Municipal Waterways Maintenance Plan Annual Report Fiscal Year 2023



October 2023 **City of San Diego Stormwater Department** 2781 Caminito Chollas San Diego, CA 92105



Executive Summary

The City of San Diego's (City) Stormwater Department (SWD) protects and enhances San Diego's vibrant communities through exceptional public service and infrastructure that reflects the importance of clean water and flood-safe communities. SWD also views stormwater as a valuable resource which supports public health, the economy, the environment, and the water supply. SWD works to provide clean waterways and flood-safe communities across San Diego by maintaining stormwater facilities in accordance with the City Charter and Council Policy.

Stormwater facilities are typically located within environmentally sensitive areas that are also habitat for sensitive wildlife and plants, which are highly regulated by local, state, and federal agencies. With stakeholder and regulatory agency input, SWD developed the Municipal Waterways Maintenance Plan (MWMP) which balances the City's need to be responsive and transparent, provide flood control, and to minimize and mitigate any adverse environmental effects that result from its activities (City of San Diego, 2020a). The MWMP covers project- and program-level activities and authorizes maintenance and repair across stormwater assets and was adopted by City Council in March 2020.

SWD completes an annual report to document stormwater facility maintenance activities and associated mitigation pursuant to Section 4.1 of the MWMP, Environmental Impact Report (EIR) Section 4.4.1.5, and the requirements of several regulatory permits. This current fiscal year (FY) 2023 annual report covers the third year of MWMP activities that occurred between July 1, 2022 and June 30, 2023 in which SWD removed approximately 7,557 tons of sediment and vegetation. More detail on the background of the program is provided in Section 1. Prior to the approval of the MWMP in 2020, the City used the Master Stormwater System Maintenance Program (MMP). The City no longer uses the MMP and now uses the MWMP to achieve its stormwater maintenance goals.

During FY 2023, SWD performed the following maintenance projects which are discussed in Section 2:

- Pomerado 2 (1-04-033) Routine Maintenance
- Tripp 1 (2-01-130) Routine Maintenance
- Mission Gorge 1 & 2 (4-07-002 & 4-07-004) Routine Maintenance
- Mission Gorge 3 (4-07-009) Repeat Maintenance
- Home 2 (5-04-224) Routine Maintenance
- Alpha 1 & Ocean View 1 (5-05-006 & 5-05-008) Emergency Maintenance
- Texas Street Brow Ditch (Facility # N/A) *Emergency Maintenance*

In FY 2023, SWD remained in compliance with all MWMP regulatory permits and agreements during the implementation of project-level as well as program-level activities at its facilities. For routine maintenance projects approved and completed as part of the MWMP, SWD will conduct ongoing repeat maintenance within the assessed and mitigated impact areas in compliance with its approvals. In such instances, SWD will provide the necessary pre- maintenance notification to the agencies. For facilities where certain approvals may lapse, SWD will obtain follow-up authorizations prior to the start of maintenance. Emergency maintenance was completed in FY 2023 when it was determined that there was a sudden and imminent threat to life, property, and/or essential public services requiring immediate action. During this fiscal year, SWD also completed numerous minor maintenance activities.



By definition, these activities do not result in significant environmental impacts, do not require compensatory mitigation, and the details of such activities are not included in this annual report.

The MWMP and approved regulatory permits require that compensatory mitigation be provided to offset impacts to biological resources (e.g. uplands or wetlands) related to maintenance activities. Section 3 provides the status of these compensatory mitigation sites associated with the FY 2023 routine and emergency channel maintenance projects as follows:

- Los Peñasquitos Canyon Enhancement Phase I (transferred to long-term management)
- San Luis Rey Mitigation Bank (credits purchased and allocated)
- Marron Valley Cornerstone Lands Mitigation Bank (credits purchased and allocated)
- Stadium (San Diego River) Wetlands Mitigation, managed by Public Utilities Department (credits purchased and allocated)

In FY 2023, SWD also made progress on other Permittee Responsible Mitigation (PRM) and Advanced Permittee Responsible Mitigation (APRM) sites that will provide the required mitigation for past as well as future facility maintenance activities. Briefly discussed in Section 3, the sites included:

- 2015/16 Emergency Mitigation Plan Rehabilitation Sites: South Chollas & Paradise Canyon (bid and contracting in progress)
- Smythe-Bandola (bid and contracting in progress)
- Los Peñasquitos Canyon Enhancement Phase II (bid and contracting in progress)
- El Cuervo del Sur Phase II (bid and contracting in progress)

Section 4 of this report provides information on routine maintenance projects prioritized for FY 2024 (July 1, 2023- June 30, 2024). Planning for FY 2024 projects began in FY 2023 for the following:

- Pomerado 1 (1-04-030)
- Titus 1 (5-02-162)
- Rolando 2(5-04-048)
- Alpha 1 (5-05-006)

Due to aging infrastructure and the ever-changing environmental conditions, emergency maintenance is sometimes required which is an approved activity under the MWMP. Although SWD seeks to proactively maintain its infrastructure, unforeseen emergency conditions may arise in FY 2024 or in subsequent years that will require immediate action. When emergency response is necessary, SWD provides proper notification to the resource agencies prior to the start of work and only completes the minimum amount of maintenance necessary to alleviate the emergency conditions.



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1.0 Introduction 1.1 Background

Under City of San Diego (City) Charter Section 26.1 and Council Policy 800-04 (City of San Diego, 2012), the City is responsible for maintaining adequate drainage facilities to remove stormwater runoff in an efficient, economic, and environmentally and aesthetically acceptable manner for the protection of property and life. The City is responsible for the maintenance of public drainage facilities that are designed and constructed to City standards and located within a public street or drainage easement dedicated to the City. The City's Stormwater Department (SWD) does the necessary work to meet these needs with a vision of providing clean waterways and flood-safe communities across San Diego.

SWD operates and maintains drainage channels, ditches, and basins that convey stormwater and urban runoff (e.g. from irrigated landscaped areas, driveways, and streets) to downstream receiving waters for the purpose of reducing flood risk and for the effective management of water resources in the City. Other components of the City's stormwater system include but are not limited to 1,148 miles of storm drainpipe, 6 miles of levees, 15 pump stations, and 46,033 structures.

Maintenance of channels primarily involves the removal of sediment, vegetation, debris, and trash to maximize stormwater conveyance capacity in support of the City's Municipal Separate Storm Sewer System (MS4) permit. SWD conducts a comprehensive list of both maintenance and repair activities that are outlined in the MWMP and discussed in this report. The long-term performance of the entire system is dependent upon ongoing and proper maintenance of channel sections essential for flood control.

Historically, maintenance of stormwater conveyance system facilities occurred on an as-needed basis as a part of normal City operations without public review or regulatory permits. In 2013, the City adopted the Master Stormwater System Maintenance Program (MMP) to govern channel operation and maintenance activities based on a certified final recirculated Programmatic Environmental Impact Report (PEIR). Subsequently, a lawsuit was filed against the MMP (*San Diegans for Open Government et al. v. City of San Diego*, San Diego Superior Court Case No. 37-2011-00101571), and the City entered into a settlement agreement that required, among other things, that the MMP PEIR be considered null and void as of September 2018 (*SDOG v. City of San Diego* 2013).

In response, the City prepared the Municipal Waterways Maintenance Plan (MWMP) and its EIR to guide SWD activities. The MWMP was approved in 2020 and was developed through a collaborative and iterative process involving City staff and multiple stakeholders including nonprofit organizations, community groups, resource agencies, and the public.

The following are the primary objectives of the MWMP:

- 1. Public safety and flood risk reduction
 - Protect life and property adjacent to, downstream, and upstream of affected channels from flooding and environmental degradation.
- 2. Responsiveness to reduce flood risk
 - Provide timely and consistent routine operations and maintenance in the affected channels and associated stormwater conveyance infrastructure.



- 3. Avoid, minimize, and/or mitigate potential effects to environmental resources
 - Avoid, minimize, and/or mitigate significant adverse environmental effects resulting from routine maintenance of stormwater facilities.
 - Incorporate and adapt to water quality management strategies intended to protect water quality and address flooding impacts.
- 4. Proactive and timely approval process
 - Provide project-level analysis upfront to expedite subsequent authorizations for routine and preventative maintenance activities within stormwater facilities.
 - Identify a review-and-approval process to include additional stormwater facilities and maintenance activities that follow the protocols and requirements of the MWMP.
 - Reduce the need to conduct emergency maintenance during significant storm events by implementing preventative maintenance activities.

The objectives of the MWMP outline the responsibility of SWD to be responsive to newly identified flood risks while obtaining streamlined approvals for routine preventative maintenance that reduce these risks. To accomplish this, the MWMP identifies the following:

- 1. A range of plan-wide activities that may occur throughout the stormwater system where flood risks may arise and that would be conducted in accordance with a regulatory framework identified under the MWMP and associated permits.
- 2. A list of Facility Maintenance Plans (FMPs) that provide specific details and requirements for many but not all facilities that are likely to require routine maintenance and repair.

Together, these two components provide operational flexibility as well as site-specific information about SWD facilities that require maintenance and repair, and it also attempts to streamline the review and approval process that is required before maintenance can begin. In preparing the MWMP, once the purpose and intent of the plan were established, SWD conducted technical and environmental analysis in support of its EIR to determine the scope, scale, and potential environmental impacts at each facilities and maintenance needs in the EIR review process. The MWMP and its EIR were analyzed and considered by each of the six regulatory agencies that issued permits and approvals for the MWMP. Overall, the EIR analyzed SWD activities at the project-level for facilities where an FMP was developed and at the program-level (discussed in more detail below) for activities that included but were not limited to minor maintenance, compensatory mitigation sites, and emergencies. This was done in compliance with the California Environmental Quality Act (CEQA).

As a result of these efforts, a final MWMP was developed that included a framework for conducting routine maintenance for 66 Facility Maintenance Plans (FMPs) (50 channels/ditches, 6 basins, and 10 structure groups) that were analyzed at the project-level in the EIR. Program-level activities included in the MWMP cover minor maintenance or repair projects that do not impact Environmentally Sensitive Lands (ESL) (including jurisdictional/coastal resources), as well as changed conditions for new or substantially amended FMPs, design and construction of compensatory mitigation sites, and emergency maintenance or repair projects. Both the project- and program-level elements were implemented to support the maintenance needs of the City's stormwater system. SWD can also amend the MWMP, as necessary, to identify additional or project-specific activities and facilities that may not have been included or considered. The MWMP EIR (Project No. 616992; SCH No. 2017071022) was certified by the San Diego City Council in June 2020 (City of San Diego, 2020b). The MWMP and associated EIR have no expiration date.



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In accordance with the MWMP goals and objectives, SWD completes annual evaluations for FMP covered facilities to prioritize upcoming maintenance (further discussed in Section 2.0) based on hydrologic and hydraulic (H&H) analysis, potential flood risks, and stakeholder input. The priority list of the facilities SWD anticipates maintaining in any upcoming fiscal year is required to be distributed to the regulatory agencies before July 1st. This provides the agencies the location and quantity of facilities SWD expects to submit for their review and approval. Because resource agency review must occur within a short timeframe, SWD attempts to begin its prioritization, planning and permitting phase early, often before the fiscal year in which maintenance would occur. However, depending on resource availability and other factors, this is sometimes not possible and SWD relies on the agencies to assist by helping expedite the review and approval of its submittals when necessary.

In general, the goal of SWD is to avoid or minimize impacts to environmental resources for the activities that it performs. When SWD completes its planned routine maintenance projects, it also ensures permit conditions and required mitigation measures are implemented. For emergency projects every effort is made to minimize impacts and environmental monitoring is completed in support of permit and notification requirements. These activities are then reported to the resource agencies annually which also includes details about the compensatory mitigation provided or obtained for each project completed.

The remainder of this report discusses MWMP approvals, reporting requirements, and the activities implemented by SWD over the past fiscal year to meet the goals of the MWMP. Section 1.3 details the requirements of this report.

1.2 Regulatory Approvals

Many of the maintenance activities identified in the MWMP require review or approval under various regulations; including but not limited to the Clean Water Act (CWA), Endangered Species Act (ESA), California Coastal Act, California Fish and Game Code, California Porter-Cologne Act, CEQA, and the City of San Diego Municipal Code. Additionally, as part of the subsequent and streamlined review process established by the MWMP for all project- and many program level activities prior to the start of work, SWD often works with the public, various stakeholders, non-governmental organizations, and environmental groups in an effort to avoid, minimize, and/or mitigate MWMP related impacts.

The following is a brief status of each of the regulatory permits and the coordination completed in association with the MWMP:

Local

- The MWMP EIR (Project No. 616992; SCH No. 2017071022) and associated Mitigation, Monitoring, and Reporting Program were certified and adopted by the San Diego City Council on June 9, 2020
- A Master Site Development Permit (SDP; No. 2392210) was approved by the San Diego City Council on June 23, 2020 and does not have an expiration date.

State

• A Master 401 Water Quality Certification (No. R9-2021-0115) was issued by the California Regional Water Quality Control Board (RWQCB) San Diego Region on May 13, 2021 and is valid until May 13, 2026 (or when the USACE RGP 102 Section 404 permit expires, if sooner).



- A Master Streambed Alteration Agreement (SAA; No.1600-2019-0226-R5) was issued by the California Department of Fish and Wildlife (CDFW) on May 10, 2021 and is valid until April 30, 2031.
- A Coastal Development Permit (CDP; No. 6-20-0356 on appeal A-6-SAN-20-0029) was approved by the California Coastal Commission (CCC) on May 12, 2021 and is valid until May 12, 2026 with a 5-year extension request option.

Federal

• A Regional General Permit (RGP 102; No. SPL-2018-00652) was issued by the U.S. Army Corps of Engineers (USACE) on June 24, 2021 and is valid until June 17, 2026.

Each permit listed above generally requires SWD to prepare a Maintenance Plan and conduct a premaintenance impact assessment for its facilities where maintenance is proposed. If environmental impacts would occur, SWD must first process a Substantial Conformance Review (SCR, further discussed in Section 2.0) and submit notifications for approvals to the agencies before initial maintenance or related work can begin. This typically occurs for project-level FMPs as well as some program-level activities listed in the previous section.

In the case of the federal USACE RGP 102, a U.S. Fish and Wildlife Service (USFWS) Section 7 consultation was completed and a Biological Opinion (BO) was issued in support of the MWMPs RGP 102 approval. On-going consultation with the USFWS is expected to continue for facility maintenance activities as well as mitigation site development where suitable habitat exists and has the potential to support federally-listed endangered species. SWD will continue to work with the USACE and USFWS to streamline this coordination as necessary. The USACE also obtained a historic resources Section 106 consultation that was required by the National Historic Preservation Act (NHPA) during the RGP 102 review and approval process. This was done to consider the potential effects on cultural resources related to MWMP facility maintenance activities.

This annual report will be distributed to the resource agencies in conformance with the reporting conditions established by the permits. In addition to the reporting requirements outlined in the MWMP and the background provided in Section 1.1 above, the following section identifies specific agency reporting details that are also included in this document.

1.3 Annual Report Requirements

To meet conditions of the authorizations listed below, this report includes:

City of San Diego (City) MWMP Section 4.4 and EIR: (Project No. 616992; SCH No. 2017071022)

- Tabular summary of the acreages of sensitive vegetation impacted at each facility that was maintained and mitigation provided (Section 2)
- Updated master stormwater facility list to reflect the facilities for which impacts have been mitigated and no additional mitigation will be required (Appendix B)
- Summary of the status of mitigation that has been carried out during the current and previous years to mitigate for impacts to upland and wetland vegetation and sensitive species (Section 3, Table 11)
- Scaled map of each affected stormwater facility (Appendix A); and
- Digital date-stamped photographs of each area that were maintained in the reporting year (Appendix C).



As stated in the MWMP Section 4.4 the annual report will not include minor maintenance activities that do not have any impacts that require compensatory mitigation.

Regional Water Quality Control Board (RWQCB) 401 Certification (No. R9-2021-0115)

- A list of facilities on which maintenance was performed during the previous year, including the type and area of impact, start and end dates of maintenance, and photo documentation of maintenance activities and construction BMPs (Section 2 and Appendix C)
- Status of mitigation for each facility, such as proof of mitigation credit purchase or status of permittee-responsible mitigation (Section 3, Table 11)
- An updated master list of all facilities in the Municipal Waterways Maintenance Plan, including facility status and maintenance history (Appendix B)
- Monitoring activities, and monitors (Section 2)
- A description of maintenance delays encountered or anticipated that may affect the schedule (Section 2); and
- A description of each incident of noncompliance during the annual monitoring period, its cause, and corrective action taken (not applicable for FY 2023).

California Department of Fish and Wildlife (CDFW) 1602 Agreement (SAA; No.1600-2019-0226-R5)

- Maintenance that was performed at each facility, including the type and area of impact (Section 2)
- Start and end dates of project activities for each facility (Section 2)
- Photo documentation (Appendix C); and
- Master table of all facilities included in the MWMP including facility status and history of maintenance (Appendix B).

California Coastal Commission (CCC) - Coastal Development Permit (Nos. 6-20-0356 and A-6-SAN-20-0029)

• Annual Report not specified as required by the permit. SWD provides the report to the CCC as a courtesy.

US Army Corps of Engineers (USACE) 404 Regional General Permit (RGP 102; No. SPL-2018-00652)

- Start and end dates of project activities for each facility (Section 2)
- Permanent and temporary impact acreage, and mitigation acreage (Section 2)
- List of projects inspected for compliance (not applicable for FY 2023)
- Photo documentation (Appendix C); and
- Master table of facilities that includes status and history of maintenance (Appendix B).

US Fish and Wildlife Services (USFWS) Informal Section 7 Consultation (FWS-SDG-20B0083-2111395)

- Document activities that were conducted in the previous year (Section 2); and
- Confirm authorized impacts were not exceeded (Section 2).



2.0 Routine and Emergency Maintenance Activities (FY 2023)

Under the MWMP, SWD identifies and prioritizes routine channel maintenance work for the upcoming fiscal year that considers, as a primary objective, the ability of each facility to meet SWD's flood risk management goals. Each fiscal year, a list of priority channels is compiled for consideration. In prioritizing the channels for maintenance, SWD also considers environmental resource impacts and the availability of mitigation, relevant water quality regulations and pollutant priorities in each watershed, public input, and its resource constraints. Once the priority list has been finalized, SWD prepares detailed Maintenance Plans and evaluates those plans to determine conformance with the MWMP EIR and regulatory permits through a streamlined review procedure developed for the MWMP. This includes the Substantial Conformance Review (SCR) process established by the City and the Coastal Commission, as well as the notification procedure necessary for resource agency review. Table 7 of the MWMP and Table 2.2 of the EIR identified as "DSD Subsequent MWMP Process Flow Chart" establishes the City's SCR review process. The Coastal Commission's review process for MWMP project-level activities is through the SCR process, however the process for program-level activities can vary.

The process of prioritization, Maintenance Plan preparation and impacts analysis, SCR review, and notifications was completed for all the Routine Maintenance projects listed in Table 1 below and will be initiated for those projects listed in Section 4 Table 13 for the FY 2024 Annual Work Plan. Emergency projects listed have either completed the notification and permit review phase or are in process for After-the-Fact (ATF) permits. A summary of all maintenance completed for Routine and Emergency maintenance including vegetation impacts and mitigation for facilities maintained during FY 2023 is included in Table 1 below. More specific details about each facility maintained are included in Section 2.1 through 2.9. Figure 1 in Appendix A depicts an overview of the location of these facilities and Figure 2 shows associated mitigation sites.

A Master Stormwater Facility and Mitigation List reflecting facilities that have been maintained and impacts mitigated in FY 2023 under the MWMP is included in Appendix B.

None of the facilities maintained in FY 2023 were required to be inspected by the USACE or any other regulatory agency for compliance. Each project was monitored by qualified staff and all activities were compliant with all environmental permits; no remedial actions were necessary.



Table 1: MWMP Facilities Maintenance and Associated Mitigation for Fiscal Year 2023

Facility Number	Facility Segment Name	Authorizations	Maintenance Start and End Date	<u>1Jurisdiction[1]</u>	<u>lmpact</u> (acres)[2]	<u>Mitigation[3]</u>
1-04-033	Pomerado 2 (<i>Routine</i>)	City – SDP 2392210, EIR #616992 (SCR PRJ 1070061, approval #3186870) USACE – 404 RGP 102 (SPL-2018-00652), RGP 102 Verification # (SPL- 2022-00625-AJW) RWQCB – 401 (R9-2021-0115) (Authorization received 11/8/22)	5/10/23 to 7/12/23	USACE/RWQCB /City	0.36	0.36 acres of mitigation credits were purchased in the San Luis Rey Mitigation Bank
Total Juris	dictional Impacts					0.36
2-01-130	Tripp 1 (<i>Routine</i>)	City – SDP 2392210, EIR #616992 (SCR PTS #698555, approval #2462994) CCC – CDP 6-21-0356 (SCR approved 12/7/2021) USACE – 404 RGP 102 (SPL-2018-00652-KJD), RGP 102 Verification # (SPL-2022-00336) RWQCB – 401 (R9-2021-0115) (Authorization received 8/15/22)	9/16/22 to 10/12/22	USACE/RWQCB /CCC/City	0.2	Previously mitigated- Tripp and Industrial were combined (0.05 acres of creation and 0.15 acres of enhancement at Los Peñasquitos Canyon Enhancement– Phase I)
Total Jurisdictional Impacts					al Impacts	0.20

¹ All impacts to USACE jurisdictional resources were temporary.

¹ Detailed breakdowns of project impacts to vegetation communities are included in the individual project subsections below. Tier IV habitat impacts are not included in this table.

¹ Additional information regarding the status of mitigation for these projects is provided in Section 3, Table 10.



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Facility Number	Facility Segment Name	Authorizations	Maintenance Start and End Date	1Jurisdiction[1]	<u>lmpact</u> (acres)[2]	Mitigation[3]
4-07-002	Mission Gorge 1 (<i>Routine</i>)	City – SDP 2392210, EIR #616992 (SCR PTS #692644, approval #3162663)	1/7/22 +-			<u>Mission Gorge 1, 2</u> and 3 previously mitigated (3.55
4-07-004	Mission Gorge 2 (<i>Routine</i>)	USACE – 404 RGP 102 (SPL-2018-00652), RGP 102 Verification # (SPL-2022-00596-AJW) RWQCB – 401 (R9-2021-0115) (Authorization received 10/21/22)	4/24/23		3.55	acres at Stadium Wetland Mitigation Project) under the Alvarado Channel project in 2015
4-07-009	Mission Gorge 3 (<i>Repeat</i>)	USACE- non-notifying NWP 3- Maintenance and 33- Temporary Construction, Access and Dewatering. No other authorizations required due to repeat maintenance	2/15/23 to 2/15/23	USACE/RWQCB /City		
	•	·		Total Jurisdiction	al Impacts	3.55
5-04-224	Home 2 (<i>Routine</i>)	City – SDP 2392210, EIR #616992 (SCR PRJ #1063813, approval #PMT-3162437) USACE – 404 RGP 102 (SPL-2018-00652-KJD), RGP 102 Verification # (SPL-2022-00543-MAL) RWQCB – 401 (R9-2021-0115) (Authorization received 9/27/22)	11/2/22 to 11/2/22	USACE/RWQCB /City	0.07	Previously mitigated 0.07 acres wetland habitat at Stadium Wetland Mitigation Project.
					0.34	Previously mitigated at Marron Valley Cornerstone Lands Conservation bank for upland habitat
		•	·	Total Jurisdiction	al Impacts	0.41



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Facility Number	Facility Segment Name	Authorizations	Maintenance Start and End Date	1Jurisdiction[1]	<u>lmpact</u> (acres)[2]	Mitigation[3]
5-05-006	Alpha 1 (Emergency)	City- Emergency SDP No. 3182776 (ATF SCR PRJ # 1094226, USACE – 404 RGP 63 Verification # (SPL-2022-00495-AJW) RWQCB- 401 RGP 63 enrolled on 11/16/22 CDFW- 1602 (Emergency Notification, EPIMS- SDO-38445-R5)	9/8/22 to 10/12/22	USACE/RWQCB /City	0.80	0.80 acres of mitigation credits were purchased in the Stadium Wetland Mitigation Project for Alpha 1
5-05-008	Ocean View 1 (Emergency)					No mitigation was required for Ocean View 1
Total Ju	risdictional Impac	ts				0.80
	Texas Street (Emergency)	City- Emergency SDP No. 1104896, USACE – (SPL-2023-00165) RWQCB- 401 RGP 63 enrolled on 03/28/23, General Cert. #R9-2023-0088;887155	2/26/23 to ongoing	USACE/RWQCB /City	0.28	0.23 acres of upland were revegetated on site, .05 acres of mitigation credits were purchased from Marron Valley Cornerstone Bank of coastal sage scrub habitat.
		CDFW- 1602 (Emergency Notification, EPIMS- 34003)			0.08	0.08 acres of wetland mitigation credits were purchased in the Stadium Wetland Mitigation Project
		•		Total Jurisdiction	al Impacts	0.36



2.1 Pomerado 2 (1-04-033) Routine Channel Maintenance Project

Routine maintenance and associated activities within the Pomerado 2 concrete channel were required to reduce flood risk to adjacent properties and infrastructure and to ensure the long-term reliability of City infrastructure. Routine maintenance at this segment was authorized through demonstration of conformance with the Municipal Waterways Maintenance Plan (MWMP) Environmental Impact Report (Project No. 619992; SCH No. 2017071022) and its applicable permits. The project site is located within the flood control channel sections just south of the intersection of Rancho Bernardo Road and Pomerado Road and extending east from near the intersection of Rios Road and Pomerado Road. The Pomerado 2 maintenance area extends south parallel to Pomerado Road until the intersection of Pomerado Road and Rios Road where the maintenance area continues east behind residential developments along Rios Road. The project is within the Rancho Bernardo Community Planning Area. The facility is not located within or adjacent to the Multi-Habitat Planning Area (MHPA) boundary or the Coastal Overlay Zone (COZ).

Routine maintenance activities were initiated within the Pomerado 2 facility segment on May 10, 2023, and concluded on July 12, 2023, in conformance with the approvals listed in Table 1 above. Authorized maintenance activities were conducted in accordance with the MWMP Environmental Impact Report (Project No. 616992; SCH No. 2017071022), Master Site Development Permit (No. 2392210), Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification (Order No. R9-2021-0115), California Department of Fish and Wildlife Streambed Alteration Agreement (No.1600-2019-0226-R5), U.S. Army Corps of Engineers Regional General Permit 102 (SPL-2018-00652), and U.S. Fish and Wildlife Informal Section 7 Consultation (FWS-SDG-20B0083-2111395), including all special conditions listed in those authorizations. This facility segment had not been previously permitted and mitigation had not been previously provided prior to this FY maintenance. Therefore, mitigation credits were required and provided. The 0.36 acres of compensatory mitigation required was provided through the purchase of rehabilitation credits at the San Luis Rey Mitigation Bank and achieved a no-net loss of wetland area (i.e., at least 1:1 rehabilitation), in accordance with the requirements in the MWMP and San Diego Biological Guidelines (SDBG) (City of San Diego 2018).

Routine maintenance work resulted in impacts to both vegetated and unvegetated portions of the maintenance areas totaling 3.19 acres (2,379 linear feet) within Pomerado 2 (1.26 acres of the maintenance area occurred within the access/loading/staging/stockpiling areas). The total mitigation area required for the project site was 1.92 acres. (See table 2) Approximately 974 cubic yards (CYs) (1,340 tons) of sediment and vegetation were removed from the maintenance areas. Following removal of vegetation and sediment within the maintenance area, approximately 230 linear feet of the concrete lining were identified as needing minor concrete repair. Approximately 114 cubic yards of damaged concrete was removed from the channel and 114 cubic yards of concrete was subsequently discharged into the channel to restore the damaged portions of concrete lining to the original as-built dimensions. During concrete repair, a temporary sandbag berm was installed around each work area to prevent unauthorized discharges, and a diversion hose and by-pass pump were used as-needed for dewatering. Vegetation communities and land covers impacted by



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maintenance at the Pomerado 2 facility segments included urban/developed, developed concrete-lined channel, disturbed land, disturbed wetland (concrete lined), eucalyptus woodland, and freshwater marsh (concrete-lined).

Biological monitoring occurred to ensure that diversion berms were functioning properly, limits of work were being observed, and all standard BMPs were being adhered to.

Because maintenance activities occurred during the avian breeding season (January 15th to September 15th), necessary pre-construction nesting bird surveys were completed for general avian species and raptors. All surveys were negative.

Additionally, noise monitoring was conducted at the edge of residentially zoned properties in accordance with Section 59.5.0404[b] of the San Diego Municipal Code. All noise level daily averages remained below the City's acceptable 12-hour 75 dBA threshold such that no additional noise attenuation measures were required.

Once routine maintenance activities were completed, City crews removed all temporary flow diversion BMPs from the Pomerado 2 channel segment in accordance with the approved Maintenance Plans. The project was conducted in compliance with all applicable agency approvals and environmental permits. Photographs showing conditions before and after maintenance in FY 2023 are included in Appendix C. The project was monitored by qualified staff and activities were compliant with approved permits and authorizations; no remedial actions were required.

Iurisdiction or SDBG Tier		Maintenance Impacts (acres)
Pomerado 2		
Developed concrete-lined channel (64200)	USACE/RWQCB/City	0.63
	CDFW/City	1.11
Disturbed wetland (concrete-lined) (11200)	USACE/RWQCB/CDFW /City	0.06
Freshwater marsh (concrete-lined) 52400)	USACE/RWQCB/CDFW/CCC/City	0.12
	Total	1.924

Table 1: Pomerado 2 Routine Channel Maintenance Impacts



2.2 Tripp 1 (2-01-130) Routine Channel Maintenance Project

Routine maintenance and associated activities within the Tripp 1 concrete ditch were required to reduce flood risk to adjacent properties and infrastructure and to ensure the long-term reliability of City infrastructure. Routine maintenance at this segment was authorized through demonstration of conformance with the Municipal Waterways Maintenance Plan (MWMP) Environmental Impact Report (Project No. 619992; SCH No. 2017071022) and its applicable permits. The facility segment is located west of Interstate 5 (I-5), east of Sorrento Valley Road, and about 200 feet south of Tripp Court, with the nearest address being 11689 Sorrento Valley Rd. (Figure 1). The access and staging areas were located within the paved parking lot area adjacent to the south and west of the facility segment in addition to within the right-of-way on Sorrento Valley Road. There are no portions of the maintenance area which intersect with the Multi-Habitat Planning Area (MHPA) boundary and the nearest MHPA boundary is located approximately 590 feet west of the maintenance area (Figure 1). The Los Peñasquitos Lagoon – Tripp facility group is located within the Torrey Pines Community Planning Area and is within the Coastal Overlay Zone (COZ) (N-APP-1 area).

Maintenance activities were initiated on September 16, 2022, and concluded on October 12, 2022, in conformance with the approvals listed in Table 1 above. Authorized maintenance activities were conducted in accordance with the MWMP Environmental Impact Report (Project No. 616992; SCH No. 2017071022), Master Site Development Permit (No. 2392210), Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification (Order No. R9-2021-0115), California Department of Fish and Wildlife Streambed Alteration Agreement (No.1600-2019-0226-R5), U.S. Army Corps of Engineers Regional General Permit 102 (SPL - 2018 - 00652), and U.S. Fish and Wildlife Informal Section 7 Consultation (FWS-SDG-20B0083-2111395), including all special conditions listed in those authorizations.

Impacts to sensitive wetland vegetation communities and jurisdictional aquatic resources in Tripp 1 occurred within the maintenance footprint that was previously permitted (previous emergency project SDP No. 2034245 [2017 Addendum]; 401 Certification No. 10C-052) and compensatory mitigation credits were previously applied at the El Cuervo del Sur (Phase 1) and Los Peñasquitos Canyon Enhancement (Phase 1) mitigation projects, such that no additional mitigation was required for these impacts. The El Cuervo del Sur (Phase 1) site has been fully installed and is in the five-year maintenance and monitoring phase, while the Los Peñasquitos Canyon Enhancement (Phase 1) site has received final sign-off from the regulatory agencies. Additional impacts to Tier IV vegetation communities and/or land covers would not require mitigation. Additional impacts to Tier IV vegetation communities and/or land covers would not require mitigation.

Routine maintenance work resulted in impacts to both vegetated and unvegetated portions of the maintenance areas totaling 0.46 acre (782 linear feet) within Tripp 1. Table 3 provides additional details regarding impacts to specific vegetation communities. Approximately 135 CYs (157 tons) of sediment and vegetation were removed from the Tripp 1 maintenance area. Following removal of vegetation and sediment within the maintenance area, five sections of the concrete lining were identified as needing minor concrete repair. Approximately 24 cubic yards (58 tons) of damaged concrete was removed from the channel and 24 cubic yards of concrete was subsequently discharged into the channel to restore the damaged portions of concrete lining to the original as-built dimensions. During concrete repair, a temporary sandbag berm was installed around each work area to prevent unauthorized discharges, and a diversion hose and by-pass pump were used as needed for dewatering. The minor concrete repairs occurred within



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the approved impact area and matched the as-built grade and form of the original concrete-lining such that there were no changes to the channel dimensions as a result of the repairs. Since these additional impacts occurred within the previously approved impact limits, project impacts were consistent with limits authorized by project approvals.

Vegetation communities and land covers impacted by maintenance at the Tripp 1 facility segments included developed (concrete-lined) channel, riparian scrub (southern willow scrub; concrete-lined) and freshwater marsh (concrete-lined).

There were no pre-construction surveys or noise monitoring for nesting birds or raptors required since work occurred outside the nesting and breeding seasons for these resources. Biologists conducted a visual sweep of the maintenance area for Ridgway's rail prior to the removal of vegetation on the first two days of maintenance as a courtesy due to the proximity of potential suitable habitat for this species, which can be found year-round in San Diego. Work was also initiated and completed outside the nesting and breeding season for this species.

Dudek biologists conducted biological monitoring to ensure compliance throughout the duration of maintenance activities.

BMPs were implemented in accordance with the project's Water Pollution Control Plan (WPCP).

Photographs showing conditions before and after maintenance in FY 2023 are included in Appendix C. The project was monitored by qualified staff and activities were compliant with approved permits and authorizations; no remedial actions were required.

MWMP Mapping Vegetation Community (Holland/ Oberbauer Code)	Jurisdiction or SDBG Tier	Maintenance Impacts (acres)
Developed concrete-lined channel (64200)	USACE/RWQCB/CDFW/CCC/City	0.41
Freshwater marsh (concrete-lined) (52400)	USACE/RWQCB/CDFW/CCC/City	005
Riparian Scrub (Southern Willow Scrub; concrete- lined) (63320)	USACE/RWQCB/CDFW/CCC/City	<0.01
	Total	0.46

Table 2: Tripp 1 Routine Channel Maintenance Impacts



2.3 Mission Gorge 1 & 2 (4-07-002 & 4-07-004) Routine Channel Maintenance Project

Routine maintenance and associated activities within the Mission Gorge 1 & 2 primarily concrete (and earthen) channel segments were required to reduce flood risk to adjacent properties and infrastructure and to ensure the long-term reliability of City infrastructure. The project site is located within the flood control channel sections north of Interstate 8 from just west of the intersection of Camino del Rio North and Fairmount Avenue and extending east past Adobe Falls Road. The Mission Gorge 1 maintenance area extends east from the west side of Fairmount Avenue up to just south of where the Metropolitan Transit System (MTS) rail line extends over the channel. The Mission Gorge 2 maintenance area extends east from north of Basillica Place to the culvert outlet just below existing commercial development and west of Mission Gorge Place. The project is within the Navajo Community Planning Area. These facilities are not located adjacent to the Multi-Habitat Planning Area (MHPA) boundary nor are they within the Coastal Overlay Zone (COZ).

Maintenance started on January 6, 2023, and concluded on April 24, 2023, in conformance with the MWMP Facility Maintenance Plan (FMP) and the approvals listed in Table 1 above. Authorized maintenance activities were conducted in accordance with the MWMP Environmental Impact Report (Project No. 616992; SCH No. 2017071022), Master Site Development Permit (No. 2392210), Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification (Order No. R9-2021-0115), California Department of Fish and Wildlife Streambed Alteration Agreement (No.1600-2019-0226-R5), U.S. Army Corps of Engineers Regional General Permit 102 (SPL-2018-00652), and U.S. Fish and Wildlife Informal Section 7 Consultation (FWS-SDG-20B0083-2111395), including all special conditions listed in those authorizations.

Routine maintenance work resulted in impacts to both vegetated and unvegetated portions of the maintenance areas totaling 2.98 acres (1,913 linear feet) within Mission Gorge 1 through 3 (1.53 acres of impacts occurred within the access/loading/staging/stockpiling areas). Table 4 provides details regarding impacts to specific vegetation communities and land covers. Approximately 7,862 CYs (1,665 tons) of sediment and vegetation were removed from the maintenance areas. It should be noted that this volume total is only comprised of material removed from Mission Gorge 1 and 2. The repeat maintenance at Mission Gorge 3 consisted of vegetation cutting only (no excavation). No maintenance activities occurred within Mission Gorge 4.

Impacts to sensitive wetland vegetation communities and jurisdictional aquatic resources in Mission Gorge 1 and 2 were previously permitted and one-time mitigation was previously provided at the City's Stadium Wetland Mitigation Project, therefore, as described in Section 5.3.5 of the MWMP EIR (City of San Diego 2020a), no additional mitigation is required for impacts associated with the proposed routine maintenance.

Dudek biologists conducted biological monitoring to ensure compliance throughout the duration of maintenance activities.

BMPs were implemented in accordance with the project's Water Pollution Control Plan (WPCP) at each maintenance interval.



Monitors documented compliance with project permit authorizations for the routine (and repeat) maintenance project, as applicable. During maintenance activities, Dudek biologists and City crews coordinated to address any monitor recommendations to ensure project compliance and proper BMP implementation. Full-time biological monitoring occurred throughout the duration of the project.

Photographs showing conditions before and after maintenance in FY 2023 are included in Appendix C. The project was monitored by qualified staff and activities were compliant with approved permits and authorizations; no remedial actions were required.

MWMP Mapping Vegetation Community (Holland/ Oberbauer Code)	Jurisdiction or SDBG Tier	Maintenance Impacts (acres)	
		Mission Gorge 1	Mission Gorge 2
Developed concerned, line of channel (C1200)	USACE/RWQCB/ City	0.30	0
Developed concrete- lined channel (64200)	CDFW/ City	0.16	0.32
Disturbed wetland, concrete- lined channel (64200)	USACE/RWQCB/CDFW/ City	0.08	0
Freshwater marsh (concrete lined) (52400)	USACE/RWQCB/CDFW/CCC/City	0.10	0.32
Ornamental plantings (11000)	CDFW/ City	0	0.01
	Total	0.64	0.65

Table 3: Mission Gorge 1 & 2 Routine Channel Maintenance Impacts



2.4 Mission Gorge 3 (4-07-009) Repeat Channel Maintenance Project

Repeat maintenance and associated activities within the Mission Gorge 3 concrete/earthen channel segments were required to reduce flood risk to adjacent properties and infrastructure and to ensure the long-term reliability of City infrastructure. The project site is located within the flood control channel sections north of Interstate 8 from just west of the intersection of Camino del Rio North and Fairmount Avenue and extending east past Adobe Falls Road. The Mission Gorge 3 maintenance area extends east from approximately Mission Gorge Place to the boundary of the existing Caltrans right-of-way just north of the Alvarado Canyon Road overpass. The project is within the Navajo Community Planning Area. These facilities are not located adjacent to the Multi-Habitat Planning Area (MHPA) boundary nor are they within the Coastal Overlay Zone (COZ).

Maintenance was coordinated with Mission Gorge 1 and 2, and only vegetation was trimmed or removed from this channel segment in compliance with prior approvals. No other work occurred.

Dudek biologists conducted biological monitoring to ensure compliance throughout the duration of maintenance activities.

BMPs were implemented in accordance with the project's Water Pollution Control Plan (WPCP).

Photographs showing conditions before and after maintenance in FY 2023 are included in Appendix C. The project was monitored by qualified staff and activities were compliant with approved permits and authorizations; no remedial actions were required.

Table 4: Mission Gorge 3 Repeat Maintenance Impacts

MWMP Mapping Vegetation Community (Holland/ Oberbauer Code)	Jurisdiction or SDBG Tier	Maintenance Impacts (acres)			
Mission Gorge 3					
No impacts occurred due to repeat maintenance	N/A	N/A			
	Total	N/A			



2.5 Home 2 (5-04-224) Routine Channel Maintenance Project

Routine maintenance was initiated at Home 2 Facility Segment (Home 2) which is an earthen-bottom channel with riprap banks at the downstream end and earthen banks throughout the remainder of the channel. Home 2 is approximately 920 feet long and ranges from 20 to 30 feet in width. Maintenance occurred within the 160-foot-long and 30-foot-wide downstream portion. Home 2 is within a portion of Auburn Creek from the downstream end of the outlet of the culvert beneath Interstate 805 (1-805) to the inlet of the culvert under Spillman Drive in the City of San Diego, San Diego County (Attachment A). Home 2 is not within the Coastal Overlay Zone or Multi-Habitat Planning Area (MHPA). The nearest MHPA boundary is approximately 550 feet east of the channel. The Project is within the Mid-City: City Heights Planning Area.

Maintenance started and ended on November 2, 2023. Maintenance activities were conducted in accordance with the MWMP EIR (Project No. 616992; SCH No. 2017071022), Master Site Development Permit (No. 2392210), RWQCB Clean Water Act Section 401 Water Quality Certification (Order No. R9-2021-0115), California Department of Fish and Wildlife Streambed Alteration Agreement (No.1600-2019-0226-R5), USACE Regional General Permit 102 (SPL-2018- 00652), and U.S. Fish and Wildlife Service Informal Section 7 Consultation (FWS-SDG-20B0083- 2111395), including all special conditions listed in those authorizations.

Approximately 16.30 cubic yards (16.31 tons) of sediment, vegetation, and debris were removed from Home 2. Impacts on sensitive vegetation communities and jurisdictional aquatic resources at Home 2 were previously permitted, and mitigation was previously assigned at the Marron Valley Cornerstone Lands Conservation Bank for impacts to sensitive upland habitats and at the Stadium Wetland Mitigation Project for wetland impacts. The project resulted in 0.07 acres of wetland impacts and 0.34 acres of upland impacts. The project resulted in 16.3 CYs (16.31 tons) of sediment and vegetation.

This project did not require preconstruction surveys or noise monitoring for nesting birds or raptors because work occurred outside the nesting and breeding seasons. The Project was conducted in compliance with all applicable agency approvals and environmental permits. No remedial actions were required, and no deviations from the Maintenance Plans occurred.

An ICF biologist conducted biological monitoring to ensure compliance throughout the duration of maintenance activities.

BMPs were implemented in accordance with the project's Water Pollution Control Plan (WPCP).

Photographs showing conditions before and after maintenance in FY 2023 are included in Appendix C. The project was monitored by qualified staff and activities were compliant with approved permits and authorizations; no remedial actions were required.



Table 5: Home 2 Routine Maintenance Impacts

MWMP Mapping Vegetation Community (Holland/ Oberbauer Code)	Jurisdiction or SDBG Tier	Maintenance Impacts (acres)
Home 2		
Wetland- Disturbed wetland (Arundo-dominated)	USACE/RWQCB/CDFW/City	<0.01
(65100)	CDFW/City	0.01
Wetland- Natural Flood Channel (64200)	USACE/RWQCB/CDFW/City	0.06
Upland- Disturbed chaparral (37200)	Tier IIIA	<0.01
	Total	0.07

2.6 Alpha 1 & Ocean View 1 (5-05-006 & 5-05-008) Emergency Channel Maintenance Project

A site evaluation was conducted by City engineers on September 7, 2022, at the Alpha 1 (earthen) and Ocean View 1 (concrete/earthen) facility segments to assess levels of sediment, vegetation, and debris in preparation of an intense storm associated with Hurricane Kay that was expected to produce upwards of 0.7 inches of rain beginning on Friday, September 9th and continuing through the afternoon of September 10th. Due to impending conditions and weather patterns expected from the hurricane, emergency actions were deemed necessary to alleviate the threat of flooding to adjacent properties and infrastructure. Based on hydraulic reports for both the Alpha 1 and Ocean View 1 segments, accumulated material had constricted hydraulic capacity in both these channels such that, combined with forecasted rain levels, it was determined that an unexpected threat to life and property involving clear and imminent danger from the potential flooding had developed. On September 7th, 2022, at approximately 7:00 pm emergency actions were determined to be necessary to alleviate the emergency. Due to the sudden nature of the emergency conditions, work was initiated on September 8, 2022.

This emergency project removed the material that was blocking downstream flows in the Alpha 1 channel on each side of the 40th St. bridge, and within the Ocean View 1 channel located southeast of the San Miguel Ave. terminus (Figure 1). The Alpha 1 channel, also known as Alpha 1 facility segment in the City's MWMP, is concrete-walled and earthen-bottom throughout the emergency maintenance area. The Ocean View 1 channel, also known as Ocean View 1 facility segment in the MWMP, is concrete-lined throughout the emergency maintenance and access area. Access to Alpha 1 was taken from both the Z Street cul-de-sac and a City right-of-way located just off S 40th Street, and access to Ocean View 1 was taken from the end of the San Miguel Avenue cul-de-sac (Figure 2). Sediment, vegetation, and debris were removed from both channels using an excavator, bulldozer, bobcat, front-end loader, and dump truck staged both in the channels and above the banks of Alpha 1 and the west side of Ocean View 1. Material was cleared from the channel using equipment, loaded into the dump trucks, and then stockpiled at the property adjacent to the Ocean View 1 access ramp prior to being hauled to an approved disposal location (i.e., Miramar Landfill).

The emergency project removed approximately 1,542 CYs (2,178 tons) of accumulated sediment, vegetation, and debris from the 442 linear foot section of the earthen bottom segment of Alpha 1, and 380 linear foot section of Ocean View 1. The emergency work was completed on September 12, 2022 and represented the minimum impacts necessary to alleviate the threat to life and property due to the unexpected flood risk.

Biological monitoring was conducted during emergency maintenance as necessary to ensure project compliance, including restriction of maintenance activity to the impact area determined to represent the minimum necessary to alleviate emergency conditions in the channels. Qualified monitoring biologists were on-site to ensure the activities remained in compliance with the MWMP/EIR, and the work was ensured that work was limited to the minimum necessary to alleviate emergency conditions, that work avoided impacts to special-status species, and ensured that no unintended impacts to other biological resources occurred.

Impacts that occurred as part of this emergency maintenance project were entirely within the MWMP Alpha 1 and Ocean View 1 facility segments Wetland impacts to Alpha 1 totaled 0.46 acres and to Ocean View 1



0.44 acres which equal 0.90 total acres of wetland impacts which required mitigation. All emergency related project impacts have been mitigated at the Stadium Mitigation site.

BMPs were implemented to the maximum extent practicable during work to reduce downstream effects.

Photographs showing conditions before and after maintenance in FY 2023 are included in Appendix C. The project was monitored by qualified staff and activities were compliant with approved permits and authorizations; no remedial actions were required.

MWMP Mapping Vegetation Community (Holland/ Oberbauer Code)	Jurisdiction or SDBG Tier	Maintenance Impacts (acres)
Alpha 1 Emergency		
Developed concrete lined shapped (C1200)	USACE/RWQCB/CDFW/City	0
Developed concrete-lined channel (64200)	CDFW/City	0.09
Wetland- Disturbed wetland (11200)	USACE/RWQCB/CDFW/City	0.11
Wetland- Riparian scrub (Southern Willow scrub (63000)	USACE/RWQCB/CDFW/City	0.05
Wetland- Natural Flood Channel (64200)	USACE/RWQCB/CDFW/City	0.15
Wetland- Riparian forest (Southern Willow forest) (61320)	USACE/RWQCB/CDFW/City	0.06
	Total	0.46

Table 6: Alpha 1 Emergency Maintenance Impacts

Table 7: Ocean View 1 Emergency Maintenance Impacts

MWMP Mapping Vegetation Community (Holland/ Oberbauer Code)	Jurisdiction or SDBG Tier	Maintenance Impacts (acres)
Ocean View 1 Emergency		
Wetland- Developed concrete-lined channel	USACE/RWQCB/CDFW/City	0.07
(64200)	CDFW/City	0.11
Wetland- Disturbed land (concrete-lined)	USACE/RWQCB/CDFW/City	0.25
Wetland- Disturbed wetland (Arundo- dominated; concrete-lined) (65100)	USACE/RWQCB/CDFW/City	0.01
	Total	0.44



2.7 Texas Street Brow Ditch (Facility #N/A) Emergency Channel Maintenance Project

The emergency project was located in an earthen ditch on the eastern side of Texas Street between Adams Avenue and Camino del Rio South within the North Park Community Plan area within the City. The emergency maintenance occurred approximately 0.30 miles south of Interstate 8 and approximately 0.6 miles west of Interstate 805. The site is not located within the City's Multi-Habitat Planning Area (MHPA) or the Coastal Overlay Zone (COZ)

A site assessment was conducted on February 17, 2023 at a section of stormwater ditch on the east side of Texas Street between Adams Avenue and Camino del Rio South to determine the extent of reported erosion and a failing roadway guardrail. Substantial effects from erosion were observed within an approximate 350-foot reach of the stormwater ditch that was threatening the structural stability of the Texas Street right-of-way as well as compromising the safety effectiveness of the guardrail on the west side of the street. Due to impending precipitation forecast to produce upwards of 2.5 inches of rain beginning on the evening of Wednesday February 22nd and continuing through Sunday evening February 26th, emergency actions were deemed necessary to re-establish the stormwater ditch per engineered recommendations in order to alleviate impending damage to the roadway subgrade, to allow for the repair of the damaged guardrail, and to install a rip rap ditch bottom to reduce water velocities to protect the bank and roadway from further erosional effects.

Emergency repair activities were initiated on February 26, 2023 (upland vegetation trimming occurred on February 22, 2023) and involved filling and re-establishing approximately 350 linear feet of earthen-bottom stormwater ditch that had eroded and compromised the Texas St. right-of-way and guardrail. Activities included removal of vegetation on affected slopes, excavation of sediment and other material to establish the new ditch alignment, and installation of rip rap within the new ditch alignment. Additionally, replacement of the compromised guardrail along Texas Street also occurred in order to meet the minimum vehicle safety requirements for the right-of-way and to meet required dimensions for re-establishment of the bank. Access for the repair work occurred from the northern end of the existing ditch (e.g., bobcats) as well as from the Texas St. right-of-way (excavator). Repair work resulted in the discharge of approximately 206 cubic yards (CY) of clean fill material into 0.04 acre (350 LF) of non-wetland waters of the U.S., specifically the ditch east of Texas Street that is an unnamed tributary to the San Diego River, for the purpose of re-establishing a stable bank and allowing the installation of a guardrail that would meet required safety standards. The area impacted was required to be mitigated at a ratio of 2:1 resulting in 0.08 acres of mitigation area required. (Table 9) Impact to coastal sage scrub (Tier II) totaled 0.28 acres. Required mitigation has been provided at the Stadium Mitigation site for impacts to natural flood channel and credits have bene purchased at the Marron Valley mitigation site for upland impacts. Revegetation is ongoing at the project site. This is being conducted as a portion of the mitigation required and reducing the amount of required mitigation off-site.

Biological and cultural resources monitoring was conducted during emergency maintenance as necessary to ensure project compliance. Because work occurred during the avian breeding season (January 15 – September 15), nesting bird surveys were conducted prior to the start of emergency maintenance and were negative. At the end of construction, a sewer line within the ditch was permanently removed.



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The emergency maintenance included removing vegetation along upland areas where slopes were impacted, excavating soils and accumulated material within and adjacent to the existing ditch in order to reestablish the ditch alignment and associated side slopes, and placement of rip rap along the full extent of the newly established earthen ditch bottom. In total, the emergency work removed approximately 1,467 CYs (2,200 tons) of sediment and vegetation.. This represented the minimum necessary to alleviate the emergency conditions.

BMPs were implemented to the maximum extent practicable during work to reduce downstream effects.

Photographs showing conditions before and after maintenance in FY 2023 are included in Appendix C. The project was monitored by qualified staff and activities were compliant with approved permits and authorizations; no remedial actions were required.

MWMP Mapping Vegetation Community (Holland/ Oberbauer Code)	Jurisdiction or SDBG Tier	Maintenance Impacts (acres)
Texas Street Emergency		
Wetland- Natural flood channel (64200)	USACE/RWQCB/CDFW/City	0.08
Upland- Coastal Sage scrub (32500)	Tier II	0.28
	Tota	al 0.36

Table 8: Texas Street Emergency Maintenance Impacts



3.0 Mitigation Projects

In accordance with the MWMP regulatory permits, one-time mitigation is required for significant biological impacts resulting from implementation of the MWMP. Table 10 lists the status of mitigation sites that are associated with FY 2023 MWMP that mitigate for past and future MWMP impacts to biological resources. To help define a site's status, SWD has divided the mitigation process into seven phases (Diagram 1). These phases may overlap one another, or a project can be in two or three phases at a given time, but in general are used to help describe a mitigation project's status.

Diagram 1: Mitigation Process



Sections 3.1 – 3.3 provide additional detail regarding the mitigation sites related to FY 2023 channel maintenance activities. Several of these mitigation sites were developed and approved prior to completion of the MWMP. Figure 2 of Appendix A provides the geographic locations of these mitigation sites.

In addition to the mitigation sites that are already assigned to MWMP facilities, SWD is actively developing additional mitigation sites, including some that have been identified as Capital Improvement Program (CIP) projects and are therefore being developed by the Engineering & Capital Projects Department. These future potential mitigation sites may serve as permittee-responsible mitigation for specific prioritized MWMP facilities or advanced-permittee responsible mitigation with credit acreage that may be assigned to MWMP facilities as they are prioritized.

The following provides additional details regarding mitigation projects that are tied to channels reported in Section 2 or where the project status has changed in FY 2023.



Table 9: Mitigation Sites Associated with MWMP Facilities - FY 2023 Status

Mitigation Site	Reviewing Agencies	Status	MWMP Facilities Mitigated/Allocated	Mitigation Site	Mitigation Type
FY 2	023 MWMP Mainten	ance Related Mi	tigation Sites (See Sections 3.	1 - 3 3)	туре
Los Peñasquitos Canyon	City/CCC/USACE/	Long-term	Roselle-2, Flintkote-1,	Los Peñasquitos	APRM
Enhancement Phase I	RWQCB/CDFW	Management	MBHS-1, PB-Olney-1, Tripp-1, Industrial 1 & 2	/ Peñasquitos	
San Luis Rey Mitigation Bank	USACE/RWQCB/ CDFW/CITY	Long-Term Management	Pomerado-2	San Luis Rey	Mitigation Bank
Marron Valley Cornerstone Bank	City	Long-Term Management	Texas St, Home-2	Tijuana/Tijuana	Mitigation Bank
Stadium (San Diego River) Wetlands Mitigation	City/USACE/ RWQCB/CDFW	5-Year Monitoring & Maintenance	Alpha <i>Emergency</i> , Texas Street <i>Emergency</i> , Home-2, Mission Gorge-1, Mission Gorge-2 & Mission Gorge-3	San Diego River/ San Diego River	APRM
			atus Has Changed in FY 2023		1
2015/16 Emergency Mitigation Plan – Rehabilitation Sites	City/RWQCB	Bid & Contracting	Home-3, Home-4, Home-5, Home-1, Rolando-1, Rolando-2, National-1, National-2, Cottonwood-1, Cottonwood-2, Jamacha-1, Washington-1, Washington-2, Parkside-1	Pueblo and Sweetwater/ San Diego Bay	PRM
Smythe-Bandola Mitigation Site	City/USACE/ RWQCB/CDFW	Bid & Contracting	Via Bandola-1, Smythe	Tijuana River/ Tijuana River	PRM
Los Peñasquitos Canyon Enhancement Phase II	City/CCC/USACE/ RWQCB/CDFW	Bid & Contracting	Mission Bay Drive-1	Los Peñasquitos / Peñasquitos	APRM
El Cuervo del Sur Phase II	City/CCC/USACE/ RWQCB/CDFW	Bid & Contracting	Industrial-2 Emergency Maintenance (2021)*	Los Peñasquitos / Peñasquitos	APRM

Note: * indicates mitigation credits have been internally assigned, but not yet formally allocated.



3.1 Long-Term Management Mitigation Sites

3.1.1 Los Peñasquitos Canyon Enhancement (Phase I)

The Los Peñasquitos Canyon Enhancement Project was designed to provide wetland enhancement mitigation for maintenance impacts to channels in the Los Peñasquitos Hydrologic Unit. The site is located within the upper reach of Lopez Canyon Creek to the east of Interstate 805. The mitigation work consisted of removing 8.5 acres of non-native species found within and adjacent to jurisdictional waters in Lopez Canyon, as well as supporting the well-being of native species of plants and animals in order to provide 6.64 acres of mitigation credit for channel maintenance impacts, as described in the *Final Los Peñasquitos Wetland Enhancement Plan* (URS Corporation, February, 2014a).

The Year 5 performance standards were achieved as of August 2020 and documented in the *Final and Year 5 Annual Compensatory Mitigation Monitoring Report for Los Peñasquitos Canyon Preserve Wetland Enhancement Project* (RECON, August 2020) which was submitted to the reviewing agencies listed in Table 11. This site has since been signed off by the permitting agencies and will remain in long-term maintenance and monitoring. Los Peñasquitos Canyon Preserve Wetland Enhancement Project has an excess of 0.66 acres of advanced permittee responsible wetland enhancement credits approved by the regulatory agencies to utilize for other projects.

The project provides wetlands enhancement mitigation for the following channel maintenance locations:

- Industrial-1
- Industrial-2
- Tripp-1
- Roselle-2

- Flintkote-1
- PB-Olney-1
- MBHS-1

3.1.2 San Luis Rey Mitigation Bank

The San Luis Rey Wetland Mitigation Bank (SLR) is adjacent to the San Luis Rey River located in the City of Oceanside, part of San Diego County. The SLR Bank occurs within the San Luis Rey-Escondido 8-digit HUC. The SLR Bank is a 54-acre mitigation project that is currently managed by Wildlands, Inc. The mitigation bank was approved by regulatory agencies in 2014 and construction was finished in 2015. This project is in long-term management.

In FY 23, SWD identified the Pomerado Facility channel segments 1 and 2 as high priorities for scheduled routine maintenance. In November 2022, SWD purchased 0.85-acre of compensatory wetland mitigation for impacts anticipated to occur during the routine maintenance activities for Pomerado 1 (0.36 acres) and Pomerado 2 (0.49 acres). Pomerado channel segment 1 maintenance was completed in FY23, and Pomerado channel segment 2 maintenance is currently scheduled for FY24.



3.1.3 Marron Valley Cornerstone Lands Mitigation Bank

The Marron Valley Cornerstone (MVC) Mitigation bank is managed by the City of San Diego's Public Utilities Department. MVC is in Marron Valley near the confluence of Tecate Creek and Cottonwood Creek. MVC is composed of 10,400 acres of City of San Diego owned land that was reserved for a four-phased mitigation project. MVC was implemented along with the City's Multiple Species Conservation Program in 1997, with the goal of providing valuable adjoining habitat for native and endangered species protection. The MVC provides three tiers of mitigation credits including vernal pools, native grasslands, and riparian woodlands.

In FY 23, SWD purchased 0.05-acre of upland credits for the Texas Street Emergency Repair Project and 0.34-acre upland credits for Home 2 routine maintenance.

3.2 Construction and/or 5-Year Maintenance & Monitoring Mitigation Sites

3.2.1 Stadium (San Diego River) Wetland Mitigation Project

The City's Stadium (San Diego River) Wetland Mitigation project is an Advanced Permittee Responsible Mitigation (APRM) site located within the floodplain of the San Diego River between I-15 and I-805. The Project was implemented and is managed by the City's Public Utilities Department (PUD) to generate compensatory mitigation credit by providing rehabilitation and enhancement of approximately 57 acres within the San Diego River, San Diego, California. Installation of the project ended on October 20, 2017, and the plant establishment period (PEP) was considered complete on February 23, 2018, thereby initiating the 5-year maintenance and monitoring period. The 5-year maintenance and monitoring period was concluded in February 2023. The Stadium site finished the Year Five Monitoring & Maintenance period (February 23, 2022 – February 23, 2023). The Stadium Mitigation Site Year 5 Annual Report was sent to the regulatory agencies in May 2023 and is currently waiting for final sign-off and 100% credit release.

SWD reserved 0.84 acre of Restoration/Rehabilitation/Enhancement credit at the Stadium Site for the impacts that occurred during the two FY23 emergency maintenance projects: Alpha and Texas Street.

SWD has previously reserved approximately 14.7 acres of mitigation credits at this site through multiple purchases of credit which have already been allocated for the following past MMP and future MWMP routine and emergency projects:

- Murphy Canyon *Routine Maintenance*
- Alvarado Creek Routine Maintenance
- San Carlos Creek Emergency Maintenance
- Reservoir Drive Emergency Maintenance
- Auburn Creek *Routine Maintenance*
- South Chollas Creek Routine Maintenance
- Montezuma Routine Maintenance
- 2015-2016 El Nino Season Emergency Projects (partially satisfied mitigation obligations):
 - o Chollas Creek at Rolando *Emergency Maintenance*
 - o Chollas Creek at National *Emergency Maintenance*



- o Cottonwood Creek Emergency Maintenance
- o Jamacha Channel Emergency Maintenance
- Washington Channel Emergency Maintenance
- Mission Gorge 3 & 4 Routine Maintenance
- Camino Del Rio 1 Emergency Maintenance
- Camino Del Arroyo 1 Emergency Maintenance

Subsequent maintenance of any of these previously mitigated facilities would likely not require additional mitigation beyond what was previously required and provided since the MWMP allows for one-time mitigation for facilities that have been previously permitted and mitigated.

3.3 Design and/or Permitting Mitigation Sites

No sites that mitigated for FY23 impacts were in the design or permitting stages.

3.4 Other Mitigation Sites

During the current FY 2023 reporting period, the City also pursued and worked on several other mitigation sites with significant status updates now available. The majority of these wetland mitigation sites will be Advanced Permittee Responsible Mitigation (APRM) sites whose mitigation exceeds what is presently needed and therefore will be allocated to past (e.g., Emergency) and future maintenance and repair activities associated with the MWMP. Table 11 below provides a summary of these sites and the progress that has been achieved in FY 2023.

Additional mitigation opportunities and sites have been identified as Capital Improvement Program (CIP) projects and are being developed by the Engineering & Capital Projects (ECP) Department. They include the Jamacha Canyon Stream Rehabilitation, the Los Peñasquitos Lagoon Restoration, the Pacific Beach Drive Storm Drain Improvement Project (Noyes Street), and Chollas Creek Restoration. These future potential projects may create or have excess mitigation that may serve as permittee-responsible mitigation for specific prioritized MWMP facilities or advanced-permittee responsible mitigation with credit acreage that may be assigned to MWMP facilities as they are prioritized. SWD is coordinating with ECP to ensure that mitigation can be allocated appropriately.



Table 10: Other MWMP Mitigation Sites' FY 2023 Progress

Mitigation Site	Status	Summary
2015/16 Emergency	Bid and Contracting	SWD advertised the project for bids for a construction contract to perform the
Mitigation Plan –		implementation in the Fall/Winter of 2023.
Rehabilitation Sites		
Smythe-Bandola	Bid and Contracting	DSD awarded a Coastal Development Permit (CDP) in December 2022. SWD advertised the
Mitigation Site		project twice in calendar year 2023, and the results of the second advertisement are
		currently under review before an award can be made. The project is anticipated to be
		implemented from Fall/Winter 2023 to Spring 2024.
Los Peñasquitos Canyon	Bid and Contracting	SWD advertised the project for bids for a construction contract to perform the
Enhancement Phase II		implementation of the project from Emerging Limited Business Enterprises, and the
		advertisement failed. SWD is preparing to re-advertise the project. The project is
		anticipated to be implemented from Fall/Winter 2023 to Spring 2024.
El Cuervo del Sur Phase II	Bid and Contracting	Initiated the bid and contracting process. The project is anticipated to go out to bid FY 25 for
		implementation in Fall/Winter 2024 to Spring 2025.



4.0 Conclusions and Future Projects

Over the FY 2023 maintenance period, routine maintenance was completed at four (4) channel facilities and emergency maintenance at four (4). These projects allowed for removal of accumulated trash, sediment, and debris which restored conveyance capacity and reduced flood risk while also maintaining the long-term reliability of the City's stormwater infrastructure. SWD is committed to providing required compensatory mitigation for wetland and upland impacts associated with its ongoing maintenance activities that affect sensitive biological resources. Section 3 identifies four (4) approved sites that SWD used to mitigate for its FY 2023 impacts. Additional sites are being implemented to provide creation (establishment), restoration (re-establishment or rehabilitation), enhancement, and acquisition mitigation acreages/credits for future SWD activities. It is important to note that the one-time mitigation approach approved as part of the MWMP, its certified EIR, and by the agencies will allow for subsequent maintenance to occur within a facility that has been previously permitted and mitigated without requiring additional mitigation if activities remain within the approved project impact footprint. Lastly, all maintenance activities identified in this report were conducted in compliance with the MWMP and all associated regulatory permits, and it is the intent of any future activities to achieve similar compliance.

Table 12 lists the facilities that SWD expects to maintain in FY 2024 (July 1, 2023 – June 30, 2024).

WMA/Watershed	Facility Group Name	Facility No.	Segment Name and Number	Coastal Zone
San Dieguito River/ San Dieguito	Green Valley Creek – Pomerado	1-04-030	Pomerado 1	No
San Diego Bay/ Pueblo San Diego	Mission Hills Canyon Creek/Titus Facility Group	5-02-162	Titus 1	No
San Diego Bay/ Pueblo San Diego	Chollas Creek - Rolando	5-04-048	Rolando 2	No
San Diego Bay/ Pueblo San Diego	South Chollas Creek – Southcrest	*5-05-006	Alpha 1	No

Table 11: Annual Work Plan (July 1, 2023 - June 30, 2024)

* Covered under the Informal Section 7 Consultation Biological Opinion enclosure table in the "not likely to adversely affect" category.



5.0 References

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- City of San Diego. 2020a. Municipal Waterways Maintenance Plan. Prepared by the Transportation & Storm Water Department, Storm Water Division- Operations & Maintenance Section. March 2020
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- ESA. 2021. El Cuervo del Sur Phase 1 Wetlands Creation Site Monitoring Year 3 Annual Compensatory Mitigation Monitoring Report. March 2021.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, California Department of Fish and Game. October 1986.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. Draft Vegetation Communities of San Diego County. March 2008.

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- URS. 2014a. Final Los Peñasquitos Canyon Preserve Wetland Enhancement Plan. February 28, 2014, updated February 25, 2015, with assistance from Helix Environmental Planning, Inc.
- URS. 2014b. Final El Cuervo del Sur Wetland Habitat Mitigation and Monitoring Plan. February 28, 2014, updated February 25, 2015, with assistance from Helix Environmental Planning, Inc.



Appendix A

Municipal Waterways Maintenance Plan Annual Report Figures


IEGO Figure 1. *N*

Figure 1. MWMP Maintenance Projects Completed in FY 23



Maintenance Area



Pomerado 2 (1-04-033) FY 23 Routine Channel Maintenance Municipal Waterways Maintenance Plan Annual Report October 2023



Maintenance Area



Tripp 1 (2-01-130) FY 23 Routine Channel Maintenance Municipal Waterways Maintenance Plan Annual Report October 2023



Maintenance Area



Mission Gorge 1 (4–07–002) FY 23 Routine Channel Maintenance Municipal Waterways Maintenance Plan Annual Report October 2023



Maintenance Area



Mission Gorge 2 (4–07–004) FY 23 Routine Channel Maintenance Municipal Waterways Maintenance Plan Annual Report October 2023



Maintenance Area



Mission Gorge 3 (4–07–009) FY 23 Repeat Channel Maintenance Municipal Waterways Maintenance Plan Annual Report October 2023



Access, Staging, and Stockpiling Area Maintenance Area



Home 2 (5-04-224) FY 23 Routine Channel Maintenance Municipal Waterways Maintenance Plan Annual Report October 2023



Maintenance Area



Alpha 1 (5-05-006) FY 23 Emergency Channel Maintenance Municipal Waterways Maintenance Plan Annual Report October 2023



Maintenance Area



Ocean View 1 (5-05-008) FY 23 Emergency Channel Maintenance Municipal Waterways Maintenance Plan Annual Report October 2023



Access, Staging, and Stockpiling Area Maintenance Area

Texas St. Brow Ditch FY 23 Emergency Channel Maintenance Municipal Waterways Maintenance Plan Annual Report October 2023





Appendix B

Master Stormwater Facility and Mitigation List

Master Stormwater Facility and Mitigation List

Facility Number	Facility Type	Facility Group Name	Segment Name- Number	Date of Most Recent Maintenance ¹	Mitigation Required (USACE/ RWQCB/ CDFW/ CCC/ City) ²	Mitigation Site(s)
San Dieguito R 1-04-030	River Watershed Channel/Ditch	Green Valley Creek - Pomerado	Pomerado-1	Pre 2011	None to date	
1-04-033	Channel/Ditch Basin	Green Valley Creek - Pomerado	Pomerado-2	Pre 2011	None to date	San Luis Rey
-04-200 os Penasquito	os Watershed	Green Valley Creek - Paseo del Verano	Paseo del Verano-1	Pre 2011	None to date	
-01-120	Channel/Ditch	Penasquitos Lagoon - Industrial	Industrial-1	2010	CCC	El Cuervo del Sur - Phase II El Cuervo del Sur - Phase I LPC Enhancement - Phase I
-01-122	Channel/Ditch	Penasquitos Lagoon - Industrial	Industrial-2	2021	USACE/RWQCB/CDFW/CCC/City	El Cuervo del Sur - Phase II (addťl mit.) El Cuervo del Sur - Phase I
01-130	Channel/Ditch Channel/Ditch	Penasquitos Lagoon - Tripp Los Penasquitos Canyon Creek - Black Mountain	Tripp-1 Black Mountain-1	2010 Pre 2011	CCC/City None to date	LPC Enhancement - Phase I
01-210	Channel/Ditch	Los Penasquitos Canyon Creek - Black Mountain	Black Mountain-2	Pre 2011	None to date	
01-900	Basin Channel/Ditch	Los Penasquitos Canyon Creek - 5-805 Basin Soledad Canyon Creek - Sorrento	5-805 Fwy-1 Roselle-1	2008 2021	Self-mitigating USACE/RWQCB/CDFW/CCC/City	El Cuervo Famosa
03-002	Channel/Ditch	Soledad Canyon Creek - Sorrento	Roselle-2	2021	USACE/RWQCB/CDFW/CCC/City	El Cuervo del Sur - Phase I LPC Enhancement - Phase I
03-012	Channel/Ditch	Carroll Canyon Creek - Carroll	Carroll Canyon-1	2016	City	El Cuervo del Sur - Phase I El Cuervo del Sur - Phase I
03-100	Channel/Ditch Channel/Ditch	Soledad Canyon Creek - Flintkote Soledad Canyon Creek - Dunhill	Flintkote-1 Dunhill-1	2022 Pre 2011	USACE/RWQCB/CDFW/CCC/City CCC	LPC Enhancement - Phase I El Cuervo del Sur - Phase II
05-140	Channel/Ditch	Chicarita Creek - Via San Marco	Via San Marco-1	Pre 2011	None to date	
W04220 ission Bay W	Structure	10405 Sorrento Valley Road		Pre 2011	None to date	
00-120	Channel/Ditch	Torrey Pines - Torrey	Torrey Pines-1	Pre 2011	None to date	
00-150	Basin	Alta La Jolla - Vickie	Vickie-1	<u>2016</u>	Self-mitigating	Cuervo del Sur - Phase I
02-101	Channel/Ditch	Mission Bay - Mission Bay High School	PB-Olney-1	2021	USACE/RWQCB/CDFW/CCC/City	LPC Enhancement - Phase I Marron Valley Cornerstorne (Upland, City-only) Cuervo del Sur - Phase I
02-103	Channel/Ditch	Mission Bay - Mission Bay High School	MBHS-1	2021	USACE/RWQCB/CDFW/CCC/City	LPC Enhancement - Phase I Marron Valley Cornerstorne (Upland, City-only)
	01 1/5:11			0001		El Cuervo del Sur - Phase II LPC Enhancement - Phase II
02-130 03-901	Channel/Ditch Channel/Ditch	Mission Bay - Mission Bay Drive Miramar - Engineer	Mission Bay Drive-1 Engineer-1	2021 2017	USACE/RWQCB/CDFW/CCC/City None	LPC Enhancement - Phase II
04-055	Channel/Ditch	Tecolote Creek - Chateau	Chateau-1	2021	None	
04-160 04-250	Channel/Ditch Channel/Ditch	Tecolote Creek - Genessee Tecolote Creek - Chateau	Genesee-1 Chateau-2	Pre 2011 2016	None to date	
	er Watershed	recolote Creek - Chateau	Chaleau-2	2016	None to date	
01-103	Channel/Ditch	San Diego River - Nimitz	Nimitz-1	Pre 2011	None to date	
01-105 01-107	Channel/Ditch Channel/Ditch	San Diego River - Nimitz San Diego River - Nimitz	Nimitz-2 Nimitz-3	Pre 2011 Pre 2011	None to date	
)1-120	Channel/Ditch	San Diego River - Valeta	Valeta-1	Pre 2011	CCC	Hollister Quarry
03-101 03-103	Channel/Ditch Channel/Ditch	San Diego River - Camino del Rio San Diego River - Camino del Rio	Camino del Arroyo-1 Camino del Rio-1	2022 2022	USACE/RWQCB/CDFW/City USACE/RWQCB/CDFW/City	Stadium Mitigation Site Stadium Mitigation Site
04-006	Channel/Ditch	Murphy Canyon Creek – Murphy Canyon	Murphy Canyon-1	Pre 2011	None to date	Stadium Milligation Sile
07-002	Channel/Ditch	Alvarado Canyon Creek - Mission Gorge	Mission Gorge-1	2017	USACE/RWQCB/CDFW/City	Stadium Mitigation Site
07-004 07-009	Channel/Ditch Channel/Ditch	Alvarado Canyon Creek - Mission Gorge Alvarado Canyon Creek - Mission Gorge	Mission Gorge-2 Mission Gorge-3	2017 2021	USACE/RWQCB/CDFW/City USACE/RWQCB/CDFW/City	Stadium Mitigation Site Stadium Mitigation Site
07-011	Channel/Ditch	Alvarado Canyon Creek - Mission Gorge	Mission Gorge-4	2021	USACE/RWQCB/CDFW/City	Stadium Mitigation Site
07-021 07-023	Channel/Ditch Channel/Ditch	Alvarado Canyon Creek - Alvarado	Alvarado-1	2022 Pre 2011	USACE/RWQCB/CDFW/City	Stadium Mitigation Site
07-023	Channel/Ditch	Alvarado Canyon Creek - Alvarado Alvarado Canyon Creek - Alvarado	Alvarado-2 Alvarado-3	Pre 2011	None to date None to date	
07-901	Channel/Ditch	Murray Reservoir - Cowles Mountain	Cowles Mountain-1	2018	None to date	
07-911 08-008	Channel/Ditch Channel/Ditch	Murray Reservoir - Cowles Mountain Norfolk Canyon Creek - Fairmount	Cowles Mountain-2 Fairmount-1	2018 Pre 2011	City None to date	Stadium Mitigation Site
08-011	Channel/Ditch	Norfolk Canyon Creek - Fairmount	Fairmount-2	Pre 2011	None to date	
08-014 08-017	Channel/Ditch Channel/Ditch	Norfolk Canyon Creek - Fairmount Norfolk Canyon Creek - Fairmount	Fairmount-3 Fairmount-4	Pre 2011 Pre 2011	None to date None to date	
		•				Stadium Mitigation Site
08-105 N02437	Channel/Ditch	Norfolk Canyon Creek - Fairmount	Baja-1	2019	RWQCB/City None to date	Marron Valley Cornerstone (City only)
V02437 V02440	Structure Structure	2087 Hotel Circle South 901 Hotel Circle South		2016 2017	None to date	
10399	Structure	1277 Cam. Del Rio South		2017	None to date	
03321 03537	Structure Structure	1660 Hotel Circle North 1331 Washington		2017 Pre 2011	None to date	
F05573 ieblo San Di	Structure ego Watershed	5505 Friars Road		2016	City	Sefton Field
02-140 02-151	Basin Channel/Ditch	Maple Canyon Creek - Maple Washington Canyon Creek - Washington	Maple-1 Washington-1	Pre 2011 2021	None to date USACE/RWQCB/CDFW/City	2015/16 Emergency Mitigation Plan
02-153	Channel/Ditch	Washington Canyon Creek - Washington	Washington-2	2021	USACE/RWQCB/CDFW/City	2015/16 Emergency Mitigation Plan
02-162 03-011	Channel/Ditch Channel/Ditch	Mission Hill Canyon Creek - Titus Powerhouse Canyon Creek - Pershing	Titus-1 Pershing-1	2016 Pre 2011	None None to date	
03-100 03-901	Channel/Ditch Channel/Ditch Channel/Ditch	Powerhouse Canyon Creek - Pershing Powerhouse Canyon Creek - Pershing San Diego Bay Unnamed Tributary - 28th St	Pershing-1 Pershing-2 28th St-1	Pre 2011 Pre 2011 Pre 2011	None to date None to date	
04-004	Channel/Ditch	Chollas Creek - National	National-1	2022	USACE/RWQCB/CDFW/City	Stadium Mitigation Site 2015/16 Emergency Mitigation Plan
04-006	Channel/Ditch	Chollas Creek - National	National-2	2022	USACE/RWQCB/CDFW/City	Stadium Mitigation Site 2015/16 Emergency Mitigation Plan
04-044 04-046	Channel/Ditch Channel/Ditch	Chollas Creek - Rolando Chollas Creek - Rolando	Cartagena-1 Rolando-1	Pre 2011 Pre 2011	None to date None to date	
04-048	Channel/Ditch	Chollas Creek - Rolando	Rolando-2	2016	RWQCB/City	2015/16 Emergency Mitigation Plan
04-101 04-163	Channel/Ditch Channel/Ditch	Chollas Creek Unnamed Tributary - Martin Chollas Creek - J St	Martin-1 J St-1	Pre 2011 Pre 2011	None to date	
04-163	Channel/Ditch Channel/Ditch	Auburn Creek - Home	J St-1 Home-1	2016	RWQCB/City	2015/16 Emergency Mitigation Plan
04-224	Channel/Ditch	Auburn Creek - Home	Home-2	2019	RWQCB/City	Stadium Mitigation Site Marron Valley Cornerstone (City only)
04-227	Channel/Ditch Channel/Ditch	Auburn Creek - Home Auburn Creek - Home	Home-3 Home-5	Pre 2011 2020	None to date RWQCB/City	Stadium Mitigation Site Otay Reed (City only)
04-239	Channel/Ditch	Auburn Creek - Wightman	Wightman-1	2016	None to date	
04-241 04-260	Channel/Ditch Channel/Ditch	Auburn Creek - Wightman Chollas Creek Unnamed Tributary - Megan	Wightman-2 Megan-1	2016 Pre 2011	RWQCB/City None to date	Onsite Restoration
04-262	Channel/Ditch	Chollas Creek Unnamed Tributary - Megan	Megan-2	Pre 2011	None to date	
04-280	Channel/Ditch Channel/Ditch	Chollas Creek - 54th St South Chollas Creek - Southcrest	54th St-1 Alpha-1	Pre 2011 2021	None to date	Stadium Mitigation Site
05-008	Channel/Ditch	South Chollas Creek - SouthCrest South Chollas Creek - Southcrest	Ocean View-1	2021 Pre 2011	None to date None to date	
05-021	Channel/Ditch	South Chollas Creek - Euclid	Euclid-2	Pre 2011	None to date	Stadium Mitigation Site
05-035	Channel/Ditch	South Chollas Creek - Federal	Federal-1	2019	City	HAF/Cornerstone

Facility Number	Facility Type	Facility Group Name	Segment Name- Number	Date of Most Recent Maintenance ¹	Mitigation Required (USACE/ RWQCB/ CDFW/ CCC/ City) ²	Mitigation Site(s)
5-05-037	Channel/Ditch	South Chollas Creek - Federal	Federal-2	2019	None	
5-05-205	Channel/Ditch	South Chollas Creek Encanto Branch - Castana	Castana-1	Pre 2011	None to date	
5-05-306	Channel/Ditch	South Chollas Creek Encanto Branch - Imperial	Imperial-2	Pre 2011	None to date	
5-05-603	Channel/Ditch	South Chollas Creek Encanto Branch - Jamacha	Jamacha-1	2016	RWQCB/City	2015/16 Emergency Mitigation Plan
5-06-005	Channel/Ditch	Paleta Creek - Cottonwood	Cottonwood-1	2016	RWQCB/City	2015/16 Emergency Mitigation Plan
5-06-008	Channel/Ditch	Paleta Creek - Cottonwood	Cottonwood-2	2016	RWQCB/City	2015/16 Emergency Mitigation Plan
5-06-020	Channel/Ditch	Paleta Creek - Solola	Solola-1	Pre 2011	None to date	
5-06-023	Channel/Ditch	Paleta Creek - Solola	Solola-2	Pre 2011	None to date	
HW04013	Structure	4202 J Street		Pre 2011	None to date	
OT03694	Structure	3644 Roselawn		2016	None to date	
OT054671	Structure	1206 Goodyear		2016	None to date	
Sweetwater W	/atershed					
5-11-003	Channel/Ditch	Sweetwater River - Parkside	Parkside-1	2016	RWQCB/City	2015/16 Emergency Mitigation Plan
Otay Watershi						
5-22-008	Channel/Ditch	Nestor Creek - Nestor	Cedar-1	2016	CCC/City	Hollister Quarry
5-22-010	Channel/Ditch	Nestor Creek - Nestor	Cedar-2	2010	CCC/City	Hollister Quarry
5-22-013	Channel/Ditch	Nestor Creek - Nestor	Dahlia-1	Pre 2011	None to date	
5-22-016	Channel/Ditch	Nestor Creek - Nestor	Cerissa-1	Pre 2011	None to date	
5-22-023	Channel/Ditch	Nestor Creek - Nestor	Grove-1	Pre 2011	None to date	
5-22-028	Channel/Ditch	Nestor Creek - Nestor	30th St-1	Pre 2011	RWQCB/CDFW/City	Otay Reed
5-22-110	Channel/Ditch	Nestor Creek - Outer	Outer-1	Pre 2011	None to date	
5-22-112	Channel/Ditch	Nestor Creek - Outer	Outer-2	Pre 2011	None to date	
Tijuana River	Watershed					
6-01-020	Channel/Ditch	Tijuana River - Pilot and Smugglers	Pilot Channel-1	2019	USACE/RWQCB/CDFW/CCC/City	TJ Emergency Mitigation Site TJ Enhancement Site TJ Emergency Mitigation Site
6-01-100	Channel/Ditch	Tijuana River - Pilot and Smugglers	Snuggler's Gulch-1	2022	USACE/RWQCB/CDFW/CCC/City	TJ Enhancement Site
6-02-118	Channel/Ditch	Tijuana River - Tocayo	Tocayo-2	Pre 2011	CCC	Hollister Quarry
6-03-135	Channel/Ditch	Tijuana River - Smythe	Via Encantadoras-1	Pre 2011		n Diego does not have maintenance responsibility for
6-03-138	Channel/Ditch	Tijuana River - Smythe	Via Encantadoras-2	Pre 2011	None to date	
6-03-143	Channel/Ditch	Tijuana River - Smythe	Via Encantadoras-3	Pre 2011	None to date	
6-03-147	Channel/Ditch	Tijuana River - Smythe	Smythe-1	2016	USACE/RWQCB/City	Smythe-Bandola Mitigation Site
6-03-150	Channel/Ditch	Tijuana River - Smythe	Via de la Bandola-1	2016	USACE/RWQCB/City	Smythe-Bandola Mitigation Site
6-04-251	Basin	Spring Canyo Creek - Cactus	Cactus-1	Pre 2011	None to date	
6-04-253	Basin	Spring Canyo Creek - Cactus	Cactus-2	Pre 2011	None to date	
6-05-110	Basin	Tijuana River - Siempre Viva	Siempre Viva-1	2019	None	
6-06-011	Channel/Ditch	Tijuana River - La Media	La Media-1	Pre 2011	None to date	
NOTER						

NOTES

1 - Pre 2011 indicates that facility was likely maintained prior to 2011 but has not been maintained since that time. Dates in **BOLD** are construction dates; these facilities have yet to be maintained following construction. 2 - City = City of San Diego; CCC = California Coastal Commission; USACE = US Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife; None = routine maintenance was completed without any mitigation requirements; None to date = routine maintenance has not been conducted. Agency names in **BOLD** indicate that MWMP permits were utilized for most recent maintenance approval. All other approvals pre-date the MWMP.



Appendix C

Pre- and Post- Maintenance Photos



Pomerado 2 (1-04-033) Routine Maintenance

Pomerado 2 Pre-Maintenance	Pomerado 2 Post-Maintenance
View of Pomerado 2 (concrete channel) looking south at built up vegetation and debris within the channel segment.	View of Pomerado 2 (concrete channel) looking south at the channel segment after the vegetation removal and concrete repair.
(May 10, 2023)	(July 12, 2023)

Tripp 1 (2-01-130) Routine Maintenance

Tripp 1 Pre-Maintenance	Tripp 1 Post-Maintenance	
View of Tripp 1 (concrete channel) looking northeast from Sorrento Valley Road.	View of Tripp 1 (concrete channel) looking northeast from Sorrento Valley Road showing the cleared ditch.	
(September 16, 2022)	(November 7, 2022)	



Mission Gorge 1 (4-07-002) Routine Maintenance



Mission Gorge 2 (4-07-004) Routine Maintenance





Mission Gorge 3 (4-07-009) Repeat Maintenance



Home 2 (5-04-224) Routine Maintenance





Alpha 1 (5-05-006) Emergency Maintenance

Alpha 1 Pre-Maintenance	Alpha 1 Post-Maintenance
View of Alpha 1 (earthen and concrete channel) looking southwest at disturbed land, riparian habitat, and accumulated trash within the upstream section of the channel under the pedestrian bridge.	View of Alpha 1 (earthen and concrete channel) looking southwest within the upstream section of the channel under the pedestrian bridge.
(September 8, 2022)	(February 28, 2023)

Ocean View 1 (5-05-008) Emergency Maintenance





Texas St Brow Ditch Emergency Maintenance

