A to Site Development Permit (SDP) No. 2034245 (Amendment to SDP No. 1134892), "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." The approved SDP (amended to SDP No. 2034245 in February 2018) was included as Attachment 6 to the SCR package (on CD) and is also available for download from T&SWD's website here: https://www.sandiego.gov/stormwater/services/mswsmp. Therefore, no revisions to the mitigation ratios for disturbed wetland or streambed shown in Tables 5 or 6 are necessary.

*Issue Number 3*: As described in the paragraph preceding Table 7 in the IBA (see page 18), the City wetland mitigation ratios for this project must be and are consistent with those identified in approved SDP No. 1134892 (amended to SDP No. 2034245 in February 2018) for the MMP. The approved SDP dictates the ratios that are required for the MMP (ratios required for the MMP are different than the MMP PEIR MMRP). The approved SDP was included as Attachment 6 to the SCR package (on CD). Per this requirement, mitigation ratios do not need to be consistent the ratios in the MMP PEIR MMRP, instead, they need to be consistent with the approved SDP. Condition 16 of the

approved SDP requires the Permittee to comply with Special Conditions 9.a, 9.c, 9.d, 9.e, 10, and 11 as referenced in the California Coastal Commission's Coastal Development Permit (CDP) No. A-6-NOC-11-086 in the entire MMP. The CDP, included as Exhibit B in the approved SDP, identifies that removal of arundo and other exotic, invasive vegetation (i.e., palm trees) is not considered an impact to wetlands requiring mitigation. Furthermore, as described in the Maintenance Impact section of the IBA (starting on page 12), vegetation removal associated with the project would be limited to cutting down of existing palm trees. All other existing vegetation would be left in place. Therefore, no revisions to the mitigation ratios for disturbed wetland shown in Table 7 are necessary.

*Issue Number 4*: As indicated in the response to Issue Number 3 above, the approved SDP and CDP identify that removal of arundo and other exotic, invasive vegetation (i.e., palm trees) is not considered an impact to wetlands requiring mitigation. Furthermore, as described in the Maintenance Impact section of the IBA (starting on page 12), vegetation removal associated with the project would be limited to cutting down of existing palm trees. All other existing vegetation would be left in place. Therefore, the proposed mitigation ratio of 0:1 for the project is consistent with the requirements of the approved SDP.

*Issue Number 5*: Comment noted. We also acknowledge this comment has been cleared.

*Issue Number 6*: Comment noted. Per MMP Maintenance Protocol WQ-2, erosion control BMPs are installed as needed and are specific to each site. T&SWD's standard practice for projects that involve installation of BMPs includes routine inspection of those BMPs to ensure their effectiveness. If plastic netting from fiber rolls is observed during the inspections, it is removed by T&SWD crews. Any fiber rolls installed as part of this project would be inspected and maintained in good condition or removed once they have reached their useful life.

*Issue Number 7*: MMP Maintenance Protocol Bio-6 is a standard protocol applicable to channels where arundo removal is proposed. Montezuma channel did not contain any arundo at the time the IBA was prepared, and no arundo, or sediment containing arundo, is currently proposed to be removed by the project. If any arundo is present in the project area at the time of maintenance, BIO-6 requires that the arundo be cut and treated. T&SWD's standard practice is to cut arundo approximately six inches above the base, thereby avoiding the exposure and transfer of any rhizomes. Also, treatment of arundo per this protocol is conducted by a licensed contractor/applicator.

*Issue Number 8*: Streambed/natural flood channel has been added to Table 4.3-10 of Attachment A to the IBA to make it consistent with the MMP PEIR MMRP. The revised Table 4.3-10 is provided in Attachment 1 to this email.

*Issue Number 9*: Please see response to Issue Numbers 3 and 4 above.

Should you have any questions or need additional information, please contact me by e-mail at mmedel@sandiego.gov or phone at (619) 527-3449.

Sincerely,

Mayra Medel
Senior Planner

Attachments: 1. Revised Individual Biological Assessment Report, Montezuma Channel Map 66, April 24, 2018, prepared by Tommy Molioo and Julie Stout of Environmental Science Associates

cc: Christine Rothman, AICP, Development Project Manager III, Transportation & Storm Water Department
Lindsey Cavallaro, Environmental Science Associates
Julie Stout, Helix Environmental Science Associates

# INDIVIDUAL BIOLOGICAL ASSESSMENT REPORT

**Site Name/Facility:** **Montezuma Channel**
**Master Program Map No.:** **Map 66**
**Date:** **April 24, 2018**
**Biologist Name/Cell Phone No.:** **Tommy Molioo (714) 514-7744; Julie Stout (858) 213-3065**

**Instructions**: This form must be completed for each storm water facility identified in the Annual Maintenance Needs Assessment report and prior to commencing any maintenance activity on the facility. The Existing Conditions information shall be collected prior to preparing of the Individual Maintenance Plan (IMP) to assist in developing the IMP. The remaining sections shall be completed after the IMP has been prepared. Attach additional sheets as needed.

## EXISTING CONDITIONS

The City of San Diego (City) has developed the Master Storm Water System Maintenance Program (Master Maintenance Program, MMP; City 2011a) 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 proposed maintenance activities within the Montezuma Channel Map 66 (as shown in Figure 1). The IBA is prepared to comply with the MMP's Programmatic Environmental Impact Report (PEIR; City 2011b). Map numbers correspond to those contained in the MMP.

The IBA procedures under the MMP provide the guidelines for a site-specific inspection of the proposed maintenance activity site including access routes (i.e., loading areas), and temporary spoils storage and staging areas. A qualified biologist determines 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; Attachment A) 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 found.

**Survey Methods and Date:**

Prior to performing field surveys, Environmental Science Associates (ESA) conducted a review of existing project documentation and permits as part of this IBA. Document review included the MMP PEIR (City 2011b) and Appendices.

Potential occurrence of special-status species within the project site was determined by a habitat suitability assessment, a review of special-status species occurrence records from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2017) and California Native Plant Society (CNPS) rare plant online inventory (CNPS 2018) in the La Mesa 7.5 minute U.S. Geological Survey (USGS) quadrangle, and the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) Resource List (USFWS 2018) based on the maintenance area and an approximate 500-foot buffer.

Upon completion of the existing data review, ESA conducted an initial biological survey and site assessment of the Map 66 segment (Reach 2) of Montezuma Channel. The Biological Study Area (BSA) for the project (Reach 2 of the Montezuma Channel), as shown in Figure 2 includes the Reach 2 maintenance area, staging area, eastern access and loading area, and a 500-foot buffer. The 500-foot buffer is included to assess the occurrence of noise-sensitive biological resources around project components where heavy equipment operation would occur. The western access and loading area is a paved access route within a developed area and would be used only for vehicle access; therefore, a buffer was not applied to this area because heavy equipment operation would not occur here. Additionally, vehicle traffic for project access in the western access and loading area would not differ significantly from typical disturbances in a developed area adjacent to a heavily traveled roadway.

The BSA was surveyed on November 21, 2017, by ESA biologists Tommy Molioo and Julie Stout from 10:30 a.m. to 12:00 p.m. Weather conditions during the survey included an average temperature of 75°F, winds of 0 to 1 miles per hour, and clear skies. The BSA for the project includes Reach 2 of the Montezuma Channel plus the staging area and access route, with a 500-foot buffer to account for potential adjacent resources. The survey consisted of walking the entire maintenance area, staging area, eastern access and loading area, and accessible portions of the 500-foot buffer to record plant and wildlife species, as well as mapping the extent of vegetation communities and land use types within the BSA. The western access and loading area and other non-accessible portions of the 500-foot buffer were surveyed from nearby access points and using aerial imagery. The survey also focused on identifying sensitive biological resources on the project site, as well as those that have a potential to occur on the project site, that may be impacted by the proposed project. A jurisdictional delineation survey was also conducted concurrently with the general biological resources survey to map the limits of potentially regulated wetlands and waters on the project site. Both the biological resources survey and jurisdictional delineation focused on verifying and, where appropriate, updating results previously documented in the PEIR for the MMP (City 2011b).

ESA's biologists documented species observed in a field notebook, mapped vegetation communities on aerial field maps, recorded locations of sensitive biological resources using a tablet with ArcCollector software, took representative photographs of the site (included at the end of this form), and completed U.S. Army Corps of Engineers (USACE) wetland datasheets.

Vegetation communities were mapped in accordance with the City's Biology Guidelines (City 2012) and following classifications described by Holland (1986), consistent with vegetation community mapping in the MMP Biological Technical Report (City 2011c). Vegetation communities and sensitive species were field mapped using printed Google Earth (November 8, 2017) aerial base maps with approximate scales of 1 inch to 100 feet and 1 inch to 50 feet) and subsequently digitized in Google Earth Pro using current and historical imagery ranging from 2012 to 2017. Representative photographs were taken during the survey and are provided in this report. Plants were identified according to The Jepson Manual: Vascular Plants of California (Baldwin et al. 2012).

This IBA also analyzes a proposed new staging area and proposed new access and loading areas, which differ from the staging, access, and loading areas included on Map 66 as analyzed in the PEIR for the MMP (City 2011b). The proposed staging area and access/loading area are shown on the Individual Maintenance Plan (IMP) for Montezuma Creek Channel MMP Map 66 (as revised March 23, 2018), developed as a result of the project's Individual Hydrologic and Hydraulic Assessment (IHHA) prepared by Rick Engineering (Rick) (as revised April 16, 2018). The new staging, access, and loading areas are shown on Figure 2.

**Project Location and Description:**

The purpose of the project is to maintain the existing storm water facility by restoring the original design capacity to provide public safety and protection of property. The City is proposing to maintain the Montezuma Channel (Reach 2) through the removal of vegetation, installation of a check dam and bollards, and repair of concrete.

To facilitate the IHHA (Rick 2018a) prepared for the maintenance, the Montezuma Channel was subdivided into three separate "reaches." This IBA evaluates Reach 2, including the staging, access, and loading areas, where maintenance is currently proposed by the City.

The Montezuma Channel is located in the College Area community within the City of San Diego south of Interstate 8, north of El Cajon Boulevard, west of College Avenue, and east of Collwood Boulevard (Figure 1). The Montezuma Channel is a predominately concrete-lined trapezoidal channel with a segment of earthen-bottomed channel downstream of 54th Street, which is within the project site boundary. Upstream of the BSA, the Montezuma Channel originates as a natural earthen-bottomed channel draining portions of College Heights and Glenridge. From there, the concrete-lined channel flows approximately 900 feet in a westerly direction, crossing underneath 54th Street in an existing 60-inch reinforced concrete pipe (RCP), and into the project site. The channel is concrete-lined for approximately 75 feet before it transitions to an earthen bottomed channel with a concrete north bank for approximately 275 feet before transitioning back to a concrete-lined trapezoidal channel outside of the project site, which extends an additional 250 feet. The lower portion of the Montezuma Channel flows into Fairmont Channel, which then flows into the San Diego River before ultimately discharging to the Pacific Ocean.

The channel segment where the project would occur (Reach 2) is zoned RS-1-1/RS-1-7 (Residential-Single Unit) and RM-3-7 (Residential-Multiple Unit). The drainage channel is not a Federal Emergency Management Agency (FEMA) defined channel and, therefore, not within a Special Flood Hazard Area. The Channel is within the within the San Diego Hydrologic Unit, the Lower San Diego Watershed, and the Mission San Diego Hydrologic Sub Area (907.11). The site is not located within or adjacent to the City's Multiple Species Conservation Program's (MSCP) Multi-Habitat Planning Area (MHPA). The Channel is not within the City of San Diego or California Coastal Commission's Coastal Overlay Zone.

Reach 2 of the Montezuma Channel is located downslope from residential development to the north and south. The slopes to the north and south of the channel contain a mix of native and non-native trees, shrubs, grasses, and disturbed areas. The earthen portions of the channel within the project site contain a row of non-native Mexican fan palm (*Washingtonia robusta*) trees with scattered native species comprising freshwater marsh habitat in the understory. Surface water was observed in portions of the channel, particularly in a ponded area at the downstream end of the concrete-lined portion of the channel. Debris, furniture, and small equipment (e.g., lawnmowers) have been dumped in the upland area to the south of the channel at the proposed access/staging area location. In total, the length of the channel maintenance area in Reach 2 includes a 75-foot concrete-lined trapezoidal channel segment west of the culvert under 54th Street and an adjacent downstream 275-foot earthen-bottomed channel segment to the west.

**Biological Resources:** **Stream Type**: **Perennial □ Intermittent ■ Ephemeral □**

Stream type designations are based on USGS topographical map stream designations and field visit review of the channel. The stream type was determined to be intermittent based on the lack of active

flow at the time of the site visit; presence of a high water table and ponded water; and persistent obligate wetland vegetation growing within the channel. Montezuma Channel is shown on the USGS La Mesa quadrangle map. Reach 2 is presumed to have intermittent sources of water from urban runoff. Montezuma channel was determined to be an intermittent channel because the channel was not flowing at the time of the site visit, but standing pools of water were present. Additionally, the presence of obligate wetland vegetation along the channel suggests that the channel is supported by a high water table during periods when the channel is not flowing.

**Vegetation**:
For purposes of this IBA, only vegetation communities or land covers within the proposed maintenance areas, including associated work areas (i.e., staging, access, and loading areas), are described below. These communities and land cover types include disturbed wetland, freshwater marsh, streambed, non-native grassland, developed, disturbed, non-native vegetation/ornamental. The vegetation category disturbed wetland (palm-dominated) was mapped within this maintenance area to distinguish stands of an invasive species, Mexican fan palm *(Washingtonia robusta*). One of the purposes of this vegetation category is to identify invasive wetland vegetation that is exempt from mitigation requirements under condition 9e of the Master Coastal Development Permit (CDP), which is applied to all storm water facility maintenance per requirement 15 of Site Development Permit 1134892 related to the MMP. Vegetation communities and land cover types are described below and summarized by acreage within the maintenance area in Table 1 below. A list of plant species observed during the November 21, 2017 field survey is provided as Attachment B.

**TABLE 1**
**EXISTING VEGETATION COMMUNITIES WITHIN THE FY 19 MONTEZUMA CREEK CHANNEL MAINTENANCE AREA (ACRES)[1]**

| Vegetation Community/Land Cover (Channel) | Non-Wetland | Wetland[2] | Total |
|---|---|---|---|
| Concrete-Lined Channel | 0.042 | -- | 0.042 |
| Developed | 0.042 | -- | 0.042 |
| Earthen-Bottomed Channel | -- | 0.097 | 0.097 |
| Disturbed Wetland | -- | 0.075 | 0.075 |
| Freshwater Marsh | -- | 0.017 | 0.017 |
| Streambed | -- | 0.004 | 0.004 |
| Total | 0.042 | 0.097 | 0.138 |
| **Vegetation Community/Land Cover (Uplands)** | **Tier IIIA** | **Tier IIIB** | **Tier IV** |
| Developed | -- | -- | 0.043 |
| Disturbed | -- | -- | 0.007 |
| Non-Native Grassland | -- | 0.041 | -- |
| Non-Native Vegetation/Ornamental | -- | -- | 0.002 |
| Total Uplands | -- | 0.041 | 0.052 |

[1]Totals may not sum exactly due to rounding.
[2]Wetlands, as defined in the City of San Diego Biology Guidelines.

## WETLANDS

### Freshwater Marsh (including disturbed)
Freshwater marsh is dominated by perennial emergent monocots that reach between 12 and 15 feet. This vegetation type occurs along the coast and in coastal valleys, near river mouths, and around lake and springs margins. Species present in this habitat in the BSA include cattails, California bulrush (*Scirpus californicus*), umbrella sedge (*Cyperus involucratus*), tall flatsedge (*C. eragrostis*), watercress (*Rorippa nasturtium-aquaticum*), spike-rush (*Eleocharis* spp.), and rabbitsfoot grass (*Polypogon monspeliensis*).

### Disturbed Wetland
Disturbed wetland is typically dominated by exotic wetland species that have likely become established following previous disturbance(s), although it may also contain native species. The habitat composition

is highly variable based on the hydrology, soils, and type and frequency of disturbance. Species typically present include rabbitsfoot grass, curly dock (*Rumex crispus*), giant reed, bristly ox-tongue, cockle-bur (*Xanthium strumarium*), umbrella sedge, common celery (*Apium graveolens*), Bermuda grass (*Cynodon dactylon*), and poison hemlock (*Conium maculatum*).

**Streambed**
Unvegetated portions of the earthen-lined channel are mapped as streambed. In the case of the Montezuma channel, these areas are the result of natural scour precluding the establishment of vegetation. Substrate in these areas is generally cobble.

**UPLANDS**

**Non-Native Grassland (Tier IIIB)**
Non-native grassland is a dense to sparse cover of annual grasses, often associated with numerous species of showy-flowered native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils. Characteristic species include oats (*Avena* spp.), foxtail chess (*Bromus madritensis* ssp. *rubens*), ripgut grass, ryegrass (*Lolium* sp.), and mustard (*Brassica* spp.). Most of the annual introduced species that comprise the majority of species and biomass within the non-native grassland originated from the Mediterranean region, an area with a long history of agriculture and a climate similar to California.

**Non-Native Vegetation/Ornamental (Tier IV)**
Non-native vegetation/ornamental consists of cultivated plants that have naturalized into otherwise native habitat areas or were put in place by humans, usually for the purpose of beautification, windbreaks, or other related purposes. Species typically observed in this habitat include Peruvian pepper (*Schinus terebinthifolius*), Brazilian pepper, golden wattle (*Acacia longifolia*), myoporum (*Myoporum laetum*), sea-fig (*Carpobrotus chilensis*), hottentot-fig (*Carpobrotus edulis*), oleander (*Nerium oleander*), Canary Island date palm (*Phoenix canariensis*), fountain grass (*Pennisetum setaceum*), and carrotwood (*Cupaniopsis anacardioides*).

**Disturbed Habitat/Ruderal (Tier IV)**
Disturbed habitat/ruderal areas are devoid of vegetation because of soil disturbance (dirt roads and/or grading) or are dominated by exotic annual forbs without a major grass component. Pursuant to City guidelines for mapping, these areas can be bare ground or are dominated by at least 50 percent cover of invasive broad-leaved non-native plant species when vegetated. Plants observed in this community on site include garland daisy (*Chrysanthemum coronarium*), Russian thistle (*Salsola tragus*), castor-bean (*Ricinus communis*), star-thistle (*Centaurea melitensis*), shortpod mustard (*Hirschfeldia incana*), fennel (*Foeniculum vulga*re), horehound (*Marrubium vulgare*), cheeseweed (*Malva parviflora*), and filaree (*Erodium* spp.).

**OTHER LANDCOVER TYPES**

**Developed**
Developed land is where permanent structures and/or pavement have been placed. Residential developments and paved access roads constitute the majority of developed land mapped in the BSA. Portions of the Montezuma Channel that are concrete-lined and do not contain any vegetation are also characterized as Developed. The Montezuma Channel is concrete-lined within the upstream and downstream portions of the BSA, with a natural earthen bottom in the middle of the BSA

**Wildlife Value**:
Freshwater marsh, disturbed wetland, non-native grassland, and non-native vegetation/ornamental

communities provide nesting and foraging habitat for birds protected under the Migratory Bird Treaty Act and habitat for small mammals. Palm trees within disturbed wetland area provide potential roosting habitat for bats within the palm skirts. Pools within the streambed provide aquatic habit for species such as the Pacific tree frog (*Hyliola regilla*). A list of wildlife species observed during the November 21, 2017 field survey is included as Attachment C.

**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:

The project site is located downslope and immediately adjacent to existing residential development and 54th Street. The surrounding development has significantly altered the previous natural conditions on and surrounding the project site due to the fragmentation of habitat, introduction of non-native species, and illegal dumping of debris. Additionally, the Montezuma Channel has been lined in concrete and passes below 54th Street through a corrugated metal culvert, which has altered the natural drainage course of the channel. As such, the channel and surrounding habitat have been degraded to a point where disturbed and non-native habitats dominate the project site.

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

If yes, describe them and their purpose: N/A

**Jurisdictional Areas:**
As discussed above, a jurisdictional delineation survey was also conducted concurrently with the general biological resources survey on November 21, 2017 to map the limits of potentially regulated wetlands and waters on the project site (Attachment D). The jurisdictional delineation included mapping and delineation of wetland and waters under the jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA); the San Diego Regional Water Quality Control Board (RWQCB) pursuant to CWA Section 401; CDFW streambed and riparian habitat pursuant to Section 1600 et seq. of California Fish and Game Code; and the City wetlands pursuant to the City's Environmentally Sensitive Lands Regulations. The delineation included two wetland determination data points; however, soil pits were not dug due to the presence of cobble substrate. Jurisdictional resources within the maintenance area are summarized in Table 2 below.

The USACE wetland boundaries were determined using three criteria (vegetation, hydrology, and soils) established for wetland delineations as described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and Arid West Regional Supplement (USACE 2008). Areas were determined to be non-wetland Waters of the U.S. if there was evidence of regular surface flow (e.g., bed and bank) but either the vegetation or soils criterion was not met. Jurisdictional estimates for the RWQCB were based on the USACE boundaries. The CDFW jurisdictional boundaries (i.e., Waters of the State) were determined based on the presence of riparian vegetation or regular surface flow.

City wetland boundaries were based on the definition of wetlands pursuant to the San Diego Municipal Code Section 113.0103, and include areas characterized by any of the following conditions: (1) All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodlands, riparian scrub, and vernal pools; (2) Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland

vegetation communities because human activities have removed the historic wetland vegetation or catastrophic or recurring natural events or processes have acted to preclude the establishment of wetland vegetation as in the case of salt pannes and mudflats; (3) Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands; and (4) Areas mapped as wetlands on Map C-713 as shown in Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

Jurisdictional resources within the Montezuma Channel Reach 2 maintenance area (including staging and access/loading areas) are summarized in Table 2 and depicted on Figure 3[1].

**TABLE 2**
**EXISTING JURISDICTIONAL RESOURCES WITHIN THE FY 19 MONTEZUMA CREEK CHANNEL MAINTENANCE AREA (ACRES)[1]**

| | USACE/RWQCB | | | CDFW | | | |
|---|---|---|---|---|---|---|---|
| **Vegetation Community** | **Non-Wetland** | **Wetland** | **Total** | **Non-Wetland[2]** | **Wetland[2] (CDFW/City)** | **Upland Bank[3]** | **Total[4]** |
| **Total Developed (includes concrete-lined channel and sidewall)** | 0.028 | - | 0.028 | 0.042 | - | - | 0.042 (75 linear feet) |
| **Total Earthen-Bottomed** | 0.004 | 0.092 | 0.097 | - | 0.097 | - | 0.097 (275 linear feet) |
| **Disturbed Wetland (palm-dominated)** | - | 0.075 | 0.075 | - | 0.075 | - | 0.075 (194 linear feet) |
| **Freshwater Marsh** | - | 0.017 | 0.017 | - | 0.017 | - | 0.017 (44 linear feet) |
| **Streambed (earthen-bottomed channel)** | 0.004 | - | 0.004 | - | 0.004 | - | 0.004 (37 linear feet) |
| **Disturbed Habitat[3]** | - | - | - | - | - | 0.003 | 0.003 (linear feet not applicable[4]) |
| **Total** | 0.032 | 0.092 | 0.125 | 0.042 | 0.097 | 0.003 | 0.142[5] (350 linear feet) |

[1] Totals may not sum exactly due to rounding.
[2] CDFW/City wetlands include unvegetated habitats such as areas of scour within streambeds that would otherwise be capable of supporting wetland vegetation.
[3] Upland bank describes non-wetland areas between the ordinary high water mark and top of bank that are under the exclusive jurisdiction of CDFW.
[4] Linear feet are only provided once for each stream segment. Where multiple vegetation communities occur along the same segment of stream, linear feet are omitted for certain communities to avoid duplication of stream habitat linear footage.
[5]Total CDFW jurisdiction is equivalent to the total of all jurisdictional areas (including USACE/RWQCB/City) due to overlapping jurisdictions.

Attach documentation supporting the determination of jurisdictional areas. (Jurisdictional Delineation Memorandum included as Attachment D)

[1] The entire western access and loading area is not depicted on Figure 3 because jurisdictional resources are not present within this area.

| **Sensitive* Plant Species Observed:**<br>Yes ■ No ☐<br>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.<br><br>* 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:**<br>Yes ☐ No ■<br>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.<br><br>* 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. |
|---|---|

**Plants**

No federal or state-listed plant species were detected during the biological survey. One sensitive plant species, San Diego sagewort (*Artemisia palmeri*) was observed in the BSA, in the same location as previously mapped in the MMP PEIR (Figure 2). A California Natural Diversity Database (CNDDB) form has been submitted for this observation. Other special-status plant species evaluated for their potential to occur on the BSA are included in the CNDDB Records (Attachment E) and Information for Planning and Consultation (IPaC) Resource List (Attachment F).

**Animals**

No federal or state-listed animal species, or other sensitive animal species, was detected during the biological survey. One special-status wildlife species, Western yellow bat (*Lasiurus xanthinus*) is a California Species of Special Concern (SSC) and has a medium potential to occur in the fan palm trees in the BSA. Suitable habitat for this species is present in the BSA and the species has been recorded within 4 miles of the BSA. However, this species was not observed or detected during the survey. Other special-status animal species evaluated for their potential to occur on the BSA are included in the CNDDB Records (Attachment E) and IPaC Resource List (Attachment F).

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

If yes, describe which portions are within an MHPA: N/A

**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:

☐ 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:

**Western yellow bat**

Western yellow bat is a California SSC that has a moderate potential to occur in the fan palm trees on the BSA. The nearest recorded occurrence of this species is approximately 4 miles away, however, due to connectivity of the Montezuma Channel to Mission Valley and the San Diego River, there is a potential for this species to occur during the maternity roosting season of March through August. If maintenance activities occur during the maternity roosting season the presence/absence of this species will need to be determined. No specific protocol survey will be conducted, but the determination of this species presence will be covered under surveys described in Applicable Maintenance Protocol BIO-5.

**Coastal California gnatcatcher**

Although there is not a moderate or high potential for coastal California gnatcatcher to occur within the BSA, this species is listed as threatened under the federal Endangered Species Act. Coastal California gnatcatcher occurs within native coastal sage scrub habitat that is typically dense and contiguous with areas of open space. The hills surrounding the BSA contain chaparral vegetation with very few coastal sage scrub species, reducing the potential for this species to nest within the BSA. Higher quality habitat is located within Mission Valley to the northwest, and although there is connectivity between the BSA and Mission Valley, the lack of suitable habitat on the BSA reduces the potential for this species to forage within the BSA.

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 sensitive species have been reported within the work areas during previous surveys. Therefore, the potential for state and federally listed sensitive species other than Migratory Bird Treaty Act (MBTA) protected birds and raptors to occur within the work area is considered very low. Figure 4 depicts CNDDB, USFWS, and SanBIOS database records within one mile of the BSA. One species has been documented within one-mile of the BSA, monarch butterfly (*Danaus plexxipus*), which occurs as an overwintering population in eucalyptus trees in California. No significant stands of eucalyptus trees occur within the BSA.

**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: N/A

No federal or state-listed plant species were detected during the biological survey. Two state and federally endangered plant species, San Diego button-celery (*Eryngium aristulatum* var. *parishii*) and San Diego mesa mint (*Pogogyne abramsii*) have been recorded within two miles of the BSA. Both of these species occur within vernal pools, which do not occur within the BSA. Four other non-listed plant species have been recorded in the vicinity of the BSA including, California adolphia (*Adolphia californica*), San Diego goldenstar (*Bloomeria clevelandii*), variegated dudleya (*Dudleya variegata*), and Orcutt's brodiaea (*Brodiaea orcuttii*). These CRPR ranked species occur either in uplands with chaparral and coastal sage scrub habitat, or in wetlands and vernal pool habitats. The upland habitats within the BSA consist of chaparral species along the surrounding slopes outside the maintenance area, while the wetland habitat on the BSA is isolated and associated with a concrete-lined channel lacking any vernal pools. Therefore, there is no potential for a listed plant species to have a moderate or high potential to be impacted by maintenance.

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

See Figure 4.

**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:

The project site functions as a local wildlife corridor, facilitating the local movement of small- to medium-sized mammals and birds toward Mission Valley and the San Diego River corridor to the northwest. However, the project site does not serve as a linkage between two large stands of undisturbed native habitat or wildlife habitat blocks. Additionally, the project site and immediate vicinity is not considered or mapped as an important wildlife corridor in the region. The temporary disturbance of wildlife movement during the proposed maintenance will not result in the disruption of the integrity of the local wildlife corridor.

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

**Nesting Raptors**
Potential habitat for nesting raptors exists in large ornamental trees, such as eucalyptus, that occur directly adjacent to the maintenance areas. These areas have the potential to support nesting raptors such as Cooper's hawk. Palm trees within the maintenance area also have the potential to support nesting raptors such as American kestrels.

**Migratory Bird Treaty Act Protected Birds**
Potential habitat for birds protected by the Migratory Bird Treaty Act (MBTA) also exists throughout the maintenance area and adjacent habitats, including in freshwater marsh, disturbed wetland, non-native grassland, and non-native vegetation/ornamental habitats. The MBTA prohibits deliberate take of birds, eggs, and active nests without a permit from the USFWS. Permits are issued for specific categories of

deliberate take (e.g., scientific collection, removal of depredating birds); however, not for incidental take (take that is the unintended result of an otherwise lawful action).

Thus, preconstruction nesting surveys by a qualified biologist are necessary to help ensure no impacts to avian species occur and that the project would comply with the MBTA and MMP's PEIR MMRP. As no incidental take permits can be issued under MBTA, no conditions to avoid incidental take can be placed on discretionary permits pursuant to MBTA (such conditions would constitute a de facto incidental take permit). In practice, reasonable diligence to avoid take of birds and/or active nests, such as preconstruction nesting bird surveys, is considered sufficient to avoid prosecution under MBTA.

Nesting surveys would include all suitable nesting habitat within the maintenance area, staging area, western access and loading area, and the noise contour buffer areas, as appropriate based on field conditions and accessibility. Equipment driving access within the paved western access and loading area is not expected to impact nesting birds as these areas are already subject to driving and human disturbance, and prolonged disturbances would not occur in these areas.

If yes, provide justification: N/A

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

Based on the noise modeling calculated in the Individual Noise Assessment for the proposed maintenance, the combined noise level from all of the equipment operating simultaneously at the edge of the habitat would be 65 dBA Leq. Although the maintenance noise would temporarily increase the ambient noise levels in the habitat, the increase would be greater than 10 dBA. Noise level increases of greater than 10 dBA are considered as doubling of the perceived loudness.

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

Although maintenance operations have potential to generate noise in excess of 60 dB(A)LEQ, as described above, no sensitive wildlife is expected to occur in the vicinity of the work due to implementation of noise-related PEIR mitigation measures (4.1.3, 4.3.13, 4.3.16, 4.3.20, 4.3.21, 4.3.22, and 4.3.25), including conducting maintenance outside of the avian breeding season. Thus, maintenance activities would not cause a significant noise impact to sensitive breeding birds.

**Biological Resource Conditions Relative to Original Survey Conducted for MASTER PROGRAM Final Program EIR (May 2010) (vegetation communities present, including adjacent uplands; general habitat quality/level of disturbance):**

The majority of habitat mapping and programmatic jurisdictional delineation work (based largely on aerial and topographic interpretation combined with upstream and downstream observations) for the PEIR was conducted by HELIX in late winter and early spring of 2007 and 2008. Vegetation/Wetland Delineation Map 66 included in the MMP Biological Resources Report (Appendix D of the MMP PEIR [City 2011b]) depicts the Reach 2 maintenance area as Tier IV Developed with USACE non-wetland waters of the U.S. within the concrete-lined segment and Freshwater Marsh with USACE non-wetland waters of the U.S. assumed to be concrete-lined channel within the earthen-bottomed channel segment. The existing conditions within Reach 2 differ from the conditions mapped in the MMP PEIR Biological Resource Report as follows: (1) the majority of Reach 2 is earthen-bottomed instead of concrete-lined; (2) freshwater marsh habitat within Reach 2 is disturbed (palm-dominated) instead of undisturbed; and

(3) the freshwater marsh habitat within Reach 2 is USACE wetland instead of USACE non-wetland waters. Additionally, the existing channel has widened through erosion along the southern bank within the earthen segment to greater than the original 20-foot wide channel and now ranges from approximately 20-30 feet wide. Maintenance would only occur within the original as-built channel width.

Additionally, the proposed staging, access, and loading areas are in a different location from what was previously analyzed in the MMP PEIR. The staging, access, and loading will no longer be provided from 54th Street, but instead will originate from Collwood Boulevard, continuing east along a paved access road toward a locked gate near the downstream end of Reach 2. This is due to the severe steepness and practical inability to lower equipment into the channel from 54th Street. The eastern access and loading area will be located immediately east of the gate and to the south of the Montezuma Channel in an area that contains non-native grassland habitat, as opposed to the disturbed and developed areas that were analyzed in the Master Program EIR. The access and loading area avoids all known occurrences of rare plants, including the adjacent population of San Diego sagewort.

**MAINTENANCE IMPACTS**

**Maintenance Methodology (based on IMP)**

The IMP (Rick 2018b) was prepared for the proposed maintenance in accordance with the MMP. The IMP identifies the limits of maintenance and describes the methodology to be used within the channel. The proposed maintenance in Reach 2 of Map 66 will include the following activities depicted in Figures 2 and 3:

- A row of 2.5-foot-tall fence posts would be installed across the channel to reduce the potential of palm tree debris or other debris from entering the existing 60-inch RCP underneath the Apartment Villas apartment complex. Chain link would not be installed between these posts. These posts should be constructed per the Individual Maintenance Plan (IMP) for Montezuma Channel MMP Map 66.
- The existing palm trees would be cut down within the earthen-bottomed portion of the Reach 2 project limits (depicted as Disturbed Wetland in Figure 3), leaving 2-foot-tall stumps with root balls intact in the ground. These stumps would be left in place to help mitigate channel velocities. All fallen palm tree trunks and debris would be removed. All other existing vegetation would be left in place. No sediment removal is proposed. Vegetation removal will not increase the capacity of the channel within this portion of Reach 2; however, existing palm trees have the potential to be uprooted and clog the existing 60-inch RCP underneath the Collwood Villas apartment complex, which would greatly increase the limits of flooding. Partial vegetation removal would decrease the risk of clogging at the downstream location while mitigating increases in flow velocities.
- A 2.75-foot-tall check dam would be installed for erosion control. This check dam would be constructed per the IMP for Montezuma Channel MMP Map 66.
- The palm tree growing out of a crack in the concrete lining would be removed and the crack in the concrete lining would be repaired to match the existing flow line.

The proposed check dam and the proposed fence posts are two separate structures. The proposed check dam is a grade control structure designed to reduce flow velocities. The proposed fence posts function as a debris collection area (trash fence) to reduce the risk of palm tree stumps and other debris from entering and clogging the 60-inch RCP underneath the Collwood Villa Apartment Complex.

Equipment involved in the maintenance would include the following or similar: Gradall (5100 Series), Track Steer (CAT 2890), Excavator (CAT 349), Front-end Loader (CAT 966), Dump Trucks (12 yard),

and 6" or smaller pumps. Water will be pumped around the maintenance area in a pipe and discharged downstream of the maintenance area. Heavy equipment will be used within the channel for installation of the check dam, posts, and removal of cut palm trees. The equipment within the channel would likely be a skid-steer loader, which would navigate through the palm stumps within the channel by cutting some palm trees to 6 inches instead of 2 inches, as needed for access. The only concrete repair would be where the palm tree is growing within the concrete-lined channel.

Equipment will use designated access roads along Collwood Boulevard and access the site through a paved internal roadway and parking lot at the rear of the Collwood Villa Apartment Complex (4819-4899 Collwood Boulevard) along the western end of the channel reach. The new staging area will be located to the southwest of the maintenance area of Reach 2, within the existing paved parking lot. Access to the channel will proceed eastward through a gate to the adjacent unpaved access/loading area, then north from the access/loading area to the channel. Steel plates will be placed on the unpaved access/loading area prior to maintenance activities to more evenly distribute the weight of the equipment. A track steer will enter the channel from the access/loading area via an earthen ramp adjacent to the southwestern end of the channel reach. The equipment will navigate through the palm stumps within the channel by cutting some palm trees to 6 inches instead of 2 feet, as needed for access. Maintenance debris (palm tree vegetation) will be removed and loaded into a dump truck for hauling off-site.

Upon completion of the maintenance, all temporary materials will be removed and equipment will be transported back to the City yard.

**Vegetation Impacts:** Total vegetation impacts are summarized in Table 3 and described below. All Vegetation impacts will be considered permanent.

**Wetland (total): 0.097 acre of permanent impacts**

Impacts to City wetlands are considered permanent and would total 0.097 acre and are comprised of 0.004 acre of streambed, 0.017 acre of freshwater marsh, and 0.075 acre of disturbed wetland.

**Upland (total): 0.050 acre of permanent impacts**

**TABLE 3**
**VEGETATION COMMUNITY/LAND COVER IMPACTS WITHIN THE FY 19 MONTEZUMA CREEK CHANNEL MAINTENANCE AREA (ACRES)[1]**

| | |
|---|---|
| **City Uplands[2]** | **0.050** |
| Tier IIIB (Non-Native Grassland) | 0.041 |
| Tier IV (Disturbed and Non-Native Vegetation/Ornamental) | 0.009 |
| **City Wetlands** | **0.097** |
| **Total Impacts** | **0.147** |

[1] Totals may not sum exactly due to rounding.
[2] Developed areas are not considered as impacted.

**Jurisdictional Impacts:** Jurisdictional impacts are summarized in Table 4 below. All jurisdictional impacts will be considered permanent.

**TABLE 4**
**JURISDICTIONAL IMPACTS WITHIN THE FY 19 MONTEZUMA CREEK CHANNEL MAINTENANCE AREA (ACRES)[1]**

| | |
|---|---|
| **USACE/RWQCB Jurisdictional Wetlands and Non-Wetland Waters** | **0.097 (275 linear feet)** |
| Wetlands | 0.092 |
| Non-Wetlands | 0.004 |
| **CDFW Streambed, Streambank, and Riparian** | **0.100 (275 linear feet)** |
| Wetland/Riparian | 0.097 |
| Upland Streambank | 0.003 |
| **Total Jurisdictional Impacts** | **0.100[2] (275 linear feet)** |

[1] Totals may not sum exactly due to rounding. Note that work within the serviceable concrete-lined channel is not considered an impact because the concrete-lined channel does not contain any vegetation, work would not occur when the channel is flowing, and the project would leave the concrete-lined channel in its current condition except for the removal of one palm tree that is needed to restore this area to the as-built condition.
[2] Total does not equal the sum of impacts for each jurisdiction due to jurisdictional overlap.

**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 nearest MHPA area is approximately 150 feet south of the maintenance area, as shown in Figure 2. No impacts would occur within the MHPA during maintenance due to the implementation of PEIR mitigation measures 4.3.13, 4.3.16, 4.3.21, 4.3.22, 4.3.25 (Attachment A), which establish buffering and temporal avoidance of impacts to sensitive resources in the vicinity of the maintenance area.

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

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:

Western yellow bat, a California SSC, has a moderate potential to occur in the stand of fan palm trees located on the BSA. This species may be impacted by maintenance activities that result in the removal of fan palm trees. Implementation of Maintenance Protocol BIO-5, which specifies conducting pre-maintenance surveys during the breeding season and implementing applicable mitigation measures from the MMRP will reduce potential impacts to this species to a less than significant level.

Additionally, a small patch of San Diego sagewort, a California Rare Plant Rank (CRPR) 4.2 species and San Diego County sensitive plant, occurs within the BSA. As stated above, the access and loading area avoids all known occurrences of rare plants, including the adjacent population of San Diego sagewort.

**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 protocols specified in the MMP will be carried out by individuals with qualifications approved by the City.

Water Quality (WQ)

WQ-2 Prevent off-site sediment transport during maintenance through the use erosion and sediment controls within storm water facilities, along access routes and around stockpile/staging areas. Install BMPs such as silt fences, fiber rolls; gravel bags; temporary sediment basins; stabilized maintenance access points (e.g., shaker plates); containment barriers (e.g., silt fence, fiber rolls and/or berms) for material stockpiles; and properly fitted covers for material transport vehicles. Remove temporary erosion or sediment control measures upon completion of maintenance unless their removal would result in greater environmental impact than leaving them in place.

WQ-3 Store BMP materials on-site to provide complete protection of exposed areas and prevent off-site sediment transport.

WQ-4 Provide training for personnel responsible for the proper installation, inspection, and maintenance of on-site BMPs.

WQ-5 Revegetate spoil and staging areas within 30 days of completion of maintenance activities. Monitor and maintain revegetated areas for a period of not less than 25 months following planting.

WQ-7 Avoid storing hazardous materials used during maintenance within 50 feet from storm water facilities. Hazardous materials shall be managed and stored in accordance with applicable local, state and federal regulations.

WQ-8 Store maintenance-related trash in areas at least 50 feet from storm water facilities, and remove any trash receptacles regularly (at least weekly).

WQ-9 Install a check dam or other comparable mechanism whenever the velocity of storm water during a “bank-full” storm event would be expected to exceed the velocities identified for unlined channels per Table 1-104.108 of the City’s Design Manual. These structures may be removed when vegetation growth has reached a point where the structure is no longer required.

WQ-10 Inspect earthen-bottom storm water facilities within 30 days of the first two-year storm following maintenance. Implement erosion control measures recommended by the field engineer, such as fiber blankets, to remediate substantial erosion that has occurred and to minimize future erosion.

Biological Resource Protection (BIO)

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 IBA, IHHA, and/or 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 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-5 Conduct appropriate pre-maintenance protocol surveys if maintenance is proposed during the breeding season of a sensitive animal species. If sensitive animal species covered by the PEIR are identified, then applicable measures from the MMRP shall be implemented under the direction of a qualified biologist to avoid significant direct and/or indirect impacts to identified sensitive animal species. If sensitive animal species are identified during pre-maintenance surveys that are not covered by the PEIR, the Storm Water Department shall contact the appropriate wildlife agencies and additional environmental review under CEQA will be required (Pre-maintenance surveys are not required within one year of a negative protocol survey).

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 of 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.

BIO-7 Avoid mechanized maintenance within 300 feet of a Cooper's hawk nest, 900 feet of a northern harrier's nest, or 500 feet of any other raptor's nest until any fledglings have left the nest. Reduced setbacks shall be allowed if the biological monitor determines that the setbacks can be reduced based on the field observations, ambient conditions, life history of the affected birds, and type of maintenance proposed. In the event the biological monitor determines that a reduced setback is appropriate, the biologist shall prepare a letter summarizing the basis for the reduced setbacks and send it to the CDFW and USFWS for concurrence prior to invoking reduced setbacks.

**Applicable PEIR mitigation measures:**
Applicable PEIR mitigation measures are included as Attachment A. These include

General Mitigation 1, 2, 3, and 4;

Biological Resources 4.3.1 through 4.3.11, 4.3.13, 4.3.14, 4.3.16, 4.3.19, 4.3.21, 4.3.22, 4.3.24, and 4.3.25

Land Use 4.1.6 and 4.1.7

**Other mitigation measures:** Regulatory permits, agreements, and/or authorizations may require additional conditions to avoid, minimize, and/or mitigate impacts to biological resources.

**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):**

Mitigation is generally required for impacts to wetlands and waters associated with maintenance activities. The mitigation ratios for maintenance activities must be consistent with those identified in the Settlement Agreement related to the Final PEIR for the MMP. Mitigation requirements differ depending on the regulatory agency, type of impact, and composition of the channel (earthen versus concrete-lined). The following is a description of mitigation required for jurisdictional impacts. As discussed above, all impacts will be considered permanent for mitigation purposes.

**Waters of the United States and State**

Proposed mitigation for impacts to USACE/RWQCB jurisdictional resources is summarized in Table 5 below. No mitigation is proposed for activities in serviceable concreted-lined channel areas, per CWA Section 404 (f)(1)(b), or for impacts within palm-dominated disturbed wetlands. Mitigation for earthen-bottom channel areas is proposed at a ratio of 2:1 for vegetated wetlands (excluding palm-dominated) and 1:1 for streambed, resulting in a total requirement of 0.039 acres.

**TABLE 5**
**PROPOSED MITIGATION FOR IMPACTS TO USACE/RWQCB JURISDICTIONAL RESOURCES (ACRES)[1]**

| Vegetation Community | Total Impacts | Mitigation Ratio | Mitigation[2] |
|---|---|---|---|
| **Total Earthen-Bottomed Channel** | 0.097 | **-** | 0.039 |
| **Disturbed Wetland (palm-dominated)** | 0.075 | **0:1** | - |
| **Freshwater Marsh** | 0.017 | **2:1** | 0.035 |
| **Streambed** | 0.004 | **1:1** | 0.004 |
| **Total** | 0.097 | **-** | 0.039 |

[1] Totals may not sum exactly due to rounding. Note that work within the serviceable concrete-lined channel is not considered an impact because the concrete-lined channel does not contain any vegetation or surface water, and the project will leave the concrete-lined channel in its current condition except for the removal of one palm tree.
[2] Stadium Wetland Mitigation Project along the San Diego River

**CDFW Jurisdictional Areas**

Proposed mitigation for impacts to CDFW jurisdictional resources is summarized in Table 6 below. No mitigation is proposed for activities in serviceable concreted-lined channel areas, disturbed habitat within upland streambank, or for impacts to palm-dominated disturbed wetlands. Mitigation for earthen-bottom channel areas is proposed at a ratio of 2:1 for vegetated wetlands (excluding palm-dominated) and 1:1 for streambed, resulting in a total requirement of 0.039 acres.

**TABLE 6**
**PROPOSED MITIGATION FOR IMPACTS TO CDFW JURISDICTIONAL RESOURCES (ACRES)[1]**

| Vegetation Community | Total Impacts | Mitigation Ratio | Mitigation[2] |
|---|---|---|---|
| **Total Earthen-Bottomed Channel** | 0.097 | **-** | 0.039 |
| **Disturbed Wetland (palm-dominated)** | 0.075 | **0:1** | - |
| **Freshwater Marsh** | 0.017 | **2:1** | 0.035 |
| **Streambed** | 0.004 | **1:1** | 0.004 |
| **Upland Bank (disturbed habitat)** | 0.003 | **0:1** | - |
| **Total** | 0.100 | **-** | 0.039 |

[1] Totals may not sum exactly due to rounding. Total impacts exclude concrete-lined channel.
[2] Stadium Wetland Mitigation Project along the San Diego River

**City Wetlands**

The City regulates both earthen and concrete-lined channels and requires compensatory mitigation for wetland impacts pursuant to the mitigation ratios specified in the modified Site Development Permit 1134892 and CDP for the Master Storm Water System Maintenance Program. Mitigation for jurisdictional impacts is also dependent upon the composition of the channel. Jurisdiction and mitigation ratios are different for earthen and concrete channels. Required mitigation for impacts to City wetlands is summarized in Table 7 below. Impacts to disturbed wetlands consisting of pure stands of non-native species (including Mexican fan palm) do not require compensatory mitigation under condition 9e of the Master Coastal Development Permit and modified SDP, which is applied to all impacts under the terms of the MMP Settlement Agreement. These impacts also do not require mitigation under the City's Significance Determination Thresholds (City 2016). Streambed is mitigated at a 2:1 ratio with a preference for out-of-kind mitigation with better habitat, according to the City Biology Guidelines (City 2012). The total mitigation requirement for City wetland and natural flood channel impacts is 0.078 acre.

**TABLE 7**
**PROPOSED MITIGATION FOR IMPACTS TO CITY WETLANDS (ACRES)[1]**

| Vegetation Community | Total Impacts | Mitigation Ratio[2] | Mitigation[3] |
|---|---|---|---|
| **Disturbed Wetland (palm-dominated)** | 0.075 | **0:1** | - |
| **Freshwater Marsh** | 0.017 | **4:1** | 0.070 |
| **Streambed** | 0.004 | **2:1** | 0.009 |
| **Total** | 0.097 | **-** | 0.078 |

[1] Totals may not sum exactly due to rounding. Note that work within the serviceable concrete-lined channel is not considered an impact because the concrete-lined channel does not contain any vegetation or surface water, and the project will leave the concrete-lined channel in its current condition except for the removal of one palm tree
[2] Mitigation ratios are pursuant to the requirements of the MMP PEIR Site Development Permit, as amended under Settlement Agreement.
[3] Stadium Wetland Mitigation Project along the San Diego River

**Uplands**

Required mitigation for impacts to City uplands is summarized in Table 8 below. Mitigation ratios are pursuant to the requirements in the City Biology Guidelines (City 2012) and based on impacts occurring outside of the MHPA and mitigation occurring within the MHPA. The total mitigation requirement for City uplands is 0.021 acre. In accordance with PEIR mitigation measure 4.3.11, upland impacts will be mitigated through payment into the City's Habitat Acquisition Fund, acquisition and preservation of specific land, or purchase of mitigation credits.

**TABLE 8**
**PROPOSED MITIGATION FOR IMPACTS TO CITY UPLANDS (ACRES)[1]**

| Vegetation Community | Total Impacts (outside MHPA) | Mitigation Ratio[1] | Mitigation (inside MHPA) |
|---|---|---|---|
| **Tier IIIB (Non-Native Grassland)** | 0.041 | **0.5:1** | 0.021 |
| **Tier IV (Disturbed, and Non-Native Vegetation/Ornamental)** | 0.009 | **0:1** | - |
| **Total** | 0.050 | **-** | 0.021 |

[1] Totals may not sum exactly due to rounding
[2] Mitigation ratios are pursuant to the requirements in the City Biology Guidelines (City 2012)

**Mitigation Description/Location:**
All impacts will be mitigated as permanent. Compensatory mitigation will be fulfilled at the Stadium Mitigation Site located along the San Diego River between I-15 and I-805 south of SDCCU Stadium. The Stadium Mitigation Site is a City of San Diego-approved advance permittee-responsible mitigation site with a service area that includes the San Diego River watershed where the Montezuma Channel site is located. Implementation of the mitigation proceeded in 2017. Based on the approved mitigation plan[2] (Atkins 2015), currently the Stadium Wetland Mitigation site primarily provides riparian woodland rehabilitation (restoration) and enhancement mitigation, plus a small amount of freshwater marsh enhancement mitigation. Because riparian woodland is of equal or higher value than the habitats that are projected to be impacted by the Montezuma Channel project, 0.02 acre of riparian woodland rehabilitation credits are proposed to address 1:1 of the total mitigation requirement, and 0.06 acre of riparian woodland enhancement credits are proposed to address the remaining mitigation need over and above the 1:1 replacement ratio.

The 0.021 acre of non-native grassland mitigation would be fulfilled through the purchase of credits from the City's Habitat Acquisition Fund for acquisition and preservation of specific land, or purchase of mitigation credits at an approved mitigation bank, such as the Marron Valley Mitigation Bank.

**ADDITIONAL COMMENTS OR RECOMMENDATIONS**

Per the IHHA, it is important to note that the preferred maintenance condition (partial vegetation maintenance) is different from the vegetation-only maintained condition. In the vegetation-only maintained condition, all vegetation within the jurisdictional boundaries of the City of San Diego maintained channel is maintained to the existing sediment layer. The preferred maintenance condition (partial vegetation maintenance) proposes only partial maintenance of the existing palm trees. The existing palm trees should be cut down, leaving 2-foot-tall stumps with root balls attached in the ground. All fallen palm tree trunks and debris should be removed. All other existing vegetation should be left in place and no sediment removal is proposed. A Manning Roughness Coefficient of 0.11 was used to reflect a channel condition with palm stumps and freshwater marsh vegetation. Sediment removal is not recommended; therefore, the current channel geometries were used.

**INDIVIDUAL BIOLOGICAL ASSESSMENT REPORT FIGURES:**
Figure 1: Project Vicinity Map
Figure 2: Vegetation Communities and Land Cover
Figure 3: Jurisdictional Delineation Results
Figure 4: CNDDB, SanBIOS, and USFWS Records

**INDIVIDUAL BIOLOGICAL ASSESSMENT REPORT ATTACHMENTS:**
Attachment A: Applicable PEIR Mitigation Measures
Attachment B: Plant Species Observed in the Montezuma Creek Channel Study Area
Attachment C: Wildlife Species Observed in the Montezuma Creek Channel Study Area
Attachment D: Jurisdictional Delineation Memorandum
Attachment E: CNDDB Records
Attachment F: IPaC Resource List

[2] The Stadium Wetland Mitigation Project Mitigation Plan is available at: https://www.sandiego.gov/sites/default/files/legacy/stormwater/pdf/alvaradomitigationplan.pdf

**REFERENCES**


Atkins. 2015. Stadium Wetland Mitigation Project (San Diego River) Mitigation Plan Final. Prepared for the City of San Diego. March 13.

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley.

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 30 January 2018].

California Department of Fish and Wildlife (CDFW). 2017. California Natural Diversity Database. Biogeographic Data Branch. Commercial Version, December, 1 2017.

City of San Diego (City). 2016. California Environmental Quality Act, Significance Determination Thresholds. Development Services Department. July.

2012. Land Development Code Biology Guidelines (as amended by Resolution No. R-307376). April 23.

2011a. Master Storm Water Maintenance Program (MMP). San Diego, California. October.

2011b. Final Recirculated Master Storm Water System Maintenance Program PEIR. San Diego, California. October 4.

2011c. Biological Technical Report. Appendix D.1 of the Final Recirculated Master Storm Water System Maintenance Program PEIR. May.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. 100 pp. with Appendices.

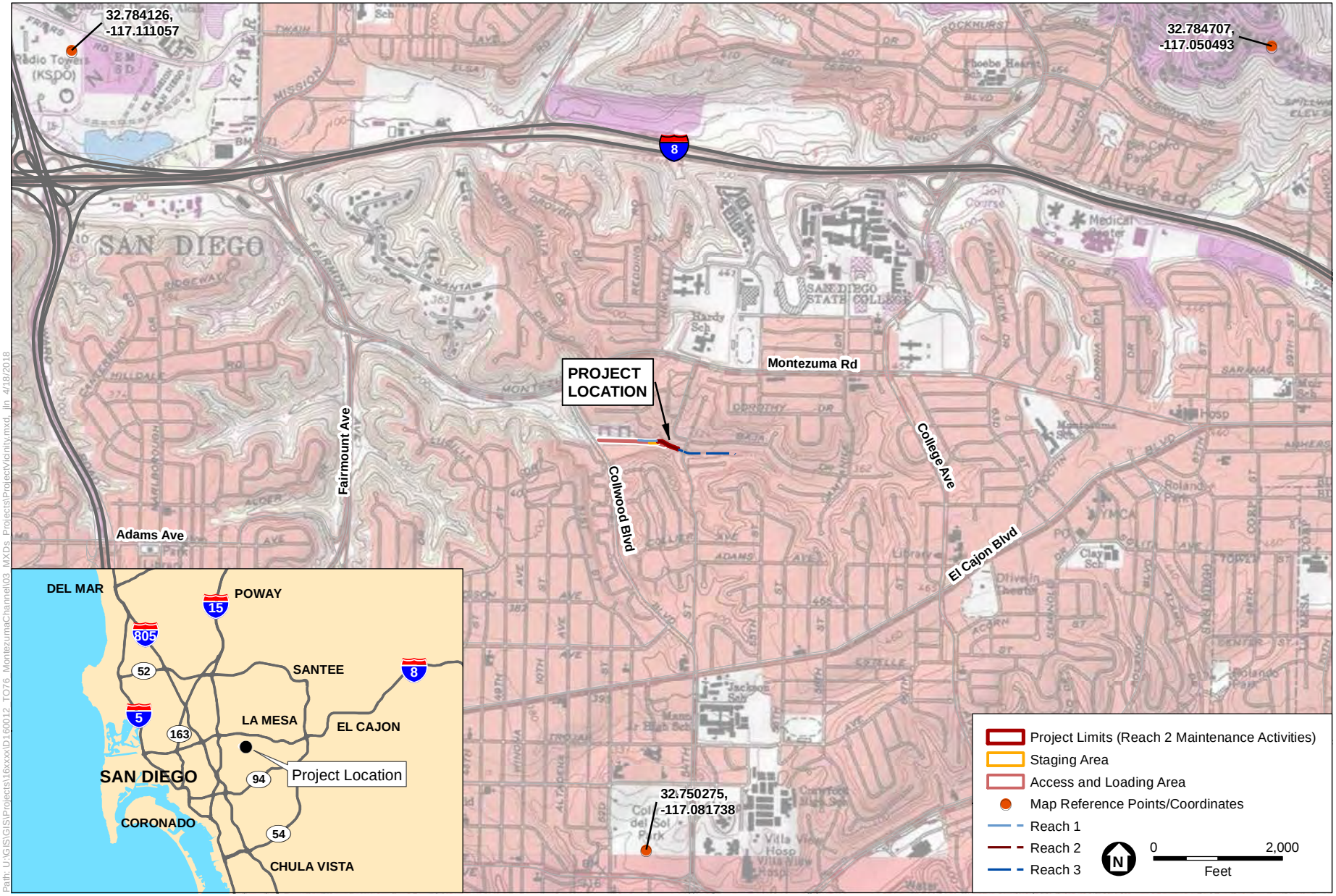
Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, California Department of Fish & Game.

Rick Engineering (Rick). 2018a. Individual Hydrologic & Hydraulic Assessment (IHHA) Report for Montezuma Creek Channel. April 16.

2018b. Individual Maintenance Plan (IMP) for Montezuma Creek Channel MMP Map #66. March 23.

U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Eds. J.S. Wakely, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Fish and Wildlife Service. 2018. IPaC - Information for Planning and Consultation. Online planning [accessed 30 January 2018].



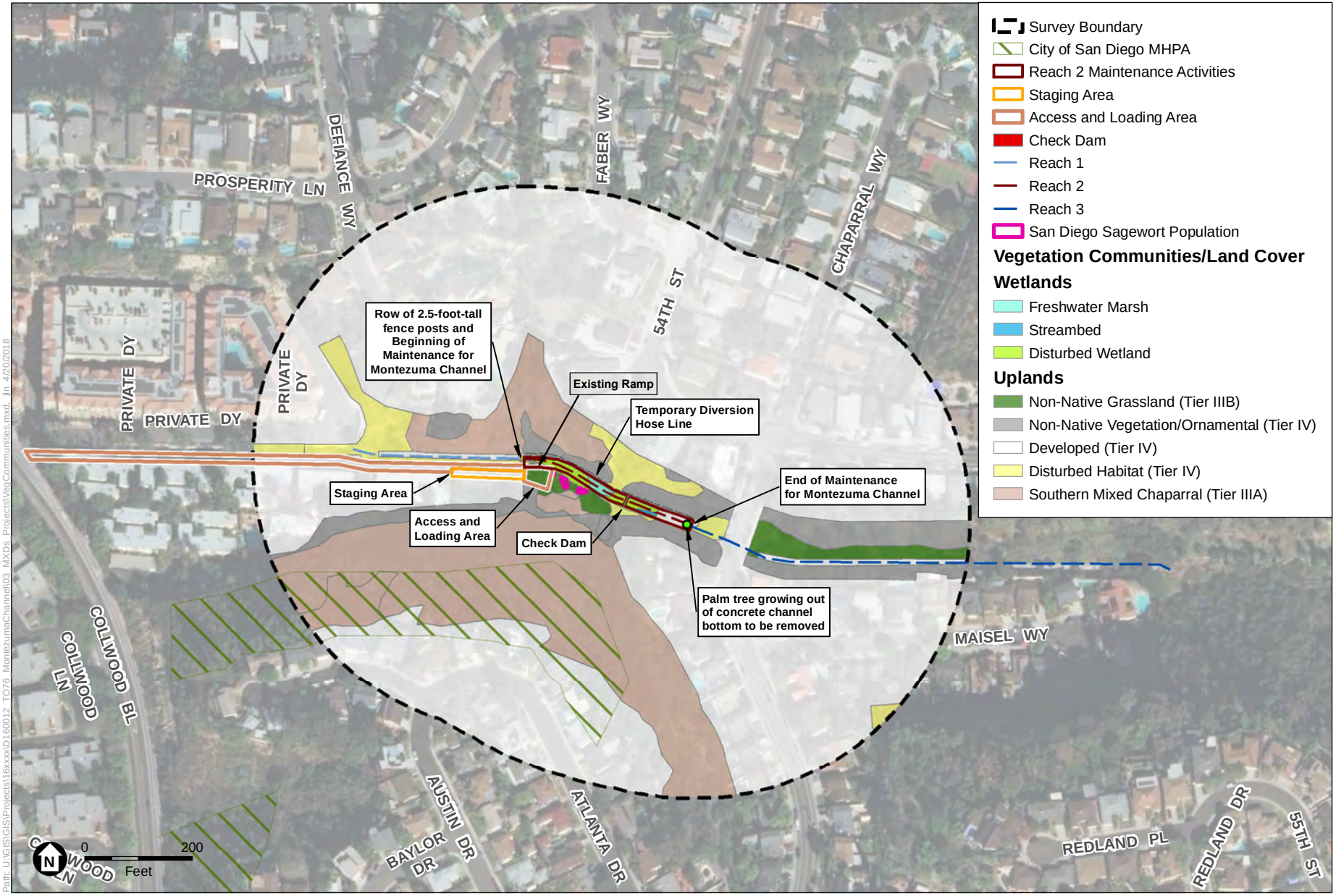

Path: U:\GIS\GIS\Projects\16xxxx\D160012_TO76_MontezumaChannel\03_MXDs_Projects\ProjectVicinity.mxd jln 4/18/2018

SOURCE: ESRI; SanGIS; USGS Topo 7.5' Quad La Mesa 1975, 1978

Montezuma Creek Channel Maintanance

**Figure 1**
Project Vicinity

ESA




SOURCE: ESRI; City of San Diego; SanGIS; ESA

Montezuma Creek Channel Maintanance

**Figure 2**

Vegetation Communities/Land Cover

ESA

City of San Diego MHPA
Map Reference Points/Coordinates
Contour Elevation (feet)

**Temporary Impacts**
Reach 2 Maintenance Activities
Access and Loading Area
Staging Area

**Permanent Impact**
Check Dam

**Potential Jurisdictional Waters**
Corps Non-Wetland WUS (concrete-lined)
Corps Non-Wetland WUS (earthen-bottom)
Corps Wetland
CDFW
San Diego Sagewort Population

**Vegetation Communities/Land Cover**

**Wetlands**
Freshwater Marsh
Streambed
Disturbed Wetland

**Uplands**
Non-Native Grassland (Tier IIIB)
Non-Native Vegetation/Ornamental (Tier IV)
Developed (Tier IV)
Disturbed Habitat (Tier IV)
Wetland Determination Data Points
Ordinary High Water Mark Data Sheet Points
Jurisdictional Determination Photo Point/Direction

32.767895, -117.081808
Row of 2.5-foot-tall fence posts and Beginning of Maintenance for Montezuma Channel
Low flow channel
OHWM/Active Flood Plain
W1
U1
Temporary Diversion Hose Line
32.767644, -117.080206
Staging Area
Access and Loading Area
Check Dam
Palm tree growing out of concrete channel bottom to be removed
End of Maintenance for Montezuma Channel
32.767203, -117.081797
32.767212, -117.080191
1
2
3
4
5
6
N
0
50
Feet

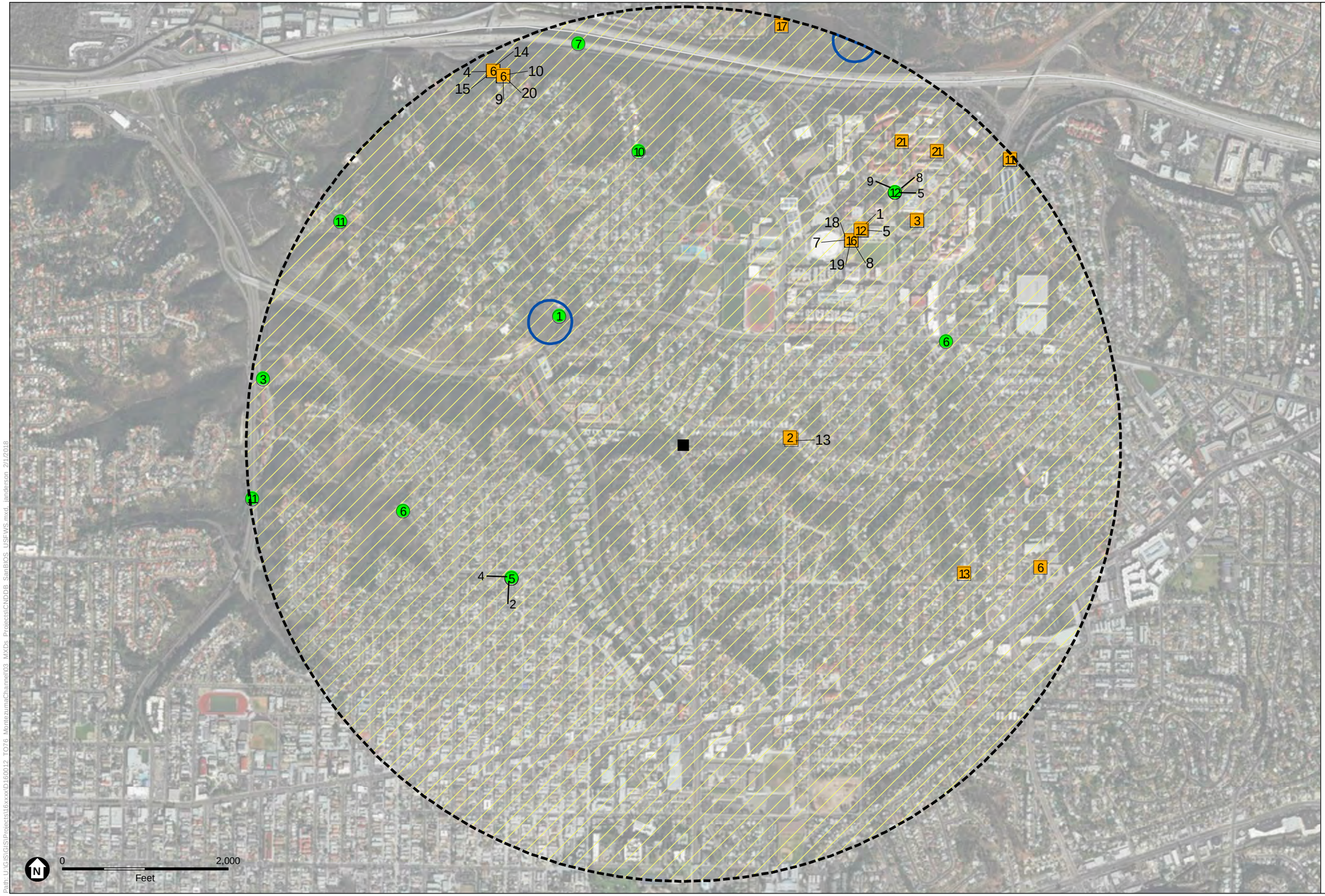
Path: U:\GIS\GIS\Projects\16xxxx\D160012_TO76_MontezumaChannel\03_MXDs_ProjectsJD_Results_FY18_20180323.mxd_jln_4/12/2018

SOURCE: Rick Engineering; ESA; SanGIS; Digital Globe aerial imagery, 1/26/2016

Montezuma Creek Channel Maintenance

**Figure 3**
Jurisdictional Delineation Results for the FY19 Montezuma Creek Channel Maintenance Area

ESA




SOURCE: ESRI; CNDDB

Montezuma Creek Channel Maintanance

**Figure 4**

CNDDB, SanBios, USFWS

ESA

**SITE PHOTOGRAPHS**

| | |
|---|---|
|  |  |
| **PHOTO NOTES:**<br>Taken from 54th Street at the eastern extent of Reach 2, facing west (downstream) toward Montezuma channel. | **PHOTO NOTES:**<br>Taken within Montezuma channel, facing west (downstream) toward fan palm stand and ponded surface water at the end of the concrete-lined channel. |
|  |  |
| **PHOTO NOTES:**<br>Taken from the downstream end of Reach 2, facing east (upstream) toward Montezuma Channel. Note fan palm stand in channel and iceplant dominating upland area to the north. | **PHOTO NOTES:**<br>Taken from the downstream end of Reach 2, facing west (downstream) toward Montezuma Channel. The channel is concrete-lined from this point continuing west. |

# Attachment A

## Applicable PEIR Mitigation Measures

**ATTACHMENT A**
**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 Mitigation Monitoring Coordinator (MMC), Storm Water Division (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.

***General Mitigation 4:*** Prior to commencement of work and pursuant to Section 1600 et seq. of the State of California Fish & Game Code, evidence of compliance with Section 1605 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 Individual Biological Assessment (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***: No maintenance activities within a proposed annual maintenance program shall be initiated before the City's ADD Environmental Designee and state and federal agencies with jurisdiction over maintenance activities have approved the Individual Maintenance Plans (IMPs) and IBAs including proposed mitigation for each of the proposed activities. In their review, the ADD Environmental Designee and agencies shall confirm that the appropriate maintenance protocols have been incorporated into each IMP.

***Mitigation Measure 4.3.3***: No maintenance activities within a proposed annual maintenance program shall be initiated until the City's ADD Environmental Designee and MMC have approved the qualifications for biologist(s) who shall be responsible for monitoring maintenance activities that may impact sensitive biological resources.

***Mitigation Measure 4.3.4***: Prior to undertaking any maintenance activity included in an annual maintenance program, a mitigation account shall be established to provide sufficient funds to implement all biological mitigation associated with the proposed maintenance activities. The fund amount shall be determined by the ADD Environmental Designee. The account shall be managed by the City's SWD, with quarterly status reports submitted to Development Services Department (DSD). The status reports shall separately identify upland and wetland account activity. Based upon the impacts identified in the IBAs, money shall be deposited into the account, as part of the project submittal, to ensure available funds for mitigation.

***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, California Department of Fish and Wildlife, Regional Water Quality Control Board, U.S. Fish and Wildlife Service (USFWS), and U.S. Army Corps of Engineers. 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 that 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.

**TABLE 4.3-10**
**WETLAND MITIGATION RATIOS**

| WETLAND TYPE MITIGATION | WETLAND TYPE MITIGATION |
|---|---|
| Southern riparian forest | 3:1 |
| Southern sycamore riparian woodland | 3:1 |
| Riparian woodland | 3:1 |
| Coastal saltmarsh | 4:1 |
| Coastal brackish marsh | 4:1 |
| Southern willow scrub | 2:1 |
| Mule fat scrub | 2:1 |
| Riparian scrub[1] | 2:1 |
| Freshwater marsh[2] | 2:1 |
| Cismontane alkali marsh | 4:1 |
| Disturbed wetland | 2:1 |
| Streambed/natural flood channel | 2:1 |

[1] Mitigation ratio within the Coastal Zone will be 3:1
[2] Mitigation ratio within the Coastal Zone will be 4:1

***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 that 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 that involves habitat acquisition and preservation shall include the following:

· Location of proposed acquisition;

· Description of the biological resources to be acquired including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact; and

· Documentation that the mitigation area would be adequately preserved and maintained in perpetuity. Mitigation that 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 Habitat 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.

**TABLE 4.3-11"**
**UPLAND HABITAT MITIGATION RATIOS[1]**

| Vegetation Type Tier | Vegetation Type Tier | Location of Impact with Respect to the MHPA | |
|---|---|---|---|
| | | Inside Outside | Inside Outside |
| Coast live oak woodland | I | 2:1 | 1:1 |
| Scrub oak chaparral | I | 2:1 | 1:1 |
| Southern foredunes | I | 2:1 | 1:1 |
| Beach | I | 2:1 | 1:1 |
| Diegan coastal sage scrub | II | 1:1 | 1:1 |
| Coastal sage-chaparral scrub | II | 1:1 | 1:1 |
| Broom baccharis scrub | II | 1:1 | 1:1 |
| Southern mixed chaparral | IIA | 1:1 | 0.5:1 |
| Non-native grassland | IIIB | 1:1 | 0.5:1 |
| Eucalyptus woodland | IV | -- | -- |
| Non-native vegetation/ornamental | IV | -- | -- |
| Disturbed habitat/ruderal | IV | -- | -- |
| Developed | IV | -- | -- |

[1]Assumes mitigation occurs within a Multi-Habitat Planning Area (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:*** Whenever off-site mitigation would result in a physical disturbance to the proposed mitigation area, the City will conduct an environmental review of the proposed mitigation plan in accordance with the California Environmental Quality Act (CEQA). If the off-site mitigation would have a significant impact on biological resources associated with the mitigation site, mitigation measures will be identified and implemented in accordance with the Mitigation, Monitoring and Reporting Program (MMRP) resulting from that CEQA analysis.

***(Mitigation Measure 4.3.15 not applicable)***

***Mitigation 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: not applicable)***

***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: not applicable)***

***Mitigation Measure 4.3.21:*** If maintenance occurs during the raptor breeding season (January 15 to August 31), a pre-maintenance survey for active raptor nests shall be conducted in areas supporting suitable habitat. If active raptor nests are found, maintenance shall not occur within 300 feet of a Cooper's hawk nest, 900 feet of a northern harrier's nest, or 500 feet of any other raptor's nest until any fledglings have left the nest.

***Mitigation Measure 4.3.22***: If removal of any eucalyptus trees or other trees used by raptors for nesting within a maintenance area is proposed during the raptor breeding season (January 15 through August 31), a qualified biologist shall ensure that no raptors are nesting in such trees. If maintenance occurs during the raptor breeding season, a pre-maintenance survey shall be conducted and no maintenance shall occur within 300 feet of any nesting site of Cooper's hawk or other nesting raptor until the young fledge. Should the biologist determine that raptors are nesting, the trees shall not be removed until after the breeding season. In addition, if removal of grassland or other habitat appropriate for nesting by northern harriers, a qualified biologist shall ensure that no harriers are nesting in such areas. If maintenance occurs during the raptor breeding season, a pre-maintenance survey shall be conducted and no maintenance shall occur within 900 feet of any nesting site of northern harrier until the young fledge.

***(Mitigation Measure 4.3.23 not applicable)***

***Mitigation Measure 4.3.24:*** If maintenance activities will occur within areas supporting listed and/or narrow endemic plants, the boundaries of the plant populations designated sensitive by the resource agencies will be clearly delineated with flagging or temporary fencing that must remain in place for the duration of the activity.

***Mitigation Measure 4.3.25:*** In order to avoid impacts to nesting avian species, including those species not covered by the Multiple Species Conservation Program (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 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 30 days prior to the pre-maintenance meeting, the qualified biologist shall submit all required documentation to MMC, verifying that any special reports, maps, plans and time lines, such as but not limited to, revegetation plans, plant relocation requirements and timing, MSCP requirements, avian or other wildlife protocol surveys, impact avoidance areas or other such information has been completed and updated.

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

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

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

· All lighting adjacent to, or within, the MHPA shall be shielded, unidirectional, low pressure sodium illumination (or similar) and directed away from sensitive areas using appropriate placement and shields. If lighting is required for nighttime maintenance, it shall be directed away from the preserve and the tops of adjacent trees with potentially nesting raptors, using appropriate placement and shielding.

· All maintenance activities (including staging areas and/or storage areas) shall be restricted to the disturbance areas shown on the approved maintenance plan. The project biologist shall monitor maintenance activities, as needed, to ensure that maintenance activities do not encroach into biologically sensitive areas beyond the limits of work as shown on the approved maintenance plan.

· No trash, oil, parking, or other maintenance-related activities shall be allowed outside the established maintenance areas including staging areas and/or storage areas, as shown on the approved maintenance plan. All maintenance related debris shall be removed off-site to an approved disposal facility.

· Access roads through MHPA-designated areas shall comply with the applicable policies contained in the "Roads and Utilities Construction and Maintenance Policies" identified in Section 1.4.2 of the City's Subarea Plan.

***(Mitigation Measure 4.1.8 not applicable)***

# Attachment B

## Plant Species Observed in the Montezuma Creek Channel Biological Study Area

**ATTACHMENT B**
**PLANT SPECIES OBSERVED IN THE MONTEZUMA CREEK CHANNEL BIOLOGICAL STUDY AREA**

| Scientific Name | Common Name | Special Status |
|---|---|---|
| Scientific Name | | |
| **EUDICOTS** | | |
| **Aizoaceae - Fig-marigold family** | | |
| * *Carpobrotus edulis* | Freeway iceplant | |
| **Anacardiaceae - Sumac or Cashew family** | | |
| *Rhus integrifolia* | Lemonade berry | |
| *Rhus ovata* | Sugar bush | |
| * *Schinus terebinthifolius* | Brazilian pepper tree | |
| **Apiaceae - Carrot family** | | |
| * *Apium graveolens* | Celery | |
| * *Foeniculum vulgare* | Fennel | |
| **Asteraceae - Sunflower family** | | |
| *Ambrosia psilostachya* | Western ragweed | |
| *Artemisia douglasiana* | Mugwort | |
| *Artemisia palmeri* | San Diego sagewort | CRPR 4.2 |
| *Baccharis pilularis* | Coyote brush | |
| **Brassicaceae - Mustard family** | | |
| * *Raphanus sativus* | Radish | |
| **Lamiaceae - Mint family** | | |
| * *Marrubium vulgare* | Horehound | |
| *Salvia mellifera* | Black sage | |
| **Polygonaceae - Buckwheat family** | | |
| *Eriogonum fasciculatum* | California buckwheat | |
| **Solanaceae - Nightshade family** | | |
| * *Nicotiana glauca* | Tree tobacco | |
| **MONOCOTS** | | |
| **Arecaceae - Palm family** | | |
| * *Washingtonia robusta* | Mexican fan palm | |
| **Cyperaceae - Sedge family** | | |
| *Schoenoplectus californicus* | Southern bulrush | |
| **Poaceae - Grass family** | | |
| * *Cynodon dactylon* | Bermuda grass | |
| * *Stipa miliacea var. miliacea* | Smilo grass | |
| **Typhaceae - Cattail family** | | |
| *Typha domingensis* | Southern cattail | |

**Legend**

*= Non-native or invasive species

Special Status:

Federal:
FE = Endangered
FT = Threatened

State:
SE = Endangered
ST =Threatened

CRPR – California Rare Plant
Rank 1A. Presumed extinct in
California
1B. Rare or Endangered in California and elsewhere
2. Rare or Endangered in California, more common elsewhere
3. Plants for which we need more information - Review list
4. Plants of limited distribution - Watch list

Threat Ranks
.1 - Seriously endangered in California
.2 – Fairly endangered in California

# Attachment C

## Wildlife Species Observed in the Montezuma Creek Channel Biological Study Area

**ATTACHMENT C**
**WILDLIFE SPECIES OBSERVED IN THE MONTEZUMA CREEK CHANNEL BIOLOGICAL STUDY AREA**

| Scientific Name | Common Name | Special Status |
|---|---|---|
| **VERTEBRATES** | | |
| **Birds** | | |
| *Calypte anna* | Anna's Hummingbird | |
| *Psaltriparus minimus* | Bushtit | |
| *Chamaea fasciata* | Wrentit | |
| *Dendroica coronata* | Yellow-rumped Warbler | |
| *Melozone crissalis* | California Towhee | |
| **Mammals** | | |
| **Rattus rattus* | Black Rat | |

**Legend**

*= Non-native or invasive

species Special Status:

Federal:
FE =
Endangered FT
= Threatened

State:
SE = Endangered ST
=Threatened
CSC = California Species of Special
Concern CFP = California Fully
Protected Species

# Attachment D

## Jurisdictional Delineation Memorandum

# Attachment E
## **CNDDB Records**

# Attachment F
## **IPaC Resource List**

# Attachment C

## Wildlife Species Observed in the Montezuma Creek Channel Biological Study Area

**ATTACHMENT C**
**WILDLIFE SPECIES OBSERVED IN THE MONTEZUMA CREEK CHANNEL BIOLOGICAL STUDY AREA**

| Scientific Name | Common Name | Special Status |
|---|---|---|
| **VERTEBRATES** | | |
| **Birds** | | |
| *Calypte anna* | Anna's Hummingbird | |
| *Psaltriparus minimus* | Bushtit | |
| *Chamaea fasciata* | Wrentit | |
| *Dendroica coronata* | Yellow-rumped Warbler | |
| *Melozone crissalis* | California Towhee | |
| **Mammals** | | |
| **Rattus rattus* | Black Rat | |

**Legend**

*= Non-native or invasive

species Special Status:

Federal:
FE =
Endangered FT
= Threatened

State:
SE = Endangered ST
=Threatened
CSC = California Species of Special
Concern CFP = California Fully
Protected Species

# Attachment D

## Jurisdictional Delineation Memorandum

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April 24, 2018

**Subject: Jurisdictional Delineation Memorandum for the FY19 Montezuma Creek Channel Maintenance Project**

# 1.0 Introduction

This memorandum summarizes the methodology and results of a field and desktop delineation of resources under the jurisdiction of the U.S. Army Corps of Engineers (USACE), San Diego Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), and City of San Diego (City) within the FY19 Montezuma Creek Channel Maintenance Project (project) area. The project would be implemented through the City Transportation and Storm Water Department under the existing Master Storm Water System Maintenance Program (MMP) (City of San Diego 2011a). The City of San Diego (City) has developed the MMP 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. The project corresponds with Map 66 in the MMP

The proposed project includes several distinct activities intended to repair and protect the existing concrete-lined and earthen-bottomed Montezuma Creek Channel and reduce flooding hazards related to the potential clogging of a downstream culvert. These activities include: (1) installation of a row of steel posts to catch debris; (2) installation of a 2-foot by 20-foot check dam to slow velocity and reduce erosion; (3) removal of exotic palm trees with roots and stumps left in place to reduce flow velocity; and (4) removal of a single palm tree and repair of damaged concrete in the concrete-lined channel segment.

# 2.0 Background

## 2.1 Project Location

The proposed project is located within the Montezuma Creek flood control channel (Montezuma Channel) in the United States Geological Survey La Mesa quadrangle (Figure 1 – Project Vicinity). The Montezuma Channel is located in the College Area community within the City of San Diego south of Interstate 8, north of El Cajon Boulevard, west of College Avenue, and east of Collwood Boulevard.

To facilitate the Individual Hydrology and Hydraulic Assessment (IHHA; Rick Engineering [Rick] 2018a) prepared for the maintenance, the Montezuma Channel was subdivided into three separate “reaches”. The proposed project is within Reach 2 of the Montezuma Creek channel and includes a 75-foot-long concrete-lined trapezoidal channel segment west of the culvert under 54th Street and an adjacent downstream 275-foot-long earthen-bottomed channel segment to the west.

The Channel is within the within the San Diego Hydrologic Unit, the Lower San Diego Watershed, and the Mission San Diego Hydrologic Sub Area (907.11).

## 2.2 Project Purpose

The purpose of the project is to maintain the existing storm water facility by restoring the original design capacity to provide public safety and protection of property. The City is proposing to maintain the Montezuma Channel (Reach 2) through the removal of vegetation, installation of a check dam and bollards, and repair of concrete.

The hydraulic capacity of Montezuma Channel ranges from less than the 2-year storm event to greater than the 100-year storm event. The majority of Montezuma Channel is bounded by slopes ranging from 10 to 50 feet high and has a 100-year storm event capacity as-designed. Using the HEC-RAS[1] hydraulic analysis prepared as part of the project's IHHA, the 60-inch reinforced concrete pipe (RCP) culverts located underneath the Collwood Villa apartment complex and underneath 54th Street were determined to be undersized. As a result of these undersized culverts, tailwater conditions are predicted to extend approximately 150 feet upstream of the existing 60-inch RCP underneath the Collwood Villa apartment complex and Collwood Boulevard and approximately 400 feet upstream of the existing 60-inch RCP underneath 54th Street for all storm events. Where tailwater conditions exist, Montezuma Channel has a capacity equivalent to less than a 2-year storm event. The water surface elevations and limits of flooding in portions of the channel impacted by these tailwater conditions are controlled by the dimensions of the existing culverts; as such, vegetation and sediment maintenance will not increase the capacity of Montezuma Channel at these locations. Because of these tailwater conditions, the overall capacity of Montezuma Channel, including the maintenance conditions described above, would be less than the 2-year storm event; however, partial vegetation maintenance in selected parts of the channel will significantly reduce the risk of clogging in the existing 60-inch RCP underneath the Collwood Villas Apartment Complex and Collwood Street. Palm trees and freshwater marsh vegetation have established within the 275-foot-long earthen-bottomed portion of Montezuma Channel. Mature palm trees have fallen down and are held in place by other standing palm trees. These trunks and their attached root balls have the potential to dislodge and clog the existing 60-inch RCP underneath the Collwood Villa apartment complex, which would greatly increase the limits of flooding.

## 2.3 Project Description

An Individual Maintenance Plan (IMP) was prepared for the proposed maintenance in accordance with the MMP (Rick 2018b). The IMP identifies the limits of maintenance and describes the methodology to be used within each channel. The proposed maintenance in Reach 2 of Map 66 will include the following activities depicted in Figure 2:

- A row of 2.5-foot-tall fence posts would be installed across the channel to reduce the potential of palm tree debris or other debris from entering the existing 60-inch RCP underneath the Apartment Villas apartment complex. Chain link would not be installed between these posts. These posts would be constructed per the IMP for Montezuma Channel MMP Map Number 66.

- The existing palm trees would be cut down within the earthen-bottomed portion of the Reach 2 project limits (depicted as Disturbed Wetland in Figure 2), leaving 2-foot-tall stumps with root balls intact in the ground. These stumps would be left in place to help mitigate channel velocities. All fallen palm tree trunks and debris

[1] The Hydrologic Engineering Center's River Analysis System (HEC-RAS) is a computer program developed for the USACE to model hydraulics of water flow through rivers and channels.

would be removed. All other existing vegetation would be left in place. No sediment removal is proposed. Vegetation removal will not increase the capacity of the channel within this portion of Reach 2; however, existing palm trees have the potential to be uprooted and clog the existing 60-inch RCP underneath the Collwood Villas apartment complex, which would greatly increase the limits of flooding. Partial vegetation removal would decrease the risk of clogging at the downstream location while mitigating increases in flow velocities.

- A 2.75-foot-tall check dam would be installed for erosion control. This check dam would be constructed per the IMP for Montezuma Channel MMP Map Number 66.

- The palm tree growing out of a crack in the concrete lining would be removed and the crack in the concrete lining would be repaired to match the existing flow line.

The proposed check dam and the proposed fence posts are two separate structures. The proposed check dam is a grade control structure designed to reduce flow velocities. The proposed fence posts function as a debris collection area (trash fence) to reduce the risk of palm tree stumps and other debris from entering and clogging the 60-inch RCP underneath the Collwood Villa Apartment Complex.

Equipment involved in the maintenance would include the following or similar: Gradall (5100 Series), Track Steer (CAT 2890), Excavator (CAT 349), Front-end Loader (CAT 966), Dump Trucks (12 yard), and 6" or smaller pumps. Water will be pumped around the maintenance area in a pipe and discharged downstream of the maintenance area. Heavy equipment will be used within the channel for installation of the check dam, posts, and removal of cut palm trees. The equipment within the channel would likely be a skid-steer loader, which would navigate through the palm stumps within the channel by cutting some palm trees to 6 inches instead of 2 inches, as needed for access. The only concrete repair would be where the palm tree is growing within the concrete-lined channel.

Equipment will use designated access roads along Collwood Boulevard and access the site through a paved internal roadway and parking lot at the rear of the Collwood Villa Apartment Complex (4819-4899 Collwood Boulevard) along the western end of the channel reach. The new staging area will be located to the southwest of the maintenance area of Reach 2, within the existing paved parking lot. Access to the channel will proceed eastward through a gate to the adjacent unpaved access/loading area, then north from the access/loading area to the channel. Steel plates will be placed on the unpaved access/loading area prior to maintenance activities to more evenly distribute the weight of the equipment. A track steer will enter the channel from the access/loading area via an earthen ramp adjacent to the southwestern end of the channel reach. The equipment will navigate through the palm stumps within the channel by cutting some palm trees to 6 inches instead of 2 feet, as needed for access. Maintenance debris (palm tree vegetation) will be removed and loaded into a dump truck for hauling off-site.

Upon completion of the maintenance, all temporary materials will be removed and equipment will be transported back to the City yard.

## 2.4 Environmental Setting

Reach 2 of the Montezuma Channel is located downslope from residential development to the north and south. The slopes to the north and south of the channel contain a mix of native and non-native trees, shrubs, grasses, and disturbed areas. The earthen portions of the channel within the project site contain a row of non-native Mexican fan palm (*Washingtonia robusta*) trees with scattered native species comprising freshwater marsh habitat in the

understory. Surface water was observed in portions of the channel, particularly in a ponded area at the downstream end of the concrete-lined portion of the channel. Debris, furniture, and small equipment (e.g., lawnmowers) have been dumped in the upland area to the south of the channel at the proposed access/staging area location. In total, the length of the channel maintenance area in Reach 2 includes a 75-foot concrete-lined trapezoidal channel segment west of the culvert under 54th Street and an adjacent downstream 275-foot earthen-bottomed channel segment to the west.

# 3.0 Methodology

The jurisdictional delineation included a desktop review of existing relevant data and a formal field delineation survey. The review included a field survey of the project area, including the Reach 2 channel maintenance area, staging area, and eastern access and loading area. A desktop review was conducted of the 500-foot buffer area and the eastern access and loading area which consists of an existing paved road and does not contain jurisdictional resources.

ESA biologists Julie Stout and Tommy Molioo conducted the formal field delineation survey on November 21, 2017. The limits of jurisdictional resources were recorded in the field using a tape measure, printed aerial photograph of the project area, and ArcCollector on an iPad connected to a Trimble GNSS device for sub-meter accuracy with the final delineation subsequently conducted via desktop mapping in Google Earth based on field data and aerial imagery. Each jurisdictional boundary was delineated based on the methodology and guidelines described below.

## 3.1 Waters of the United States

Waters of the United States were delineated to encompass the outer extent of both wetland and non-wetland waters.

### Non-Wetlands

Federal jurisdiction over a non-wetland waters of the United States extends to the ordinary high water mark (OHWM), defined in 33 C.F.R. Section 328.3 as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, or the presence of litter and debris. Delineation methods and data sheets were completed in accordance with *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008a), and the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010).

### Wetlands

To determine the extent of potential jurisdictional wetlands on the project site, USACE's *Wetlands Delineation Manual* (USACE 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (USACE 2008b) was used as a guide for identifying wetland characteristics. The delineation of USACE wetlands follows a three-parameter approach in which, to be considered a wetland, an area must exhibit indicators of hydrophytic vegetation, hydric soils, and wetland hydrology.

## 3.2 Waters of the State (RWQCB)

Waters under the jurisdiction of the San Diego RWQCB under Clean Water Act (CWA) Section 401 were considered concurrent with Waters of the United States.

## 3.3 California Department of Fish and Wildlife Jurisdictional Areas

CDFW-jurisdictional waters were delineated to include the top of the bank of a stream, and include the outer dripline of the adjacent riparian vegetation. For portions of the channel with concrete sidewalls, CDFW-jurisdiction was assumed to extend to the top of the concrete sidewalls.

## 3.4 City of San Diego Wetlands

City of San Diego wetlands were delineated based on the definition of wetlands in the City's Environmentally Sensitive Lands Regulations of the Land Development Code and include areas characterized by any of the following conditions: (1) all areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodlands, riparian scrub, and vernal pools; (2) areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities have removed the historic wetland vegetation or catastrophic or recurring natural events or processes have acted to preclude the establishment of wetland vegetation, as in the case of salt pannes and mudflats; (3) areas lacking wetland vegetation communities, hydric soils, and wetland hydrology as a result of non-permitted filling of previously existing wetlands; or (4) areas mapped as wetlands on Map C-713 as shown in Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

City wetlands were mapped to include all USACE wetland and non-wetland waters, excluding concrete-lined channel that does not contain any vegetation, and all CDFW jurisdiction, excluding upland streambanks due to the lack of wetland vegetation, soils, and hydrology.

# 4.0 Results

Based on the data review and formal jurisdictional delineation field survey, the Reach 2 project area was determined to contain wetlands and waters under the jurisdiction of the USACE, RWQCB, CDFW, and City of San Diego (Figure 3). Photographs are included as Appendix A. Acreages by jurisdiction are provided for the Reach 2 study area in Table 1, followed by a text description for each jurisdictional feature.

The Reach 2 (project area segment) of the Montezuma Creek Channel (unnamed tributary to the San Diego River) is an intermittent flood control channel and includes a 75-foot-long concrete-lined trapezoidal channel segment west of the culvert under 54th Street and an adjacent downstream 275-foot-long earthen-bottomed channel segment to the west with a concrete northern sidewall. The adjacent channel segments upstream and downstream of Reach 2 are both concrete-lined. The Reach 2 channel and OHWM are an average of approximately 20 feet wide, ranging from approximately 10 to 30 feet wide. The channel includes a discontinuous low-flow channel and areas with wetland vegetation extending across the entire channel and occurring within the limits of the OHWM. Adjacent upland vegetation is predominantly disturbed habitat and non-native grassland with non-native and ornamental species growing along with dispersed native chaparral species on steep slopes leading up to residential housing along hilltops. Wetland and deepwater habitat classifications according to Cowardin at al. 1979 are

provided in Table 1 based on the field survey results. The NWI Cowardin Classification of the site is Riverine Intermittent Streambed, Temporarily Flooded, excavated (R4SBAx).

**TABLE 1**
**EXISTING JURISDICTIONAL RESOURCES WITHIN THE FY 19 MONTEZUMA CREEK CHANNEL MAINTENANCE AREA (ACRES)[1]**

| | USACE/RWQCB | | | CDFW | | | |
|---|---|---|---|---|---|---|---|
| **Vegetation Community (*Cowardin Classification Code*)** | **Non-Wetland** | **Wetland** | **Total** | **Non-Wetland[2]** | **Wetland[2] (CDFW/City)** | **Upland Bank[3]** | **Total[4]** |
| Total Developed (includes concrete-lined channel and sidewall) (*R4SBAx*) | 0.028 | - | 0.028 | 0.042 | - | - | 0.042 (75 linear feet) |
| Total Earthen-Bottomed | 0.004 | 0.092 | 0.097 | - | 0.097 | - | 0.097 (275 linear feet) |
| Disturbed Wetland (palm-dominated) (*PFO3E*) | - | 0.075 | 0.075 | - | 0.075 | - | 0.075 (194 linear feet) |
| Freshwater Marsh (*PEM13*) | - | 0.017 | 0.017 | - | 0.017 | - | 0.017 (44 linear feet) |
| Streambed (earthen-bottomed channel) (*R4SB3*) | 0.004 | - | 0.004 | - | 0.004 | - | 0.004 (37 linear feet) |
| Disturbed Habitat[3] | - | - | - | - | - | 0.003 | 0.003 (linear feet not applicable[4]) |
| Total | 0.032 | 0.092 | 0.125 | 0.042 | 0.097 | 0.003 | 0.142[5] (350 linear feet) |

1 Totals may not sum exactly due to rounding.
2 CDFW/City wetlands include unvegetated habitats such as areas of scour within streambeds that would otherwise be capable of supporting wetland vegetation.
3 Upland bank describes non-wetland areas between the ordinary high water mark and top of bank that are under the exclusive jurisdiction of CDFW.
4 Linear feet are only provided once for each stream segment. Where multiple vegetation communities occur along the same segment of stream, linear feet are omitted for certain communities to avoid duplication of stream habitat linear footage.
5 Total CDFW jurisdiction is equivalent to the total of all jurisdictional areas (including USACE/RWQCB/City) due to overlapping jurisdictions.

**Cowardin Classification Codes:**
System: R = Riverine, P = Palustrine; Subsystem: 4 = Intermittent; Class: SB = Streambed, EM = Emergent, FO = Forested; Water Regime: C = Seasonally Flooded; E = Seasonally Flooded/Saturated;; Modifier: x = excavated

## 4.1 Waters of the United States (USACE)

### Non-Wetland

Non-wetland waters of the United States within the project area include the eastern segment of concrete-lined flood control channel as well as unvegetated low-flow channels within the earthen-bottomed segment of flood control channel. Earthen-bottomed areas generally consisted of cobble substrate. No additional erosional features, upland swales, ditches and other features were noted in the maintenance.

### Wetlands

Wetlands within the channel exhibited clearly defined limits of wetland vegetation and hydrology. A single pair of wetland determination data points were sampled in the field, and areas determined to be wetland exhibited positive indicators for hydrophytic vegetation and wetland hydrology. Hydric soils were not identifiable because

of the inability to dig a soil test pit through the thick surface layer of cobble substrate and palm tree roots; therefore, soils were assumed to be hydric based on the presence of hydrophytic vegetation and wetland hydrology (Appendix B). Conditions on site were considered normal with regards to seasonal rainfall and hydrology.

Wetlands were present across the entire channel in several locations with wetland vegetation occurring below the OHWM, based on the presence of recent wrack deposits on vegetation. OHWM datasheets are included as Appendix C.

Soils in the project site were reviewed through the U.S. Department of Agriculture Natural Resources Conservation Service's Web Soil Survey and determined to be within the following map unit: Diablo-Urban land complex, 5 to 15 percent slopes (Appendix D).

## 4.2 Waters of the State (RWQCB)

Waters under the jurisdiction of the San Diego RWQCB were delineated as concurrent with Waters of the United States. The Montezuma Creek channel is within the San Diego Hydrologic Unit, the Lower San Diego Watershed, and the Mission San Diego Hydrologic Sub Area (907.11).

In the San Diego Basin Plan (San Diego RWQCB 1994), beneficial uses listed for unnamed tributaries of the San Diego River include agriculture, industrial service supply, contact water recreation, non-contact water recreation, warm freshwater habitat, wildlife habitat, and rare, threatened, or endangered species.

The lower San Diego River is designated as a water quality limited segment for indicator bacteria pursuant to CWA Section 303(d).

## 4.3 California Department of Fish and Wildlife Jurisdictional Areas

CDFW jurisdictional resources in the project area include all jurisdictional Waters of the United States and State, as well as upland streambank areas above the OHWM, and the outer extent of the riparian canopy, comprised of palm trees. Where the channel banks were nearly vertical, the CDFW top of bank was generally congruent with the outer extent of Water of the United States and the OHWM.

## 4.4 City of San Diego Wetlands

City wetlands in the project area include areas of disturbed freshwater marsh (palm-dominated), freshwater marsh, and natural flood channel.

# 5.0 Project Impacts and Mitigation

## 5.1 Impacts

Jurisdictional resources within the proposed project impact area (portions of Reach 2) are summarized in Table 2. For mitigation purposes, all impacts are considered permanent. Impacts would result from construction equipment access within the channel as well as disturbance associated with the cutting and removal of palm trees. These impacts would include crushing of herbaceous vegetation and potential compaction of the channel bottom. No trees or shrubs are present in the channel with the exception of the palm trees that would be removed. Vehicle

access within the concrete-lined channel would not result in impacts because it does not contain any vegetation and work would not be conducted within flowing water. Installation of concrete footings within the existing concrete sidewall and concrete replacement after removal of the single palm tree growing within the concrete-lined channel would not result in significant or adverse impacts. Impacts associated with excavation surrounding the post and check dam footings would occur within an approximate 5-foot buffer of these structures. Installation of the check dam and post footings and would consist of less than 10 cubic yards of concrete fill occurring within 60 square feet (0.001 acre) of disturbed wetland (palm-dominated) habitat.

**TABLE 2**
**JURISDICTIONAL IMPACTS WITHIN THE FY 19 MONTEZUMA CREEK CHANNEL MAINTENANCE AREA (ACRES)[1]**

| **USACE/RWQCB Jurisdictional Wetlands and Non-Wetland Waters** | **0.097 (275 linear feet)** |
|---|---|
| Wetlands | 0.092 |
| Non-Wetlands | 0.004 |
| **CDFW Streambed, Streambank, and Riparian** | **0.100 (275 linear feet)** |
| Wetland/Riparian | 0.097 |
| Upland Streambank | 0.003 |
| **Total Jurisdictional Impacts** | **0.100[2] (275 linear feet)** |

1 Totals may not sum exactly due to rounding. Note that work within the serviceable concrete-lined channel is not considered to be an impact because the concrete-lined channel does not contain any vegetation, work would not occur when the channel is flowing, and the project would leave the concrete-lined channel in its current condition except for the removal of one palm tree that is needed to restore this area to the as-built condition.

2 Total does not equal the sum of impacts for each jurisdiction due to jurisdictional overlap

## 5.2 Avoidance and Minimization

The proposed maintenance is based on the minimum needed to reduce the risk of culvert clogging and prevent flow velocities from exceeding permissible levels. In addition, short-term impacts to water quality and wildlife would be minimized through implementation of the BMPs identified in the IMP and Water Pollution Control Plan (McGrath Consulting 2017).

## 5.3 Compensatory Mitigation

All impacts will be mitigated as permanent. Compensatory mitigation will be fulfilled at the Stadium Mitigation Site located along the San Diego River between I-15 and I-805 south of SDCCU Stadium. The Stadium Mitigation Site is a City of San Diego-approved advance permittee-responsible mitigation site with a service area that includes the San Diego River watershed where the Montezuma Channel site is located. Implementation of the mitigation proceeded in 2017. Based on the approved mitigation plan[2] (Atkins 2015), currently the Stadium Wetland Mitigation site primarily provides riparian woodland rehabilitation (restoration) and enhancement mitigation, plus a small amount of freshwater marsh enhancement mitigation. Because riparian woodland is of equal or higher value than the habitats that are projected to be impacted by the Montezuma Channel project, 0.02 acre of riparian woodland rehabilitation credits are proposed to address 1:1 of the total mitigation requirement,

2 The Stadium Wetland Mitigation Project Mitigation Plan is available at: https://www.sandiego.gov/sites/default/files/legacy/stormwater/pdf/alvaradomitigationplan.pdf

and 0.06 acre of riparian woodland enhancement credits are proposed to address the remaining mitigation need over and above the 1:1 replacement ratio.

## Waters of the United States and State (USACE/RWQCB)

Proposed mitigation for impacts to USACE/RWQCB jurisdictional resources is summarized in Table 5 below. No mitigation is proposed for activities in serviceable concreted-lined channel areas, per CWA Section 404 (f)(1)(b). Mitigation for earthen-bottom channel areas is proposed at a ratio of 2:1 for vegetated wetlands (excluding palm-dominated) and 1:1 for streambed, resulting in a total requirement of 0.039 acres.

**TABLE 5**
**PROPOSED MITIGATION FOR IMPACTS TO USACE/RWQCB JURISDICTIONAL RESOURCES (ACRES)[1]**

| Vegetation Community | Total Impacts | Mitigation Ratio | Mitigation[2] |
|---|---|---|---|
| Total Earthen-Bottomed Channel | 0.097 | - | 0.039 |
| Disturbed Wetland (palm-dominated) | 0.075 | 0:1 | - |
| Freshwater Marsh | 0.017 | 2:1 | 0.035 |
| Streambed | 0.004 | 1:1 | 0.004 |

1 Totals may not sum exactly due to rounding. Note that work within the serviceable concrete-lined channel is not considered an impact because the concrete-lined channel does not contain any vegetation, work would not occur when the channel is flowing, and the project would leave the concrete-lined channel in its current condition except for the removal of one palm tree that is needed to restore this area to the as-built condition.
2 Stadium Wetland Mitigation Project along the San Diego River

## CDFW Jurisdictional Areas

Proposed mitigation for impacts to CDFW jurisdictional resources is summarized in Table 6 below. No mitigation is proposed for activities in serviceable concreted-lined channel areas, disturbed habitat within upland streambank, or for impacts to palm-dominated disturbed wetlands. Mitigation for earthen-bottom channel areas is proposed at a ratio of 2:1 for vegetated wetlands (excluding palm-dominated) and 1:1 for streambed, resulting in a total requirement of 0.039 acres.

**TABLE 6**
**PROPOSED MITIGATION FOR IMPACTS TO CDFW JURISDICTIONAL RESOURCES (ACRES)[1]**

| Vegetation Community | Total Impacts | Mitigation Ratio | Mitigation[2] |
|---|---|---|---|
| Total Earthen-Bottomed Channel | 0.097 | - | 0.039 |
| Disturbed Wetland (palm-dominated) | 0.075 | 0:1 | - |
| Freshwater Marsh | 0.017 | 2:1 | 0.035 |
| Streambed | 0.004 | 1:1 | 0.004 |
| Upland Bank (disturbed habitat) | 0.003 | 0:1 | - |
| Total | 0.100 | - | 0.039 |

1 Totals may not sum exactly due to rounding. Total impacts exclude concrete-lined channel.
2 Stadium Wetland Mitigation Project along the San Diego River

## City of San Diego Wetlands

The provided mitigation ratios are consistent with those identified in the Settlement Agreement related to the Final PEIR for the MMP. Mitigation for jurisdictional impacts is also dependent upon the composition of the channel. Jurisdiction and mitigation ratios are different for earthen and concrete channels. Required mitigation for impacts to City wetlands is summarized in Table 7 below. Impacts to disturbed wetlands consisting of pure stands of non-native species (including Mexican fan palm) do not require compensatory mitigation under condition 9e of the Master Coastal Development Permit, which is applied to all impacts under the terms of the MMP Settlement Agreement. These impacts also do not require mitigation under the City's Significance Determination Thresholds (City 2016). Streambed is mitigated at a 2:1 ratio with a preference for out-of-kind mitigation with better habitat, according to the City Biology Guidelines (City 2012). The total mitigation requirement for City wetland and natural flood channel impacts is 0.078 acre.

**TABLE 7**
**PROPOSED MITIGATION FOR IMPACTS TO CITY WETLANDS (ACRES)[1]**

| Vegetation Community | Total Impacts | Mitigation Ratio[2] | Mitigation[3] |
|---|---|---|---|
| Disturbed Wetland (palm-dominated) | 0.075 | 0:1 | - |
| Freshwater Marsh | 0.017 | 4:1 | 0.070 |
| Streambed | 0.004 | 2:1 | 0.009 |
| Total | 0.097 | - | 0.078 |

1 Totals may not sum exactly due to rounding. Note that work within the serviceable concrete-lined channel is not considered an impact because the concrete-lined channel does not contain any vegetation, work would not occur when the channel is flowing, and the project would leave the concrete-lined channel in its current condition except for the removal of one palm tree that is needed to restore this area to the as-built condition.

2 Mitigation ratios are pursuant to the requirements of the MMP PEIR Site Development Permit, as amended under Settlement Agreement.

3 Stadium Wetland Mitigation Project along the San Diego River

# 6.0 References

Atkins. 2015. Stadium Wetland Mitigation Project (San Diego River) Mitigation Plan Final. Prepared for the City of San Diego. March 13.

City of San Diego (City). 2016. California Environmental Quality Act, Significance Determination Thresholds. Development Services Department. July.

——. 1997. City of San Diego Multiple Species Conservation Program Subarea Plan. March.

——. 1999. Biology Guidelines. San Diego Municipal Code. Land Development Code. Adopted September 28, 1999. Amended April 23, 2012.

——. 2002. Guidelines for Conducting Biological Surveys. July.

——. 2011. Master Storm Water System Maintenance Program. Transportation & Storm Water Department Storm Water Division Operations & Maintenance Section. July.

——. 2012. Land Development Code Biology Guidelines (as amended by Resolution No. R- 307376). April 23

Environmental Laboratory. 1987. U.S. Army Corps of Engineers Wetland Delineation Manual. Prepared for the U.S. Army Corps of Engineers.

Google Earth. 2017. Desktop application Available at: http://www.google.com/earth/index.html. Accessed December 2017.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency, 156 pp.

Lichvar, R.W., B. Allen, J. Byersdorfer, D. Cate, L. Dixon, and C. Photos. 2009. Vegetation and Channel Morphology Responses to Ordinary High Water Discharge Events in Arid West Stream Channels. U.S. Army Engineer Research and Development Center. ERDC/CRREL TR-09-5

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016.

McGrath Consulting. 2017. Water Pollution Control Plan for Montezuma Creek Channel. May 24.

Munsell. 2000. Munsell soil color charts. GretagMacbeth, New Windsor, New York, USA.

Natural Resources Conservation Service (NRCS). 2010. Field Indicators of Hydric Soils in the United States, Version 7.0, 2010. Edited by L.M. Vasilas, G.W. Hurt, and C.V. Noble. U.S. Department of Agriculture, Natural Resources Conservation Service, in cooperation with the National Technical Committee for Hydric Soils.

——. 2017. Web Soil Survey. Available at: http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed December 2017.

Rick Engineering (Rick). 2018a. Individual Hydrologic & Hydraulic Assessment (IHHA) Report for Montezuma Creek Channel. April 16.

——. 2018b. Individual Maintenance Plan (IMP) for Montezuma Creek Channel MMP Map #66. March 23.

San Diego Regional Water Quality Control Board (RWQCB). 1994. Water Quality Control Plan for the San Diego Basin (9). Adopted September 8, 1994. Amended May 17, 2016.

U.S. Army Corps of Engineers (USACE). 2008a. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. August.

——. 2008b. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Eds. J.S. Wakely, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center. September.

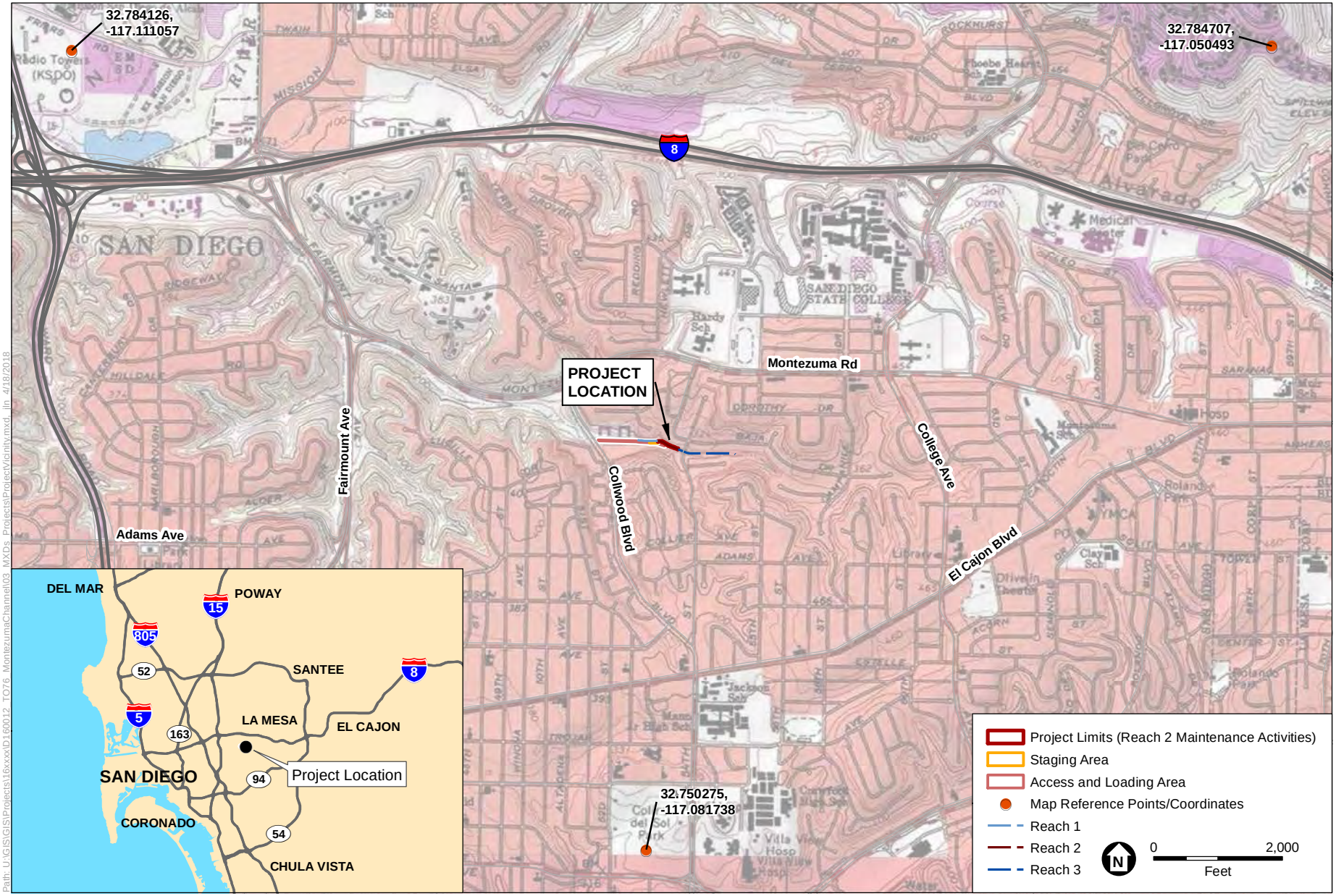
——. 2010. Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. July.

U.S. Fish and Wildlife Service. 2017. National Wetlands Inventory. Wetlands Mapper. Accessed December 2017.

# 7.0 List of Appendices

Appendix A – Site Photographs

Appendix B – Wetland Determination Datasheets
Appendix C – Ordinary High Water Mark Datasheets
Appendix D – Soil Survey Map



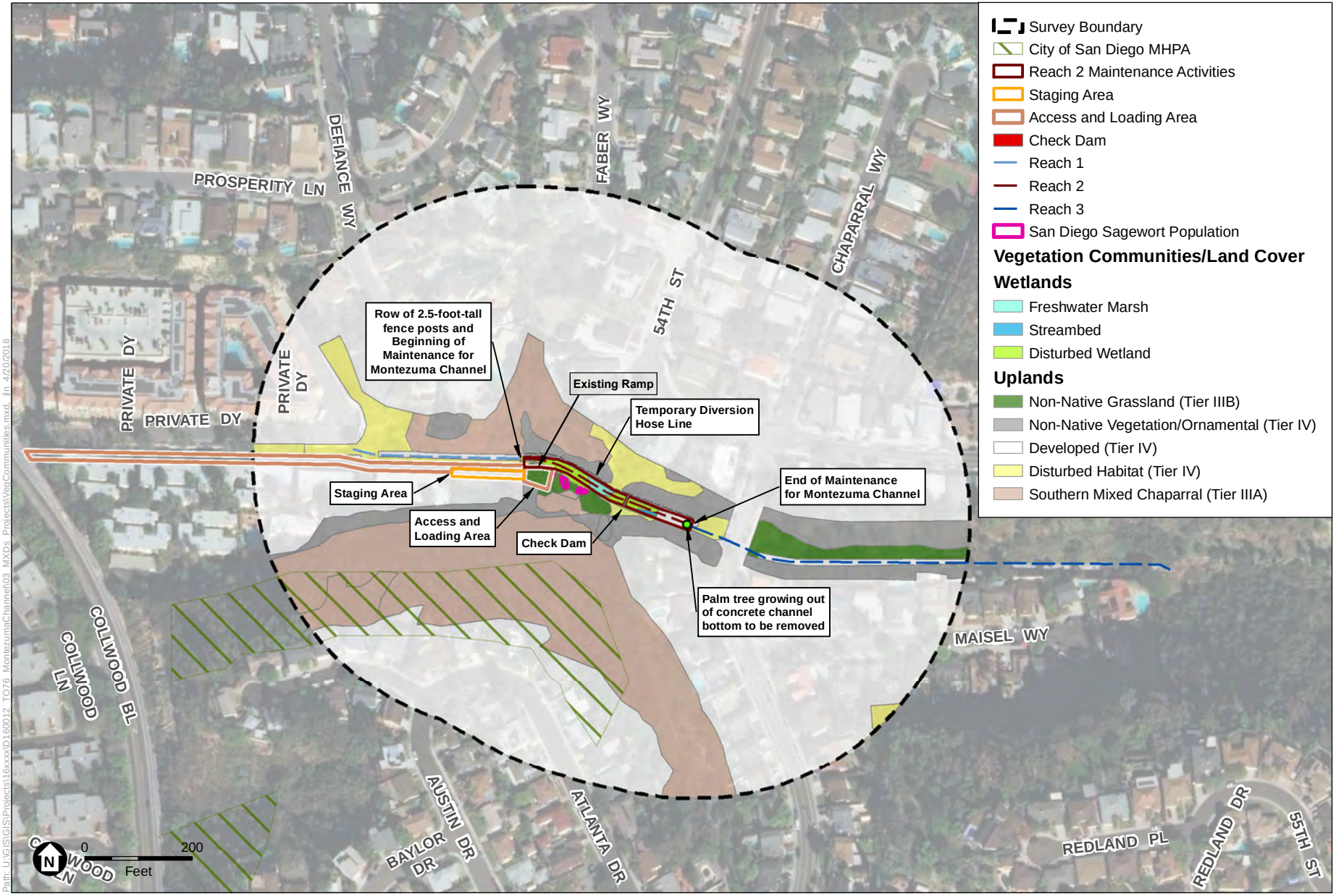

Path: U:\GIS\GIS\Projects\16xxxx\D160012_TO76_MontezumaChannel\03_MXDs_Projects\ProjectVicinity.mxd jln 4/18/2018

SOURCE: ESRI; SanGIS; USGS Topo 7.5' Quad La Mesa 1975, 1978

Montezuma Creek Channel Maintanance

**Figure 1**
Project Vicinity

ESA




SOURCE: ESRI; City of San Diego; SanGIS; ESA

Montezuma Creek Channel Maintanance

**Figure 2**

Vegetation Communities/Land Cover

ESA

City of San Diego MHPA
Map Reference Points/Coordinates
Contour Elevation (feet)

**Temporary Impacts**
Reach 2 Maintenance Activities
Access and Loading Area
Staging Area

**Permanent Impact**
Check Dam

**Potential Jurisdictional Waters**
Corps Non-Wetland WUS (concrete-lined)
Corps Non-Wetland WUS (earthen-bottom)
Corps Wetland
CDFW
San Diego Sagewort Population

**Vegetation Communities/Land Cover**

**Wetlands**
Freshwater Marsh
Streambed
Disturbed Wetland

**Uplands**
Non-Native Grassland (Tier IIIB)
Non-Native Vegetation/Ornamental (Tier IV)
Developed (Tier IV)
Disturbed Habitat (Tier IV)
Wetland Determination Data Points
Ordinary High Water Mark Data Sheet Points
Jurisdictional Determination Photo Point/Direction

32.767895, -117.081808
Row of 2.5-foot-tall fence posts and Beginning of Maintenance for Montezuma Channel
Low flow channel
OHWM/Active Flood Plain
W1
U1
Temporary Diversion Hose Line
32.767644, -117.080206
Staging Area
Access and Loading Area
Check Dam
Palm tree growing out of concrete channel bottom to be removed
End of Maintenance for Montezuma Channel
32.767203, -117.081797
32.767212, -117.080191
1
2
3
4
5
6
N
0
50
Feet

Path: U:\GIS\GIS\Projects\16xxxx\D160012_TO76_MontezumaChannel\03_MXDs_ProjectsJD_Results_FY18_20180323.mxd_jln 4/12/2018

SOURCE: Rick Engineering; ESA; SanGIS; Digital Globe aerial imagery, 1/26/2016

Montezuma Creek Channel Maintenance

**Figure 3**
Jurisdictional Delineation Results for the FY19 Montezuma Creek Channel Maintenance Area

ESA

# Appendix A
## Site Photographs

Appendix A – Site Photographs

1 – East end of Reach 2, facing west.

2 – Concrete-lined channel segment facing west.

3 – End of concrete-lined channel, facing west.

4 – Natural flood control channel with cobble substrate, facing east.

Appendix B – Site Photographs

5 – Disturbed wetland (palm tree dominated), panorama going west to east.

6 – Disturbed wetland (palm tree dominated) and freshwater marsh, panorama going west to east.

7 – Wetland Data Point W1 (wetland), facing north.

8 – Wetland Data Point U1 (upland), facing north.

# Appendix B
## Wetland Determination Data Forms

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: FY18 Montezuma Creek Channel Maintenance City/County: San Diego Sampling Date: 11/21/2017

Applicant/Owner: City of San Diego State: CA Sampling Point: U1

Investigator(s): Julie Stout, Tommy Molioo Section, Township, Range: Township 16 South, Range 2 West, Section 22

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): < 1

Subregion (LRR): C Lat: 32.767617 Long: -117.081153 Datum: WGS 84

Soil Map Unit Name: Diablo-Urban land complex, 5 to 15 percent slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---|---|
| Hydrophytic Vegetation Present? | Yes ☐ | No ☑ | **Is the Sampled Area within a Wetland?** Yes ☐ No ☑ |
| Hydric Soil Present? | Yes ☐ | No ☑ | |
| Wetland Hydrology Present? | Yes ☐ | No ☑ | |

Remarks:

## VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: 30') | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. *Eucalyptus polyanthemos* | 20 | Y | UPL |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | 20 = Total Cover | | |
| **Sapling/Shrub Stratum (Plot size: 5')** | | | |
| 1. *Baccharis pilularis* | 5 | Y | UPL |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | 5 = Total Cover | | |
| **Herb Stratum (Plot size: 5')** | | | |
| 1. *Cynodon dactylon* | 20 | Y | FACU |
| 2. *Foeniculum vulgare* | 15 | Y | UPL |
| 3. *Artemisia palmeri* | 20 | Y | UPL |
| 4. *Stipa miliacea* | 5 | N | UPL |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | 60 = Total Cover | | |
| **Woody Vine Stratum (Plot size: )** | | | |
| 1. | | | |
| 2. | | | |
| | 0 = Total Cover | | |

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | | Multiply by: | |
|---|---|---|---|
| OBL species | 0 | x 1 = | 0 |
| FACW species | 0 | x 2 = | 0 |
| FAC species | 0 | x 3 = | 0 |
| FACU species | 70 | x 4 = | 280 |
| UPL species | 65 | x 5 = | 325 |
| Column Totals: | 135 (A) | | 605 (B) |

Prevalence Index = B/A = 4.48

**Hydrophytic Vegetation Indicators:**

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0[1]

☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes ☐ No ☑

Remarks:

## SOIL

Sampling Point: U1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-unknown | NA | | | | | | | Cobble |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

**Indicators for Problematic Hydric Soils[3]:**

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

**Hydric Soil Present? Yes _____ No ✓**

Remarks:

Unable to sample soil material due to cobble and thick palm tree roots. Soils presumed non-hydric based on lack of hydrophytic vegetation and wetland hydrology.

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

**Wetland Hydrology Present? Yes _____ No ✓**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: FY18 Montezuma Creek Channel Maintenance City/County: San Diego Sampling Date: 11/21/2017

Applicant/Owner: City of San Diego State: CA Sampling Point: W1

Investigator(s): Julie Stout, Tommy Molioo Section, Township, Range: Township 16 South, Range 2 West, Section 22

Landform (hillslope, terrace, etc.): lower floodplain Local relief (concave, convex, none): concave Slope (%): 3

Subregion (LRR): C Lat: 32.767632 Long: -117.081140 Datum: WGS 84

Soil Map Unit Name: Diablo-Urban land complex, 5 to 15 percent slopes NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)

Are Vegetation ☑, Soil ☐, or Hydrology ☑ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

| | | |
|---|---|---|
| Hydrophytic Vegetation Present? | Yes ☑ No ☐ | **Is the Sampled Area within a Wetland?** Yes ☑ No ☐ |
| Hydric Soil Present? | Yes ☑ No ☐ | |
| Wetland Hydrology Present? | Yes ☑ No ☐ | |

Remarks:

Decreased flooding due to restrictive upstream culverts, increased perennial flow due to suburban irrigation, northern bank and upstream segment of channel are concrete, channel is colonized by several invasive species. Channel may be affected by dredging.

### VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: 30') | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. *Washingtonia robusta* | 40 | Y | FACW |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| | 40 | = Total Cover | |
| **Sapling/Shrub Stratum** (Plot size: 5') | | | |
| 1. *Washingtonia robusta* | 25 | Y | FACW |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| | 25 | = Total Cover | |
| **Herb Stratum** (Plot size: 5') | | | |
| 1. *Cynodon dactylon* | 20 | Y | FACU |
| 2. *Apium graveolens* | 5 | N | NL/FACW* |
| 3. *Schoenoplectus californicus* | 30 | Y | OBL |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| | 55 | = Total Cover | |
| **Woody Vine Stratum** (Plot size: ) | | | |
| 1. | | | |
| 2. | | | |
| | 0 | = Total Cover | |

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | | Multiply by: | |
|---|---|---|---|
| OBL species | 30 | x 1 = | 30 |
| FACW species | 70 | x 2 = | 140 |
| FAC species | 0 | x 3 = | 0 |
| FACU species | 20 | x 4 = | 80 |
| UPL species | 0 | x 5 = | 0 |
| Column Totals: | 120 (A) | | 250 (B) |

Prevalence Index = B/A = 2.08

**Hydrophytic Vegetation Indicators:**

☑ Dominance Test is >50%

☑ Prevalence Index is ≤3.0[1]

☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes ☑ No ☐

Remarks:

*Species not listed in 206 NWPL, but considered a non-upland species based on status in previous NWPL

## SOIL

Sampling Point: W1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-unknown | NA | | | | | | | Cobble |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

**Indicators for Problematic Hydric Soils[3]:**

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ✓ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** **Yes** ✓ **No** _____

Remarks:

Unable to sample soil material due to cobble and thick palm tree roots. Soils presumed hydric based on indicators of hydrophytic vegetation and wetland hydrology.

## HYDROLOGY

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ✓ Drift Deposits (B3) (**Riverine**)
- ✓ Drainage Patterns (B10)
- ✓ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes ✓ No _____ Depth (inches): 24*

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

**Wetland Hydrology Present?** **Yes** ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Water table estimate is based on the elevation of standing water in the lower portion of channel. Dry season status is based on the lack of any local significant late fall precipitation events preceding the delineation.

# Appendix C

## Ordinary High Water Mark Datasheets

# Arid West Ephemeral and Intermittent Streams OHWM Datasheet

**Project:** FY19 Montezuma
**Project Number:**
**Stream:** Montezuma Creek
**Investigator(s):** Julie Stout

**Date:** 11/21/2017
**Town:** San Diego
**Photo begin file#:**

**Time:**
**State:** CA
**Photo end file#:**

Y ☐ / N ■ Do normal circumstances exist on the site?

Y ■ / N ☐ Is the site significantly disturbed?

**Location Details:**
~4891-4896 54th Street, San Diego, CA

**Projection:** **Datum:** WGS 84
**Coordinates:** 32.767527, -117.080787

**Potential anthropogenic influences on the channel system:**

Decreased flooding due to restrictive upstream culverts, increased perennial flow due to suburban irrigation, northern bank and upstream segment of channel are concrete, channel is colonized by several invasive species.

**Brief site description:**

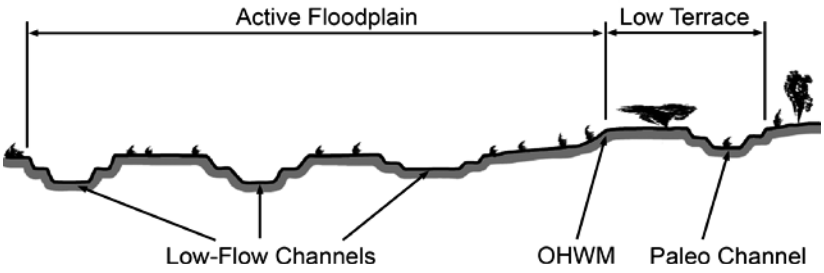
Montezuma Creek is a semi-natural flood control channel located in a suburban setting. The study area of the channel is located in a steep canyon with naturalized vegetation within the channel and along the canyon banks and residential development on the hilltops surrounding the canyon.

**Checklist of resources (if available):**

- ■ Aerial photography
  Dates:
- ■ Topographic maps
- ☐ Geologic maps
- ■ Vegetation maps
- ■ Soils maps
- ☐ Rainfall/precipitation maps
- ■ Existing delineation(s) for site
- ☐ Global positioning system (GPS)
- ■ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units




**Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:**

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ■ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☐ GPS
   - ■ Other:

**Project ID:** FY19 Montezuma **Cross section ID:** FY18 Montezuma **Date:** 11/21/2017

## Cross section drawing:


## OHWM

**GPS point:** 32.767617; -117.081083 (south edge)

**Indicators:**

- ☐ Change in average sediment texture
- ☒ Change in vegetation species
- ☒ Change in vegetation cover
- ☒ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

**Comments:**

## Floodplain unit: ☒ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

**GPS point:** 32.767657; -117.081065 (north channel)

**Characteristics of the floodplain unit:**

Average sediment texture: cobble

Total veg cover: 20 % Tree: 10 % Shrub: 0 % Herb: 10 %

Community successional stage:

- ☐ NA
- ☒ Early (herbaceous & seedlings)
- ☒ Mid (herbaceous, shrubs, saplings)
- ☒ Late (herbaceous, shrubs, mature trees)

**Indicators:**

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☒ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

**Comments:**

**Project ID:** FY19 Montezuma **Cross section ID:** **Date:** 11/21/2017

**Floodplain unit:** ☐ Low-Flow Channel ☒ Active Floodplain ☐ Low Terrace

**GPS point:** 32.767617; -117.081083 (south edge)

**Characteristics of the floodplain unit:**

Average sediment texture: cobble

Total veg cover: 90 % Tree: 70 % Shrub: _____ % Herb: 20 %

Community successional stage:

- ☐ NA
- ☒ Early (herbaceous & seedlings)
- ☒ Mid (herbaceous, shrubs, saplings)
- ☒ Late (herbaceous, shrubs, mature trees)

**Indicators:**

- ☐ Mudcracks
- ☐ Ripples
- ☒ Drift and/or debris
- ☒ Presence of bed and bank
- ☒ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

**Comments:**

**Floodplain unit:** ☐ Low-Flow Channel ☐ Active Floodplain ☒ Low Terrace

**GPS point:** 32.767617; -117.081083 (north edge)

**Characteristics of the floodplain unit:**

Average sediment texture: cobble

Total veg cover: _____ % Tree: 5 % Shrub: 10 % Herb: 70 %

Community successional stage:

- ☐ NA
- ☒ Early (herbaceous & seedlings)
- ☒ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

**Indicators:**

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

**Comments:**

# Appendix D
## **Soil Survey Map**

Soil Map—San Diego County Area, California
(Montezuma Channel Maintenance FY19)


Map Scale: 1:1,360 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

## MAP LEGEND

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**
- Streams and Canals

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**
- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Diego County Area, California
Survey Area Data: Version 12, Sep 13, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 7, 2014—Jan 4, 2015

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| DcD | Diablo-Urban land complex, 5 to 15 percent slopes | 6.9 | 84.8% |
| OkC | Olivenhain-Urban land complex, 2 to 9 percent slopes | 1.2 | 15.2% |
| **Totals for Area of Interest** | | **8.1** | **100.0%** |

# Attachment E
## **CNDDB Records**

# Selected Elements by Common Name

## California Department of Fish and Wildlife

## California Natural Diversity Database

**Query Criteria:** Quad IS (La Mesa (3211771) OR National City (3211761) OR La Jolla (3211772) OR Point Loma (3211762) OR Jamul Mountains (3211668) OR El Cajon (3211678) OR San Vicente Reservoir (3211688) OR Poway (3211781) OR Del Mar (3211782))

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **American badger**<br>*Taxidea taxus* | AMAJF04010 | None | None | G5 | S3 | SSC |
| **American peregrine falcon**<br>*Falco peregrinus anatum* | ABNKD06071 | Delisted | Delisted | G4T4 | S3S4 | FP |
| **aphanisma**<br>*Aphanisma blitoides* | PDCHE02010 | None | None | G3G4 | S2 | 1B.2 |
| **arroyo toad**<br>*Anaxyrus californicus* | AAABB01230 | Endangered | None | G2G3 | S2S3 | SSC |
| **Baja California coachwhip**<br>*Coluber fuliginosus* | ARADB21026 | None | None | G5 | S1S2 | SSC |
| **beach goldenaster**<br>*Heterotheca sessiliflora ssp. sessiliflora* | PDAST4V0K2 | None | None | G4T2T3 | S1 | 1B.1 |
| **Belding's savannah sparrow**<br>*Passerculus sandwichensis beldingi* | ABPBX99015 | None | Endangered | G5T3 | S3 | |
| **Bell's sage sparrow**<br>*Artemisiospiza belli belli* | ABPBX97021 | None | None | G5T2T4 | S3 | WL |
| **big free-tailed bat**<br>*Nyctinomops macrotis* | AMACD04020 | None | None | G5 | S3 | SSC |
| **Blochman's dudleya**<br>*Dudleya blochmaniae ssp. blochmaniae* | PDCRA04051 | None | None | G3T2 | S2 | 1B.1 |
| **bottle liverwort**<br>*Sphaerocarpos drewei* | NBHEP35030 | None | None | G1 | S1 | 1B.1 |
| **Brand's star phacelia**<br>*Phacelia stellaris* | PDHYD0C510 | None | None | G1 | S1 | 1B.1 |
| **burrowing owl**<br>*Athene cunicularia* | ABNSB10010 | None | None | G4 | S3 | SSC |
| **California adolphia**<br>*Adolphia californica* | PDRHA01010 | None | None | G3 | S2 | 2B.1 |
| **California black rail**<br>*Laterallus jamaicensis coturniculus* | ABNME03041 | None | Threatened | G3G4T1 | S1 | FP |
| **California brown pelican**<br>*Pelecanus occidentalis californicus* | ABNFC01021 | Delisted | Delisted | G4T3 | S3 | FP |
| **California glossy snake**<br>*Arizona elegans occidentalis* | ARADB01017 | None | None | G5T2 | S2 | SSC |
| **California horned lark**<br>*Eremophila alpestris actia* | ABPAT02011 | None | None | G5T4Q | S4 | WL |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **California least tern**<br>*Sternula antillarum browni* | ABNNM08103 | Endangered | Endangered | G4T2T3Q | S2 | FP |
| **California mellitid bee**<br>*Melitta californica* | IIHYM74010 | None | None | G4? | S2? | |
| **California Orcutt grass**<br>*Orcuttia californica* | PMPOA4G010 | Endangered | Endangered | G1 | S1 | 1B.1 |
| **Campbell's liverwort**<br>*Geothallus tuberosus* | NBHEP1C010 | None | None | G1 | S1 | 1B.1 |
| **Cedros Island oak**<br>*Quercus cedrosensis* | PDFAG05650 | None | None | G3 | S1 | 2B.2 |
| **chaparral ragwort**<br>*Senecio aphanactis* | PDAST8H060 | None | None | G3 | S2 | 2B.2 |
| **cliff spurge**<br>*Euphorbia misera* | PDEUP0Q1B0 | None | None | G5 | S2 | 2B.2 |
| **coast horned lizard**<br>*Phrynosoma blainvillii* | ARACF12100 | None | None | G3G4 | S3S4 | SSC |
| **coast patch-nosed snake**<br>*Salvadora hexalepis virgultea* | ARADB30033 | None | None | G5T4 | S2S3 | SSC |
| **coast woolly-heads**<br>*Nemacaulis denudata var. denudata* | PDPGN0G011 | None | None | G3G4T2 | S2 | 1B.2 |
| **coastal cactus wren**<br>*Campylorhynchus brunneicapillus sandiegensis* | ABPBG02095 | None | None | G5T3Q | S3 | SSC |
| **coastal California gnatcatcher**<br>*Polioptila californica californica* | ABPBJ08081 | Threatened | None | G4G5T2Q | S2 | SSC |
| **coastal dunes milk-vetch**<br>*Astragalus tener var. titi* | PDFAB0F8R2 | Endangered | Endangered | G2T1 | S1 | 1B.1 |
| **coastal triquetrella**<br>*Triquetrella californica* | NBMUS7S010 | None | None | G2 | S2 | 1B.2 |
| **coastal whiptail**<br>*Aspidoscelis tigris stejnegeri* | ARACJ02143 | None | None | G5T5 | S3 | SSC |
| **Cooper's hawk**<br>*Accipiter cooperii* | ABNKC12040 | None | None | G5 | S4 | WL |
| **Coronado skink**<br>*Plestiodon skiltonianus interparietalis* | ARACH01114 | None | None | G5T5 | S2S3 | WL |
| **Coulter's goldfields**<br>*Lasthenia glabrata ssp. coulteri* | PDAST5L0A1 | None | None | G4T2 | S2 | 1B.1 |
| **Coulter's saltbush**<br>*Atriplex coulteri* | PDCHE040E0 | None | None | G3 | S1S2 | 1B.2 |
| **Crotch bumble bee**<br>*Bombus crotchii* | IIHYM24480 | None | None | G3G4 | S1S2 | |
| **Dean's milk-vetch**<br>*Astragalus deanei* | PDFAB0F2R0 | None | None | G1 | S1 | 1B.1 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **decumbent goldenbush**<br>*Isocoma menziesii var. decumbens* | PDAST57091 | None | None | G3G5T2T3 | S2 | 1B.2 |
| **Del Mar manzanita**<br>*Arctostaphylos glandulosa ssp. crassifolia* | PDERI040E8 | Endangered | None | G5T2 | S2 | 1B.1 |
| **Del Mar Mesa sand aster**<br>*Corethrogyne filaginifolia var. linifolia* | PDAST2M027 | None | None | G4T1T2Q | S1S2 | 1B.1 |
| **delicate clarkia**<br>*Clarkia delicata* | PDONA050D0 | None | None | G3 | S3 | 1B.2 |
| **desert bedstraw**<br>*Galium proliferum* | PDRUB0N1V0 | None | None | G5 | S2 | 2B.2 |
| **double-crested cormorant**<br>*Phalacrocorax auritus* | ABNFD01020 | None | None | G5 | S4 | WL |
| **Dulzura pocket mouse**<br>*Chaetodipus californicus femoralis* | AMAFD05021 | None | None | G5T3 | S3 | SSC |
| **Dunn's mariposa-lily**<br>*Calochortus dunnii* | PMLIL0D0C0 | None | Rare | G2G3 | S2S3 | 1B.2 |
| **Encinitas baccharis**<br>*Baccharis vanessae* | PDAST0W0P0 | Threatened | Endangered | G1 | S1 | 1B.1 |
| **estuary seablite**<br>*Suaeda esteroa* | PDCHE0P0D0 | None | None | G3 | S2 | 1B.2 |
| **felt-leaved monardella**<br>*Monardella hypoleuca ssp. lanata* | PDLAM180A2 | None | None | G4T3 | S3 | 1B.2 |
| **Gander's pitcher sage**<br>*Lepechinia ganderi* | PDLAM0V040 | None | None | G3 | S3 | 1B.3 |
| **Gander's ragwort**<br>*Packera ganderi* | PDAST8H1F0 | None | Rare | G2 | S2 | 1B.2 |
| **globose dune beetle**<br>*Coelus globosus* | IICOL4A010 | None | None | G1G2 | S1S2 | |
| **golden eagle**<br>*Aquila chrysaetos* | ABNKC22010 | None | None | G5 | S3 | FP |
| **golden-spined cereus**<br>*Bergerocactus emoryi* | PDCAC11010 | None | None | G2G3 | S2 | 2B.2 |
| **grasshopper sparrow**<br>*Ammodramus savannarum* | ABPBXA0020 | None | None | G5 | S3 | SSC |
| **green sea turtle**<br>*Chelonia mydas* | ARAAA02010 | Threatened | None | G3 | S1 | |
| **heart-leaved pitcher sage**<br>*Lepechinia cardiophylla* | PDLAM0V020 | None | None | G3 | S2S3 | 1B.2 |
| **Hermes copper butterfly**<br>*Lycaena hermes* | IILEPC1160 | Candidate | None | G1 | S1 | |
| **hoary bat**<br>*Lasiurus cinereus* | AMACC05030 | None | None | G5 | S4 | |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **Laguna Mountains jewelflower**<br>*Streptanthus bernardinus* | PDBRA2G060 | None | None | G3G4 | S3S4 | 4.3 |
| **Lakeside ceanothus**<br>*Ceanothus cyaneus* | PDRHA04070 | None | None | G2 | S2 | 1B.2 |
| **least Bell's vireo**<br>*Vireo bellii pusillus* | ABPBW01114 | Endangered | Endangered | G5T2 | S2 | |
| **least bittern**<br>*Ixobrychus exilis* | ABNGA02010 | None | None | G5 | S2 | SSC |
| **light gray lichen**<br>*Mobergia calculiformis* | NLT0018660 | None | None | G3 | S1 | 3 |
| **light-footed Ridgway's rail**<br>*Rallus obsoletus levipes* | ABNME05014 | Endangered | Endangered | G5T1T2 | S1 | FP |
| **little mousetail**<br>*Myosurus minimus ssp. apus* | PDRAN0H031 | None | None | G5T2Q | S2 | 3.1 |
| **long-eared myotis**<br>*Myotis evotis* | AMACC01070 | None | None | G5 | S3 | |
| **long-spined spineflower**<br>*Chorizanthe polygonoides var. longispina* | PDPGN040K1 | None | None | G5T3 | S3 | 1B.2 |
| **Maritime Succulent Scrub**<br>*Maritime Succulent Scrub* | CTT32400CA | None | None | G2 | S1.1 | |
| **mesa shoulderband**<br>*Helminthoglypta coelata* | IMGASC2530 | None | None | G1 | S1 | |
| **Mexican flannelbush**<br>*Fremontodendron mexicanum* | PDSTE03020 | Endangered | Rare | G2 | S1 | 1B.1 |
| **Mexican long-tongued bat**<br>*Choeronycteris mexicana* | AMACB02010 | None | None | G4 | S1 | SSC |
| **mimic tryonia (=California brackishwater snail)**<br>*Tryonia imitator* | IMGASJ7040 | None | None | G2 | S2 | |
| **Mission Canyon bluecup**<br>*Githopsis diffusa ssp. filicaulis* | PDCAM07023 | None | None | G5T1Q | S1 | 3.1 |
| **monarch - California overwintering population**<br>*Danaus plexippus pop. 1* | IILEPP2012 | None | None | G4T2T3 | S2S3 | |
| **mud nama**<br>*Nama stenocarpa* | PDHYD0A0H0 | None | None | G4G5 | S1S2 | 2B.2 |
| **Munz's sage**<br>*Salvia munzii* | PDLAM1S140 | None | None | G2 | S2 | 2B.2 |
| **northwestern San Diego pocket mouse**<br>*Chaetodipus fallax fallax* | AMAFD05031 | None | None | G5T3T4 | S3S4 | SSC |
| **Nuttall's acmispon**<br>*Acmispon prostratus* | PDFAB2A0V0 | None | None | G1G2 | S1 | 1B.1 |
| **Nuttall's scrub oak**<br>*Quercus dumosa* | PDFAG050D0 | None | None | G3 | S3 | 1B.1 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **obscure bumble bee**<br>*Bombus caliginosus* | IIHYM24380 | None | None | G4? | S1S2 | |
| **oil neststraw**<br>*Stylocline citroleum* | PDAST8Y070 | None | None | G3 | S3 | 1B.1 |
| **orange-throated whiptail**<br>*Aspidoscelis hyperythra* | ARACJ02060 | None | None | G5 | S2S3 | WL |
| **Orcutt's bird's-beak**<br>*Dicranostegia orcuttiana* | PDSCR0J0G0 | None | None | G2G3 | S1 | 2B.1 |
| **Orcutt's brodiaea**<br>*Brodiaea orcuttii* | PMLIL0C0B0 | None | None | G2 | S2 | 1B.1 |
| **Orcutt's pincushion**<br>*Chaenactis glabriuscula var. orcuttiana* | PDAST20095 | None | None | G5T1T2 | S1 | 1B.1 |
| **Orcutt's spineflower**<br>*Chorizanthe orcuttiana* | PDPGN040G0 | Endangered | Endangered | G1 | S1 | 1B.1 |
| **osprey**<br>*Pandion haliaetus* | ABNKC01010 | None | None | G5 | S4 | WL |
| **Otay manzanita**<br>*Arctostaphylos otayensis* | PDERI040Y0 | None | None | G1 | S1 | 1B.2 |
| **Otay Mesa mint**<br>*Pogogyne nudiuscula* | PDLAM1K040 | Endangered | Endangered | G1 | S1 | 1B.1 |
| **Otay Mountain ceanothus**<br>*Ceanothus otayensis* | PDRHA04430 | None | None | G1G2 | S1 | 1B.2 |
| **Otay tarplant**<br>*Deinandra conjugens* | PDAST4R070 | Threatened | Endangered | G1 | S1 | 1B.1 |
| **Pacific pocket mouse**<br>*Perognathus longimembris pacificus* | AMAFD01042 | Endangered | None | G5T1 | S1 | SSC |
| **pallid bat**<br>*Antrozous pallidus* | AMACC10010 | None | None | G5 | S3 | SSC |
| **Palmer's frankenia**<br>*Frankenia palmeri* | PDFRA01040 | None | None | G3? | S1 | 2B.1 |
| **Palmer's goldenbush**<br>*Ericameria palmeri var. palmeri* | PDAST3L0C1 | None | None | G4T2? | S2 | 1B.1 |
| **Palmer's grapplinghook**<br>*Harpagonella palmeri* | PDBOR0H010 | None | None | G4 | S3 | 4.2 |
| **Parry's tetracoccus**<br>*Tetracoccus dioicus* | PDEUP1C010 | None | None | G3? | S2 | 1B.2 |
| **pocketed free-tailed bat**<br>*Nyctinomops femorosaccus* | AMACD04010 | None | None | G4 | S3 | SSC |
| **prairie falcon**<br>*Falco mexicanus* | ABNKD06090 | None | None | G5 | S4 | WL |
| **prostrate vernal pool navarretia**<br>*Navarretia prostrata* | PDPLM0C0Q0 | None | None | G2 | S2 | 1B.1 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **purple stemodia**<br>*Stemodia durantifolia* | PDSCR1U010 | None | None | G5 | S2 | 2B.1 |
| **quino checkerspot butterfly**<br>*Euphydryas editha quino* | IILEPK405L | Endangered | None | G5T1T2 | S1S2 | |
| **Ramona horkelia**<br>*Horkelia truncata* | PDROS0W0G0 | None | None | G3 | S3 | 1B.3 |
| **red-diamond rattlesnake**<br>*Crotalus ruber* | ARADE02090 | None | None | G4 | S3 | SSC |
| **Riverside fairy shrimp**<br>*Streptocephalus woottoni* | ICBRA07010 | Endangered | None | G1G2 | S1S2 | |
| **Robinson's pepper-grass**<br>*Lepidium virginicum var. robinsonii* | PDBRA1M114 | None | None | G5T3 | S3 | 4.3 |
| **round-leaved filaree**<br>*California macrophylla* | PDGER01070 | None | None | G4 | S4 | 1B.2 |
| **salt marsh bird's-beak**<br>*Chloropyron maritimum ssp. maritimum* | PDSCR0J0C2 | Endangered | Endangered | G4?T1 | S1 | 1B.2 |
| **salt spring checkerbloom**<br>*Sidalcea neomexicana* | PDMAL110J0 | None | None | G4 | S2 | 2B.2 |
| **San Diego ambrosia**<br>*Ambrosia pumila* | PDAST0C0M0 | Endangered | None | G1 | S1 | 1B.1 |
| **San Diego banded gecko**<br>*Coleonyx variegatus abbotti* | ARACD01031 | None | None | G5T3T4 | S1S2 | SSC |
| **San Diego barrel cactus**<br>*Ferocactus viridescens* | PDCAC08060 | None | None | G3? | S2S3 | 2B.1 |
| **San Diego black-tailed jackrabbit**<br>*Lepus californicus bennettii* | AMAEB03051 | None | None | G5T3T4 | S3S4 | SSC |
| **San Diego bur-sage**<br>*Ambrosia chenopodiifolia* | PDAST0C080 | None | None | G2G3 | S1 | 2B.1 |
| **San Diego button-celery**<br>*Eryngium aristulatum var. parishii* | PDAPI0Z042 | Endangered | Endangered | G5T1 | S1 | 1B.1 |
| **San Diego desert woodrat**<br>*Neotoma lepida intermedia* | AMAFF08041 | None | None | G5T3T4 | S3S4 | SSC |
| **San Diego fairy shrimp**<br>*Branchinecta sandiegonensis* | ICBRA03060 | Endangered | None | G2 | S2 | |
| **San Diego goldenstar**<br>*Bloomeria clevelandii* | PMLIL1H010 | None | None | G2 | S2 | 1B.1 |
| **San Diego gumplant**<br>*Grindelia hallii* | PDAST470D4 | None | None | G2 | S2 | 1B.2 |
| **San Diego marsh-elder**<br>*Iva hayesiana* | PDAST580A0 | None | None | G3 | S2 | 2B.2 |
| **San Diego Mesa Claypan Vernal Pool**<br>*San Diego Mesa Claypan Vernal Pool* | CTT44322CA | None | None | G2 | S2.1 | |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **San Diego Mesa Hardpan Vernal Pool**<br>*San Diego Mesa Hardpan Vernal Pool* | CTT44321CA | None | None | G2 | S2.1 | |
| **San Diego mesa mint**<br>*Pogogyne abramsii* | PDLAM1K010 | Endangered | Endangered | G1 | S1 | 1B.1 |
| **San Diego ringneck snake**<br>*Diadophis punctatus similis* | ARADB1001A | None | None | G5T2T3 | S2? | |
| **San Diego sagewort**<br>*Artemisia palmeri* | PDAST0S160 | None | None | G3? | S3? | 4.2 |
| **San Diego sand aster**<br>*Corethrogyne filaginifolia var. incana* | PDAST2M025 | None | None | G4T1Q | S1 | 1B.1 |
| **San Diego thorn-mint**<br>*Acanthomintha ilicifolia* | PDLAM01010 | Threatened | Endangered | G1 | S1 | 1B.1 |
| **San Miguel savory**<br>*Clinopodium chandleri* | PDLAM08030 | None | None | G2 | S2 | 1B.2 |
| **sand-loving wallflower**<br>*Erysimum ammophilum* | PDBRA16010 | None | None | G2 | S2 | 1B.2 |
| **sandy beach tiger beetle**<br>*Cicindela hirticollis gravida* | IICOL02101 | None | None | G5T2 | S2 | |
| **sea dahlia**<br>*Leptosyne maritima* | PDAST2L0L0 | None | None | G2 | S1 | 2B.2 |
| **senile tiger beetle**<br>*Cicindela senilis frosti* | IICOL02121 | None | None | G2G3T1T3 | S1 | |
| **sessile-leaved yerba santa**<br>*Eriodictyon sessilifolium* | PDHYD040A0 | None | None | G4 | S1 | 2B.1 |
| **Shaw's agave**<br>*Agave shawii var. shawii* | PMAGA010P1 | None | None | G2G3T2 | S1 | 2B.1 |
| **short-leaved dudleya**<br>*Dudleya brevifolia* | PDCRA04053 | None | Endangered | G1 | S1 | 1B.1 |
| **short-lobed broomrape**<br>*Orobanche parishii ssp. brachyloba* | PDORO040A2 | None | None | G4?T4 | S3 | 4.2 |
| **silver-haired bat**<br>*Lasionycteris noctivagans* | AMACC02010 | None | None | G5 | S3S4 | |
| **singlewhorl burrobrush**<br>*Ambrosia monogyra* | PDAST50010 | None | None | G5 | S2 | 2B.2 |
| **slender cottonheads**<br>*Nemacaulis denudata var. gracilis* | PDPGN0G012 | None | None | G3G4T3? | S2 | 2B.2 |
| **smooth tarplant**<br>*Centromadia pungens ssp. laevis* | PDAST4R0R4 | None | None | G3G4T2 | S2 | 1B.1 |
| **snake cholla**<br>*Cylindropuntia californica var. californica* | PDCAC0D2Y1 | None | None | G3T2 | S1 | 1B.1 |
| **south coast saltscale**<br>*Atriplex pacifica* | PDCHE041C0 | None | None | G4 | S2 | 1B.2 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **southern California legless lizard**<br>*Anniella stebbinsi* | ARACC01060 | None | None | G3 | S3 | SSC |
| **southern California rufous-crowned sparrow**<br>*Aimophila ruficeps canescens* | ABPBX91091 | None | None | G5T3 | S3 | WL |
| **Southern Coast Live Oak Riparian Forest**<br>*Southern Coast Live Oak Riparian Forest* | CTT61310CA | None | None | G4 | S4 | |
| **Southern Coastal Salt Marsh**<br>*Southern Coastal Salt Marsh* | CTT52120CA | None | None | G2 | S2.1 | |
| **Southern Cottonwood Willow Riparian Forest**<br>*Southern Cottonwood Willow Riparian Forest* | CTT61330CA | None | None | G3 | S3.2 | |
| **Southern Interior Cypress Forest**<br>*Southern Interior Cypress Forest* | CTT83230CA | None | None | G2 | S2.1 | |
| **Southern Maritime Chaparral**<br>*Southern Maritime Chaparral* | CTT37C30CA | None | None | G1 | S1.1 | |
| **Southern Riparian Forest**<br>*Southern Riparian Forest* | CTT61300CA | None | None | G4 | S4 | |
| **Southern Riparian Scrub**<br>*Southern Riparian Scrub* | CTT63300CA | None | None | G3 | S3.2 | |
| **Southern Sycamore Alder Riparian Woodland**<br>*Southern Sycamore Alder Riparian Woodland* | CTT62400CA | None | None | G4 | S4 | |
| **southern tarplant**<br>*Centromadia parryi ssp. australis* | PDAST4R0P4 | None | None | G3T2 | S2 | 1B.1 |
| **southwestern willow flycatcher**<br>*Empidonax traillii extimus* | ABPAE33043 | Endangered | Endangered | G5T2 | S1 | |
| **spotted bat**<br>*Euderma maculatum* | AMACC07010 | None | None | G4 | S3 | SSC |
| **spreading navarretia**<br>*Navarretia fossalis* | PDPLM0C080 | Threatened | None | G2 | S2 | 1B.1 |
| **sticky dudleya**<br>*Dudleya viscida* | PDCRA040T0 | None | None | G2 | S2 | 1B.2 |
| **summer holly**<br>*Comarostaphylis diversifolia ssp. diversifolia* | PDERI0B011 | None | None | G3T2 | S2 | 1B.2 |
| **Swainson's hawk**<br>*Buteo swainsoni* | ABNKC19070 | None | Threatened | G5 | S3 | |
| **Tecate cypress**<br>*Hesperocyparis forbesii* | PGCUP040C0 | None | None | G2 | S2 | 1B.1 |
| **Thorne's hairstreak**<br>*Callophrys thornei* | IILEPE2150 | None | None | G1 | S1 | |
| **thread-leaved brodiaea**<br>*Brodiaea filifolia* | PMLIL0C050 | Threatened | Endangered | G2 | S2 | 1B.1 |
| **Torrey pine**<br>*Pinus torreyana ssp. torreyana* | PGPIN04152 | None | None | G1T1 | S1 | 1B.2 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **Torrey Pine Forest**<br>*Torrey Pine Forest* | CTT83140CA | None | None | G1 | S1.1 | |
| **Townsend's big-eared bat**<br>*Corynorhinus townsendii* | AMACC08010 | None | None | G3G4 | S2 | SSC |
| **tricolored blackbird**<br>*Agelaius tricolor* | ABPBXB0020 | None | Candidate Endangered | G2G3 | S1S2 | SSC |
| **two-striped gartersnake**<br>*Thamnophis hammondii* | ARADB36160 | None | None | G4 | S3S4 | SSC |
| **Valley Needlegrass Grassland**<br>*Valley Needlegrass Grassland* | CTT42110CA | None | None | G3 | S3.1 | |
| **variegated dudleya**<br>*Dudleya variegata* | PDCRA040R0 | None | None | G2 | S2 | 1B.2 |
| **wandering (=saltmarsh) skipper**<br>*Panoquina errans* | IILEP84030 | None | None | G4G5 | S2 | |
| **wart-stemmed ceanothus**<br>*Ceanothus verrucosus* | PDRHA041J0 | None | None | G2 | S2? | 2B.2 |
| **western beach tiger beetle**<br>*Cicindela latesignata latesignata* | IICOL02113 | None | None | G2G4T1T2 | S1 | |
| **western mastiff bat**<br>*Eumops perotis californicus* | AMACD02011 | None | None | G5T4 | S3S4 | SSC |
| **western red bat**<br>*Lasiurus blossevillii* | AMACC05060 | None | None | G5 | S3 | SSC |
| **western small-footed myotis**<br>*Myotis ciliolabrum* | AMACC01140 | None | None | G5 | S3 | |
| **western snowy plover**<br>*Charadrius alexandrinus nivosus* | ABNNB03031 | Threatened | None | G3T3 | S2S3 | SSC |
| **western spadefoot**<br>*Spea hammondii* | AAABF02020 | None | None | G3 | S3 | SSC |
| **western tidal-flat tiger beetle**<br>*Cicindela gabbii* | IICOL02080 | None | None | G2G4 | S1 | |
| **western yellow bat**<br>*Lasiurus xanthinus* | AMACC05070 | None | None | G5 | S3 | SSC |
| **western yellow-billed cuckoo**<br>*Coccyzus americanus occidentalis* | ABNRB02022 | Threatened | Endangered | G5T2T3 | S1 | |
| **white rabbit-tobacco**<br>*Pseudognaphalium leucocephalum* | PDAST440C0 | None | None | G4 | S2 | 2B.2 |
| **white-tailed kite**<br>*Elanus leucurus* | ABNKC06010 | None | None | G5 | S3S4 | FP |
| **willowy monardella**<br>*Monardella viminea* | PDLAM18140 | Endangered | Endangered | G1 | S1 | 1B.1 |
| **woven-spored lichen**<br>*Texosporium sancti-jacobi* | NLTEST7980 | None | None | G3 | S1 | 3 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **yellow rail** | ABNME01010 | None | None | G4 | S1S2 | SSC |
| *Coturnicops noveboracensis* | | | | | | |
| **yellow warbler** | ABPBX03010 | None | None | G5 | S3S4 | SSC |
| *Setophaga petechia* | | | | | | |
| **yellow-breasted chat** | ABPBX24010 | None | None | G5 | S3 | SSC |
| *Icteria virens* | | | | | | |
| **Yuma myotis** | AMACC01020 | None | None | G5 | S4 | |
| *Myotis yumanensis* | | | | | | |

**Record Count: 190**

# Attachment F
## **IPaC Resource List**

**IPaC** **U.S. Fish & Wildlife Service**

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

San Diego County, California

## Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:



## Birds

| NAME | STATUS |
|---|---|
| California Least Tern *Sterna antillarum browni*<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/8104 | Endangered |
| Coastal California Gnatcatcher *Polioptila californica californica*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/8178 | Threatened |
| Least Bell's Vireo *Vireo bellii pusillus*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/5945 | Endangered |
| Light-footed Clapper Rail *Rallus longirostris levipes*<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/6035 | Endangered |
| Southwestern Willow Flycatcher *Empidonax traillii extimus*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/6749 | Endangered |

## Insects

| NAME | STATUS |
|---|---|
| Quino Checkerspot Butterfly *Euphydryas editha quino (=E. e. wrighti)*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/5900 | Endangered |

## Crustaceans

| NAME | STATUS |
|---|---|

| NAME | STATUS |
|---|---|
| Riverside Fairy Shrimp Streptocephalus wootoni<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/8148 | Endangered |
| San Diego Fairy Shrimp Branchinecta sandiegonensis<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/6945 | Endangered |

## Flowering Plants

| NAME | STATUS |
|---|---|
| California Orcutt Grass Orcuttia californica<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/4923 | Endangered |
| Del Mar Manzanita Arctostaphylos glandulosa ssp. crassifolia<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/7673 | Endangered |
| San Diego Ambrosia Ambrosia pumila<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/8287 | Endangered |
| San Diego Button-celery Eryngium aristulatum var. parishii<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/5937 | Endangered |
| San Diego Mesa-mint Pogogyne abramsii<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/5971 | Endangered |
| San Diego Thornmint Acanthomintha ilicifolia<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/351 | Threatened |
| Spreading Navarretia Navarretia fossalis<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/1334 | Threatened |
| Thread-leaved Brodiaea Brodiaea filifolia<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/6087 | Threatened |
| Willowy Monardella Monardella viminea<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/250 | Endangered |



## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see maps of where birders and the general public have sighted birds in and around your project area, visit E-bird tools such as the E-bird data mapping tool (search for the name of a bird on your list to see specific locations where that bird has been reported to occur within your project area over a certain timeframe) and the E-bird Explore Data Tool (perform a query to see a list of all birds sighted in your county or region and within a certain timeframe). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

| NAME | BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.) |
|---|---|
| Allen's Hummingbird Selasphorus sasin<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9637 | Breeds Feb 1 to Jul 15 |
| Ashy Storm-petrel Oceanodroma homochroa<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/7237 | Breeds May 1 to Jan 15 |
| Bald Eagle Haliaeetus leucocephalus<br>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.<br>https://ecos.fws.gov/ecp/species/1626 | Breeds Jan 1 to Aug 31 |
| Black Oystercatcher Haematopus bachmani<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9591 | Breeds Apr 15 to Oct 31 |
| Black Skimmer Rynchops niger<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/5234 | Breeds May 20 to Sep 15 |
| Black Swift Cypseloides niger<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/8878 | Breeds Jun 15 to Sep 10 |
| Black Turnstone Arenaria melanocephala<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. | Breeds elsewhere |
| Black-chinned Sparrow Spizella atrogularis<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9447 | Breeds Apr 15 to Jul 31 |

Burrowing Owl Athene cunicularia — Breeds Mar 15 to Aug 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9737

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe Aechmophorus clarkii — Breeds Jan 1 to Dec 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Costa's Hummingbird Calypte costae — Breeds Jan 15 to Jun 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9470

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Gull-billed Tern Gelochelidon nilotica — Breeds May 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9501

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Le Conte's Thrasher toxostoma lecontei — Breeds Feb 15 to Jun 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8969

Lewis's Woodpecker Melanerpes lewis — Breeds Apr 20 to Sep 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9408

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Mountain Plover Charadrius montanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3638

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

| | |
|---|---|
| Short-billed Dowitcher Limnodromus griseus<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9480 | Breeds elsewhere |
| Tricolored Blackbird Agelaius tricolor<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/3910 | Breeds Mar 15 to Aug 10 |
| Whimbrel Numenius phaeopus<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9483 | Breeds elsewhere |
| White Headed Woodpecker Picoides albolarvatus<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br>https://ecos.fws.gov/ecp/species/9411 | Breeds May 1 to Aug 15 |
| Willet Tringa semipalmata<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska | Breeds elsewhere |
| Wrentit Chamaea fasciata<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska | Breeds Mar 15 to Aug 10 |

# Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

**Probability of Presence** (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

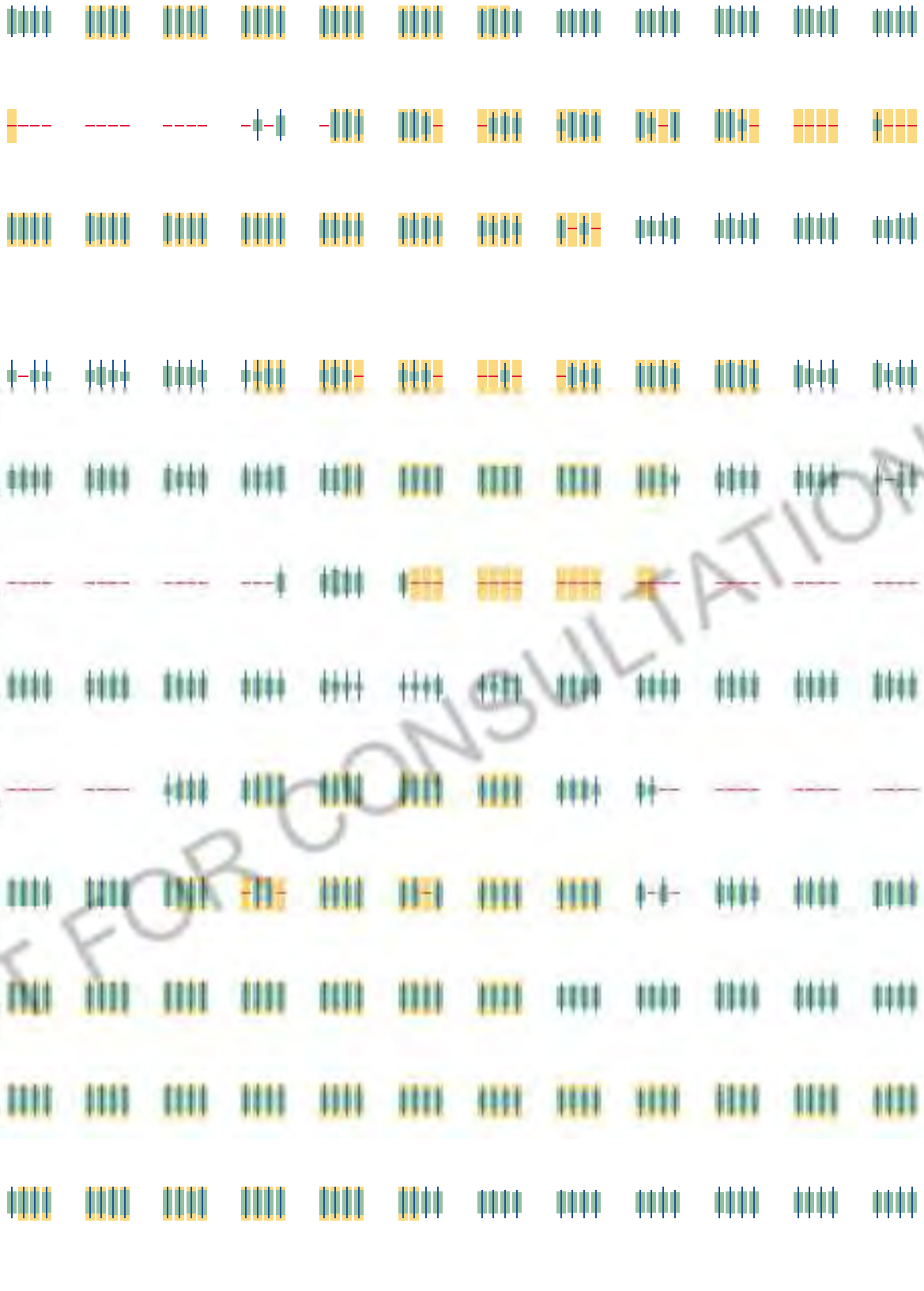
**Breeding Season** (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

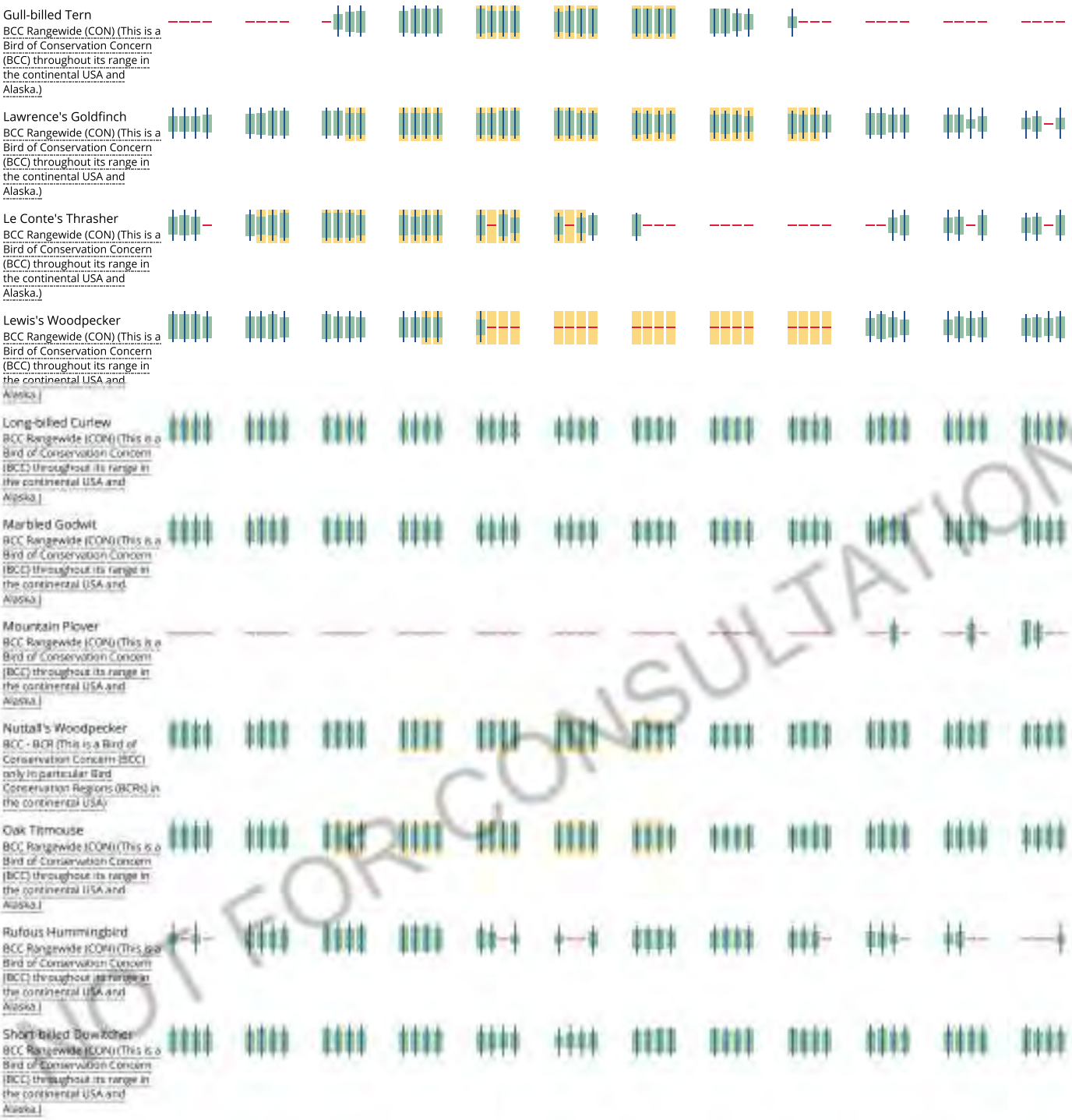
**Survey Effort** (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

**No Data** (–)
A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.





Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the counties which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird entry on your migratory bird species list indicates a breeding season, it is probable that the bird breeds in your project's counties at some point within the timeframe specified. If 'Breeds elsewhere' is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. 'BCC Rangewide' birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. 'BCC - BCR' birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. 'Non-BCC - Vulnerable' birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

**Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

**What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the BGEPA should such impacts occur.

# Facilities

## Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

# Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location overlaps the following wetlands:

RIVERINE

R4SBAx

A full description for each wetland code can be found at the National Wetlands Inventory website:
https://ecos.fws.gov/ipac/wetlands/decoder

**Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

**Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercific worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

# Cycle Issues

THE CITY OF SAN DIEGO
Development Services Department
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

## Project Information

**Project Nbr:** 608835 **Title:** Montezuma Creek MMP 66 SCR
**Project Mgr:** Deisher, Helene (619) 446-5223 hmdeisher@sandiego.gov

## Review Information

| | | | | |
|---|---|---|---|---|
| **Cycle Type:** | 4 Submitted (Multi-Discipline) | **Submitted:** | 07/16/2018 | Deemed Complete on 07/16/2018 |
| **Reviewing Discipline:** | Plan Environmental | **Cycle Distributed:** | 07/16/2018 | |
| **Reviewer:** | **Morrison, Susan** | **Assigned:** | 07/17/2018 | |
| | **(619) 533-6492** | **Started:** | 07/17/2018 | |
| | SIMorrison@sandiego.gov | **Review Due:** | 07/30/2018 | |
| **Hours of Review:** | 3.00 | **Completed:** | 08/01/2018 | **COMPLETED LATE** |
| **Next Review Method:** | Submitted (Multi-Discipline) | **Closed:** | 08/02/2018 | |

. The review due date was changed to 07/30/2018 from 08/09/2018 per agreement with customer.
. We request a 3rd complete submittal for Plan Environmental on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Last month Plan Environmental performed 5 reviews, 80.0% were on-time, and 20.0% were on projects at less than < 3 complete submittals.

### Env Review - 6/28/2018

| Cleared? | Issue Num | Issue Text |
|---|---|---|
| ☒ | 1 | WPCP - The last sentence in the Project Scope in Table 2 (p. 3) conflics with page 16 of the IHHA (Appendix D), which states that further studies will need to be performed to analyze the cost and feasibility of repairing missing and broken concrete at this location. In addition, the repair of this concrete in the downstream portion is not included as a project activity in the Memorandum or in any of the other appendicies. Table 2, Project Scope, also does not include the removal of the palm tree growing out of the crack in the concrete lining and repair of the crack. (From Cycle 1) |
| ☒ | 2 | Plan Environmental is awaiting completion of MSCP's review and any comments before making an environmental determination regarding the SCR. (From Cycle 1) |

### Env Review - 7/31/2018

| Cleared? | Issue Num | Issue Text |
|---|---|---|
| ☒ | 3 | Plan Environmental has completed the review of the resubmittal and is satisfied with the responses to comments related to Plan - MSCP. (New Issue) |
| ☒ | 4 | Based on review of the submitted documents, including the Memorandum dated 7/13/2018 and the IBA dated 4/24/2018, Plan Environmental has determined that the Montezuma Creek Channel Maintenance Project is in substantial conformance with the Master Storm Water System Maintenance Program (MMP), including Map 66, the Master Site Development Permit (SDP) No. 1134892 amended by SDP No. 2034245, and the Program Environmental Impact Report (PEIR [Project No. 42891/SCH No. 2004101032]). (New Issue) |

For questions regarding the 'Plan Environmental' review, please call Susan Morrison at (619) 533-6492. Project Nbr: 608835 / Cycle: 4

# Cycle Issues

THE CITY OF SAN DIEGO
Development Services Department
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

## Review Information

| | | | | |
|---|---|---|---|---|
| **Cycle Type:** | 4 Submitted (Multi-Discipline) | **Submitted:** | 07/16/2018 | Deemed Complete on 07/16/2018 |
| **Reviewing Discipline:** | Plan-MSCP | **Cycle Distributed:** | 07/16/2018 | |
| **Reviewer:** | **Paver, Sean** | **Assigned:** | 07/16/2018 | |
| | **(619) 433-5243** | **Started:** | 08/01/2018 | |
| | Spaver@sandiego.gov | **Review Due:** | 07/30/2018 | |
| **Hours of Review:** | 2.00 | **Completed:** | 08/01/2018 | **COMPLETED LATE** |
| **Next Review Method:** | Submitted (Multi-Discipline) | **Closed:** | 08/02/2018 | |

. The review due date was changed to 07/30/2018 from 08/09/2018 per agreement with customer.
. We request a 3rd complete submittal for Plan-MSCP on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Last month Plan-MSCP performed 25 reviews, 72.0% were on-time, and 62.5% were on projects at less than < 3 complete submittals.

## MSCP 1st Revieew

| Cleared? | Issue Num | Issue Text |
|---|---|---|
| ☒ | 1 | MEMO & IBA Figure 4 - In the memo and IBA, please explain if the earthen ramp is existing or proposed & show location on figure 4. (From Cycle 2) |
| ☒ | 2 | IBA - Tables 5 & 6 proposed wetland mitigation ratios (i.e. disturbed wetland and streambed mitigation of 1:1) does not match Table 11-1 Wetland Mitigation Ratios in the PEIR MMRP (wherein disturbed wetland & streambed is to be mitigated at 2:1). Please correct. Also the discretionary documents do not have different mitigation tables for City, state and federal impacts that you have here. Please correct discrepancies per direction in #4 below. (From Cycle 2) |
| ☒ | 3 | IBA - Table 7 proposed wetland mitigation ratio (i.e. disturbed wetland 0:1 ratio) does not match Table 11-1 Wetland Mitigation Ratios in the PEIR MMRP (wherein disturbed wetland is to be mitigated at 2:1). Please correct discrepancies per direction in #4 below. (From Cycle 2) |
| ☒ | 4 | IBA - Existing Conditions - The description of disturbed wetlands does not explain that it is palm dominated. Also palm dominated does not preclude any natives and the fact that disturbed wetland is considered a 2:1 mitigable habitat per the City's 2012 Biology Guidelines and the discretionary documents for the PEIR. Please revise to match Biology Guidelines and approved PEIR or refer back to the impact section wherein it is stated that only palms will be removed and other existing veg will be left in place as a reason for 0:1 ratio (i.e. work in that area is essentially restoration). (From Cycle 2) |
| ☒ | 6 | IBA - Mitigation - WQ-2 - Remove erosion control features unless greater environmental impact would occur than leaving them in place. - Please consider specifying no plastic netting be left in place from fiber rolls or fiber rolls be covered in jute to avoid trapping small animals on-site. (From Cycle 2) |
| ☒ | 7 | IBA- Mitigation BIO-6 measure - specify environmental hygiene for the equipment being used so no rhizome, seeds, etc will be tracked out to new sites on the equipment/shoes etc. (From Cycle 2) |
| ☒ | 8 | IBA Attachment A - Table 4.3-10 - Please add streambed/natural flood channel to the Table to make it consistent with Table 11-1 of the PEIR MMRP. (From Cycle 2) |
| ☒ | 9 | For all the mitigation ratio comments above, make it clear that CDP condition 9e applies because only non-native elements of the disturbed wetland would be removed and therefore the ratio is consistent with the CDP and justifies why the SDP , the PEIR and the 2012 Biology Guideline inconsistency is justified. This info should also be included in the Memo's in a clear manner. Also explain why the CDP is applicable in a non-coastal zone. (From Cycle 2) |

For questions regarding the 'Plan-MSCP' review, please call Sean Paver at (619) 433-5243. Project Nbr: 608835 / Cycle: 4