

#### Facility Maintenance Plan

# Green Valley Creek - Paseo del Verano Facility Group

Segment Name (Facility number): Paseo del Verano 1 (1-04-200)



#### **Overview**

Watershed Management Area (WMA)	San Dieguito River		
Watershed (Number)	San Dieguito River (1)		
Hydrologic Subarea	905.22		
Drainage Name (Number)	Green Valley Creek (04)		
Facility Group Name	Green Valley Creek - Paseo del Verano		
Segment Name (Facility Number)	Paseo del Verano 1 (1-04-200)		
Substrate Paseo del Verano 1 / Concrete			
Location	About 400 feet northeast of the intersection of Paseo del Verano and Caminito Balata		
MMP Map No(s).	169		
Facility Inspection No.	169		
Other Former Names	None		



Figure 1: Vicinity Map of Green Valley Creek - Paseo del Verano Facility Group

#### **Water Quality Resource Summary**

This section describes water quality conditions within the facility and watershed.

San Dieguito River Watershed Management Area; Hydrologic	Subarea 905.22
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Adopted TMDLs	Bacteria Project
<b>Highest Priority Water</b>	Bacteria
<b>Quality Condition</b>	

#### Green Valley Creek - Paseo del Verano

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Beneficial Uses			
303(d) listed Impairments	No impairments recorded on the 303(d) List		

#### Green Valley Creek (First downstream water body)

Green valley Creek (First downstream water body)		
Municipal and Domestic Supply (MUN)		
Agricultural Supply (AGR)		
Industrial Service Supply (IND)		
Industrial Process Supply (PROC)		
Contact Water Recreation (REC-1)		
Non-contact Water Recreation (REC-2)		
Warm Freshwater Habitat (WARM)		
Wildlife Habitat (WILD)		
Benthic Community Effects, Chloride, Manganese, Pentachlorophenol (PCP), Pesticides, Sulfates, Total Nitrogen as N		

#### Paseo del Verano Segment 1 Detail

Facility Type	Concrete desilting basin		
Substrate Detail	Concrete bottom, and earthen and concrete banks		
<b>Location Within Watershed</b> Upper reach of Green Valley Creek (unnamed tributary), immed upstream of Green Valley Creek			
Tributaries (listed from downstream to upstream)	No named tributaries		
Facility Length Approximately 203 feet			
Top-of-Bank Width Approximately 92 feet			
Bottom Facility Width	Approximately 75 feet		
Facility Depth Approximately 11 feet			
Adjacent Land Use	Agriculture, Open Space, Parks, Single-Family Residential, Transportation		
As-Built Drawing Number	17603-8-D		
Coastal Zone	No		



Figure 1: July 2017, riprap structure at outlet structure



Figure 2: Vicinity Map of Paseo del Verano Segment 1

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Maintenance		Prior to 2011: Unknown January 2011 – March 2019: No maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	N/A	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Previous Impacts		None

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	Dense vegetation including tree growth was observed. Approximately 2 feet of sediment deposition was estimated on the upstream side of the rock gabion.
Maintenance Recommendation	Remove accumulated sediment, debris and vegetation from basin bottom to restore the as-built condition.  Trim vegetation on side slopes of the basin.  Repair gabion rock-filled barrier walls to as-built condition.
In-Stream Post-Maintenance Erosion Control Recommendation	N/A (basin)

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Eucalyptus woodland		
	Ornamental plantings		
	Riparian forest (southern willow forest)		
<b>Adjacent Vegetation</b>	Agricultural land		
	Developed land		
	Eucalyptus woodland		
	Ornamental plantings		
<b>Habitat and Wildlife</b>	<b>Wildlife</b> There is limited suitable habitat contained within the facility for wildlife. However, raptors		
	could use the eucalyptus woodland present adjacent to the facility for nesting/roosting.		
MHPA	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA)		
Mitigation Within	None		
Facility			

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources			
Resource Identified in APE	None		
<b>Potential Historical Resources</b>	None		
Constraint Identified			

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	MM-BIO-3
EP-HAZ-3	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Facility Group	Green Valley Creek - Paseo del Verano
Segment Name	Paseo del Verano 1
Facility No.	1-04-200
Facility Location	400 feet northeast of the intersection of Paseo del Verano and Caminito
	Balata to an outfall structure on east side of Paseo del Verano
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of desilting basin, per as-built dimensions and Hydrology and
	Hydraulics recommendations
Hydrology and Hydraulics	Remove accumulated sediment, debris and vegetation from basin bottom
Maintenance Recommendation	to restore the as-built condition.
	Trim vegetation on side slopes of the basin.
	Repair gabion rock-filled barrier walls to as-built condition.
Maintenance Activities	Vegetation grubbing, trimming, and removal
	Invasive plant species treatment and removal
	Sediment removal
	Concrete repair
Maintenance Method	Excavation; mechanized equipment inside and outside the basin
	Temporary access/loading
	Temporary staging
	Temporary diversions
	Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair	Yes; see Appendix A-4
and Maintenance	
Culvert Maintenance	Yes; see Appendix A-4
Post-Maintenance Erosion Control	No
Recommendation	
Trash/Debris Fence Repair and	No
Maintenance	
Facility Type	Concrete desilting basin
Existing Plans and/or As-Builts?	Yes; 17603-8-D
Substrate Detail	Concrete bottom, and earthen and concrete banks
Facility Dimensions	Length: 203 feet
(Approximate)	Top width: 92 feet
	Bottom width: 75 feet
	Depth: 11 feet
Authorized Facility Maintenance	Area: Basin: 0.29 acres
Area	

Maintenance Quantities	To be determined at time of maintenance
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may
	also be modified as long as changes do not result in new significant
	environmental impacts.
Equipment	Bobcat/skid-steer, Gradall/excavator, loader, dump truck, trash pump, fuel-
	powered hand tools, sweeper
Schedule	Up to approximately 30 working days
Maintenance Crew	Approximately 8–16 people
Routine Maintenance Procedures	1. Bobcat/skid-steer, Gradall/excavator, and/or loader enter or are lowered
	into basin at access/loading area
	2. Bobcat/skid-steer pushes material to loader
	3. Fuel-powered hand tools used to trim vegetation on side slopes
	4. Loader scoops material from basin and loads dump truck at
	access/loading area
	5. Dump truck hauls material to legal disposal site
Traffic Control	Yes; coordinate with the City of San Diego
Additional Maintenance Information	
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s) shall
	conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources; if
	present, flag/delineate
	2. Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Suitable habitat for sensitive species <sup>1</sup> :
	1. Within maintenance area: Yes, limited suitable habitat present
	2. Adjacent to maintenance area: Yes
	Activities to be conducted under authority of a qualified biologist:
	1. Nesting bird surveys required within 72 hours of the start of vegetation
	clearing from February 1 through September 15
Flow Management	As needed:
	1. Vactor or pump standing water from facility
	2. Install temporary dry-weather flow-diversion berm(s) across facility
	(upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream,
	allow for distributed discharge and infiltration
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan

<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors

BMP Installation	See Water Pollution Control Plan	
In-Stream Post-Maintenance	N/A (basin)	
<b>Erosion Control Recommendation</b>		
Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:	
	1. Demobilize equipment	
	2. Restore temporary access/loading areas to pre-maintenance condition or	
	as required by the WPCP for final stabilization	
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project	
	area(s), as needed	
	4. Remove temporary BMPs	
	5. Update maintenance record	
	6. Conduct post-maintenance site photo documentation	
Other Notes	None	



#### Facility Maintenance Plan

## Los Peñasquitos Canyon Creek - 5-805 Basin Facility Group

Segment Name (Facility number): 5-805 Fwys 1 (2-01-900)



#### **Overview**

Watershed Management Area (WMA)	Los Peñasquitos
Watershed (Number)	Los Peñasquitos (2)
Hydrologic Subarea	906.10
Drainage Name (Number)	Los Peñasquitos Canyon Creek (01)
Facility Group Name	Los Peñasquitos Canyon Creek - 5-805 Basin
Segment Name (Facility Number)	5-805 Fwys 1 (2-01-900)
Substrate	5-805 Fwys 1 / Earthen
Location	About 1,200 feet north of Sorrento Valley Boulevard and east of
	Vista Sorrento Parkway
MMP Map No(s).	N/A
Facility Inspection No.	N/A
Other Former Names	None

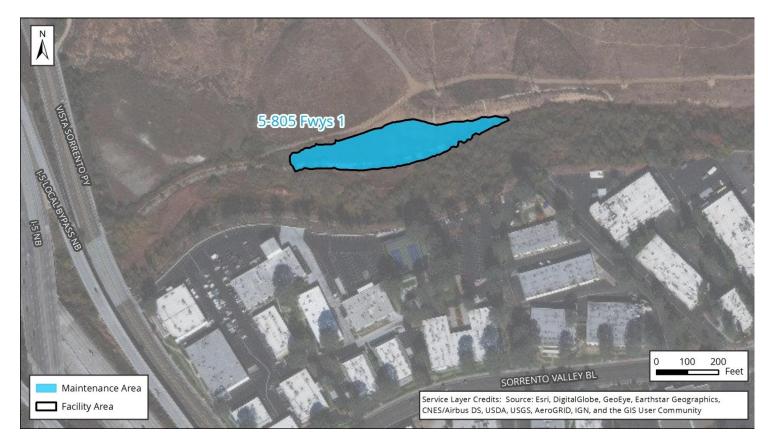


Figure 1: Vicinity Map of Los Peñasquitos Canyon Creek - 5-805 Basin Facility Group

#### **Water Quality Resource Summary**

This section describes water quality conditions within the facility and watershed.

Los Peñasquitos Watershed Management Area; Hydrologic Subarea 906.10		
Adopted TMDLs	Los Peñasquitos Lagoon sedimentation and siltation, Bacteria Project I	
Highest Priority Water Quality Condition	Bacteria, sediment (wet weather), freshwater discharges (dry weather)	

Los Peñasquitos Canyon Creek - 5-805 Basin		
Beneficial Uses	Agricultural Supply (AGR)  Industrial Samina Supply (AND)	
	<ul><li>Industrial Service Supply (IND)</li><li>Non-contact Water Recreation (REC-2)</li></ul>	
	<ul> <li>Preservation of Biological Habitats of Special Significance (BIOL)</li> </ul>	
	Warm Freshwater Habitat (WARM)	
	Wildlife Habitat (WILD)	
303(d) listed Impairments	Benthic Community Effects, Indicator Bacteria, Nitrogen, Pesticides, Phosphate,	
	Total Dissolved Solids, Toxicity	

Los Peñasquitos Lagoon (First downstream water body)	
Beneficial Uses	Contact Water Recreation (REC-1)
	Non-contact Water Recreation (REC-2)
	<ul> <li>Preservation of Biological Habitats of Special Significance (BIOL)</li> </ul>
	Wildlife Habitat (WILD)
	Rare, Threatened, or Endangered Species (RARE)
	<ul> <li>Spawning, Reproduction, and/or Early Development (SPWN)</li> </ul>
	Estaurine (EST)
	Marine (MAR)
	Migration of Aquatic Organisms (MIGR)
	Shellfish Harvesting (SHELL)
303(d) listed Impairments	Sedimentation/Siltation, Toxicity

#### 5-805 Fwys Segment 1 Detail

Facility Type	Earthen desilting basin
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of Los Peñasquitos Canyon Creek, upstream of the Los Peñasquitos Lagoon
Tributaries (listed from downstream to	Soledad Canyon Creek, Soledad Canyon Creek Unnamed Tributary, Los
upstream)	Peñasquitos Canyon Creek Unnamed Tributary, Carroll Canyon Creek
Facility Length	Approximately 744 feet
Top-of-Bank Width	Approximately 64–124 feet
Bottom Facility Width	Approximately 40–100 feet
Facility Depth	Approximately 6 feet
Adjacent Land Use	Industrial, Multi-Family Residential, Office, Open Space, Parks, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	33927-D
Coastal Zone	DEF-CER



Figure 1: May 2018, looking west into the desilting basin with Penasquitos Creek visible on the outside of the rip rap berm

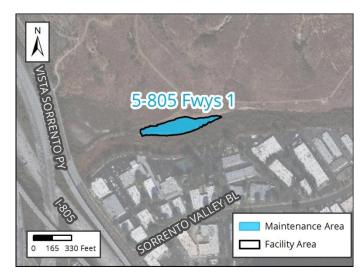


Figure 2: Vicinity Map of 5-805 Fwys Segment 1

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance 2008: Basin constructed
riiscory or wainte	
	January 2009 – March 2019: No maintenance conducted
Past Regulatory A	Approvals
CEQA	MND No. 47248 February 2006
CDP	CDP No 291354
SDP	SDP No. 151258
404	NWP 7/43 USACE File #SPL-2006-01537-LAM (expired May 2010)
401	RWQCB 401 Cert No. 04C-126 (no expiration)
1602	CDFW SAA No. #1600-2004-0521-R5 (expired March 2012)
Mitigation for Pro	evious Impacts  None; no mitigation required in approvals for construction and routine maintenance of basin

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	Moderate vegetation was observed throughout the basin with a minor amount of sediment deposition
Maintenance Recommendation	Remove vegetation from basin inlet and side weir, and restore to the as-built condition.  Remove any accumulated sediment and debris from basin.
In-Stream Post-Maintenance Erosion Control Recommendation	N/A (basin)

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	<ul> <li>Coastal salt marsh</li> <li>Disturbed land</li> <li>Riparian scrub (mulefat scrub)</li> </ul>
	Tamarisk thickets
Adjacent Vegetation	<ul> <li>Coastal sage scrub</li> <li>Coastal salt marsh</li> <li>Riparian forest (southern willow forest)</li> <li>Disturbed coastal sage scrub</li> <li>Disturbed land</li> <li>Eucalyptus woodland</li> <li>Natural flood channel</li> <li>Ornamental plantings</li> <li>Riparian scrub (mulefat scrub)</li> </ul>
	Urban / Developed
Habitat and Wildlife	There is suitable nesting habitat for sensitive wildlife within and adjacent to the site. Coastal California gnatcatcher has potential to nest in coastal sage scrub habitat north of the basin that is within the MHPA and least Bell's vireo and southwestern willow flycatcher could occur within the riparian scrub (mulefat scrub) and riparian forest (southern willow forest) both within and directly adjacent to the site. Ridgway's rail could also occur within the coastal salt marsh habitat both within and directly adjacent to the basin. In addition, raptors could utilize the tall eucalyptus woodland and ornamental vegetation south of the basin for nesting.
МНРА	A small section of the basin is intersected by the Multi Habitat Planning Area (MHPA) boundary on the south side.
Mitigation Within Facility	None. The basin is an artificially constructed wetland.

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	P-37-031095
Resource Identified Adjacent to APE	None
Resource Type	Prehistoric hearths

Historical Resources	
Resource Identified in APE	Basin; 1960; c. 1963–1974 earthen basin
Potential Historical Resources Constraint Identified	Yes

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-2
EP-BIO-6	MM-BIO-3
Health and Safety/Hazards (HAZ)	MM-BIO-4
EP-HAZ-3	MM-BIO-5
Land Use (LU)	MM-BIO-6
EP-LU-1	MM-BIO-7
Paleontological Resources (PAL)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-PAL-1	MM-CR-1
Solid Waste (SW)	MM-CR-2
EP-SW-2	MM-CR-3
EP-SW-3	MM-CR-4
EP-SW-4	MM-HR-1
EP-SW-5	MM-HR-2
EP-SW-6	Noise (NOI)
EP-SW-7	MM-NOI-1
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

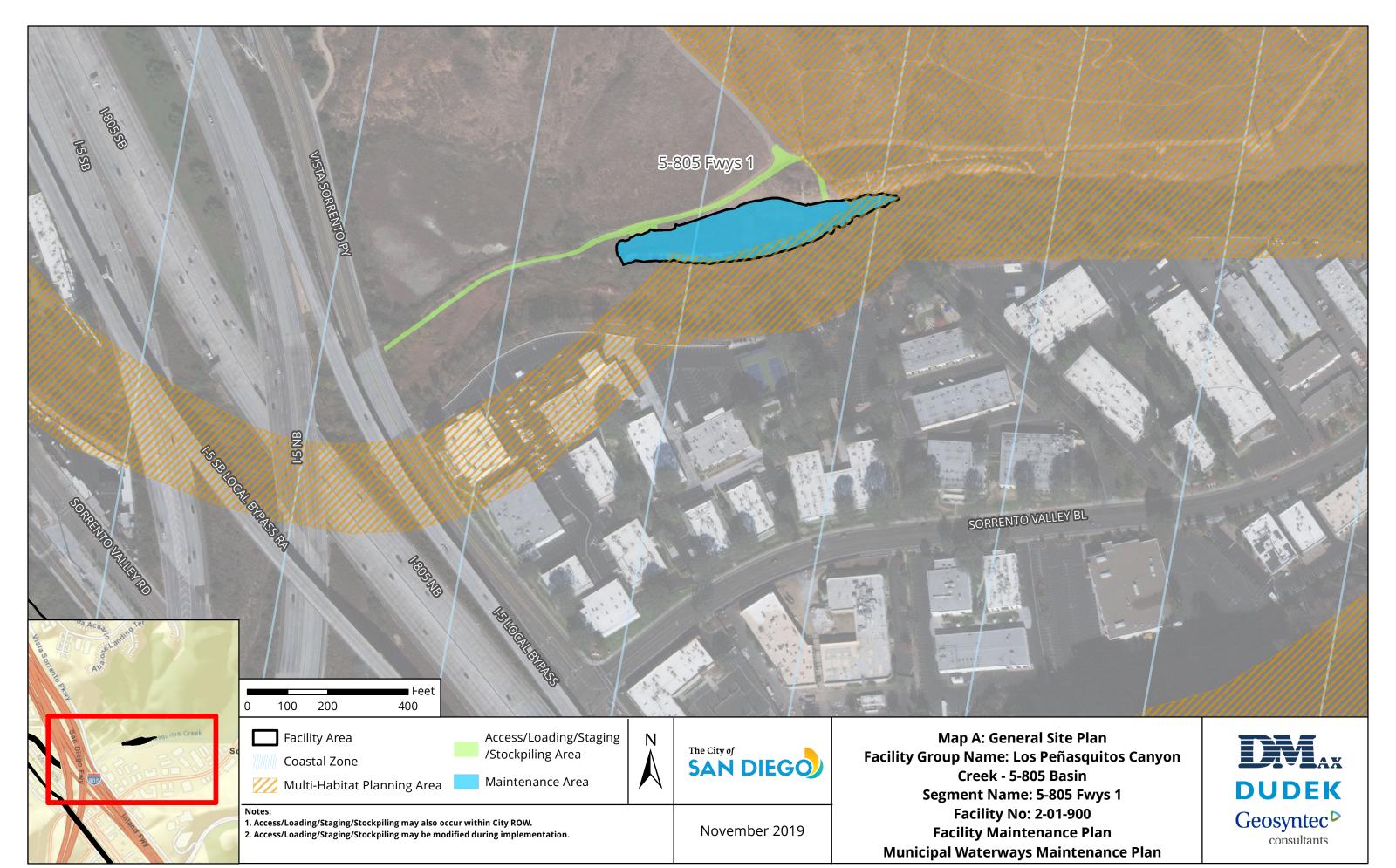
This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Facility Group	Los Peñasquitos Canyon Creek - 5-805 Basin
Segment Name	5-805 Fwys 1
Facility No.	2-01-900
Facility Location	1,200 feet northeast from the intersection of Sorrento Valley Boulevard and
	Vista Sorrento Parkway
Coastal Zone	DEF-CER
MWMP Proposed Maintenance	Maintenance of desilting basin per as-built dimensions, and Hydrology and
	Hydraulics recommendations
Hydrology and Hydraulics	Remove vegetation from basin inlet and side weir, and restore to the as-
Maintenance Recommendation	built condition.
	Remove any accumulated sediment and debris from basin.
Maintenance Activities	Vegetation grubbing, trimming, and removal
	Invasive plant species treatment and removal
	Sediment removal
Maintenance Method	Excavation; mechanized equipment inside and outside the basin
	Temporary access/loading
	Temporary staging
	Temporary diversions using excavated material
	Hand removal of vegetation
Bank Repair	No
Concrete Repair	No
Concrete/Gabion Structure Repair	No
and Maintenance	
Culvert Maintenance	No
Post-Maintenance Erosion Control	No
Recommendation	
Trash/Debris Fence Repair and	No
Maintenance	
Facility Type	Earthen desilting basin
Existing Plans and/or As-Builts?	Yes; 33927-D
Substrate Detail	Earthen bottom and banks
Facility Dimensions	Length: 744 feet
(Approximate)	Top width: 64–124 feet
	Bottom width: 40–100 feet
	Depth: 6 feet
Authorized Facility Maintenance	Area: Basin: 1.44 acres
Area	
Maintenance Quantities	To be determined at time of maintenance

Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,	
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may	
	also be modified as long as changes do not result in new significant	
Positions and	environmental impacts.	
Equipment	Bulldozer/track-steer, Gradall/excavator, loader, dump truck, trash pump,	
	fuel-powered hand tools, sweeper	
Schedule	Up to approximately 30–40 working days	
Maintenance Crew	Approximately 12–15 people	
Routine Maintenance Procedures	1. Bulldozer/track-steer enters basin at access/loading area	
	2. Bulldozer/track-steer pushes material to Gradall/excavator at	
	access/loading area	
	3. Gradall/excavator and/or loader scoops material from basin and loads	
	dump truck	
	4. Dump truck hauls material to legal disposal site	
Traffic Control	Yes, on Vista Sorrento Parkway; coordinate with the City of San Diego	
	Additional Maintenance Information	
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s) shall	
	conduct the following on site:	
	1. Review sensitive biological, historical, and water quality resources; if	
	present, flag/delineate	
	2. Conduct appropriate training	
	3. Review Best Management Practices (BMP) installation	
	4. If needed, review pre- and during-maintenance pumping procedure	
	5. Conduct pre-maintenance site photo documentation	
Biology	Suitable habitat for sensitive species <sup>1</sup> :	
	1. Within maintenance area: Yes	
	2. Adjacent to maintenance area: Yes	
	Activities to be conducted under authority of a qualified biologist:	
	1. Nesting bird surveys required within 72 hours of the start of vegetation	
	clearing from February 1 through September 15	
Flow Management	As needed:	
	Vactor or pump standing water from facility	
	Install temporary dry-weather flow-diversion berm(s) across facility	
	(upstream and downstream of maintenance area)	
	3. Position vactor/pump to capture any incoming or contained flows	
	4. If pumping water through temporary hose(s) to location(s) downstream,	
	allow for distributed discharge and infiltration	
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan	
BMP Installation	See Water Pollution Control Plan	
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<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors

In-Stream Post-Maintenance	N/A (basin)
<b>Erosion Control Recommendation</b>	
Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:
	1. Demobilize equipment
	2. Restore temporary access/loading areas to pre-maintenance condition or
	as required by the WPCP for final stabilization
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project
	area(s), as needed
	4. Remove temporary BMPs
	5. Update maintenance record
	6. Conduct post-maintenance site photo documentation
Other Notes	Equipment will need to be staged overnight on job site. Coordinate with
	Parks and Recreation, and SDGE.



### Facility Maintenance Plan

### Alta La Jolla - Vickie Facility Group

Segment Name (Facility number):
Vickie 1 (3-00-150)



#### **Overview**

Watershed Management Area (WMA)	Mission Bay
Watershed (Number)	Mission Bay (3)
Hydrologic Subarea	906.30
Drainage Name (Number)	Alta La Jolla (00)
Facility Group Name	Alta La Jolla - Vickie
Segment Name (Facility Number)	Vickie 1 (3-00-150)
Substrate	Vickie 1 / Earthen
Location	Bordered by Vickie Drive to the south, Westknoll Drive to the west and Soledad Road to the east
MMP Map No(s).	N/A
Facility Inspection No.	N/A
Other Former Names	None



Figure 1: Vicinity Map of Alta La Jolla - Vickie Facility Group

#### **Water Quality Resource Summary**

This section describes water quality conditions within the facility and watershed.

Mission Bay Watershed Management Area; Hydrologic Subarea 906.30	Mission Bay	v Watershed Managem	nent Area: Hvdrolo	gic Subarea 906.30
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Adopted TMDLs	Bacteria Project I
<b>Highest Priority Water</b>	Bacteria
Quality Condition	

Alta	La	ol	la -	٧	icl	kie
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Aita La Jolia - Vickie		
Beneficial Uses		
303(d) listed Impairments	No impairments recorded on the 303(d) List	

Mission Bay (First downstream water body)		
Beneficial Uses	Industrial Service Supply (IND)	
	Contact Water Recreation (REC-1)	
	Non-contact Water Recreation (REC-2)	
	Wildlife Habitat (WILD)	
	Rare, Threatened, or Endangered Species (RARE)	
	<ul> <li>Spawning, Reproduction, and/or Early Development (SPWN)</li> </ul>	
	Commercial and Sport Fishing (COMM)	
	Estaurine (EST)	
	Marine (MAR)	
	Migration of Aquatic Organisms (MIGR)	
	Shellfish Harvesting (SHELL)	
303(d) listed Impairments	No additional downstream waterbodies	

#### **Vickie Segment 1 Detail**

Facility Type	Earthen detention basin
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Unnamed tributary to Mission Bay, upstream of Mission Bay
Tributaries (listed from downstream to	No named tributaries
upstream)	
Facility Length	Approximately 234 feet
Top-of-Bank Width	Approximately 104–124 feet
Bottom Facility Width	Approximately 60–80 feet
Facility Depth	Approximately 11 feet
Adjacent Land Use	Industrial, Multi-Family Residential, Other Residential, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	35418-D
Coastal Zone	No



Figure 1: May 2018, looking north east into the detention basin from the south western end with the grated concrete culvert partially visible in the foreground

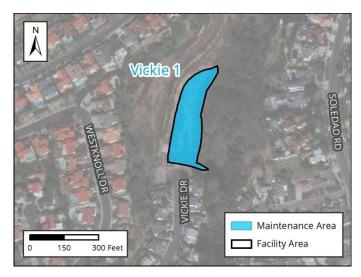


Figure 2: Vicinity Map of Vickie Segment 1

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance 2016: Basin constructed and mitigation installed adjacent to basin
•	January 2017 – March 2019: No maintenance conducted
Past Regulatory A	Approvals
CEQA	MND No. 128971 January 2011
CDP	N/A
SDP	SDP No. 443956
404	IP USACE File #SPL-2010-00157-RRS (expired June 2018)
401	RWQCB 401 Cert No. 10C-033 (expired November 2018)
1602	CDFW SAA No. 1600-2010-0053-R5 (expires March 2019)
Mitigation for Pro	evious Impacts  None; no mitigation required in approvals for construction and routine maintenance of basin

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	Dense vegetation including trees and accumulated sediment/debris were observed in the detention basin. The sediment depth was estimated to be approximately 1 foot deep across the basin and inlets and outlets were observed to be
	partially surrounded by vegetation.
Maintenance Recommendation	Remove accumulated sediment, debris, and vegetation from basin bottom, from around inlet structure at the far north end of the basin, and from outflow structure at the south end of the basin to restore the as-built condition.  Remove accumulated debris from storm drain outlet structures upstream of the basin.
In-Stream Post-Maintenance Erosion Control Recommendation	N/A (basin)

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Coastal sage scrub
	Disturbed coastal sage scrub
	Disturbed land
	Riparian Scrub (mulefat scrub)
<b>Adjacent Vegetation</b>	Coastal sage scrub
	Disturbed coastal sage scrub
	Disturbed land
	Eucalyptus woodland
	Natural flood channel
	Ornamental plantings
	Riparian scrub (mulefat scrub)
	Urban / Developed
Habitat and Wildlife	There is suitable nesting habitat for sensitive wildlife within and adjacent to the site. Coastal California gnatcatcher has potential to nest in coastal sage scrub habitat surrounding the basin that is within the MHPA. Least Bell's vireo could also occur within the riparian scrub (mulefat scrub) both within and adjacent to the site. Additionally, raptors could utilize the tall ornamental vegetation adjacent to the basin for nesting.
MHPA	The facility is adjacent to the Multi Habitat Planning Area (MHPA). The nearest MHPA
	boundary is located approximately 100 feet to the west of the basin.
Mitigation Within	None. Basin was constructed as part of adjacent channel restoration. Adjacent channel
Facility	areas are part of the Alta La Jolla wetlands mitigation site. The basin is not part of the
	mitigation site and was anticipated to be routinely maintained.

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

<b>Archeological and Tribal Resources</b>	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources	
Resource Identified in APE	Channel; 5354 Vickie Rd.; c. 1964–1966 earthen channel; building more than 45 years old (not previously evaluated)
Potential Historical Resources Constraint Identified	Yes

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-2
EP-BIO-6	MM-BIO-3
Health and Safety/Hazards (HAZ)	MM-BIO-4
EP-HAZ-3	MM-BIO-5
Land Use (LU)	MM-BIO-6
EP-LU-1	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
Paleontological Resources (PAL)	MM-HR-1
EP-PAL-1	MM-HR-2
Solid Waste (SW)	Noise (NOI)
EP-SW-2	MM-NOI-1
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

# Alta La Jolla - Vickie Facility Group Facility Maintenance Plan

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Facility Group	Alta La Jolla - Vickie
Segment Name	Vickie 1
Facility No.	3-00-150
Facility Location	North of Vickie Drive
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of detention basin per as-built dimensions, and Hydrology
	and Hydraulics recommendations
Hydrology and Hydraulics	Remove accumulated sediment, debris, and vegetation from basin bottom,
Maintenance Recommendation	from around inlet structure at the far north end of the basin, and from
	outflow structure at the south end of the basin to restore the as-built
	condition.
	Remove accumulated debris from storm drain outlet structures upstream
	of the basin.
Maintenance Activities	Vegetation grubbing, trimming, and removal
	Invasive plant species treatment and removal
	Sediment removal
	Concrete repair for as-needed repair to inlet and outlet structures
Maintenance Method	Excavation; mechanized equipment inside and outside the basin
	Temporary access/loading
	Temporary staging
	Temporary stockpiling
	Temporary diversions
	Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair	No
and Maintenance	
Culvert Maintenance	No
Post-Maintenance Erosion Control	No
Recommendation	
Trash/Debris Fence Repair and	No
Maintenance	
Facility Type	Earthen detention basin
Existing Plans and/or As-Builts?	Yes; 35418-D
Substrate Detail	Earthen bottom and banks
Facility Dimensions	Length: 234 feet
(Approximate)	Top width: 104–124 feet
	Bottom width: 60–80 feet
	Depth: 11 feet

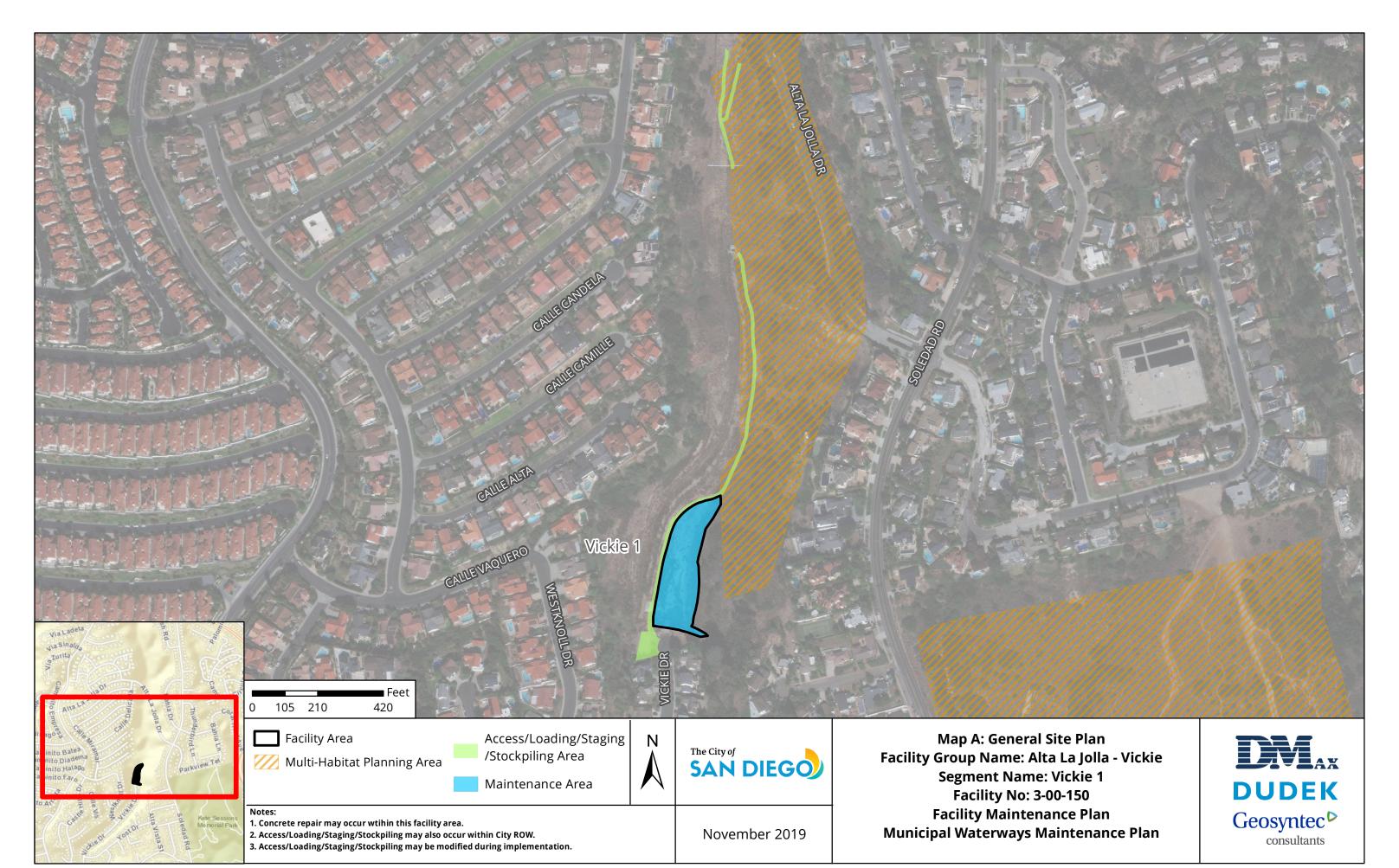
#### Alta La Jolla - Vickie Facility Group Facility Maintenance Plan

Analoguica de Francisco Barbara do Como	Average Parity 4.42 areas		
Authorized Facility Maintenance	Area: Basin: 1.13 acres		
Area			
Maintenance Quantities	To be determined at time of maintenance		
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,		
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may		
	also be modified as long as changes do not result in new significant		
	environmental impacts.		
Equipment	Bulldozer/track-steer, Gradall/excavator, loader, dump truck, trash pump,		
	sweeper		
Schedule	Up to approximately 30–45 days		
Maintenance Crew	Approximately 8–16 people		
Routine Maintenance Procedures	1. Bulldozer/track-steer, Gradall/excavator, and/or loader enter basin at		
	access/loading area		
	2. Bulldozer/track-steer pushes material to Gradall/excavator at		
	access/loading area.		
	3. Gradall/excavator scoops material and loads dump truck		
	4. Dump truck hauls material to legal disposal site		
Traffic Control No			
	Additional Maintenance Information		
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s) shall		
	conduct the following on site:		
	1. Review sensitive biological, historical, and water quality resources; if		
	present, flag/delineate		
	2. Conduct appropriate training		
	3. Review Best Management Practices (BMP) installation		
	4. If needed, review pre- and during-maintenance pumping procedure		
	5. Conduct pre-maintenance site photo documentation		
Biology	Suitable habitat for sensitive species <sup>1</sup> :		
	1. Within maintenance area: Yes		
	2. Adjacent to maintenance area: Yes		
	Activities to be conducted under authority of a qualified biologist:		
	1. Nesting bird surveys required within 72 hours of the start of vegetation		
	clearing from February 1 through September 15		
Flow Management	As needed:		
5	Vactor or pump standing water from facility		
	2. Install temporary dry-weather flow-diversion berm(s) across facility		
	(upstream and downstream of maintenance area)		
	3. Position vactor/pump to capture any incoming or contained flows		
	4. If pumping water through temporary hose(s) to location(s) downstream,		
	allow for distributed discharge and infiltration		
	and the analysis and managed and ministration		

<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors

#### Alta La Jolla - Vickie Facility Group Facility Maintenance Plan

Downstream Sensitive Waters	No	
BMP Installation	See Water Pollution Control Plan	
In-Stream Post-Maintenance	N/A (basin)	
Erosion Control Recommendation		
Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:	
	1. Demobilize equipment	
	2. Restore temporary access/loading areas to pre-maintenance condition or	
	as required by the WPCP for final stabilization	
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project	
	area(s), as needed	
	4. Remove temporary BMPs	
	5. Update maintenance record	
	6. Conduct post-maintenance site photo documentation	
Other Notes	Regular watering to minimize the spread of dust offsite is recommended	



### Facility Maintenance Plan

# Maple Canyon Creek - Maple Facility Group

Segment Name (Facility number): Maple 1 (5-02-140)



#### **Overview**

Watershed Management Area (WMA)	San Diego Bay
Watershed (Number)	Pueblo San Diego (5)
Hydrologic Subarea	908.21
Drainage Name (Number)	Maple Canyon Creek (02)
Facility Group Name	Maple Canyon Creek - Maple
Segment Name (Facility Number)	Maple 1 (5-02-140)
Substrate	Maple 1 / Earthen
Location	Bordered by West Laurel Street to the south, State Street to the west, and 1st Avenue to the east
MMP Map No(s).	N/A
Facility Inspection No.	N/A
Other Former Names	None



Figure 1: Vicinity Map of Maple Canyon Creek - Maple Facility Group

### **Water Quality Resource Summary**

This section describes water quality conditions within the facility and watershed.

San Diego Bay Watershed Management Area; Hydrologic Subarea 908.21
--

Adopted TMDLs	None
<b>Highest Priority Water</b>	No Highest Priority has been identified for this part of the Watershed Management
Quality Condition	Area

Maple Canyon Creek - Maple	
Beneficial Uses	
303(d) listed Impairments	No impairments recorded on the 303(d) List

#### San Diego Bay (First downstream water body)

San Diego Bay (First downstream water body)		
Beneficial Uses	Industrial Service Supply (IND)	
	Contact Water Recreation (REC-1)	
	Non-contact Water Recreation (REC-2)	
	<ul> <li>Preservation of Biological Habitats of Special Significance (BIOL)</li> </ul>	
	Wildlife Habitat (WILD)	
	Rare, Threatened, or Endangered Species (RARE)	
	<ul> <li>Spawning, Reproduction, and/or Early Development (SPWN)</li> </ul>	
	Navigation (NAV)	
	Commercial and Sport Fishing (COMM)	
	Estaurine (EST)	
	Marine (MAR)	
	Migration of Aquatic Organisms (MIGR)	
	Shellfish Harvesting (SHELL)	
303(d) listed Impairments	Mercury, PAHs (Polycyclic Aromatic Hydrocarbons), PCBs (Polychlorinated biphenyls)	
-	<u> </u>	

### Maple Segment 1 Detail

Facility Type	Earthen desilting basin
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of Maple Canyon Creek, upstream of San Diego Bay
Tributaries (listed from downstream to	No named tributaries
upstream)	
Facility Length	Approximately 90 feet
Top-of-Bank Width	Approximately 55 feet
Bottom Facility Width	Approximately 35 feet
Facility Depth	Approximately 5 feet
Adjacent Land Use	Commercial, Industrial, Multi-Family Residential, Office, Open Space, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	None
Coastal Zone	No



Figure 1: May 2018, looking east from the detention basin at the incised natural flood channel upstream

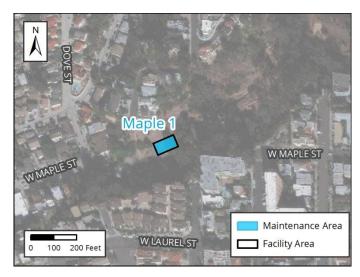


Figure 2: Vicinity Map of Maple Segment 1

### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance Prior to 2011: Unknown	
	January 2011 – March 2019: No maintenance conducted	
Past Regulatory A	Approvals	
CEQA	None	
CDP	N/A	
SDP	None	
404	No Permit Required Letter USACE File #SPL-2016-00393	
401	None	
1602	None	
Mitigation for Pro	evious Impacts None	

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	Light vegetation was observed and sediment accumulation, including sand, silt, and small cobble varied from 0.5 to 5 feet deep
Maintenance Recommendation	Remove accumulated sediment, debris, and vegetation from the desilting basin
In-Stream Post-Maintenance Erosion Control Recommendation	N/A (basin)

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	<ul><li>Disturbed land</li><li>Natural flood channel</li></ul>
Adjacent Vegetation	<ul> <li>Disturbed coastal sage scrub</li> <li>Disturbed land</li> <li>Disturbed wetland (palm-dominated)</li> <li>Eucalyptus woodland</li> <li>Natural flood channel</li> <li>Ornamental plantings</li> </ul>
Habitat and Wildlife	There is limited suitable nesting habitat onsite for wildlife. However, raptors could utilize the tall ornamental vegetation adjacent to the basin for nesting.
МНРА	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA). The nearest MHPA boundary is located more than 1,000 feet from the basin.
Mitigation Within Facility	None. Upstream channel areas have been identified as a potential restoration site. A compensatory mitigation plan has not yet been prepared.

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources	
Resource Identified in APE	Channel; c. 1966–1974 earthen channel
<b>Potential Historical Resources</b>	Yes
Constraint Identified	

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	MM-BIO-3
EP-HAZ-3	MM-BIO-4
Paleontological Resources (PAL)	MM-BIO-6
EP-PAL-1 Historic, Archaeological, and Tribal Cu	
	Resources (HR and CR)
Solid Waste (SW)	MM-HR-1
EP-SW-2	MM-HR-2
EP-SW-3	Noise (NOI)
EP-SW-4	MM-NOI-1
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Facility Group	Maple Canyon Creek - Maple	
Segment Name	Maple 1	
Facility No.	5-02-140	
Facility Location	300 feet west of the intersection of West Maple Street and Dove Street	
Coastal Zone	No	
MWMP Proposed Maintenance	Maintenance of desilting basin per estimated original design dimensions,	
	and Hydrology and Hydraulics recommendations	
Hydrology and Hydraulics	Remove accumulated sediment, debris, and vegetation from the desilting	
Maintenance Recommendation	basin	
Maintenance Activities	Vegetation grubbing, trimming, and removal	
	Invasive plant species treatment and removal	
	Sediment removal	
Maintenance Method	Excavation; mechanized equipment inside and outside the basin	
	Temporary access/loading	
	Temporary staging	
	Temporary diversions	
	Hand removal of vegetation	
Bank Repair	No	
Concrete Repair	No	
Concrete/Gabion Structure Repair	No	
and Maintenance		
Culvert Maintenance	No	
Post-Maintenance Erosion Control	No	
Recommendation		
Trash/Debris Fence Repair and	No	
Maintenance		
Facility Type	Earthen desilting basin	
Existing Plans and/or As-Builts?	None	
Substrate Detail	Earthen bottom and banks	
Facility Dimensions	Length: 90 feet	
(Approximate)	Top width: 55 feet	
	Bottom width: 35 feet	
	Depth: 5 feet	
Authorized Facility Maintenance	Area: Basin: 0.12 acres	
Area		
Maintenance Quantities	To be determined at time of maintenance	

	<del>,</del>	
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,	
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may	
	also be modified as long as changes do not result in new significant	
	environmental impacts.	
Equipment	Gradall/excavator, loader, dump truck, trash pump, sweeper	
Schedule	Up to approximately 5 days	
Maintenance Crew	Approximately 8–10 people	
Routine Maintenance Procedures	1. Gradall/excavator and/or loader enter basin at access/loading area	
	2. Gradall/excavator and/or loader scoops material from basin and loads	
	dump truck at access/loading area	
	3. Dump truck hauls material to legal disposal site	
Traffic Control	No	
	Additional Maintenance Information	
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s) shall	
	conduct the following on site:	
	1. Review sensitive biological, historical, and water quality resources; if	
	present, flag/delineate	
	2. Conduct appropriate training	
	3. Review Best Management Practices (BMP) installation	
	4. If needed, review pre- and during-maintenance pumping procedure	
	5. Conduct pre-maintenance site photo documentation	
Biology	Suitable habitat for sensitive species <sup>1</sup> :	
	1. Within maintenance area: Yes, limited suitable habitat present	
	2. Adjacent to maintenance area: No	
	Activities to be conducted under authority of a qualified biologist:	
	1. Nesting bird surveys required within 72 hours of the start of vegetation	
	clearing from February 1 through September 15	
Flow Management	As needed:	
	1. Vactor or pump standing water from facility	
	2. Install temporary dry-weather flow-diversion berm(s) across facility	
	(upstream and downstream of maintenance area)	
	3. Position vactor/pump to capture any incoming or contained flows	
	4. If pumping water through temporary hose(s) to location(s) downstream,	
	allow for distributed discharge and infiltration	
<b>Downstream Sensitive Waters</b>	Yes; implement BMPs per Water Pollution Control Plan	
BMP Installation	See Water Pollution Control Plan	
In-Stream Post-Maintenance	N/A (basin)	
<b>Erosion Control Recommendation</b>		
· · · · · · · · · · · · · · · · · · ·		

<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:
	1. Demobilize equipment
	2. Restore temporary access/loading areas to pre-maintenance condition or
	as required by the WPCP for final stabilization
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project
	area(s), as needed
	4. Remove temporary BMPs
	5. Update maintenance record
	6. Conduct post-maintenance site photo documentation
Other Notes	None



### Facility Maintenance Plan

# Spring Canyon Creek - Cactus Facility Group

Segment Names (Facility numbers):

Cactus 1 (6-04-251)

Cactus 2 (6-04-253)



#### **Overview**

Watershed Management Area (WMA)	Tijuana River
Watershed (Number)	Tijuana River (6)
Hydrologic Subarea	911.12
Drainage Name (Number)	Spring Canyon Creek (04)
Facility Group Name	Spring Canyon Creek - Cactus
Segment Name (Facility Number)	Cactus 1 (6-04-251)
	Cactus 2 (6-04-253)
Substrate	Cactus 1 / Concrete
	Cactus 2 / Concrete
Location	Bordered to the east by Cactus Road and to the west by a business
	and industrial area
MMP Map No(s).	125
Facility Inspection No.	125
Other Former Names	None

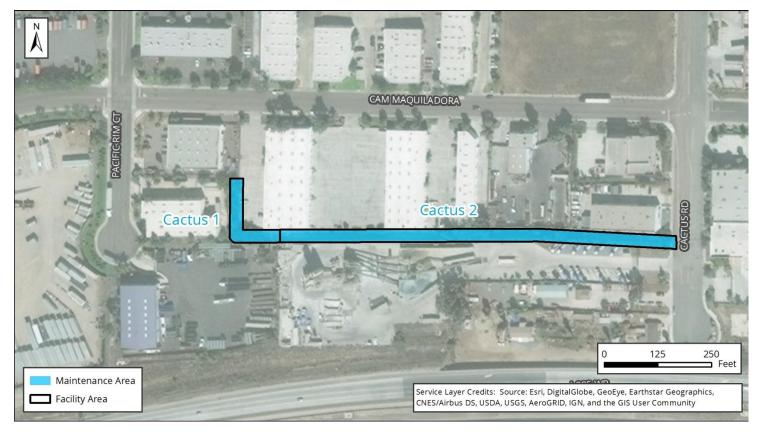


Figure 1: Vicinity Map of Spring Canyon Creek - Cactus Facility Group

#### **Water Quality Resource Summary**

This section describes water quality conditions within the facility and watershed.

Tijuana River Watershed Management Area; Hydrologic Subarea 911.12		
Adopted TMDLs	None	
<b>Highest Priority Water</b>	Sediment	
Quality Condition		

Spring Canyon Creek - Cactus	•
Beneficial Uses	
303(d) listed Impairments	No impairments recorded on the 303(d) List

Tijuana River (First downstre	am water body)				
Beneficial Uses	Non-contact Water Recreation (REC-2)				
	<ul> <li>Preservation of Biological Habitats of Special Significance (BIOL)</li> </ul>				
	Warm Freshwater Habitat (WARM)				
	Wildlife Habitat (WILD)				
	Rare, Threatened, or Endangered Species (RARE)				
303(d) listed Impairments	Ammonia as Nitrogen, Benthic Community Effects, Cadmium, Eutrophic, Indicator Bacteria, Low Dissolved Oxygen, Pesticides, Phosphorus, Sedimentation/Siltation, Selenium, Solids, Surfactants (MBAS), Synthetic Organics, Total Nitrogen as N, Toxicity, Trace Elements, Trash				

### Cactus Segment 1 Detail

Facility Type	Concrete detention basin			
Substrate Detail	Concrete bottom and banks			
Location Within Watershed	Upper reach of Spring Canyon Creek, immediately upstream of Spring Canyon Creek (Cactus Segment 2)			
Tributaries (listed from downstream to upstream)	No named tributaries			
Facility Length	Approximately 229 feet			
Top-of-Bank Width	Approximately 23 feet			
Bottom Facility Width	Approximately 2 feet			
Facility Depth	Approximately 7 feet			
Adjacent Land Use	Industrial, Transportation			
As-Built Drawing Number	23327-10-D & 23327-12-D			
Coastal Zone	No			



Figure 1: July 2017, standing water and vegetation growth in the basin

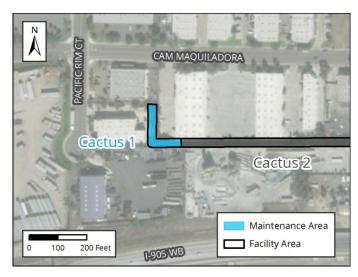


Figure 2: Vicinity Map of Cactus Segment 1

### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Maintenance		Prior to 2011: Unknown	
January 2011 – March 2019: No maintenance conducted			
Past Regulatory A	Approvals		
CEQA	2011 MMP PEIR N	No. 42891	
CDP	N/A		
SDP	SDP No. 2034245	5 (2017 Addendum)	
404	None		
401	None		
1602	None		
Mitigation for Pre	evious Impacts	None; no mitigation required in approvals for construction and routine maintenance of basin	

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	Dense vegetation, tree growth, and accumulated sediment and debris were observed in the basin. Sediment depth was estimated to be approximately 2 feet deep across the basin. All inlets and outlets were fully covered by vegetation.	
Maintenance Recommendation	Remove accumulated sediment, debris, and vegetation throughout the basin to restore the as-built condition	
In-Stream Post-Maintenance Erosion Control Recommendation	N/A (basin)	

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	<ul> <li>Developed concrete-lined channel</li> </ul>		
	Disturbed wetland		
	Riparian forest (southern willow forest)		
<b>Adjacent Vegetation</b>	Developed land		
	Disturbed land		
	Ornamental plantings		
Habitat and Wildlife	Although this basin does contain some suitable vegetation for sensitive wildlife species (e.g., least Bell's vireo), the basin extents and area of vegetation present are limited and isolated from other native habitat such that it is unlikely for wildlife to use the basin for nesting or foraging		
МНРА	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA). The nearest MHPA boundary is located approximately 790 feet to the south of the basin.		
Mitigation Within Facility	None		

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources		
Resource Identified in APE	None	
<b>Potential Historical Resources</b>	None	
Constraint Identified		

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)		
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood		
	Character (AES)		
EP-BIO-1	MM-AES-1		
EP-BIO-2	Air Quality (AQ)		
EP-BIO-3a, 3b, 3c	MM-AQ-1		
EP-BIO-4	Biological Resources (BIO)		
EP-BIO-5	MM-BIO-1a		
EP-BIO-6	MM-BIO-2		
Health and Safety/Hazards (HAZ)	MM-BIO-3		
EP-HAZ-3	MM-BIO-4		
Solid Waste (SW)	MM-BIO-5		
EP-SW-2	MM-BIO-6		
EP-SW-3	Noise (NOI)		
EP-SW-4	MM-NOI-1		
EP-SW-5			
EP-SW-6			
EP-SW-7			
EP-SW-8			
Water Quality (WQ)			
EP-WQ-1			

#### **Maintenance Methods**

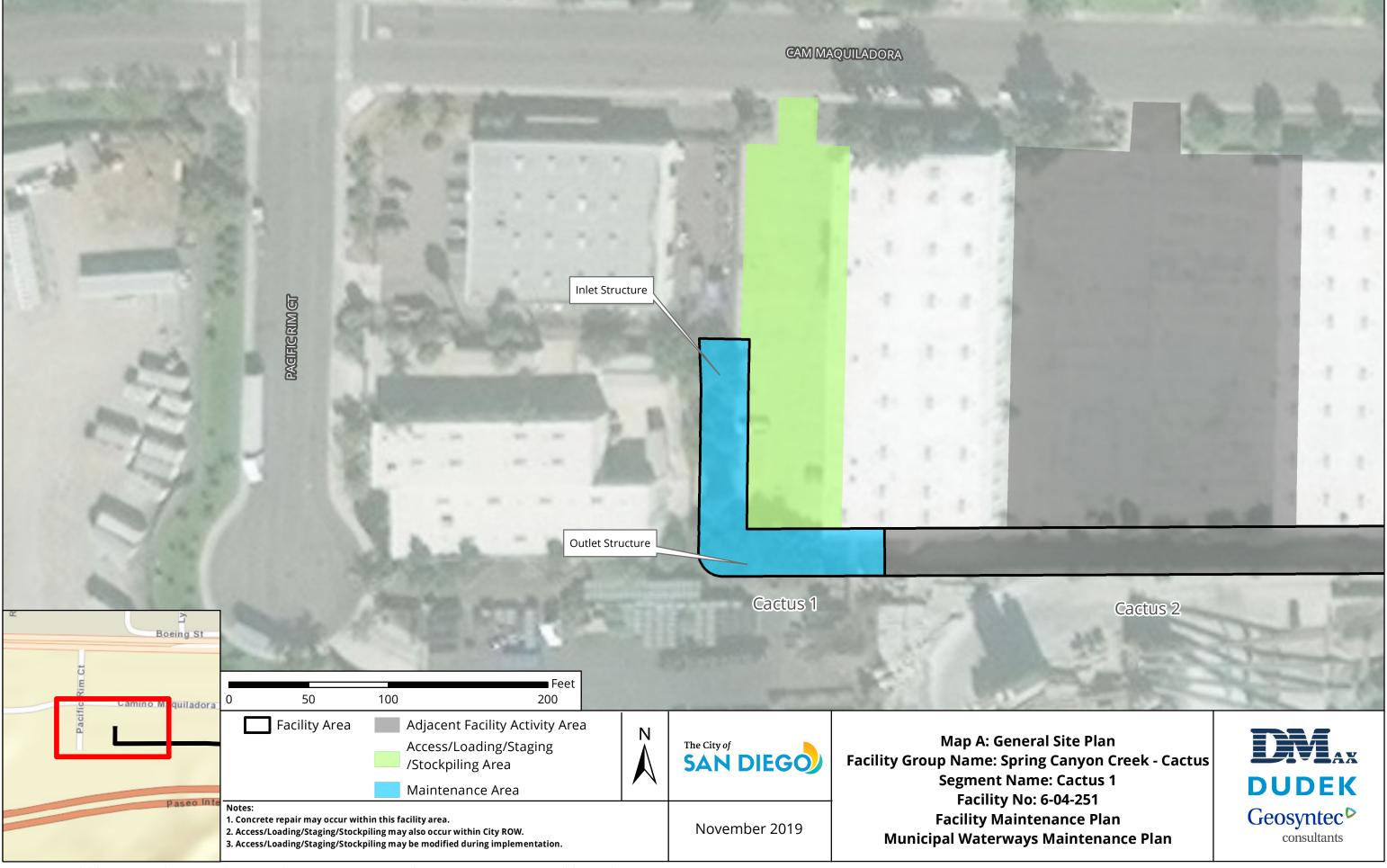
This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Facility Group	Spring Canyon Creek - Cactus
Segment Name	Cactus 1
Facility No.	6-04-251
Facility Location	From Cactus Road to the east to Cactus 2 segment to the west
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of concrete detention basin per as-built dimensions and
	Hydrology and Hydraulics recommendations
Hydrology and Hydraulics	Remove accumulated sediment, debris, and vegetation throughout the
Maintenance Recommendation	basin to restore the as-built condition
Maintenance Activities	Vegetation grubbing, trimming, and removal
	Invasive plant species treatment and removal
	Sediment removal
	Concrete repair
Maintenance Method	Excavation; mechanized equipment inside and outside the basin
	Temporary access/loading
	Temporary staging
	Temporary diversions
	Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair	No
and Maintenance	
Culvert Maintenance	No
Post-Maintenance Erosion Control	No
Recommendation	
Trash/Debris Fence Repair and	No
Maintenance	
Facility Type	Concrete detention basin
Existing Plans and/or As-Builts?	Yes; 23327-10-D & 23327-12-D
Substrate Detail	Concrete bottom and banks
Facility Dimensions	Length: 229 feet
(Approximate)	Top width: 23 feet
	Bottom width: 2 feet
	Depth: 7 feet
Authorized Facility Maintenance	Length: Basin: 229 feet
Area	Width: 23 feet
Maintenance Quantities	To be determined at time of maintenance

Access/Loading/Staging/Stockpiling	Designated areas on Map A and Smuggler's Gulch Map B or within City			
Area(s)	ROW may be used for access, loading staging, and/or stockpiling. The			
Al ea(s)	boundaries of these areas may also be modified as long as changes do not			
	result in new significant environmental impacts.			
Faccions	Bobcat/skid-steer, Gradall/excavator, loader, dump truck, trash pump, fuel-			
Equipment				
	powered hand tools, sweeper			
Schedule	Up to approximately 14 working days			
Maintenance Crew	Approximately 8–12 people			
Routine Maintenance Procedures	1. Bobcat/skid-steer and loader enter or are lowered into basin at			
	access/loading area with Gradall/excavator assistance			
	2. Bobcat/skid-steer and loader pushes material to Gradall/excavator at			
	access/loading area			
	3. Gradall/excavator scoops material from basin and loads dump truck			
	4. Dump truck hauls material to legal disposal site			
Traffic Control	No			
	Additional Maintenance Information			
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s) shall			
	conduct the following on site:			
	1. Review sensitive biological, historical, and water quality resources; if			
	present, flag/delineate			
	2. Conduct appropriate training			
	3. Review Best Management Practices (BMP) installation			
	4. If needed, review pre- and during-maintenance pumping procedure			
	5. Conduct pre-maintenance site photo documentation			
Biology	Suitable habitat for sensitive species <sup>1</sup> :			
	1. Within maintenance area: Yes, limited suitable habitat present			
	2. Adjacent to maintenance area: Yes, limited suitable habitat present			
	Activities to be conducted under authority of a qualified biologist:			
	1. Nesting bird surveys required within 72 hours of the start of vegetation			
	clearing from February 1 through September 15			
	2. Ensure adequate implementation of Shot Hole Borer beetle procedures			
	in accordance with current guidelines, if necessary			
Flow Management	As needed:			
	1. Vactor or pump standing water from facility			
	2. Install temporary dry-weather flow-diversion berm(s) across facility			
	(upstream and downstream of maintenance area)			
	3. Position vactor/pump to capture any incoming or contained flows			
	4. If pumping water through temporary hose(s) to location(s) downstream,			
	allow for distributed discharge and infiltration			
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan			

<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors

BMP Installation	See Water Pollution Control Plan			
In-Stream Post-Maintenance	N/A (basin)			
<b>Erosion Control Recommendation</b>				
Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:			
	1. Demobilize equipment			
	2. Restore temporary access/loading areas to pre-maintenance condition or			
	as required by the WPCP for final stabilization			
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project			
	area(s), as needed			
	4. Remove temporary BMPs			
	5. Update maintenance record			
	6. Conduct post-maintenance site photo documentation			
Other Notes	None			



### Cactus Segment 2 Detail

Facility Type	Concrete detention basin
Substrate Detail	Concrete bottom and banks
Location Within Watershed	Upper reach of Spring Canyon Creek
Tributaries (listed from downstream to	No named tributaries
upstream)	
Facility Length	Approximately 923 feet
Top-of-Bank Width	Approximately 25 feet
Bottom Facility Width	Approximately 7–10 feet
Facility Depth	Approximately 5 feet
Adjacent Land Use	Industrial, Transportation
As-Built Drawing Number	23327-8-D & 23327-12-D
Coastal Zone	No



Figure 1: July 2017, sediment, debris deposition and vegetation growth in basin

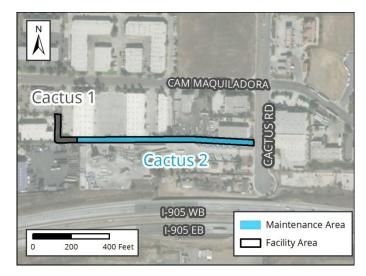


Figure 2: Vicinity Map of Cactus Segment 2

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance	Prior to 2011: Unknown
		January 2011 – March 2019: No maintenance conducted
Past Regulatory Approvals		
CEQA	2011 MMP PEIR N	No. 42891
CDP	N/A	
SDP	SDP No. 2034245	i (2017 Addendum)
404	None	
401	None	
1602	None	
Mitigation for Pro	evious Impacts	None; no mitigation required in approvals for construction and routine maintenance of basin

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	Heavy vegetation and accumulated sediment and debris was observed in the basin. Sediment depth was estimated to be approximately 6 inches deep across the bottom of the basin. Inlets and outlets were fully covered by vegetation.  Approximately 6 inches of standing water was observed west of outflow structure.
Maintenance Recommendation	Remove accumulated sediment, debris, and vegetation throughout the basin to restore the as-built condition
In-Stream Post-Maintenance Erosion Control Recommendation	N/A (basin)

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Developed concrete-lined channel
	Disturbed wetland (concrete-lined)
	Ornamental plantings (concrete-lined)
	Riparian forest (southern willow forest; concrete-lined)
	Riparian scrub (southern willow scrub; concrete-lined)
<b>Adjacent Vegetation</b>	Developed land
	Disturbed land
	Ornamental plantings
Habitat and Wildlife	Although this basin does contain some suitable vegetation for sensitive wildlife species (e.g., least Bell's vireo), the basin extents and area of vegetation present are limited and isolated from other native habitat such that it is unlikely for wildlife to utilize the basin for nesting or foraging
MHPA	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA). The nearest
	MHPA boundary is located approximately 870 feet to the south of the basin.
Mitigation Within	None
Facility	

### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources			
Resource Identified in APE	None		
Potential Historical Resources	None		
Constraint Identified			

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	MM-BIO-3
EP-HAZ-1	MM-BIO-4
EP-HAZ-3	MM-BIO-5
Solid Waste (SW)	MM-BIO-6
EP-SW-2	Noise (NOI)
EP-SW-3	MM-NOI-1
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

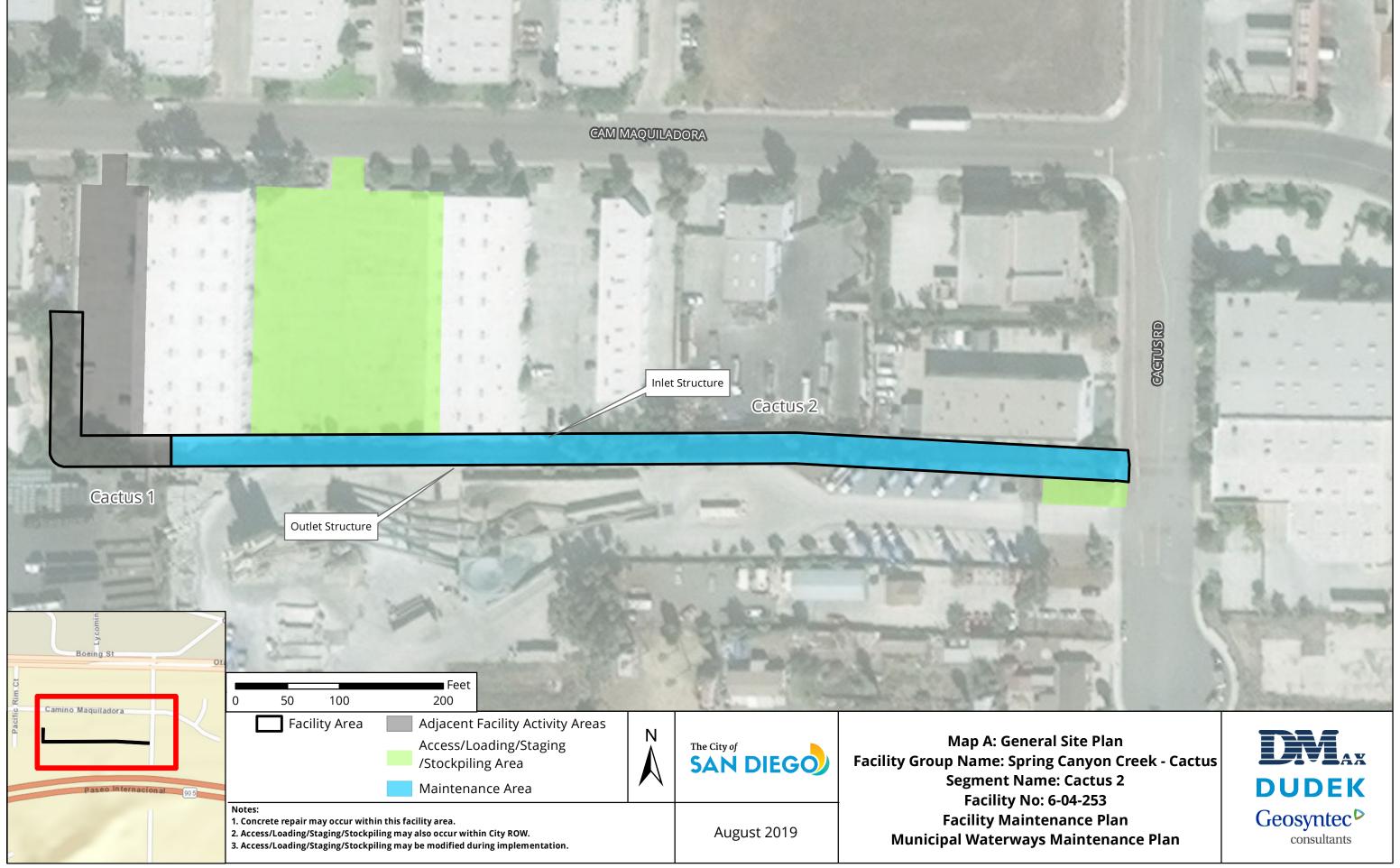
Facility Group	Spring Canyon Creek - Cactus
Segment Name	Cactus 2
Facility No.	6-04-253
Facility Location	From outlet of storm drain pipe that drains Pacific Rim Court that enters the north end of the basin from the northwest to an outflow structure located at the southwest corner of the basin
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of concrete detention basin per as-built dimensions and
•	Hydrology and Hydraulics recommendations
Hydrology and Hydraulics	Remove accumulated sediment, debris, and vegetation throughout the
Maintenance Recommendation	basin to restore the as-built condition
Maintenance Activities	Vegetation grubbing, trimming, and removal Invasive plant species treatment and removal Sediment removal Concrete repair
Maintenance Method	Excavation; mechanized equipment inside and outside the basin Temporary access/loading Temporary staging Temporary diversions Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair	No
and Maintenance	
Culvert Maintenance	No
Post-Maintenance Erosion Control	No
Recommendation	
Trash/Debris Fence Repair and	No
Maintenance	
Facility Type	Concrete detention basin
Existing Plans and/or As-Builts?	Yes; 23327-8-D & 23327-12-D
Substrate Detail	Concrete bottom and banks
Facility Dimensions	Length: 923 feet
(Approximate)	Top width: 25 feet
	Bottom width: 7–10 feet
	Depth: 5 feet
Authorized Facility Maintenance	Length: Basin: 923 feet
Area	Width: 25 feet
Maintenance Quantities	To be determined at time of maintenance

Access/Loading/Staging/Stockpiling	Designated areas on Man A and Smuggler's Culch Man P or within City
Area(s)	Designated areas on Map A and Smuggler's Gulch Map B or within City ROW may be used for access, loading staging, and/or stockpiling. The
Al ea(5)	boundaries of these areas may also be modified as long as changes do not
	result in new significant environmental impacts.
Equipment	
Equipment	Bobcat/skid-steer, Gradall/excavator, loader, dump truck, trash pump, fuel-
	powered hand tools, sweeper
Schedule	Up to approximately 14 working days
Maintenance Crew	Approximately 8–12 people
Routine Maintenance Procedures	1. Bobcat/skid-steer and loader enter or are lowered into basin at
	access/loading area with Gradall/excavator assistance
	2. Bobcat/skid-steer and loader pushes material to Gradall/excavator at
	access/loading area
	3. Gradall/excavator scoops material from basin and loads dump truck
	4. Dump truck hauls material to legal disposal site
Traffic Control	No
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s) shall
	conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources; if
	present, flag/delineate
	2. Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Suitable habitat for sensitive species <sup>1</sup> :
	1. Within maintenance area: Yes, limited suitable habitat present
	2. Adjacent to maintenance area: Yes, limited suitable habitat present
	Activities to be conducted under authority of a qualified biologist:
	1. Nesting bird surveys required within 72 hours of the start of vegetation
	clearing from February 1 through September 15
	2. Ensure adequate implementation of Shot Hole Borer beetle procedures
	in accordance with current guidelines, if necessary
Flow Management	As needed:
5	1. Vactor or pump standing water from facility
	2. Install temporary dry-weather flow-diversion berm(s) across facility
	(upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream,
	allow for distributed discharge and infiltration
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan
DOWNISH CAIN SCHOLLIVE WALERS	res, implement bivirs per water rollution Control Flan

<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors

## Spring Canyon Creek - Cactus Facility Group Facility Maintenance Plan

BMP Installation	See Water Pollution Control Plan	
In-Stream Post-Maintenance	N/A (basin)	
<b>Erosion Control Recommendation</b>		
Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:	
	1. Demobilize equipment	
	2. Restore temporary access/loading areas to pre-maintenance condition or	
	as required by the WPCP for final stabilization	
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project	
	area(s), as needed	
	4. Remove temporary BMPs	
	5. Update maintenance record	
	6. Conduct post-maintenance site photo documentation	
Other Notes	None	



## Facility Maintenance Plan

# Tijuana River - Siempre Viva Facility Group

Segment Name (Facility number): Siempre Viva 1 (6-05-110)



#### **Overview**

Watershed Management Area (WMA)	Tijuana River
Watershed (Number)	Tijuana River (6)
Hydrologic Subarea	911.12
Drainage Name (Number)	Tijuana River Unnamed Tributary (05)
Facility Group Name	Tijuana River - Siempre Viva
Segment Name (Facility Number)	Siempre Viva 1 (6-05-110)
Substrate	Siempre Viva 1 / Earthen
Location	Bordered by the International Border to the south, Siempre Viva Road to the north, and Britannia Boulevard to the west
MMP Map No(s).	126, 127
Facility Inspection No.	126, 127
Other Former Names	Bristow Channel, Wruck Canyon



Figure 1: Vicinity Map of Tijuana River - Siempre Viva Facility Group

#### **Water Quality Resource Summary**

This section describes water quality conditions within the facility and watershed.

Tijuana River Watershed Management Area; Hydrologic Subarea 911.12		
Adopted TMDLs	Adopted TMDLs None	
Highest Priority Water Quality Condition	Sediment	

Tijuana River - Siempre Viva	
Beneficial Uses	Agricultural Supply (AGR)
	Non-contact Water Recreation (REC-2)
	Warm Freshwater Habitat (WARM)
	Wildlife Habitat (WILD)
303(d) listed Impairments	No impairments recorded on the 303(d) List

Tijuana River (First downstream water body)	
Beneficial Uses	Non-contact Water Recreation (REC-2)
	<ul> <li>Preservation of Biological Habitats of Special Significance (BIOL)</li> </ul>
	Warm Freshwater Habitat (WARM)
	Wildlife Habitat (WILD)
	Rare, Threatened, or Endangered Species (RARE)
303(d) listed Impairments	Ammonia as Nitrogen, Benthic Community Effects, Cadmium, Eutrophic, Indicator Bacteria, Low Dissolved Oxygen, Pesticides, Phosphorus, Sedimentation/Siltation, Selenium, Solids, Surfactants (MBAS), Synthetic Organics, Total Nitrogen as N, Toxicity, Trace Elements, Trash

#### Siempre Viva Segment 1 Detail

Facility Type	Earthen detention basin
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Upper reach of Tijuana River unnamed tributary, upstream of Tijuana River
Tributaries (listed from downstream to upstream)	No named tributaries
Facility Length	Approximately 2,896 feet
Top-of-Bank Width	Approximately 30 feet
Bottom Facility Width	Approximately 4–8 feet
Facility Depth	Approximately 6 feet
Adjacent Land Use	Commercial, Industrial, Mexico (out of jurisdiction), Open Space, Transportation, Vacant
As-Built Drawing Number	22611-D
Coastal Zone	No



Figure 1: December 2016, downstream portion looking south towards the shared detention facility

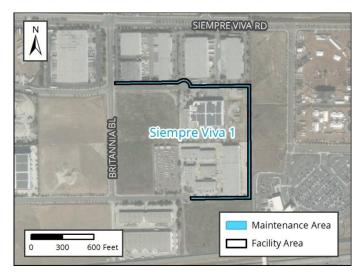


Figure 2: Vicinity Map of Siempre Viva Segment 1

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance Prior to 2011: Unknown	
	2011 – 2017: No maintenance conducted	
	2018 – 2019: Routine maintenance conducted	
Past Regulatory A	Approvals	
CEQA	2011 MMP PEIR No. 42891	
CDP	N/A	
SDP	SDP No. 2034245 (2017 Addendum)	
404	N/A; No Permit Required	
401	N/A; No Permit Required	
1602	N/A; No Permit Required	
Mitigation for Pro	•	
	maintenance of basin	

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.<sup>1</sup>

Current Conditions Affecting Facility Capacity	The vegetation was observed to range from light to dense with evidence of approximately 1.5 feet of sediment deposition
Maintenance Recommendation	Remove accumulated sediment, debris, and vegetation from ditch bottom and banks from Station 175 to Station 736 in Reach 1, from Station 736 to Station 1460 in Reach 2, and from Station 771 to Station 1311 in Reach 3.  Remove accumulated sediment/debris and vegetation from detention basin in Reach 3 (Siempre Viva Channel Detention Basin) from Station 0 to Station 771.  Remove accumulated sediment/debris and vegetation from detention basin in Reach 1 (Bristow Channel Detention Basin) from Station 0 to Station 175. The existing wet well (Station 0 to Station 45) is recommended to be maintained by private property owners.
In-Stream Post-Maintenance Erosion Control Recommendation	N/A (basin)

<sup>&</sup>lt;sup>1</sup> Stations are approximate and may not directly correspond with facility and/or maintenance lengths

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	<ul> <li>Developed concrete-lined channel</li> </ul>
	Disturbed wetland
	Ornamental plantings
	Riparian forest (southern willow forest)
	Riparian scrub
<b>Adjacent Vegetation</b>	Developed concrete-lined channel
	Developed land
	Disturbed land
	Ornamental plantings
Habitat and Wildlife	This basin contains suitable vegetation for sensitive wildlife species (e.g., least Bell's vireo). However, the basin extents are limited and it is isolated from other native areas such that the potential for sensitive species to use the basin for nesting or foraging is low.
MHPA	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA). The nearest
	MHPA boundary is located more than 1,000 feet west of the basin.
Mitigation Within	None
Facility	

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	P-37-007208
Resource Identified Adjacent to APE	None
Resource Type	Prehistoric lithic scatter

Historical Resources			
Resource Identified in APE	None		
Potential Historical Resources	None		
Constraint Identified			

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-2
EP-BIO-6	MM-BIO-3
Health and Safety/Hazards (HAZ)	MM-BIO-4
EP-HAZ-3	MM-BIO-5
Paleontological Resources (PAL)	MM-BIO-6
EP-PAL-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Facility Group	Tijuana River - Siempre Viva
Segment Name	Siempre Viva 1
Facility No.	6-05-110
Facility Location	From outlet of culvert underneath Britannia Boulevard to the end of the cul-de-sac at Britannia Court
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of earthen channel/detention basin per as-built dimensions and Hydrology and Hydraulics recommendations
Hydrology and Hydraulics Maintenance Recommendation <sup>2</sup>	Remove accumulated sediment, debris, and vegetation from ditch bottom and banks from Station 175 to Station 736 in Reach 1, from Station 736 to Station 1460 in Reach 2, and from Station 771 to Station 1311 in Reach 3. Remove accumulated sediment/debris and vegetation from detention basin in Reach 3 (Siempre Viva Channel Detention Basin) from Station 0 to Station 771.  Remove accumulated sediment/debris and vegetation from detention basin in Reach 1 (Bristow Channel Detention Basin) from Station 0 to Station 175. The existing wet well (Station 0 to Station 45) is recommended to be maintained by private property owners.
Maintenance Activities	Vegetation grubbing, trimming, and removal Invasive plant species treatment and removal Sediment removal
Maintenance Method	Excavation; mechanized equipment inside and outside the basin Temporary access/loading Temporary staging Temporary diversions Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair and Maintenance	No
Culvert Maintenance	No
Post-Maintenance Erosion Control Recommendation	No
Trash/Debris Fence Repair and Maintenance	No
Facility Type	Earthen detention basin

-

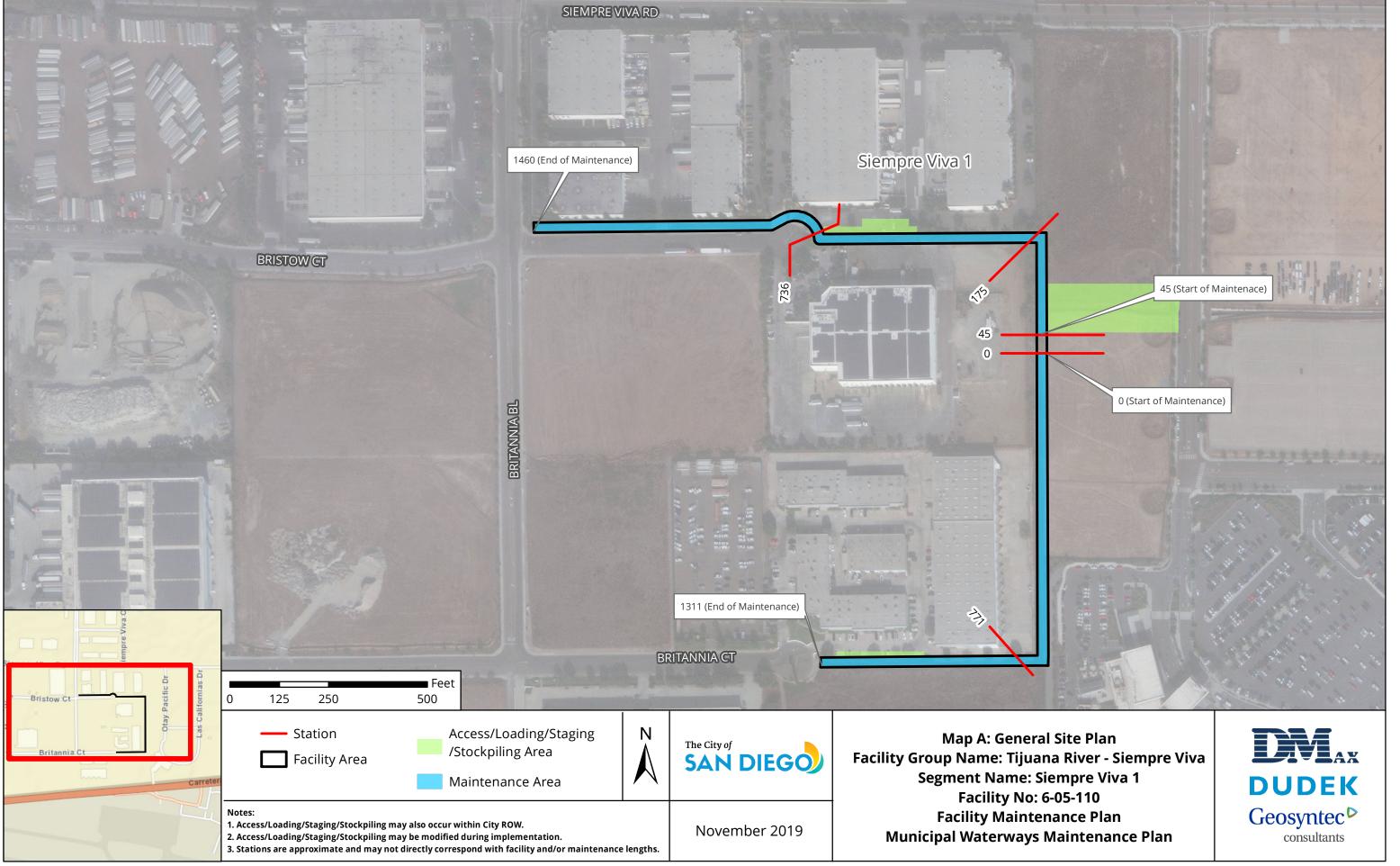
<sup>&</sup>lt;sup>2</sup> Stations are approximate and may not directly correspond with facility and/or maintenance lengths

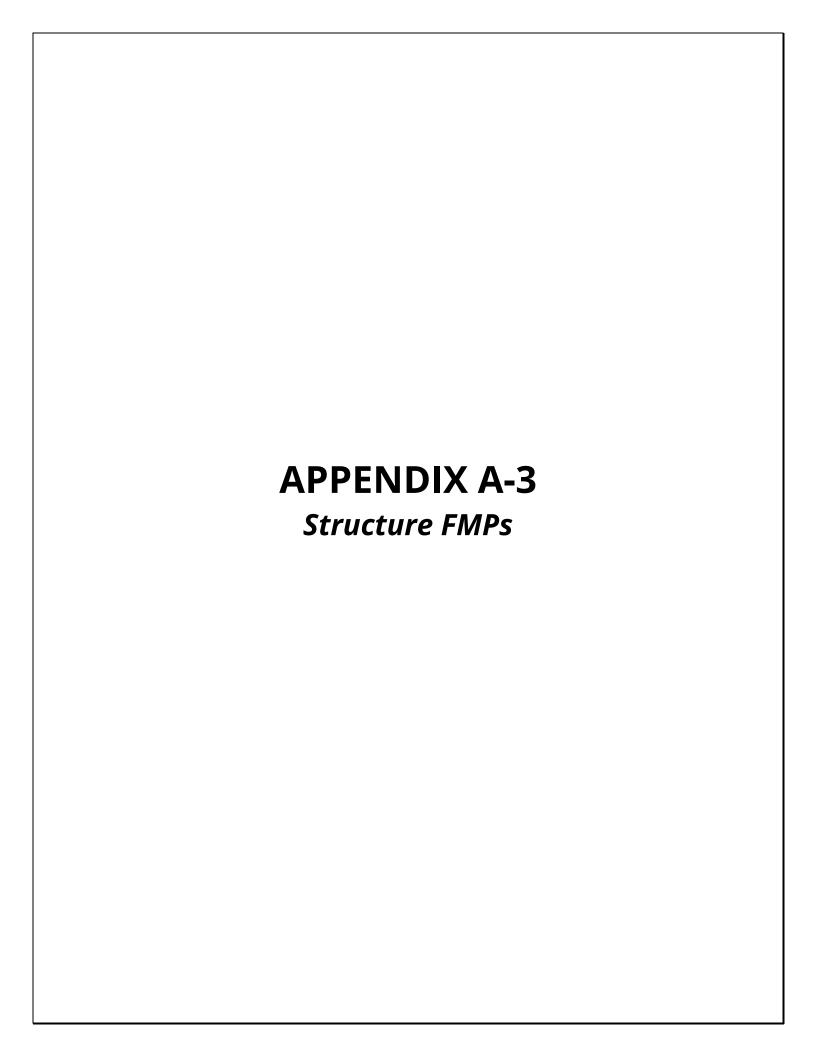
Existing Plans and/ox As Builts?	Voc. 22611 D
Existing Plans and/or As-Builts?	Yes; 22611-D
Substrate Detail	Earthen bottom and banks
Facility Dimensions	Length: 2,896 feet
(Approximate)	Top width: 30 feet
	Bottom width: 4–8 feet
	Depth: 6 feet
Authorized Facility Maintenance	Length: Basin: 2,711 feet; Culvert: 185 feet
Area	Width: 28 feet
Maintenance Quantities	To be determined at time of maintenance
Access/Loading/Staging/Stockpiling	Designated areas on Map A and Smuggler's Gulch Map B or within City
Area(s)	ROW may be used for access, loading staging, and/or stockpiling. The
	boundaries of these areas may also be modified as long as changes do not
	result in new significant environmental impacts.
Equipment	Bulldozer/track-steer, Gradall/excavator, dump truck, trash pump, sweeper
Schedule	Up to approximately 20–30 working days
Maintenance Crew	Approximately 8–16 people
Routine Maintenance Procedures	1. Bulldozer/track-steer enters basin at access/loading area
	2. Bulldozer/track-steer pushes material to Gradall/excavator at
	access/loading area
	3. Gradall/excavator scoops material from basin and loads dump truck
	4. Dump truck hauls material to legal disposal site
Traffic Control	No
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s) shall
	conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources; if
	present, flag/delineate
	2. Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Suitable habitat for sensitive species <sup>3</sup> :
	1. Within maintenance area: Yes
	2. Adjacent to maintenance area: Yes, limited suitable habitat present
	Activities to be conducted under authority of a qualified biologist:
	1. Nesting bird surveys required within 72 hours of the start of vegetation
	clearing from February 1 through September 15
	2. Ensure adequate implementation of Shot Hole Borer beetle procedures
	in accordance with current guidelines, if necessary
	in accordance with current guidelines, if fieldssafy

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<sup>&</sup>lt;sup>3</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors

Flow Management	As needed:	
1 low management		
	1. Vactor or pump standing water from facility	
	2. Install temporary dry-weather flow-diversion berm(s) across facility	
	(upstream and downstream of maintenance area)	
	3. Position vactor/pump to capture any incoming or contained flows	
	4. If pumping water through temporary hose(s) to location(s) downstream,	
	allow for distributed discharge and infiltration	
<b>Downstream Sensitive Waters</b>	Yes; implement BMPs per Water Pollution Control Plan	
BMP Installation	See Water Pollution Control Plan	
In-Stream Post-Maintenance	N/A (basin)	
<b>Erosion Control Recommendation</b>		
Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:	
	1. Demobilize equipment	
	2. Restore temporary access/loading areas to pre-maintenance condition or	
	as required by the WPCP for final stabilization	
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project	
	area(s), as needed	
	4. Remove temporary BMPs	
	5. Update maintenance record	
	6. Conduct post-maintenance site photo documentation	
Other Notes	None	





### Facility Maintenance Plan

# Facility Name: 10405 Sorrento Valley Road

IAMFLOC: #HW04220



#### **Detail**

Watershed Management Area (WMA)	Los Peñasquitos
Hydrologic Subarea	906.10
Drainage Name	Soledad/Carroll Canyon
Tributaries (listed from downstream to upstream)	No named tributaries
Location Within Watershed	Draining to lower reach of Soledad Canyon Creek, immediately upstream of Soledad Canyon Creek (Roselle Segment 1)
Location	Nearest Intersection: Sorrento Valley Road and Carroll Canyon Road
Adjacent Land Use	Industrial, Office, Open Space, Transportation, Vacant
Coastal Zone	CST-APP, N-APP-1
Structure Type	Inlet
Structure Detail	Culvert entrance
Pipe Diameter and Material	48 inches reinforced concrete pipe
Pipe Length	136 feet
IAMFLOC	#HW04220
SAP ID	SS-025270
Equipment ID	80049573
GIS ID	DS050012
Other Identifiers	None
As-built Drawing Number	22551-4-D



Figure 1: July 2017, photo of 10405 Sorrento Valley Road

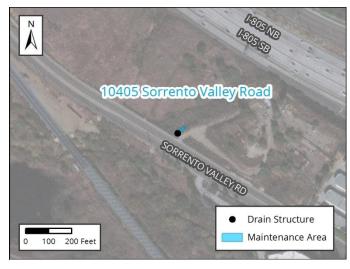


Figure 2: Vicinity Map of 10405 Sorrento Valley Road

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance	Prior to 2011: Unknown January 2011 – March 2017: No maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	None	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Pre	evious Impacts	No

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility, recommended maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	The inlet is a headwall struture with approximately 0.5 feet of sediment and debris depostion. A large piece of construction debris is located near culvert entrance.
Maintenance Recommendation	Recommend removal of construction debris and sediment and rock debris at the culvert entrance
In-Stream Post-Maintenance Erosion Control Recommendation	No

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Coastal sage scrub (Baccharis-dominated)
Adjacent Vegetation	<ul> <li>Coastal sage scrub (Baccharis-dominated)</li> <li>Developed land</li> <li>Disturbed coastal sage scrub</li> <li>Disturbed land</li> <li>Eucalyptus woodland</li> <li>Ornamental vegetation</li> <li>Riparian forest</li> </ul>
Habitat and Wildlife	There is limited suitable habitat contained within the facility for wildlife. However, raptors could use the tall ornamental vegetation or riparian forest present adjacent to the facility across Sorrento Valley Road for nesting/roosting. In addition, other sensitive bird species (e.g., least Bell's vireo) could occur in riparian forest habitat adjacent to the channel across Sorrento Valley Road.
МНРА	The facility is not within or adjacent to the Multi-Habitat Planning Area (MHPA). The nearest MHPA boundary is located approximately 250 feet west of the structure.
Mitigation Within Facility	None

#### **Water Quality Resource Summary**

303(d) listed Impairments

Los Peñasquitos Watershed I	Management Area; Hydrologic Subarea 906.10		
Adopted TMDLs	Los Peñasquitos Lagoon sedimentation and siltation, Bacteria Project I		
<b>Highest Priority Water</b>	Bacteria, sediment (wet weather), freshwater discharges (dry weather)		
<b>Quality Condition</b>			
N/A			
Beneficial Uses			
303(d) listed Impairments	No impairments recorded on the 303(d) List		
Soledad Canyon Creek (First	downstream water body)		
Beneficial Uses	Agricultural Supply (AGR)		
	Industrial Service Supply (IND)		
	Non-contact Water Recreation (REC-2)		
	Warm Freshwater Habitat (WARM)		
	Cold Freshwater Habitat (COLD)		
	Wildlife Habitat (WILD)		

Sediment Toxicity, Selenium

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

<b>Archeological and Tribal Resources</b>	
Resource Identified in APE	P-37-004609
Resource Identified Adjacent to APE	None
Resource Type	Prehistoric village
Historical Resources	
Resource Identified in APE	None
Potential Historical Resources	None
Constrain Identified	

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-2
EP-BIO-6	MM-BIO-3
Health and Safety/Hazards (HAZ)	MM-BIO-4
EP-HAZ-3	MM-BIO-5
Solid Waste (SW)	MM-BIO-6
EP-SW-2	MM-BIO-7
EP-SW-3	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-SW-4	MM-CR-1
EP-SW-5	MM-CR-2
EP-SW-6	MM-CR-3
EP-SW-7	MM-CR-4
EP-SW-8	Noise (NOI)
Water Quality (WQ)	MM-NOI-1
EP-WQ-1	

#### **Maintenance Methods**

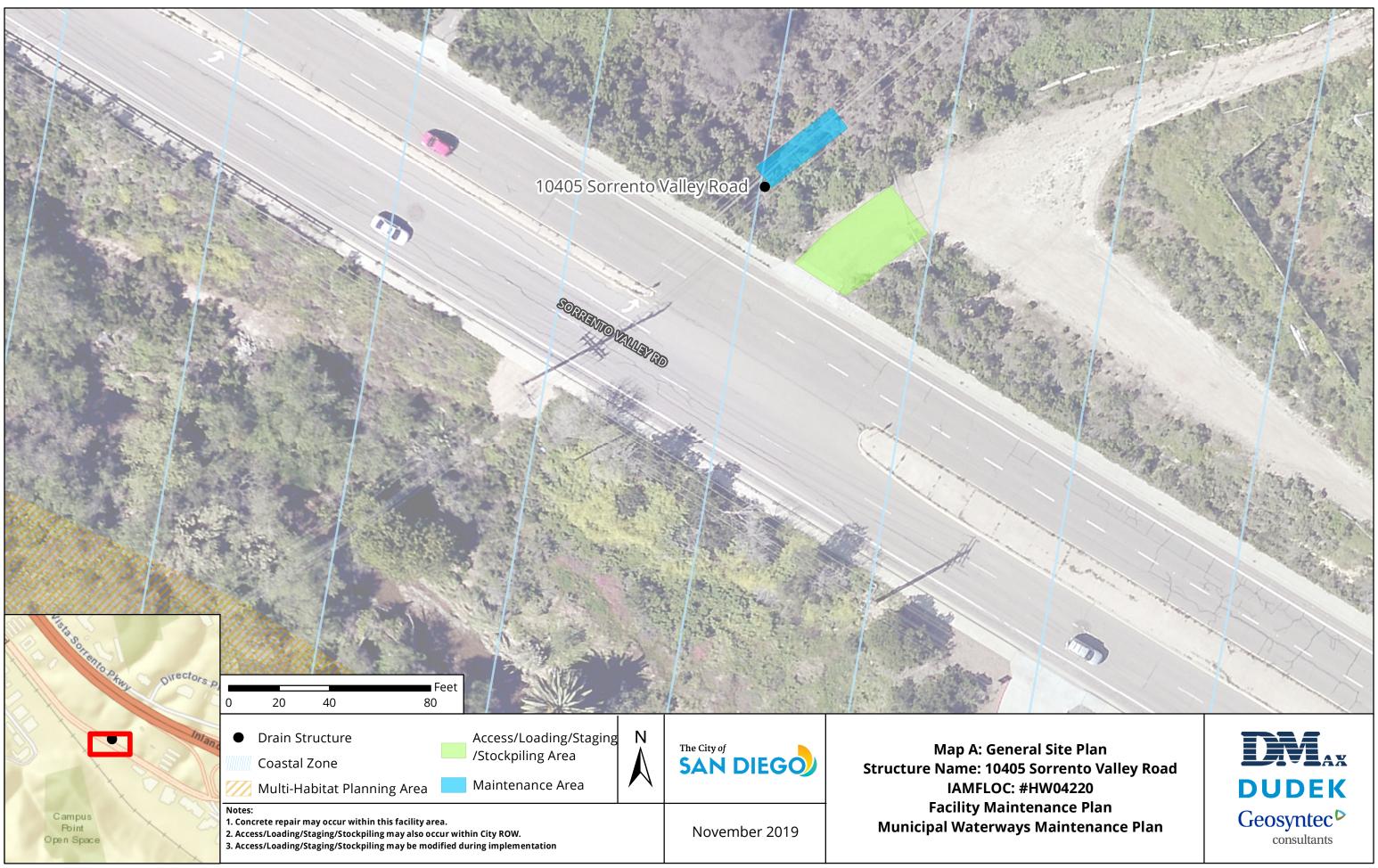
This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Structure Name	10405 Sorrento Valley Road	
Coastal Zone	CST-APP, N-APP-1	
MWMP Proposed Maintenance	Maintenance of structure per as-built dimensions and Hydrology and	
	Hydraulics Recommendation	
Hydrology and Hydraulics	Recommend removal of construction debris and sediment and rock debris	
Recommendation	at the culvert entrance	
Maintenance Activities	Vegetation grubbing, trimming, and removal	
	Invasive plant species treatment and removal	
	Sediment removal	
	Concrete repair	
Maintenance Method	Excavation; mechanized equipment outside of facility	
	Temporary access/loading	
	Temporary staging	
	Temporary diversions	
	Hand removal of vegetation	
Bank Repair	No	
Concrete Repair	Yes; see Appendix A-4	
Concrete/Gabion Structure Repair	No	
and Maintenance		
Culvert Maintenance	Yes; see Appendix A-4	
Post-Maintenance Erosion Control	No	
Recommendation		
Trash/Debris Fence Repair and	No	
Maintenance		
Structure Type	Inlet	
Existing Plans and/or As-Builts?	Yes; 22551-4-D	
Structure Size	48 inches	
Structure Detail	Culvert entrance	
Maintenance Area Substrate	Earthen and riprap	
Authorized Facility Maintenance	Length: 38 feet	
Area	Width: 12 feet	
Maintenance Quantities	To be determined at time of maintenance	
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,	
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may	
	also be modified as long as changes do not result in new significant	
	environmental impacts.	
Equipment	Gradall/excavator, loader, dump truck, vactor, fuel-powered hand tools	
Schedule	Up to approximately 1–3 working days	
Maintenance Crew	Approximately 8–10 people people	

Routine Maintenance Procedures	Conduct maintenance procedures as follows:
	1. Workers enter facility at access/loading area
	2. Workers use fuel-powered hand tools to clear vegetation and prepare
	concrete debris for removal
	3. Gradall/excavator and loader at access/loading area remove material
	from facility and load dump trucks
	4. Dump trucks haul material to legal disposal site
Traffic Control	No
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist shall
	conduct the following on site:
	1. Review sensitive biological/historical/water quality resources; if present
	flag/delineate
	2. Conduct appropriate training
	3. Review BMP installation
	4. If needed, review pre- and during-maintenance pumping procedures
	5. Conduct pre-maintenance site photo documentation
Biology	Suitable habitat for sensitive species <sup>1</sup> :
	1. Within maintenance area: Yes, limited suitable habitat present
	2. Adjacent to maintenance area: Yes
	Activities to be conducted under authority of a qualified biologist:
	1. Nesting bird surveys required within 72 hours of the start of vegetation
	clearing from February 1 through September 15
Flow Management	As needed:
3	1. Vactor or pump standing water from facility
	2. Install temporary dry-weather flow-diversion berm(s) across facility
	(upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream,
	allow for distributed discharge and infiltration
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan
BMP Installation	See Water Pollution Control Plan
In-Stream Post-Maintenance	No
<b>Erosion Control Recommendation</b>	
	I .

<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors.

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:	
	1. Demobilize equipment	
	2. Restore temporary access/loading areas to pre-maintenance condition	
	as required by the WPCP for final stabilization	
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project	
	area(s), as needed	
	4. Remove temporary BMPs	
	5. Update maintenance record	
	6. Conduct post-maintenance site photo documentation	
Other Notes	None	



## Facility Maintenance Plan

# Facility Name: 1331 Washington

IAMFLOC:

#OT03537



#### **Detail**

Watershed Management Area (WMA)	San Diego River
Hydrologic Subarea	907.11
Drainage Name	Mission Valley South
Tributaries (listed from downstream to upstream)	No named tributaries
Location Within Watershed	Draining to San Diego River
Location	Nearest Intersection: Washington Street and Pascoe Street
Adjacent Land Use	Commercial, Multi-Family Residential, Single Family
	Residential, Transportation, Vacant
Coastal Zone	No
Structure Type	Outlet
Structure Detail	None
Pipe Diameter and Material	24 inches reinforced concrete pipe
Pipe Length	188 feet
IAMFLOC	#OT03537
SAP ID	SS-028300
Equipment ID	80027216
GIS ID	DS026277
Other Identifiers	None
As-built Drawing Number	6201-12-R



Figure 1: July 2017, photo of 1331 Washington



Figure 2: Vicinity Map of 1331 Washington

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance	Prior to 2011: Unknown January 2011 – March 2019: No maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	N/A	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Pre	evious Impacts	No

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility, recommended maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	Vegetation (ice plant and a palm tree) is growing in the ditch and near the outlet. Large debris (fallen palm trees) partially blocking the ditch.
Maintenance Recommendation	Recommend trimming the vegetation out of the concrete ditch, removing palm trees from within the ditch, and removing the fallen trees. Backfill voids under concrete structure to ensure structural integrity or stability.
In-Stream Post-Maintenance Erosion Control Recommendation	Subject to further analysis to determine need and type

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Developed concrete-lined channel
<b>Adjacent Vegetation</b>	Developed land
	Disturbed wetland (palm-dominated)
	Eucalyptus woodland
	Natural flood channel
	Ornamental vegetation
Habitat and Wildlife	There is limited suitable habitat contained within the facility for wildlife. However, raptors could use the eucalyptus woodland present adjacent to the facility for nesting/roosting.
MHPA	The facility is not within or adjacent to the Multi-Habitat Planning Area (MHPA). The nearest
	MHPA boundary is located approximately 700 feet north of the structure.
Mitigation Within Facility	None

#### **Water Quality Resource Summary**

San Diego River Watershed Management Area; Hydrologic Subarea 907.11

Adopted TMDLs	Bacteria Project I		
<b>Highest Priority Water</b>	Bacteria		
<b>Quality Condition</b>			
N/A			
Beneficial Uses			
303(d) listed Impairments	No impairments recorded on the 303(d) List		
San Diego River (First downst	ream water body)		
Beneficial Uses	Agricultural Supply (AGR)		
	Industrial Service Supply (IND)		
	Contact Water Recreation (REC-1)		
	Non-contact Water Recreation (REC-2)		
	<ul> <li>Preservation of Biological Habitats of Special Signficance (BIOL)</li> </ul>		
	Warm Freshwater Habitat (WARM)		
	Wildlife Habitat (WILD)		
	<ul> <li>Preservation of Rare and Endangered Species (RARE)</li> </ul>		
303(d) listed Impairments	Benthic Community Effects, Cadmium, Indicator Bacteria, Nitrogen, Oxygen,		
	Dissolved, Phosphorus, Total Dissolved Solids, Toxicity		

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
<b>Resource Identified Adjacent to APE</b>	None
Resource Type	N/A

Historical Resources	
Resource Identified in APE	Facility; 1947 structural facility
<b>Potential Historical Resources</b>	Yes
Constrain Identified	

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
, ,	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-2
EP-BIO-6	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
Health and Safety/Hazards (HAZ)	MM-HR-1
EP-HAZ-3	MM-HR-2
Hydrology (HYD)	Noise (NOI)
EP-HYD-1	MM-NOI-1
Solid Waste (SW)	
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

# 1331 Washington (Drain ID: #OT03537) Facility Maintenance Plan

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Structure Name	1331 Washington
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of structure per as-built dimensions and Hydrology and
	Hydraulics Recommendation
Hydrology and Hydraulics	Recommend trimming the vegetation out of the concrete ditch, removing
Recommendation	palm trees from within the ditch, and removing the fallen trees. Backfill
	voids under concrete structure to ensure structural integrity or stability.
Maintenance Activities	Vegetation grubbing, trimming, and removal
	Invasive plant species treatment and removal
	Sediment removal
	Concrete repair
Maintenance Method	Excavation; mechanized equipment outside of facility
	Temporary access/loading
	Temporary staging
	Temporary diversions
	Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair	No
and Maintenance	
Culvert Maintenance	No
Post-Maintenance Erosion Control	Subject to further analysis to determine need and type
Recommendation	
Trash/Debris Fence Repair and	No
Maintenance	
Structure Type	Outlet
Existing Plans and/or As-Builts?	Yes; 6201-12-R
Structure Size	24 inches
Structure Detail	None
Maintenance Area Substrate	Concrete
Authorized Facility Maintenance	Length: 186 feet
Area	Width: 12 feet
Maintenance Quantities	To be determined at time of maintenance
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may
	also be modified as long as changes do not result in new significant
	environmental impacts.
Equipment	Bobcat/skid-steer, Gradall/excavator, loader, backhoe, dump truck, vactor,
	fuel-powered hand tools

#### 1331 Washington (Drain ID: #OT03537) Facility Maintenance Plan

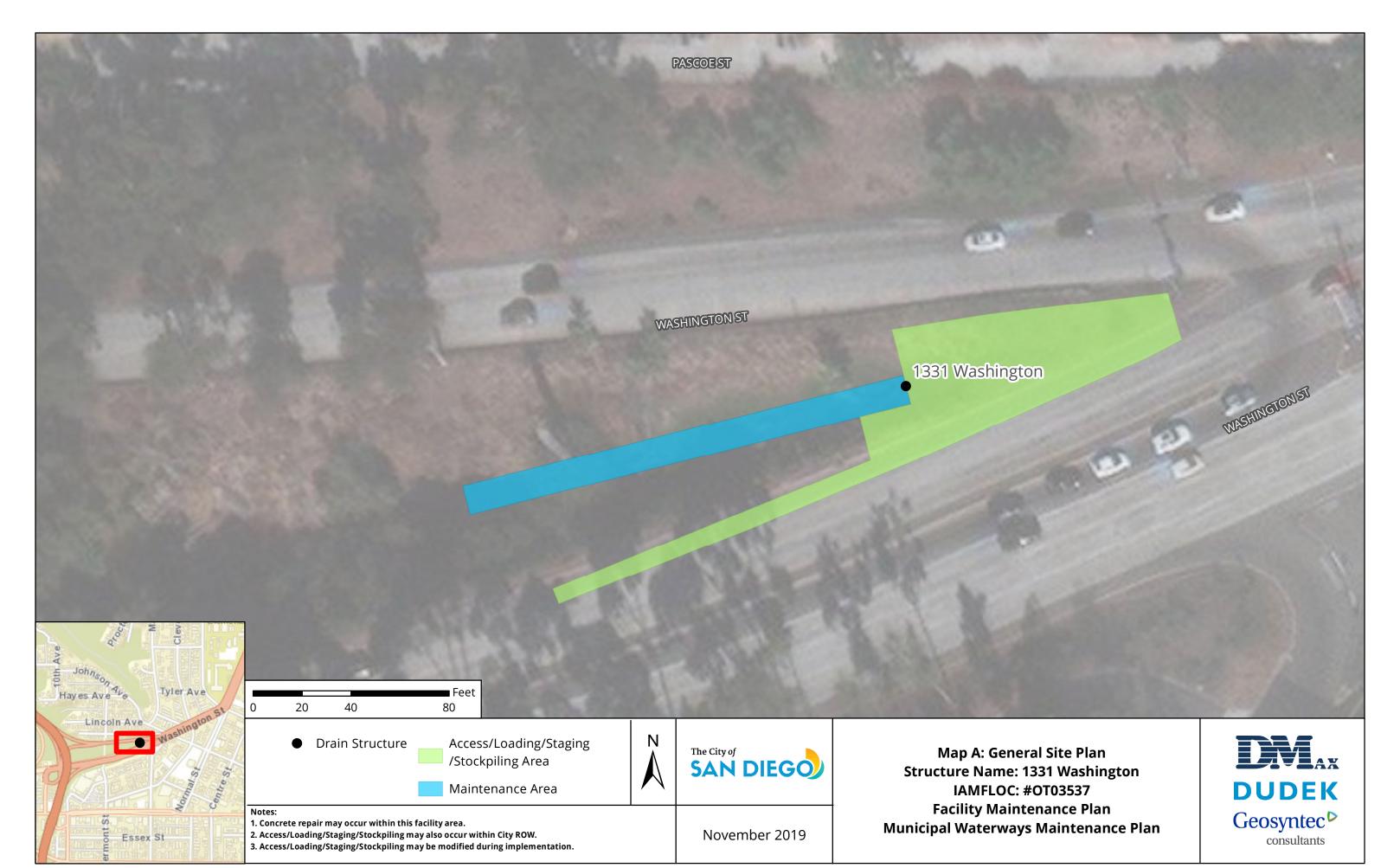
Schedule	Up to approximately 5 working days
Maintenance Crew	Approximately 8–10 people
Routine Maintenance Procedures	Conduct maintenance procedures as follows:
	1. Gradall/excavator at access/loading area scoops material and removes
	palms from facility and loads dump trucks
	2. Dump trucks haul material to legal disposal site
Traffic Control	Yes; coordinate with Caltrans and City of San Diego
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist shall
	conduct the following on site:
	1. Review sensitive biological/historical/water quality resources; if present
	flag/delineate
	2. Conduct appropriate training
	3. Review BMP installation
	4. If needed, review pre- and during-maintenance pumping procedures
	5. Conduct pre-maintenance site photo documentation
Biology	Suitable habitat for sensitive species <sup>1</sup> :
	1. Within maintenance area: Yes, limited suitable habitat present
	2. Adjacent to maintenance area: Yes
	Activities to be conducted under authority of a qualified biologist:
	1. Nesting bird surveys required within 72 hours of the start of vegetation
	clearing from February 1 through September 15
Flow Management	As needed:
	1. Vactor or pump standing water from facility
	2. Install temporary dry-weather flow-diversion berm(s) across facility
	(upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream,
	allow for distributed discharge and infiltration
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan
BMP Installation	See Water Pollution Control Plan
In-Stream Post-Maintenance	Subject to further analysis to determine need and type
<b>Erosion Control Recommendation</b>	

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<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors.

#### 1331 Washington (Drain ID: #OT03537) Facility Maintenance Plan

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:
	1. Demobilize equipment
	2. Restore temporary access/loading areas to pre-maintenance condition or as required by the WPCP for final stabilization
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project area(s), as needed
	4. Remove temporary BMPs
	5. Update maintenance record
	6. Conduct post-maintenance site photo documentation
Other Notes	None



## Facility Maintenance Plan

# Facility Name: 1277 Camino del Rio South

**IAMFLOC:** 

#IN10399



#### **Detail**

Watershed Management Area (WMA)	San Diego River
Hydrologic Subarea	907.11
Drainage Name	Mission Valley South
Tributaries (listed from downstream to upstream)	San Diego River Unnamed Tributary
Location Within Watershed	Draining to lower reach of San Diego River unnamed tributary, upstream of San Diego River unnamed tributary (Camino del Rio)
Location	Nearest Intersection: Camino del Rio S and Mission Center Road; access behind Chuze Fitness
Adjacent Land Use	Commercial, Office, Open Space, Single Family Residential, Transportation, Vacant
Coastal Zone	No
Structure Type	Inlet
Structure Detail	Culvert entrance
Pipe Diameter and Material	30 inches reinforced concrete pipe
Pipe Length	212 feet
IAMFLOC	#IN10399
SAP ID	SS-005783
Equipment ID	80038052
GIS ID	DS023923
Other Identifiers	Corner of 1277 Camino del Rio S (Chuze Fitness – Hotel Circle South)
As-built Drawing Number	12290-2-D



Figure 1: July 2017, photo of 1277 Camino del Rio South



Figure 2: Vicinity Map of 1277 Camino del Rio South

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance	Prior to 2016: Unknown April 2016: Vegetation trimming conducted
		April 2017: Minor maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	N/A	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Pro	evious Impacts	No

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility, recommended maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	The engineered concrete inlet is a concrete-drop-type structure with some sediment, vegetation, and debris accumulation. There is evidence of erosion on either side of the drop structure, with a major cavitation on the left side. It appears some of the runoff goes into the parking lot and not the drop structure.
Maintenance Recommendation	Recommend to remove sediment debris, and vegetation from drop structure. Further studies are recommended to investigate the cause of the erosion near the structure.
In-Stream Post-Maintenance Erosion Control Recommendation	No

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses and notes to illustrate special habitat and wildlife.

Facility Vegetation	Developed concrete-lined channel
<b>Adjacent Vegetation</b>	• Chaparral
	Coastal sage scrub
	Developed land
	Ornamental vegetation
Habitat and Wildlife	The structure area itself does not contain suitable vegetation for sensitive wildlife, however suitable habitat is present in the areas surrounding the facility for sensitive bird species, such as coastal California gnatcatcher
MHPA	The facility is adjacent to the Multi-Habitat Planning Area (MHPA). The nearest MHPA
	boundary is located approximately 20 feet south of the structure.
Mitigation Within Facility	None

#### **Water Quality Resource Summary**

San Diego River Watershed Management Area; Hydrologic Subarea 907.11

Adopted TMDLs	Bacteria Project I	
<b>Highest Priority Water</b>	Bacteria	
<b>Quality Condition</b>		
N/A		
Beneficial Uses		
303(d) listed Impairments	No impairments recorded on the 303(d) List	
San Diego River (First downst	ream water body)	
Beneficial Uses	Agricultural Supply (AGR)	
	Industrial Service Supply (IND)	
	Contact Water Recreation (REC-1)	
	Non-contact Water Recreation (REC-2)	
	<ul> <li>Preservation of Biological Habitats of Special Signficance (BIOL)</li> </ul>	
	Warm Freshwater Habitat (WARM)	
	Wildlife Habitat (WILD)	
	<ul> <li>Preservation of Rare and Endangered Species (RARE)</li> </ul>	
303(d) listed Impairments	Benthic Community Effects, Cadmium, Indicator Bacteria, Nitrogen, Oxygen,	
	Dissolved, Phosphorus, Total Dissolved Solids, Toxicity	

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

<b>Archeological and Tribal Resources</b>	
Resource Identified in APE	None
Resource Identified Adjacent to APE	P-37-011055
Resource Type	Prehistoric hearth and artifact scatter

Historical Resources	
Resource Identified in APE	Facility; c. 1966–1974 structural facility
Potential Historical Resources	Yes
Constrain Identified	

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-2
EP-BIO-6	MM-BIO-3
Health and Safety/Hazards (HAZ)	MM-BIO-4
EP-HAZ-3	MM-BIO-6
Land Use (LU)	MM-BIO-7
EP-LU-1	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
Solid Waste (SW)	MM-HR-1
EP-SW-2	MM-HR-2
EP-SW-3	Noise (NOI)
EP-SW-4	MM-NOI-1
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Structure Name	1277 Camino del Rio South	
Coastal Zone	No	
MWMP Proposed Maintenance	Maintenance of structure per as-built dimensions and Hydrology and	
	Hydraulics Recommendation	
Hydrology and Hydraulics	Recommend to remove sediment debris, and vegetation from drop	
Recommendation	structure. Further studies are recommended to investigate the cause of	
	the erosion near the structure.	
Maintenance Activities	Vegetation grubbing, trimming, and removal	
	Invasive plant species treatment and removal	
	Sediment removal	
	Concrete repair	
Maintenance Method	Excavation; mechanized equipment outside of facility	
	Temporary access/loading	
	Temporary staging	
	Temporary diversions	
	Hand removal of vegetation	
Bank Repair	No	
Concrete Repair	Yes; see Appendix A-4	
Concrete/Gabion Structure Repair	No	
and Maintenance		
Culvert Maintenance	Yes; see Appendix A-4	
Post-Maintenance Erosion Control	No	
Recommendation		
Trash/Debris Fence Repair and	Yes; see Appendix A-4	
Maintenance		
Structure Type	Inlet	
Existing Plans and/or As-Builts?	Yes; 12290-2-D	
Structure Size	30 inches	
Structure Detail	Culvert entrance	
Maintenance Area Substrate	Concrete	
Authorized Facility Maintenance	Length: 11 feet	
Area	Width: 13–22 feet	
Maintenance Quantities	To be determined at time of maintenance	
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,	
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may	
	also be modified as long as changes do not result in new significant	
	environmental impacts.	
Equipment	Bobcat/skid-steer, Gradall/excavator, loader, backhoe, dump truck, vactor,	
	fuel-powered hand tools	

Schedule	Up to approximately 2–3 working days	
Maintenance Crew	Approximately 8–10 people	
Routine Maintenance Procedures	Conduct maintenance procedures as follows:	
	1. Gradall/excavator or backhoe will be stationed above structure in	
	access/loading area	
	2. Gradall/excavator or backhoe will scoop material from structure and load	
	into dump trucks	
	3. Vactor stationed above structure in access/loading area assists removing material	
	4. Workers enter facility at access/loading area	
	5. Workers assist removing material using hand tools	
	6. Dump trucks and vactor haul material to legal disposal site	
Traffic Control	No	
	Additional Maintenance Information	
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist shall	
	conduct the following on site:	
	1. Review sensitive biological/historical/water quality resources; if present	
	flag/delineate	
	2. Conduct appropriate training	
	3. Review BMP installation	
	4. If needed, review pre- and during-maintenance pumping procedures	
	5. Conduct pre-maintenance site photo documentation	
Biology	Suitable habitat for sensitive species <sup>1</sup> :	
	1. Within maintenance area: No	
	2. Adjacent to maintenance area: Yes	
	Activities to be conducted under authority of a qualified biologist:	
	1. Nesting bird surveys required within 72 hours of the start of vegetation	
	clearing from February 1 through September 15	
Flow Management	As needed:	
Tiow management	1. Vactor or pump standing water from facility	
	2. Install temporary dry-weather flow-diversion berm(s) across facility	
	(upstream and downstream of maintenance area)	
	3. Position vactor/pump to capture any incoming or contained flows	
	4. If pumping water through temporary hose(s) to location(s) downstream,	
	allow for distributed discharge and infiltration	
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan	
BMP Installation	See Water Pollution Control Plan	
In-Stream Post-Maintenance	No	
	INU	
<b>Erosion Control Recommendation</b>		

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<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors.

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:
	1. Demobilize equipment
	2. Restore temporary access/loading areas to pre-maintenance condition or
	as required by the WPCP for final stabilization
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project
	area(s), as needed
	4. Remove temporary BMPs
	5. Update maintenance record
	6. Conduct post-maintenance site photo documentation
Other Notes	None



## Facility Maintenance Plan

# Facility Name: 5505 Friars Road

IAMFLOC:

#OT05573



#### **Detail**

Watershed Management Area (WMA)	San Diego River
Hydrologic Subarea	907.11
Drainage Name	Mission Valley North
Tributaries (listed from downstream to upstream)	No named tributaries
Location Within Watershed	Draining to San Diego River
Location	Nearest Intersection: Friars Road and Colusa Street
Adjacent Land Use	Commercial, Industrial, Multi-Family Residential, Office,
	Open Space, Parks, Public Facilities and Utilities,
	Transportation
Coastal Zone	No
Structure Type	Outlet
Structure Detail	Headwall
Pipe Diameter and Material	36 inches reinforced concrete pipe
Pipe Length	492 feet
IAMFLOC	#OT05573
SAP ID	SS-011513
Equipment ID	80038074
GIS ID	DS024014
Other Identifiers	Friars and Colusa
As-built Drawing Number	17923-7-D



Figure 1: July 2017, photo of 5505 Friars Road



Figure 2: Vicinity Map of 5505 Friars Road

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance Prior to 2011: Unknown	
	2015 and 2016: Emergency maintenance conducted	
Past Regulatory Approvals		
CEQA	NOE: Emergency Project No. 477023	
CDP	N/A	
SDP	Emergency Permit No. 1670498	
404	RGP 63 (SPL-2016-00039-MG)	
401	RGP 63 Verification No. R9-2016-0024:820968	
1602	1602 LSA Emergency Notification	
Mitigation for Previous Impacts Sefton Field/Pueblo Lot 1102 (0.11 acre)		

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility, recommended maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	The outlet is a headwall structure with 1 to 2 feet of sediment and debris deposition at the headwall. Previously placed riprap was not visible due to the sediment and debris deposition. It appears that the sediment deposition is also creating a plug downstream of the outlet. Large vegetation regrowth is occuring with in the previously maintained portion of the outlet.
Maintenance Recommendation	Recommend to remove sediment for an approximately 50 foot length to restore previous maintenance area and allow the outlet to drain
In-Stream Post-Maintenance Erosion Control Recommendation	As-built includes a riprap energy dissipator at the outlet. Additional analysis is needed to determine if the as-built condition reduces velocities below permissible levels.

### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses and notes to illustrate special habitat and wildlife.

Facility Vegetation	Disturbed wetland (Arundo-dominated)
Adjacent Vegetation	<ul> <li>Coastal sage scrub (Baccharis-dominated)</li> <li>Developed land</li> <li>Disturbed land</li> <li>Disturbed wetland</li> <li>Disturbed wetland (Arundo-dominated)</li> <li>Eucalyptus woodland</li> <li>Ornamental vegetation</li> <li>Riparian forest (southern riparian forest)</li> <li>Riparian forest (southern willow forest)</li> </ul>
Habitat and Wildlife	There is limited suitable habitat contained within the facility for wildlife. However, raptors could use the eucalyptus woodland or riparian forest present adjacent to the facility for nesting/roosting. In addition, other sensitive bird species (e.g., least Bell's vireo) could occur in riparian forest (southern willow forest) habitat adjacent to the channel.
МНРА	The facility is adjacent to the Multi-Habitat Planning Area (MHPA) which is located directly west and south of the structure.
Mitigation Within Facility	Downstream areas include past and potential future compensatory mitigation areas

#### **Water Quality Resource Summary**

San Diego River Watershed M	lanagement Area; Hydrologic Subarea 907.11
Adopted TMDLs	Bacteria Project I
<b>Highest Priority Water</b>	Bacteria
Quality Condition	
	<del></del>
N/A	
Beneficial Uses	
303(d) listed Impairments	No impairments recorded on the 303(d) List
San Diego River (First downst	ream water body)
Beneficial Uses	Agricultural Supply (AGR)
	Industrial Service Supply (IND)
	Contact Water Recreation (REC-1)
	Non-contact Water Recreation (REC-2)
	<ul> <li>Preservation of Biological Habitats of Special Signficance (BIOL)</li> </ul>
	Warm Freshwater Habitat (WARM)
	Wildlife Habitat (WILD)
	<ul> <li>Preservation of Rare and Endangered Species (RARE)</li> </ul>
303(d) listed Impairments	Benthic Community Effects, Cadmium, Indicator Bacteria, Nitrogen, Oxygen,
	Dissolved, Phosphorus, Total Dissolved Solids, Toxicity

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A
Historical Resources	
Historical Resources Resource Identified in APE	Facility; c. 1966–1972 structural facility
	Facility; c. 1966–1972 structural facility Yes

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-2
EP-BIO-6	MM-BIO-4
Health and Safety/Hazards (HAZ)	MM-BIO-5
EP-HAZ-3	MM-BIO-6
Hydrology (HYD)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HYD-1	MM-HR-1
Land Use (LU)	MM-HR-2
EP-LU-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Structure Name	5505 Friars Road
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of structure per as-built dimensions and Hydrology and
	Hydraulics Recommendation
Hydrology and Hydraulics	Recommend to remove sediment for an approximately 50 foot length to
Recommendation	restore previous maintenance area and allow the outlet to drain
Maintenance Activities	Vegetation grubbing, trimming, and removal
	Invasive plant species treatment and removal
	Sediment removal
	Concrete repair
Maintenance Method	Excavation; mechanized equipment in facility
	Temporary access/loading
	Temporary staging
	Temporary diversions
	Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair	No
and Maintenance	
Culvert Maintenance	Yes; see Appendix A-4
Post-Maintenance Erosion Control	Subject to further analysis to determine need and type
Recommendation	
Trash/Debris Fence Repair and	No
Maintenance	
Structure Type	Outlet
Existing Plans and/or As-Builts?	Yes; 17923-7-D
Structure Size	36 inches
Structure Detail	Headwall
Maintenance Area Substrate	Earthen
Authorized Facility Maintenance	Length: 50 feet
Area	Width: 17 feet
Maintenance Quantities	To be determined at time of maintenance
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may
	also be modified as long as changes do not result in new significant
	environmental impacts.
Equipment	Bulldozer/track-steer, Gradall/excavator, dump truck, trash pump, vactor
Schedule	Up to approximately 5 working days
Maintenance Crew	Approximately 10–15 people

1. Bulldozer/track-steer enters facility at access/loading area 2. Bulldozer/track-steer pushes material to Gradall/excavator at access/loading area 3. Gradall/excavator scoops material from facility and loads dump trucks 4. Dump trucks haul material to legal disposal site  No  Additional Maintenance Information  Pre-Maintenance Meeting  Prior to the start of any maintenance activity, a qualified specialist shall conduct the following on site: 1. Review sensitive biological/historical/water quality resources; if present flag/delineate 2. Conduct appropriate training 3. Review BMP installation 4. If needed, review pre- and during-maintenance pumping procedures 5. Conduct pre-maintenance site photo documentation  Biology  Suitable habitat for sensitive species 1: 1. Within maintenance area: Yes, limited suitable habitat present 2. Adjacent to maintenance area: Yes, limited suitable habitat present 2. Adjacent to maintenance area: Yes Activities to be conducted under authority of a qualified biologist: 1. Nesting bird surveys required within 72 hours of the start of vegetation clearing from February 1 through September 15  Flow Management  As needed: 1. Vactor or pump standing water from facility 2. Install temporary dry-weather flow-diversion berm(s) across facility (upstream and downstream of maintenance area) 3. Position vactor/pump to capture any incoming or contained flows 4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration	Routine Maintenance Procedures	Conduct maintenance procedures as follows:
2. Bulldozer/track-steer pushes material to Gradall/excavator at access/loading area 3. Gradall/excavator scoops material from facility and loads dump trucks 4. Dump trucks haul material to legal disposal site  No  Additional Maintenance Information  Pre-Maintenance Meeting  Prior to the start of any maintenance activity, a qualified specialist shall conduct the following on site: 1. Review sensitive biological/historical/water quality resources; if present flag/delineate 2. Conduct appropriate training 3. Review BMP installation 4. If needed, review pre- and during-maintenance pumping procedures 5. Conduct pre-maintenance site photo documentation  Biology  Suitable habitat for sensitive species¹: 1. Within maintenance area: Yes, limited suitable habitat present 2. Adjacent to maintenance area: Yes Activities to be conducted under authority of a qualified biologist: 1. Nesting bird surveys required within 72 hours of the start of vegetation clearing from February 1 through September 15  Flow Management  As needed: 1. Vactor or pump standing water from facility 2. Install temporary dry-weather flow-diversion berm(s) across facility (upstream and downstream of maintenance area) 3. Position vactor/pump to capture any incoming or contained flows 4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration	Routine Maintenance Procedures	·
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conduct the following on site:  1. Review sensitive biological/historical/water quality resources; if present flag/delineate  2. Conduct appropriate training  3. Review BMP installation  4. If needed, review pre- and during-maintenance pumping procedures  5. Conduct pre-maintenance site photo documentation  Biology  Suitable habitat for sensitive species <sup>1</sup> :  1. Within maintenance area: Yes, limited suitable habitat present  2. Adjacent to maintenance area: Yes     Activities to be conducted under authority of a qualified biologist:  1. Nesting bird surveys required within 72 hours of the start of vegetation clearing from February 1 through September 15  Flow Management  As needed:  1. Vactor or pump standing water from facility  2. Install temporary dry-weather flow-diversion berm(s) across facility (upstream and downstream of maintenance area)  3. Position vactor/pump to capture any incoming or contained flows  4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration		Additional Maintenance Information
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flag/delineate 2. Conduct appropriate training 3. Review BMP installation 4. If needed, review pre- and during-maintenance pumping procedures 5. Conduct pre-maintenance site photo documentation  Biology  Suitable habitat for sensitive species¹: 1. Within maintenance area: Yes, limited suitable habitat present 2. Adjacent to maintenance area: Yes		conduct the following on site:
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2. Adjacent to maintenance area: Yes Activities to be conducted under authority of a qualified biologist: 1. Nesting bird surveys required within 72 hours of the start of vegetation clearing from February 1 through September 15  As needed: 1. Vactor or pump standing water from facility 2. Install temporary dry-weather flow-diversion berm(s) across facility (upstream and downstream of maintenance area) 3. Position vactor/pump to capture any incoming or contained flows 4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration		·
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<ol> <li>Install temporary dry-weather flow-diversion berm(s) across facility (upstream and downstream of maintenance area)</li> <li>Position vactor/pump to capture any incoming or contained flows</li> <li>If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration</li> </ol>	Flow Management	
(upstream and downstream of maintenance area) 3. Position vactor/pump to capture any incoming or contained flows 4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration		, , ,
<ul><li>3. Position vactor/pump to capture any incoming or contained flows</li><li>4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration</li></ul>		
4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration		· ·
allow for distributed discharge and infiltration		
Downstroam Consitive Waters Vos: implement PMPs per Water Pollution Control Plan		
res, implement bivies per water control rian	<b>Downstream Sensitive Waters</b>	Yes; implement BMPs per Water Pollution Control Plan
BMP Installation See Water Pollution Control Plan	BMP Installation	See Water Pollution Control Plan
In-Stream Post-Maintenance As-built includes a riprap energy dissipator at the outlet. Additional analysis	In-Stream Post-Maintenance	As-built includes a riprap energy dissipator at the outlet. Additional analysis
<b>Erosion Control Recommendation</b> is needed to determine if the as-built condition reduces velocities below	<b>Erosion Control Recommendation</b>	is needed to determine if the as-built condition reduces velocities below
permissible levels.		permissible levels.

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<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors.

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:
	1. Demobilize equipment
	2. Restore temporary access/loading areas to pre-maintenance condition or as required by the WPCP for final stabilization
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project area(s), as needed
	4. Remove temporary BMPs
	5. Update maintenance record
	6. Conduct post-maintenance site photo documentation
Other Notes	None



## Facility Maintenance Plan

# Facility Name: 1660 Hotel Circle North

**IAMFLOC:** 

#OT03321



#### **Detail**

Watershed Management Area (WMA)	San Diego River
Hydrologic Subarea	907.11
Drainage Name	Mission Valley South
Tributaries (listed from downstream to upstream)	No named tributaries
Location Within Watershed	Draining to San Diego River
Location	Nearest Intersection: Hotel Circle North and Fashion Valley Road
Adjacent Land Use	Commercial, Multi-Family Residential, Office, Parks,
	Transportation, Vacant
Coastal Zone	No
Structure Type	Outlet
Structure Detail	Headwall
Pipe Diameter and Material	54 inches reinforced concrete arch culvert
Pipe Length	152 feet
IAMFLOC	#OT03321
SAP ID	SS-013792 (2)
Equipment ID	80027000
GIS ID	DS024580
Other Identifiers	None
As-built Drawing Number	12997-1-D



Figure 1: July 2017, photo of 1660 Hotel Circle North



Figure 2: Vicinity Map of 1660 Hotel Circle North

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	Prior to 2015: Unknown  November 2016 and November 2017: Minor emergency maintenance conducted	
Past Regulatory A	Approvals	
CEQA	NOE: Emergency Project No. 475704	
CDP	N/A	
SDP	None	
404	File No. SPL-2016-00121-MG (No Permit Required)	
401	Concurrence in 2/2016 that no permit required; no file #	
1602	Courtesy notification submitted 03/2016	
Mitigation for Previous Impacts No		

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility, recommended maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	Maintenance recently performed at this location, so outlet area was clear. Previously the area had 5 to 10 feet of sediment deposition and vegetation growth.
Maintenance Recommendation	Recommend to keep the outlet clear as sediment and vegetation build up
In-Stream Post-Maintenance Erosion Control Recommendation	Subject to further analysis to determine need and type

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses and notes to illustrate special habitat and wildlife.

Facility Vegetation	Natural flood channel
Adjacent Vegetation	<ul> <li>Developed land</li> <li>Disturbed wetland</li> <li>Eucalyptus woodland</li> <li>Ornamental vegetation</li> <li>Riparian forest (southern willow forest)</li> </ul>
Habitat and Wildlife	There is limited suitable habitat contained within the facility for wildlife. However, raptors could use the tall ornamental vegetation or riparian forest present adjacent to the facility for nesting/roosting. In addition, other sensitive bird species (e.g., least Bell's vireo) could occur in riparian forest (southern willow forest) habitat adjacent to the channel.
МНРА	The facility is not within or adjacent to the Multi-Habitat Planning Area (MHPA). The nearest MHPA boundary is located approximately 365 feet north of the structure.
Mitigation Within Facility	None

#### **Water Quality Resource Summary**

Adopted TMDLs	Management Area; Hydrologic Subarea 907.11  Bacteria Project I	
Highest Priority Water	Bacteria	
Quality Condition	Bucceria	
N/A		
Beneficial Uses		
303(d) listed Impairments	No impairments recorded on the 303(d) List	
San Diego River (First downst	ream water body)	
Beneficial Uses • Agricultural Supply (AGR)		
	Industrial Service Supply (IND)	
	Contact Water Recreation (REC-1)	
	Non-contact Water Recreation (REC-2)	
	<ul> <li>Preservation of Biological Habitats of Special Signficance (BIOL)</li> </ul>	
	Warm Freshwater Habitat (WARM)	
	Wildlife Habitat (WILD)	
	Preservation of Rare and Endangered Species (RARE)	
303(d) listed Impairments	Benthic Community Effects, Cadmium, Indicator Bacteria, Nitrogen, Oxygen,	
•	Dissolved, Phosphorus, Total Dissolved Solids, Toxicity	

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources	
Resource Identified in APE	Facility; 1969 structural facility
Potential Historical Resources	Yes
Constrain Identified	

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	MM-BIO-3
EP-HAZ-3	MM-BIO-4
Hydrology (HYD)	MM-BIO-5
EP-HYD-1	MM-BIO-6
Solid Waste (SW)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-SW-2	MM-HR-1
EP-SW-3	MM-HR-2
EP-SW-4	Noise (NOI)
EP-SW-5	MM-NOI-1
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

## 1660 Hotel Circle North (Drain ID: #OT03321) Facility Maintenance Plan

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Structure Name	1660 Hotel Circle North
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of structure per as-built dimensions and Hydrology and
	Hydraulics Recommendation
Hydrology and Hydraulics	Recommend to keep the outlet clear as sediment and vegetation build up
Recommendation	
Maintenance Activities	Vegetation grubbing, trimming, and removal
	Invasive plant species treatment and removal
	Sediment removal
	Concrete repair
Maintenance Method	Excavation; mechanized equipment inside and outside of facility
	Temporary access/loading
	Temporary staging
	Temporary diversions
	Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair	No
and Maintenance	
Culvert Maintenance	Yes; see Appendix A-4
Post-Maintenance Erosion Control	Subject to further analysis to determine need and type
Recommendation	
Trash/Debris Fence Repair and	No
Maintenance	
Structure Type	Outlet
Existing Plans and/or As-Builts?	Yes; 12997-1-D
Structure Size	54 inches & Arch Culvert
Structure Detail	Headwall
Maintenance Area Substrate	Earthen
Authorized Facility Maintenance	Length: 46 feet
Area	Width: 16–23 feet
Maintenance Quantities	To be determined at time of maintenance
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may
	also be modified as long as changes do not result in new significant
	environmental impacts.
Equipment	Bulldozer/track-steer, Baker tank, Gradall/excavator, dump truck, vactor
Schedule	Up to approximately 15–20 working days
Maintenance Crew	Approximately 8–10 people

## 1660 Hotel Circle North (Drain ID: #OT03321) Facility Maintenance Plan

Routine Maintenance Procedures	Conduct maintenance procedures as follows:
	1. Bulldozer/track-steer enters or is lowered into facility at access/loading
	area
	2. Bulldozer/track-steer push material to access/loading area
	3. Gradall/excavator at access/loading area scoops material from facility
	and loads dump trucks
	4. Dump trucks haul material to legal disposal site
	5. Use Baker tank, as needed, for dewatering
Traffic Control	No
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist shall
-	conduct the following on site:
	1. Review sensitive biological/historical/water quality resources; if present
	flag/delineate
	2. Conduct appropriate training
	3. Review BMP installation
	4. If needed, review pre- and during-maintenance pumping procedures
	5. Conduct pre-maintenance site photo documentation
Biology	Suitable habitat for sensitive species <sup>1</sup> :
	1. Within maintenance area: Yes, limited suitable habitat present
	2. Adjacent to maintenance area: Yes
	Activities to be conducted under authority of a qualified biologist:
	1. Nesting bird surveys required within 72 hours of the start of vegetation
	clearing from February 1 through September 15
Flow Management	As needed:
	1. Vactor or pump standing water from facility
	2. Install temporary dry-weather flow-diversion berm(s) across facility
	(upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream,
	allow for distributed discharge and infiltration
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan
BMP Installation	See Water Pollution Control Plan
In-Stream Post-Maintenance	Subject to further analysis to determine need and type
Erosion Control Recommendation	, , , , , , , , , , , , , , , , , , , ,

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<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors.

#### 1660 Hotel Circle North (Drain ID: #OT03321) Facility Maintenance Plan

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:
	1. Demobilize equipment
	2. Restore temporary access/loading areas to pre-maintenance condition or
	as required by the WPCP for final stabilization
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project
	area(s), as needed
	4. Remove temporary BMPs
	5. Update maintenance record
	6. Conduct post-maintenance site photo documentation
Other Notes	None



#### Facility Maintenance Plan

## Facility Name: 901 Hotel Circle South

IAMFLOC: #HW02440



#### **Detail**

Watershed Management Area (WMA)	San Diego River
Hydrologic Subarea	907.11
Drainage Name	Mission Valley South
Tributaries (listed from downstream to upstream)	San Diego River Unnamed Tributary
Location Within Watershed	Draining to San Diego River
Location	Nearest Intersection: Hotel Circle S and Bachman Place
Adjacent Land Use	Commercial, Open Space, Single Family Residential,
	Transportation, Vacant
Coastal Zone	No
Structure Type	Inlet
Structure Detail	Culvert entrance, headwall, and debris fences
Pipe Diameter and Material	42 inches reinforced concrete pipe
Pipe Length	128 feet
IAMFLOC	#HW02440
SAP ID	SS-008101
Equipment ID	80032163
GIS ID	DS025050
Other Identifiers	98S 756 E. Court Way and Hawk Street (Frogs – Hotel Circle South)
As-built Drawing Number	16423-1-D



Figure 1: July 2017, photo of 901 Hotel Circle South



Figure 2: Vicinity Map of 901 Hotel Circle South



Figure 3: July 2017. Photo of 901 Hotel Circle South debris fence

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance	Prior to 2015: Unknown
•		2016: Emergency maintenance
		June and November 2017: Minor maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	N/A	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Pro	evious Impacts	No

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility, recommended maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	The inlet is a headwall structure with sediment and debris deposition near the headwall and behind the debris fences. The concrete channel behind the debris fence is missing large section of concrete/gunite from the channel bottom. The downstream debris fence has a gap at the bottom and looks to be in need of repairs.
Maintenance Recommendation	Recommended to remove sediment and debris from the structure as well as repair the missing concrete/gunite and the debris fence
In-Stream Post-Maintenance Erosion Control Recommendation	No

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Developed concrete-lined channel
Adjacent Vegetation	<ul> <li>Chaparral</li> <li>Coastal sage scrub</li> <li>Developed land</li> <li>Disturbed land</li> <li>Eucalyptus woodland</li> <li>Natural flood channel</li> <li>Ornamental vegetation</li> </ul>
Habitat and Wildlife	There is limited suitable habitat contained within the facility for wildlife. However, raptors could use the eucalyptus woodland present adjacent to the facility for nesting/roosting. In addition, other sensitive bird species (e.g., coastal California gnatcatcher) could occur in coastal sage scrub habitat adjacent to the structure.
МНРА	The facility is partially within the Multi-Habitat Planning Area (MHPA) which extends south of the structure.
Mitigation Within Facility	None

#### **Water Quality Resource Summary**

San Diego River Watershed	Management Area: H	vdrologic Subarea 907.11

|--|

**Highest Priority Water** 

**Quality Condition** 

Bacteria

#### San Diego River Unnamed Tributary

#### Beneficial Uses • Ag

- Agricultural Supply (AGR)
- Industrial Service Supply (IND)
- Contact Water Recreation (REC-1)
- Non-contact Water Recreation (REC-2)
- Warm Freshwater Habitat (WARM)
- Wildlife Habitat (WILD)
- Preservation of Rare and Endangered Species (RARE)

**303(d) listed Impairments** No impairments recorded on the 303(d) List

#### San Diego River (First downstream water body)

# Agricultural Supply (AGR) Industrial Service Supply (IND) Contact Water Recreation (REC-1) Non-contact Water Recreation (REC-2) Preservation of Biological Habitats of Special Signficance (BIOL) Warm Freshwater Habitat (WARM) Wildlife Habitat (WILD) Preservation of Rare and Endangered Species (RARE) 303(d) listed Impairments Benthic Community Effects, Cadmium, Indicator Bacteria, Nitrogen, Oxygen,

Benthic Community Effects, Cadmium, Indicator Bacteria, Nitrogen, Oxyger Dissolved, Phosphorus, Total Dissolved Solids, Toxicity

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	P-37-011055
Resource Type	Prehistoric hearth and artifact scatter

Historical Resources		
Resource Identified in APE	None	
<b>Potential Historical Resources</b>	None	
Constrain Identified		

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	MM-BIO-3
EP-HAZ-3	MM-BIO-4
Land Use (LU)	MM-BIO-6
EP-LU-1	MM-BIO-7
Solid Waste (SW)	Noise (NOI)
EP-SW-2	MM-NOI-1
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

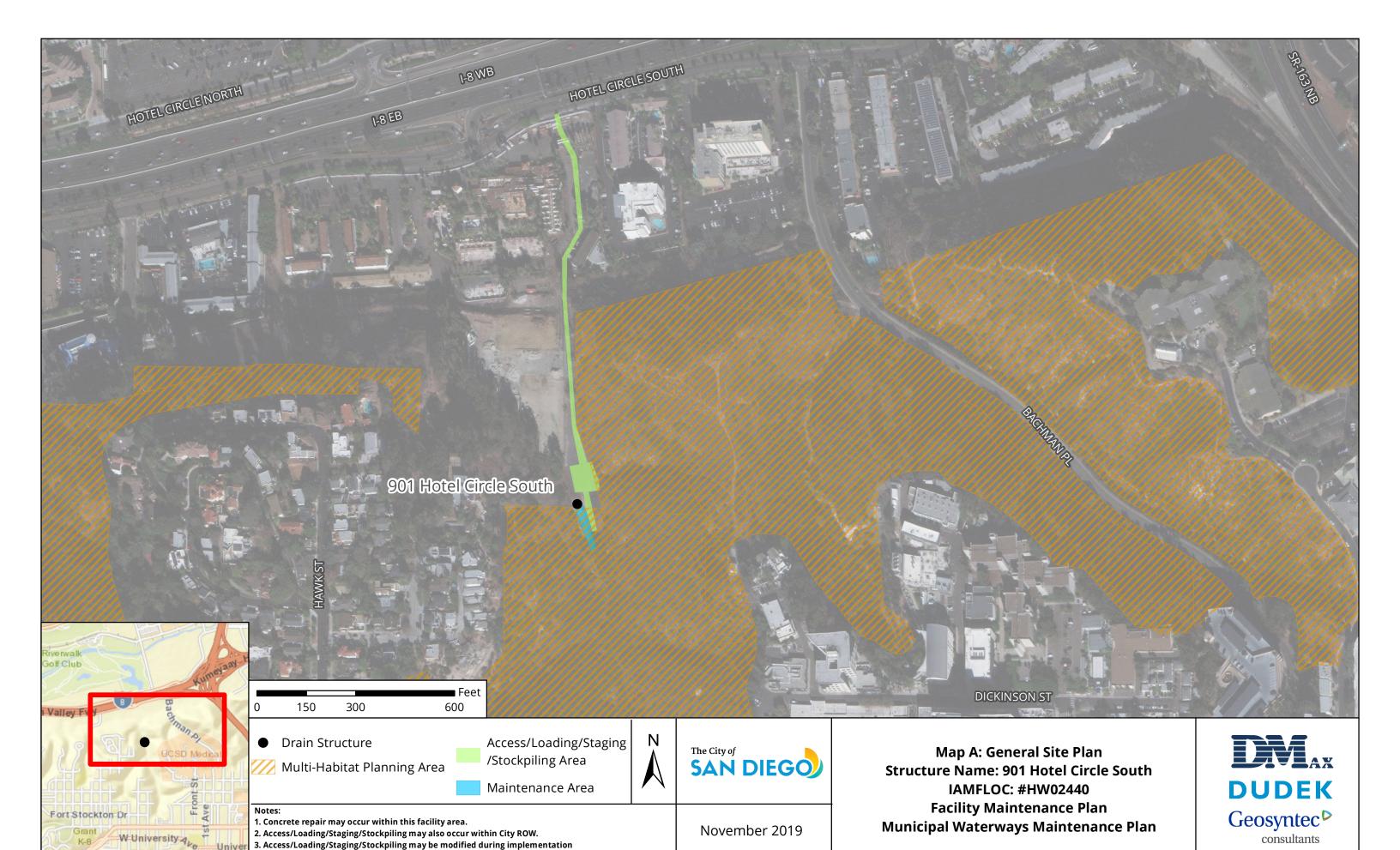
Structure Name	901 Hotel Circle South
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of structure per as-built dimensions and Hydrology and
	Hydraulics Recommendation
Hydrology and Hydraulics	Recommended to remove sediment and debris from the structure as well
Recommendation	as repair the missing concrete/gunite and the debris fence
Maintenance Activities	Vegetation grubbing, trimming, and removal
	Invasive plant species treatment and removal
	Sediment removal
	Concrete repair
	Structure/Trash fence repair
Maintenance Method	Excavation; mechanized equipment in and outside of facility
	Temporary access/loading
	Temporary staging
	Temporary diversions
	Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair	No
and Maintenance	
Culvert Maintenance	No
Post-Maintenance Erosion Control	No
Recommendation	
Trash/Debris Fence Repair and	Yes; see Appendix A-4
Maintenance	
Structure Type	Inlet
Existing Plans and/or As-Builts?	Yes; 16423-1-D
Structure Size	42 inches
Structure Detail	Culvert entrance, headwall, and debris fences
Maintenance Area Substrate	Concrete
Authorized Facility Maintenance	Length: 149 feet
Area	Width: 16-36 feet
Maintenance Quantities	To be determined at time of maintenance
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may
	also be modified as long as changes do not result in new significant
	environmental impacts.
Equipment	Gradall/excavator, dump truck, vactor
Schedule	Up to approximately 1 working day

Maintenance Crew	Approximately 6–10 people
Routine Maintenance Procedures	Conduct maintenance procedures as follows:
	1. Gradall/excavator is stationed above the channel bank in access/loading
	area
	2. Gradall/excavator scoops material from facility and loads dump trucks
	3. Dump trucks haul material to legal disposal site
Traffic Control	No
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist shall
	conduct the following on site:
	1. Review sensitive biological/historical/water quality resources; if present
	flag/delineate
	2. Conduct appropriate training
	3. Review BMP installation
	4. If needed, review pre- and during-maintenance pumping procedures
	5. Conduct pre-maintenance site photo documentation
Biology	Suitable habitat for sensitive species <sup>1</sup> :
	1. Within maintenance area: Yes, limited suitable habitat present
	2. Adjacent to maintenance area: Yes
	Activities to be conducted under authority of a qualified biologist:
	1. Nesting bird surveys required within 72 hours of the start of vegetation
	clearing from February 1 through September 15
Flow Management	As needed:
_	1. Vactor or pump standing water from facility
	2. Install temporary dry-weather flow-diversion berm(s) across facility
	(upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream,
	allow for distributed discharge and infiltration
<b>Downstream Sensitive Waters</b>	Yes; implement BMPs per Water Pollution Control Plan
BMP Installation	See Water Pollution Control Plan
In-Stream Post-Maintenance	No
<b>Erosion Control Recommendation</b>	

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<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors.

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:
	1. Demobilize equipment
	2. Restore temporary access/loading areas to pre-maintenance condition or
	as required by the WPCP for final stabilization
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project
	area(s), as needed
	4. Remove temporary BMPs
	5. Update maintenance record
	6. Conduct post-maintenance site photo documentation
Other Notes	None



#### Facility Maintenance Plan

## Facility Name: 2087 Hotel Circle South

IAMFLOC: #HW02437



#### **Detail**

Watershed Management Area (WMA)	San Diego River
Hydrologic Subarea	907.11
Drainage Name	Mission Valley South
Tributaries (listed from downstream to upstream)	San Diego River unnamed tributary
Location Within Watershed	Draining to upper reach of San Diego River unnamed tributary
Location	Nearest Intersection: Hotel Circle South and I-8 on ramp
Adjacent Land Use	Commercial, Open Space, Single Family Residential, Transportation, Vacant
Coastal Zone	No
Structure Type	Inlet
Structure Detail	Culvert entrance
Pipe Diameter and Material	30 inches reinforced concrete pipe
Pipe Length	162 feet
IAMFLOC	#HW02437
SAP ID	SS-013389
Equipment ID	80032160
GIS ID	DS024954
Other Identifiers	1,690 feet from Fort Stockton on Allen Road (Extended Stay – 2087 Hotel Circle South)
As-built Drawing Number	20299-2-D



Figure 1: July 2017, photo of 2087 Hotel Circle South



Figure 2: Vicinity Map of 2087 Hotel Circle South



Figure 3: July 2017. Photo of 2087 Hotel Circle South debris fence

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Maintenance	Prior to 2011: Unknown
	March 2016: Emergency maintenance conducted
	January 2017: Minor maintenance conducted

#### **Past Regulatory Approvals**

CEQA NOE: Emergency Project No. 481884

CDP N/A

SDP Emergency Project No. 1688294

**404** RGP 63 USACE File #SPL-2016-00212-WSZ

**401** Emergency notification 03/2016 (no file number assigned)

**1602** Emergency notification 03/2016 (no file number assigned)

Mitigation for Previous Impacts No

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility, recommended maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	The inlet is a headwall structure with the upstream conveyance broken into three sections by debris fences. The section immediately upstream of the inlet is clean with very little debris. The second section has about 2 feet of sediment and debris built up behind the debris fence. The third section has approximately 1 foot of sediment and debris built up behind the debris fence.
Maintenance Recommendation	Recommend to remove sediment and debris built up upstream of the debris fences
In-Stream Post-Maintenance Erosion Control Recommendation	No

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Developed concrete-lined channel
	Natural flood channel
<b>Adjacent Vegetation</b>	Chaparral
	Coastal sage scrub
	Developed concrete-lined channel
	Developed land
	Disturbed land
	Eucalyptus woodland
	Natural flood channel
	Ornamental vegetation
	Riparian forest (coast live oak)
	Riparian forest (southern riparian forest)
Habitat and Wildlife	There is limited suitable habitat contained within the facility for wildlife. However, raptors could use the eucalyptus woodland present adjacent to the facility for nesting/roosting. In addition, other sensitive bird species (e.g., coastal California gnatcatcher) could occur in coastal sage scrub habitat adjacent to the structure.
MHPA	The structure is located entirely within the Multi-Habitat Planning Area (MHPA)
Mitigation Within Facility	None

#### **Water Quality Resource Summary**

Juli Diego Miver viater Jirea Mariagerilette / Mea, Fryar Glogie Japarea Jozz II	San Diego River W	/atershed Managemen	t Area; Hydrolog	ic Subarea 907.11
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**Adopted TMDLs** Bacteria Project I **Highest Priority Water** Bacteria

**Quality Condition** 

#### San Diego River Unnamed Tributary

#### **Beneficial Uses** Agricultural Supply (AGR)

- Industrial Service Supply (IND)
- Contact Water Recreation (REC-1)
- Non-contact Water Recreation (REC-2)
- Warm Freshwater Habitat (WARM)
- Wildlife Habitat (WILD)
- Preservation of Rare and Endangered Species (RARE)

303(d) listed Impairments No impairments recorded on the 303(d) List

#### San Diego River (First downstream water body)

#### Agricultural Supply (AGR) **Beneficial Uses** Industrial Service Supply (IND) Contact Water Recreation (REC-1) Non-contact Water Recreation (REC-2) Preservation of Biological Habitats of Special Signficance (BIOL) Warm Freshwater Habitat (WARM) Wildlife Habitat (WILD) Preservation of Rare and Endangered Species (RARE) 303(d) listed Impairments Benthic Community Effects, Cadmium, Indicator Bacteria, Nitrogen, Oxygen,

Dissolved, Phosphorus, Total Dissolved Solids, Toxicity

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources		
Resource Identified in APE	None	
Resource Identified Adjacent to APE	None	
Resource Type	N/A	

Historical Resources		
Resource Identified in APE	None	
Potential Historical Resources Constrain Identified	None	

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-2
EP-BIO-6	MM-BIO-3
Health and Safety/Hazards (HAZ)	MM-BIO-4
EP-HAZ-3	MM-BIO-6
Land Use (LU)	MM-BIO-7
EP-LU-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Structure Name	2087 Hotel Circle South	
Coastal Zone	No	
MWMP Proposed Maintenance	Maintenance of structure per as-built dimensions and Hydrology and	
	Hydraulics Recommendation	
Hydrology and Hydraulics	Recommend to remove sediment and debris built up upstream of the	
Recommendation	debris fences	
Maintenance Activities	Vegetation grubbing, trimming, and removal	
	Invasive plant species treatment and removal	
	Sediment removal	
	Concrete repair	
Maintenance Method	Excavation; mechanized equipment in facility	
	Temporary access/loading	
	Temporary staging	
	Temporary diversions	
	Hand removal of vegetation	
Bank Repair	No	
Concrete Repair	Yes; see Appendix A-4	
Concrete/Gabion Structure Repair	No	
and Maintenance		
Culvert Maintenance	Yes; see Appendix A-4	
Post-Maintenance Erosion Control	No	
Recommendation		
Trash/Debris Fence Repair and	Yes; see Appendix A-4	
Maintenance		
Structure Type	Inlet	
Existing Plans and/or As-Builts?	Yes; 20299-2-D	
Structure Size	30 inches	
Structure Detail	Culvert entrance	
Maintenance Area Substrate	Earthen and concrete	
<b>Authorized Facility Maintenance</b>	Length: 120 feet	
Area	Width: 9–13 feet	
Maintenance Quantities	To be determined at time of maintenance	
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,	
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may	
	also be modified as long as changes do not result in new significant	
	environmental impacts.	
Equipment	Bulldozer/track-steer, loader, mini-excavator, dump truck, vactor	
Schedule	Up to approximately 20 working days	
Maintenance Crew	Approximately 10–15 people	

Routine Maintenance Procedures	Conduct maintenance procedures as follows:
	1. Bullozer/track-steer and mini-excavator enter facility at access/loading
	area
	2. Bulldozer/track-steer, and mini-excavator push/transport material to to
	access/loading area
	3. Loader at access/loading area scoops material and loads dump trucks
	4. Dump trucks haul material to legal disposal site
Traffic Control	No
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist shall
	conduct the following on site:
	1. Review sensitive biological/historical/water quality resources; if present
	flag/delineate
	2. Conduct appropriate training
	3. Review BMP installation
	4. If needed, review pre- and during-maintenance pumping procedures
	5. Conduct pre-maintenance site photo documentation
Biology	Suitable habitat for sensitive species <sup>1</sup> :
	1. Within maintenance area: Yes, limited suitable habitat present
	2. Adjacent to maintenance area: Yes
	Activities to be conducted under authority of a qualified biologist:
	1. Nesting bird surveys required within 72 hours of the start of vegetation
	clearing from February 1 through September 15
Flow Management	As needed:
3	1. Vactor or pump standing water from facility
	2. Install temporary dry-weather flow-diversion berm(s) across facility
	(upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream,
	allow for distributed discharge and infiltration
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan
BMP Installation	See Water Pollution Control Plan
In-Stream Post-Maintenance	No
<b>Erosion Control Recommendation</b>	
	I .

<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors.

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:	
	<ol> <li>Demobilize equipment</li> <li>Restore temporary access/loading areas to pre-maintenance condition o as required by the WPCP for final stabilization</li> </ol>	
	area(s), as needed	
	4. Remove temporary BMPs	
	5. Update maintenance record	
	6. Conduct post-maintenance site photo documentation	
Other Notes	None	



Mission Hills

#### Facility Maintenance Plan

## Facility Name: 3644 Roselawn

IAMFLOC: #OT03694



#### **Detail**

Watershed Management Area (WMA)	San Diego Bay
Hydrologic Subarea	908.22
Drainage Name	Chollas
Tributaries (listed from downstream to upstream)	Auburn Creek
Location Within Watershed	Draining to Auburn Creek
Location	Nearest Intersection: Roselawn Avenue and Euclid Avenue; access through 3634 Roselawn Avenue
Adjacent Land Use	Commercial, Industrial, Single Family Residential,
	Transportation, Vacant
Coastal Zone	No
Structure Type	Outlet
Structure Detail	Pipe and headwall
Pipe Diameter and Material	18 inches reinforced concrete pipe
Pipe Length	80 feet
IAMFLOC	#OT03694
SAP ID	SS-023610
Equipment ID	80027375
GIS ID	DS027991
Other Identifiers	None
As-built Drawing Number	17423-D



Figure 1: July 2017, photo of 3644 Roselawn



Figure 2: Vicinity Map of 3644 Roselawn

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance	Prior to 2011: Unknown September 2016: Minor maintenance conducted
	<u> </u>	September 2010. Millor maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	N/A	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Pre	evious Impacts	No

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility, recommended maintenance, and the potential for erosion following maintenance.

<b>Current Conditions Affecting</b>	Maintenance recently performed at this location so outfall area was clear.	
Facility Capacity	Minor sediment build up was noted near the outlet.	
<b>Maintenance Recommendation</b>	Recommend vegetation trimming and sediment removal to continue to allow	
	outlet to drain	
In-Stream Post-Maintenance	As-built includes a riprap energy dissipator at the outlet. Additional analysis is	
Erosion Control	needed to determine if the as-built condition reduces velocities below	
Recommendation	permissible levels.	

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Ornamental vegetation
<b>Adjacent Vegetation</b>	Developed land
	Ornamental vegetation
Habitat and Wildlife	There are no significant biological resources suitable for sensitive species use within or adjacent to the facility
МНРА	The facility is not within or adjacent to the Multi-Habitat Planning Area (MHPA). The structure is surrounded by residential development.
Mitigation Within Facility	None

#### **Water Quality Resource Summary**

San Diego Ray Watershed Management Area: Hydrologic Subarea 908 22

San Diego Day Watershed Management Area, Hydrologic Subarea 308.22		
Adopted TMDLs	Bacteria Project I; Chollas Creek dissolved copper, lead, and zinc; Chollas Creek	
	diazinon	

Highest Priority Water Quality Condition

N/A

Bacteria; dissolved copper, lead, and zinc

Beneficial Uses
303(d) listed Impairments No impairments recorded on the 303(d) List

Chollas Creek (First downstream water body)

Beneficial UsesNon-contact Water Recreation (REC-2)Warm Freshwater Habitat (WARM)

Warm Freshwater Habitat (V
 Wildlife Habitat (WILD)

**303(d) listed Impairments** Copper, Indicator Bacteria, Lead, Nitrogen, Pesticides, Phosphorus, Trash, Zinc

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

## Archeological and Tribal Resources Resource Identified in APE None Resource Identified Adjacent to APE None Resource Type N/A

Historical Resources	
Resource Identified in APE	Facility; 1951 structural facility
Potential Historical Resources Constrain Identified	Yes

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-2
EP-BIO-6	MM-BIO-4
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-HR-1
Hydrology (HYD)	MM-HR-2
EP-HYD-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Structure Name	3644 Roselawn
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of structure per as-built dimensions and Hydrology and
	Hydraulics Recommendation
Hydrology and Hydraulics	Recommend vegetation trimming and sediment removal to continue to
Recommendation	allow outlet to drain
Maintenance Activities	Vegetation grubbing, trimming, and removal
	Invasive plant species treatment and removal
	Sediment removal
	Concrete repair
Maintenance Method	Excavation; mechanized equipment in facility
	Temporary access/loading
	Temporary staging
	Temporary diversions
	Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair	No
and Maintenance	
Culvert Maintenance	Yes; see Appendix A-4
Post-Maintenance Erosion Control	Subject to further analysis to determine need and type
Recommendation	
Trash/Debris Fence Repair and	No
Maintenance	
Structure Type	Outlet
Existing Plans and/or As-Builts?	Yes; 17423-D
Structure Size	18 inches
Structure Detail	Pipe and headwall
Maintenance Area Substrate	Earthen
Authorized Facility Maintenance	Length: 52 feet
Area	Width: 6–8 feet
Maintenance Quantities	To be determined at time of maintenance
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may
	also be modified as long as changes do not result in new significant
	environmental impacts.
Equipment	Bulldozer/track-steer, mini-excavator, dump truck, vactor, fuel-powered
	hand tools
Schedule	Up to approximately 3–5 working days

#### 3644 Roselawn (Drain ID: #OT03694) Facility Maintenance Plan

Maintenance Crew	Approximately 9–12 people
Routine Maintenance Procedures	Conduct maintenance procedures as follows:
	1.Bulldozer/track-steer and mini-excavator enter facility at access/loading
	area
	2. Mini-excavator scoops material and loads bulldozer/track-steer
	3. Bulldozer/track-steer transports material and loads dump truck at
	access/loading area
	4. Dump trucks haul material to legal disposal site
Traffic Control	No
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist shall
3	conduct the following on site:
	1. Review sensitive biological/historical/water quality resources; if present
	flag/delineate
	2. Conduct appropriate training
	3. Review BMP installation
	4. If needed, review pre- and during-maintenance pumping procedures
	5. Conduct pre-maintenance site photo documentation
Biology	Suitable habitat for sensitive species <sup>1</sup> :
	1. Within maintenance area: No
	2. Adjacent to maintenance area: No
	Activities to be conducted under authority of a qualified biologist:
	1. Nesting bird surveys required within 72 hours of the start of vegetation
	clearing from February 1 through September 15
Flow Management	As needed:
•	1. Vactor or pump standing water from facility
	2. Install temporary dry-weather flow-diversion berm(s) across facility
	(upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream,
	allow for distributed discharge and infiltration
<b>Downstream Sensitive Waters</b>	Yes; implement BMPs per Water Pollution Control Plan
BMP Installation	See Water Pollution Control Plan
In-Stream Post-Maintenance	As-built includes a riprap energy dissipator at the outlet. Additional analysis
<b>Erosion Control Recommendation</b>	is needed to determine if the as-built condition reduces velocities below
	permissible levels.

<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors.

#### 3644 Roselawn (Drain ID: #OT03694) Facility Maintenance Plan

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:
	1. Demobilize equipment
	2. Restore temporary access/loading areas to pre-maintenance condition or as required by the WPCP for final stabilization
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project area(s), as needed
	4. Remove temporary BMPs
	5. Update maintenance record
	6. Conduct post-maintenance site photo documentation
Other Notes	None



### Facility Maintenance Plan

# Facility Name: 4202 J Street

IAMFLOC: #HW04013



#### **Detail**

Watershed Management Area (WMA)	San Diego Bay
Hydrologic Subarea	908.22
Drainage Name	Chollas
Tributaries (listed from downstream to upstream)	Chollas Creek unnamed tributary
Location Within Watershed	Draining to upper reach of Chollas Creek unnamed tributary, upstream of Chollas Creek (Ocean View)
Location	Nearest Intersection: J Street and 42nd Street; guardrail on corner is removed for equipment access
Adjacent Land Use	Parks, Single Family Residential, Transportation, Vacant
Coastal Zone	No
Structure Type	Outlet
Structure Detail	Pipe and headwall
Pipe Diameter and Material	30 inches reinforced concrete pipe
Pipe Length	37 feet
IAMFLOC	#HW04013
SAP ID	Sx-014413
Equipment ID	80046823
GIS ID	DS047703
Other Identifiers	None
As-built Drawing Number	28415-9-D



Figure 1: July 2017, photo of 4202 J Street



Figure 2: Vicinity Map of 4202 J Street

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance	Prior to 2011: Unknown January 2011 – March 2017: No maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	N/A	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Pre	evious Impacts	No

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility, recommended maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	The outlet is a headwall with approximately 0.5 feet of sediment and debris deposition. Additional sediment deposition (approximately 1–2 feet) and vegetation growth immediately downstream of the outlet creates a blockage for lower flows.	
Maintenance Recommendation	Recommend removal of sediment and vegetation at the outlet headwall to allow outlet to drain	
In-Stream Post-Maintenance Erosion Control Recommendation	As-built includes a riprap energy dissipator at the outlet. Additional analysis is needed to determine if the as-built condition reduces velocities below permissible levels.	

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses and notes to illustrate special habitat and wildlife.

Facility Vegetation	<ul><li>Disturbed wetland (Arundo dominated)</li><li>Riparian scrub (southern willow scrub)</li></ul>
Adjacent Vegetation	<ul> <li>Developed land</li> <li>Disturbed land</li> <li>Disturbed wetland (Arundo-dominated)</li> <li>Eucalyptus woodland</li> <li>Ornamental vegetation</li> <li>Riparian scrub (southern willow scrub)</li> </ul>
Habitat and Wildlife	There is suitable habitat contained within and adjacent to the facility for sensitive species (e.g., least Bell's vireo). Raptors could also use the eucalyptus woodland present adjacent to the facility for nesting/roosting.
МНРА	The facility is not within or adjacent to the Multi-Habitat Planning Area (MHPA). The structure is surrounded by residential development.
Mitigation Within Facility	None

#### **Water Quality Resource Summary**

San Diego Bay Watershed Management Area; Hydrologic Subarea 908.22			
Adopted TMDLs	Bacteria Project I; Chollas Creek dissolved copper, lead, and zinc; Chollas Creek diazinon		
Highest Priority Water Quality Condition	Bacteria; dissolved copper, lead, and zinc		
Chollas Creek Unnamed Trib	•		
Beneficial Uses	<ul> <li>Non-contact Water Recreation (REC-2)</li> <li>Warm Freshwater Habitat (WARM)</li> <li>Wildlife Habitat (WILD)</li> </ul>		
303(d) listed Impairments	No impairments recorded on the 303(d) List		
Chollas Creek (First downstre	eam water body)		

Chollas Creek (First downstream water body)		
Beneficial Uses	Non-contact Water Recreation (REC-2)	
	Warm Freshwater Habitat (WARM)	
	Wildlife Habitat (WILD)	
303(d) listed Impairments	Copper, Indicator Bacteria, Lead, Nitrogen, Pesticides, Phosphorus, Trash, Zinc	

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

<b>Archeological and Tribal Resources</b>	
Resource Identified in APE	None
Resource Identified Adjacent to APE	P-37-035162
Resource Type	Memorial park

Historical Resources		
Resource Identified in APE	None	
Potential Historical Resources	None	
Constrain Identified		

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	MM-BIO-3
EP-HAZ-3	MM-BIO-4
Hydrology (HYD)	MM-BIO-6
EP-HYD-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Structure Name	4202 J Street
Coastal Zone	No
MWMP Proposed Maintenance	Maintenance of structure per as-built dimensions and Hydrology and
	Hydraulics Recommendation
Hydrology and Hydraulics	Recommend removal of sediment and vegetation at the outlet headwall to
Recommendation	allow outlet to drain
Maintenance Activities	Vegetation grubbing, trimming, and removal
	Invasive plant species treatment and removal
	Sediment removal
	Concrete repair
Maintenance Method	Excavation; mechanized equipment outside of facility
	Temporary access/loading
	Temporary staging
	Temporary diversions
	Hand removal of vegetation
Bank Repair	No
Concrete Repair	Yes; see Appendix A-4
Concrete/Gabion Structure Repair	No
and Maintenance	
Culvert Maintenance	Yes; see Appendix A-4
Post-Maintenance Erosion Control	Subject to further analysis to determine need and type
Recommendation	
Trash/Debris Fence Repair and	No
Maintenance	
Structure Type	Outlet
Existing Plans and/or As-Builts?	Yes; 28415-9-D
Structure Size	30 inches
Structure Detail	Pipe and headwall
Maintenance Area Substrate	Earthen
Authorized Facility Maintenance	Length: 96 feet
Area	Width: 11 feet
Maintenance Quantities	To be determined at time of maintenance
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may
	also be modified as long as changes do not result in new significant
	environmental impacts.
Equipment	Bulldozer/track-steer, Gradall/excavator, backhoe, dump truck, vactor, fuel-
	powered hand tools
Schedule	Up to approximately 14 working days

Maintenance Crew	Approximately 10–14 people
Routine Maintenance Procedures	Conduct maintenance procedures as follows:
	1. Gradall/excavator at access/loading area scoops material from facility
	and loads dump trucks
	2. Bulldozer/track-steer will be used in facility to push material
	3. Dump trucks haul material to legal disposal site
Traffic Control	Yes; coordinate with MTS as needed
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist shall
	conduct the following on site:
	1. Review sensitive biological/historical/water quality resources; if present
	flag/delineate
	2. Conduct appropriate training
	3. Review BMP installation
	4. If needed, review pre- and during-maintenance pumping procedures
	5. Conduct pre-maintenance site photo documentation
Biology	Suitable habitat for sensitive species <sup>1</sup> :
	1. Within maintenance area: Yes
	2. Adjacent to maintenance area: Yes
	Activities to be conducted under authority of a qualified biologist:
	1. Nesting bird surveys required within 72 hours of the start of vegetation
	clearing from February 1 through September 15
Flow Management	As needed:
	1. Vactor or pump standing water from facility
	2. Install temporary dry-weather flow-diversion berm(s) across facility
	(upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream,
	allow for distributed discharge and infiltration
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan
BMP Installation	See Water Pollution Control Plan
In-Stream Post-Maintenance	As-built includes a riprap energy dissipator at the outlet. Additional analysis
<b>Erosion Control Recommendation</b>	is needed to determine if the as-built condition reduces velocities below
	permissible levels.

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<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors.

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:		
	1. Demobilize equipment		
	2. Restore temporary access/loading areas to pre-maintenance condition or		
	as required by the WPCP for final stabilization		
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project		
	area(s), as needed		
	4. Remove temporary BMPs		
	5. Update maintenance record		
	6. Conduct post-maintenance site photo documentation		
Other Notes	None		



### Facility Maintenance Plan

# Facility Name: 1206 Goodyear

IAMFLOC:

#OT04671



#### **Detail**

Watershed Management Area (WMA)	San Diego Bay
Hydrologic Subarea	908.22
Drainage Name	South Chollas
Tributaries (listed from downstream to upstream)	South Chollas Creek, South Chollas Creek Encanto Branch
Location Within Watershed	Draining to lower reach of South Chollas Creek, upstream of South Chollas Creek (Alpha)
Location	Nearest Intersection: Boston Avenue and Goodyear Street; access through paved driveway at 3650 Boston Avenue
Adjacent Land Use	Multi-Family Residential, Public Facilities and Utilities, Single Family Residential, Transportation, Vacant
Coastal Zone	No
Structure Type	Outlet
Structure Detail	Outfall headwall
Pipe Diameter and Material	33 inches reinforced concrete pipe
Pipe Length	130 feet
IAMFLOC	#OT04671
SAP ID	SS-004621
Equipment ID	80028356
GIS ID	DS035962
Other Identifiers	None
As-built Drawing Number	20676-D



Figure 1: July 2017, photo of 1206 Goodyear



Figure 2: Vicinity Map of 1206 Goodyear

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	nance	Prior to 2015: Unknown October 2015 and August 2016: Minor maintenance conducted
		October 2013 and August 2016. Millor maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	N/A	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Pre	evious Impacts	No

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility, recommended maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity	The outlet is a headwall structure with sediment and debris deposition and vegetation growth at the headwall
Maintenance Recommendation	Recommend removal of sediment and vegetation at the culvert headwall to allow outlet to drain Repair rip rap energy dissipator at outlet per as-built (DWG 20676-D)
In-Stream Post-Maintenance Erosion Control Recommendation	As-built includes a riprap energy dissipator at the outlet. Additional analysis is needed to determine if the as-built condition reduces velocities below permissible levels.

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses and notes to illustrate special habitat and wildlife.

Facility Vegetation	Disturbed land
	Ornamental vegetation
<b>Adjacent Vegetation</b>	Developed land
	Disturbed land
	Natural flood channel
	Ornamental vegetation
Habitat and Wildlife	There are no significant biological resources suitable for sensitive species use within or adjacent to the facility
МНРА	The facility is not within or adjacent to the Multi-Habitat Planning Area (MHPA). The structure is surrounded by residential development.
Mitigation Within Facility	None

#### **Water Quality Resource Summary**

San Diego Bay Watershed Ma	nagement Area; Hydrologic Subarea 908.22		
Adopted TMDLs	Bacteria Project I; Chollas Creek dissolved copper, lead, and zinc; Chollas Creek diazinon		
Highest Priority Water Quality Condition	Bacteria; dissolved copper, lead, and zinc		
Chollas Creek Unnamed Tribu	utary		
Beneficial Uses	<ul> <li>Non-contact Water Recreation (REC-2)</li> <li>Warm Freshwater Habitat (WARM)</li> <li>Wildlife Habitat (WILD)</li> </ul>		
303(d) listed Impairments	No impairments recorded on the 303(d) List		
Chollas Creek (First downstre	am water body)		
Beneficial Uses	<ul> <li>Non-contact Water Recreation (REC-2)</li> <li>Warm Freshwater Habitat (WARM)</li> <li>Wildlife Habitat (WILD)</li> </ul>		
303(d) listed Impairments	Copper, Indicator Bacteria, Lead, Nitrogen, Pesticides, Phosphorus, Trash, Zinc		

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources		
Resource Identified in APE	None	
Resource Identified Adjacent to APE	None	
Resource Type	N/A	

Historical Resources		
Resource Identified in APE	None	
<b>Potential Historical Resources</b>	None	
Constrain Identified		

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-2
EP-BIO-6	MM-BIO-3
Health and Safety/Hazards (HAZ)	MM-BIO-4
EP-HAZ-3	MM-BIO-6
Hydrology (HYD)	Noise (NOI)
EP-HYD-1	MM-NOI-1
Solid Waste (SW)	
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### **Maintenance Methods**

This section describes the specific activities, equipment, and methodology for maintenance of this facility including a general site plan (Map A). It is intended to be used as a guide for the maintenance crew.

Structure Name	1206 Goodyear	
Coastal Zone	No	
MWMP Proposed Maintenance	Maintenance of structure per as-built dimensions and Hydrology and	
	Hydraulics Recommendation	
Hydrology and Hydraulics	Recommend removal of sediment and vegetation at the culvert headwall to	
Recommendation	allow outlet to drain	
	Repair rip rap energy dissipator at outlet per as-built (DWG 20676-D)	
Maintenance Activities	Vegetation grubbing, trimming, and removal	
	Invasive plant species treatment and removal	
	Sediment removal	
	Concrete repair	
Maintenance Method	Excavation; mechanized equipment outside of facility	
	Temporary access/loading	
	Temporary staging	
	Temporary diversions	
	Hand removal of vegetation	
	Hand removal of sediment	
Bank Repair	No	
Concrete Repair	Yes; see Appendix A-4	
Concrete/Gabion Structure Repair	No	
and Maintenance		
Culvert Maintenance	Yes; see Appendix A-4	
Post-Maintenance Erosion Control	Subject to further analysis to determine need and type	
Recommendation		
Trash/Debris Fence Repair and	No	
Maintenance		
Structure Type	Outlet	
Existing Plans and/or As-Builts?	Yes; 20676-D	
Structure Size	33 inches	
Structure Detail	Outfall headwall	
Maintenance Area Substrate	Earthen	
Authorized Facility Maintenance	Length: 35 feet	
Area	Width: 5 feet	
Maintenance Quantities	To be determined at time of maintenance	
Access/Loading/Staging/Stockpiling	Designated areas on Map A or within City ROW may be used for access,	
Area(s)	loading, staging, and/or stockpiling. The boundaries of these areas may	
	also be modified as long as changes do not result in new significant	
	environmental impacts.	
Equipment	Gradall/excavator, dump truck, vactor, fuel-powered hand tools	

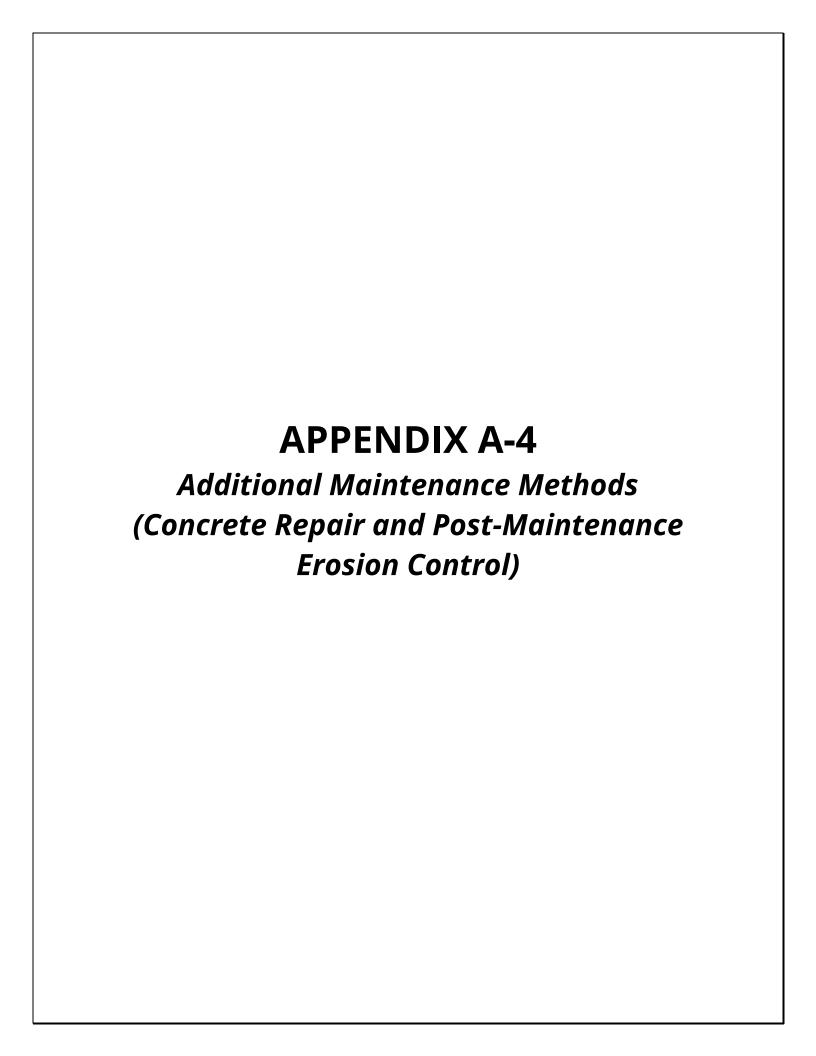
Schedule	Up to approximately 2 working days	
Maintenance Crew	Approximately 3–6 people	
Routine Maintenance Procedures	Conduct maintenance procedures as follows:	
Noutine Maintenance Frocedures	Gradall/excavator is stationed above structure in access/loading area	
	2. Gradall/excavator scoops material in front of structure	
	3. Gradall/excavator dumps material into dump truck	
	4. Vactor stationed at access/loading assists in removal of material	
	5. Workers may assist removing material using hand tools	
	6. Dump truck and vactor haul material to legal disposal site	
Traffic Control	No	
	Additional Maintenance Information	
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist shall	
	conduct the following on site:	
	1. Review sensitive biological/historical/water quality resources; if present	
	flag/delineate	
	2. Conduct appropriate training	
	3. Review BMP installation	
	4. If needed, review pre- and during-maintenance pumping procedures	
	5. Conduct pre-maintenance site photo documentation	
Biology	Suitable habitat for sensitive species <sup>1</sup> :	
	1. Within maintenance area: No	
	2. Adjacent to maintenance area: No	
	Activities to be conducted under authority of a qualified biologist:	
	1. Nesting bird surveys required within 72 hours of the start of vegetation	
	clearing from February 1 through September 15	
Flow Management	As needed:	
	1. Vactor or pump standing water from facility	
	2. Install temporary dry-weather flow-diversion berm(s) across facility	
	(upstream and downstream of maintenance area)	
	3. Position vactor/pump to capture any incoming or contained flows	
	4. If pumping water through temporary hose(s) to location(s) downstream,	
	allow for distributed discharge and infiltration	
Downstream Sensitive Waters	Yes; implement BMPs per Water Pollution Control Plan	
BMP Installation	See Water Pollution Control Plan	
In-Stream Post-Maintenance	As-built includes a riprap energy dissipator at the outlet. Additional analysis	
<b>Erosion Control Recommendation</b>	is needed to determine if the as-built condition reduces velocities below	
	permissible levels.	

<sup>&</sup>lt;sup>1</sup> Species covered under the Multiple Species Conservation Program, other special-status species, including raptors.

Post-Maintenance Procedures	Conduct post-maintenance procedures as follows:
	1. Demobilize equipment
	2. Restore temporary access/loading areas to pre-maintenance condition or as required by the WPCP for final stabilization
	3. Street Sweeper will sweep/clean debris from street/right-of-way/project
	area(s), as needed 4. Remove temporary BMPs
	5. Update maintenance record
	6. Conduct post-maintenance site photo documentation
Other Notes	None



3. Access/Loading/Staging/Stockpiling may be modified during implementation.



#### Concrete Repair Maintenance Methods

Facility Group/Segment <sup>1</sup>	As-needed for all MWMP Facilities with existing concrete lining
Description & Purpose	Concrete repair/replacement to restore facilities to existing
	constructed or original as-built conditions
Maintenance Sites	Within concrete lined and/or concrete banked facilities
Materials	Cement, sand, aggregate, rebar, wire mesh
Expected Lifespan	N/A
Equipment <sup>2</sup>	Bobcat/skid-steer, bulldozer/track-steer, Gradall/excavator, loader, backhoe, dump truck, trash pump, vactor, fuel-powered hand tools, wheelbarrow, sweeper, cement truck, tow-behind mixer, concrete truck (with hoses/pumps), concrete saw, impulse/jack-hammer
Maintenance Procedures	(attachments)  Minor repair/replacement by hand:
maintenance riocedules	<ol> <li>With hand tools (e.g., shovels), remove material (e.g., vegetation, debris, soil/sediment) limited to work area</li> <li>Prepare surface (work area) to be repaired/replaced by removing cracked, damaged or deteriorated concrete and cleaning surface. Work area should be clean, dry, rough, and dust-free.</li> <li>Imported material may be pumped, wheel-barrowed or transported by truck/loader, etc. to work area. On-site materials may also be used for aggregate or backfill to grade, if appropriate.</li> <li>Regrade work area using rake or similar hand tool to recontour any underlying surficial soil before bonding agent/concrete is applied, if needed</li> <li>Concrete Installation:         <ul> <li>Install a wire-mesh lining or rebar to tie into existing concrete per as-built or specifications, if needed</li> <li>Pour/pump concrete repair mix to fill/seal cracks or to be formed to replace missing or deteriorated concrete per manufacturer's instructions. Material, such as conventional cement materials with an aggregate component, may be wheel-barrowed to work area and poured; or pumped/sprayed from concrete truck via hoses/pumps.</li> <li>Apply bonding agent to cracks or deteriorated concrete per manufacturer's instructions, if needed</li> <li>Use hand tools to smooth concrete to grade</li> </ul> </li> <li>Place/transport material in a portable trash bin, wheel-barrow, or</li> </ol>

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<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various concrete repair jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

## Concrete Repair Maintenance Methods

by equipment to loading/access area, as needed

7. Equipment loads material from access/loading area into dump truck to be transported to approved disposal site

#### Minor or Major repair/replacement using equipment

- 1. With equipment (e.g., Bobcat/skid-steer, bulldozer/track-steer, Gradall/excavator) and/or hand tools (e.g., shovels), remove material (e.g., vegetation, debris, soil/sediment) within work area. Equipment/crew may work within channel or from an access area outside the channel, depending on facility characteristics. Reference facility-specific FMP for access areas.
- 2. Prepare surface (work area) to be repaired/replaced. Equipment with corresponding impulse/jack-hammer attachments may be used to break up damaged concrete.
- 3. Remove cracked, damaged or deteriorated concrete and clean surface. Work area should be clean, dry, rough, and dust-free.
- 4. Excavate (e.g., with equipment or hand shoveled) work area and backfill with suitable soil or material per City engineering standards, if needed
- 5. Imported material may be pumped, wheel-barrowed or transported by truck/loader, etc. to work area. On-site materials may also be used for aggregate or backfill to grade, if appropriate.
- 6. For minor repair/replacement, regrade surficial soil using hand tools (e.g., rake) to recontour any underlying surficial soil before bonding agent/concrete is applied, if needed. For major repair/replacement, use mechanized equipment to regrade and excavate 1-2 feet below surficial soil.
- 7. Concrete Installation:
  - a. Install wire-mesh lining or rebar to tie into existing concrete per as-built or specifications, if needed
  - b. Pour/pump concrete repair mix to fill/seal cracks or to be formed to replace missing or deteriorated concrete per manufacturer's instructions. Material, such as conventional cement materials with an aggregate component, may be wheelbarrowed to work area and poured; or pumped/sprayed from concrete truck via hoses/pumps.
  - c. Apply bonding agent to cracks or deteriorated concrete per manufacturer's instructions, if needed
  - d. Use hand tools to smooth concrete to grade
- 8. Place/transport material in a portable trash bin, wheel-barrow, or by equipment to loading/access area, as needed
- 9. Equipment loads material from access/loading area into dump truck to be transported to approved disposal site

#### Concrete Repair Maintenance Methods

Maintenance Frequency	As-needed
Schedule	Approximately 7–21 working days
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s)
	shall conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources;
	if present, flag/delineate
	2. Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping
	procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Reference facility-specific FMP
Flow Management	As needed:
	1. Vactor or pump standing water from channel
	2. Install temporary dry-weather flow-diversion berm(s) across
	channel (upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s)
	downstream, allow for distributed discharge and infiltration
<b>Downstream Sensitive</b>	Reference facility-specific FMP
Waters	
BMP Installation	See Water Pollution Control Plan (WPCP)
Post-Maintenance	Conduct post-maintenance procedures as required by the WPCP
Procedures	including the following:
	1. Demobilize equipment
	2. Return temporary access/loading area(s) to pre-maintenance or
	habitat type
	3. Remove temporary BMPs
	4. Update maintenance record
	5. Conduct post-maintenance site photo documentation
Other Notes	None

#### Concrete/Gabion Structure Repair and Maintenance Methods

	As-needed for all MWMP Facilities with existing concrete or gabion	
Facility Group/Segment <sup>1</sup>	structure(s)	
Description & Purpose	Concrete/gabion structure repair/replacement to restore facilities to	
	existing constructed or original as-built conditions	
Maintenance Sites	Generally located at existing concrete/gabion structures	
Materials	Concrete, imported rock, metal wire mesh gabion, rebar, wire mesh	
Expected Lifespan	N/A	
Equipment <sup>2</sup>	Bobcat/skid-steer, bulldozer/track-steer, Gradall/excavator, loader,	
	backhoe, dump truck, trash pump, vactor, fuel-powered hand tools,	
	wheelbarrow, sweeper, cement truck, tow-behind mixer, concrete	
	truck (with hoses/pumps), concrete saw, impulse/jack-hammer	
	(attachments)	
Maintenance Procedures	Minor repair/replacement by hand:	
	1. With hand tools (e.g., shovels), remove material (e.g., vegetation,	
	debris, soil/sediment) limited to work area	
	2. Prepare surface (work area) to be repaired/replaced by removing	
	cracked, damaged or deteriorated concrete and cleaning surface.	
	Work area should be clean, dry, rough, and dust-free.	
	3. Imported material may be pumped, wheel-barrowed or	
	transported by truck/loader, etc. to work area. On-site materials may	
	also be used for aggregate or backfill to grade, if appropriate.	
	4. Regrade work area using rake or similar hand tool to recontour	
	any underlying surficial soil before bonding agent/concrete is applied	
	or gabion is replaced, if needed	
	5. Concrete Installation:	
	a. Install a wire-mesh lining or rebar to tie into existing concrete	
	per as-built or specifications, if needed	
	b. Pour/pump concrete repair mix to fill/seal cracks or to be	
	formed to replace missing or deteriorated concrete per	
	manufacturer's instructions. Material, such as conventional	
	cement materials with an aggregate component, may be wheel-	
	barrowed to work area and poured; or pumped/sprayed from	
	concrete truck via hoses/pumps.	
	c. Apply bonding agent to cracks or pour/pump concrete repair	
	mix to fill/seal cracks or deteriorated concrete per manufacturer's	
	instructions, if needed	

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<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various concrete/gabion repair jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

## Concrete/Gabion Structure Repair and Maintenance Methods

- d. Use hand tools to smooth concrete to grade
- 6. Gabion Installation:
  - a. Assemble gabion wire mesh boxes and place into facility, connecting adjacent units to form a continuous structure, as needed
  - b. Manually fill gabion baskets with rocks to minimize voids and damage to the wire mesh. Fill in stages to avoid local deformation c. Level off rock fill 20–30 millimeters above the top of the mesh then folder over lid and lace along all edges to allow for settlement
- 7. Place/transport material in a portable trash bin, wheel-barrow, or by equipment to loading/access area, as needed
- 8. Equipment loads material from access/loading area into dump truck to be transported to approved disposal site

#### Minor or Major repair/replacement using equipment:

- 1. With equipment (e.g., bobcat/skid-steer, bulldozer/track-steer, Gradall/excavator) and/or hand tools (e.g., shovels), remove material (e.g., vegetation, debris, soil/sediment) within work area. Equipment/crew may work within channel or from an access/loading area outside the channel, depending on facility characteristics. Reference facility-specific FMP for access areas.
- 2. Prepare surface (work area) to be repaired/replaced. Equipment with corresponding impulse/jack-hammer attachments may be used to break up damaged concrete.
- 3. Remove cracked, damaged or deteriorated concrete and clean surface. Work area should be clean, dry, rough, and dust-free.
- 4. Excavate (e.g., with equipment or hand shoveled) work area and backfill with suitable soil or material per City engineering standards, if needed
- 5. Imported material may be pumped, wheel-barrowed or transported by truck/loader, etc. to work area. On-site materials may also be used for aggregate or backfill to grade, if appropriate.
- 6. For minor repair/replacement, regrade surficial soil using hand tools (e.g., rake) before bonding agent/concrete is applied or gabion is replaced, if needed. For major repair/replacement, use mechanized equipment to regrade and excavate 1-2 feet below surficial soil.
- 7. Concrete installation:
  - a. Install a wire-mesh lining or rebar to tie into existing concrete per as-built or specifications, if needed
  - b. Pour/pump concrete repair mix to fill/seal cracks or to be formed to replace missing or deteriorated concrete per

#### Concrete/Gabion Structure Repair and Maintenance Methods

	manufacturer's instructions. Material, such as conventional cement materials with an aggregate component, may be wheel-barrowed to work area and poured; or pumped/sprayed from concrete truck via hoses/pumps.  c. Apply bonding agent to cracks or deteriorated concrete per manufacturer's instructions, if needed d. Use hand tools to smooth concrete to grade 8. Gabion installation: a. Assemble gabion wire mesh boxes and place into facility, connecting adjacent units to form a continuous structure, as needed b. Manually fill gabion baskets with rocks to minimize voids and damage to the wire mesh. Fill in stages to avoid local deformation c. Level off rock fill 20–30 millimeters above the top of the mesh then folder over lid and lace along all edges to allow for settlement 9. Place/transport material in a portable trash bin, wheel-barrow, or by equipment to loading/access area, as needed 10. Equipment loads material from access/loading area into dump truck to be transported to approved disposal site
Maintenance Frequency	As-needed
Schedule	Approximately 7–21 working days
	Additional Maintenance Information
Pre-Maintenance Meeting  Biology	Prior to the start of any maintenance activity, a qualified specialist(s) shall conduct the following on site:  1. Review sensitive biological, historical, and water quality resources; if present, flag/delineate  2. Conduct appropriate training  3. Review Best Management Practices (BMP) installation  4. If needed, review pre- and during-maintenance pumping procedure  5. Conduct pre-maintenance site photo documentation  Reference facility-specific FMP
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Flow Management	As needed:  1. Vactor or pump standing water from channel  2. Install temporary dry-weather flow-diversion berm(s) across channel (upstream and downstream of maintenance area)  3. Position vactor/pump to capture any incoming or contained flows  4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration

#### Concrete/Gabion Structure Repair and Maintenance Methods

Downstream Sensitive	Reference facility-specific FMP
Waters	
BMP Installation	See Water Pollution Control Plan (WPCP)
Post-Maintenance	Conduct post-maintenance procedures as required by the WPCP
Procedures	including the following:
	1. Demobilize equipment
	2. Return temporary access/loading area(s) to pre-maintenance or
	habitat type
	3. Remove temporary BMPs
	4. Update maintenance record
	5. Conduct post-maintenance site photo documentation
Other Notes	None

### **Culvert Maintenance Maintenance Methods**

Facility Group/Segment <sup>1</sup>	As-needed for all MWMP Facilities with existing culverts
Description & Purpose	Maintenance of culverts per as-built/estimated original design
	dimensions, and Hydrology and Hydraulics recommendation
Maintenance Sites	Generally located at the inlet, outlet, and within the culvert as-
	needed and when accessible
Materials	None
Expected Lifespan	N/A
Equipment <sup>2</sup>	Bobcat/skid-steer, bulldozer/track-steer, Gradall/excavator, loader,
	backhoe, dump truck, trash pump, vactor, fuel-powered hand tools,
	wheelbarrow, sweeper
<b>Maintenance Procedures</b>	Mechanized Equipment:
	1. Equipment (e.g., Bobcat/skid-steer, bulldozer/track-steer, tractor,
	Gradall/excavator, loader) enters/is lowered into facility; or stationed
	outside/above facility in access/loading area or within public right-of-
	way.
	2. Equipment scoops material from culvert and pushes material (e.g.,
	vegetation, debris, soil/sediment) to access/loading area
	3. Equipment loads material from access/loading area into dump
	truck to be transported to approved disposal site
	Vactor:
	1. Vactor is stationed outside/above facility in access/loading area or
	within public right-of-way, depending on facility characteristics.
	Reference facility-specific FMP for access areas.
	2. Crew uses water from vactor/water truck/hydrant to flush material from culvert
	3. Equipment (e.g., Gradall/excavator/backhoe) stationed
	outside/above facility within access/loading area may assist in
	scooping/pushing material (e.g., vegetation, debris, soil/sediment)
	from culvert to vactor or into a dump truck
	4. Vactor vacuums material from culvert (for small quantities)
	5. Material may need to be temporarily stockpiled and dewatered
	6. Vactor/dump truck disposes/decants material into approved
	disposal site
Maintenance Frequency	As-needed
Schedule	Approximately 5–30 working days

<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various culvert maintenance jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

### **Culvert Maintenance Maintenance Methods**

	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s) shall conduct the following on site:  1. Review sensitive biological, historical, and water quality resources; if present, flag/delineate  2. Conduct appropriate training  3. Review Best Management Practices (BMP) installation  4. If needed, review pre- and during-maintenance pumping procedure  5. Conduct pre-maintenance site photo documentation
Biology	Reference facility-specific FMP
Flow Management	As needed: 1. Vactor or pump standing water from channel 2. Install temporary dry-weather flow-diversion berm(s) across channel (upstream and downstream of maintenance area) 3. Position vactor/pump to capture any incoming or contained flows 4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration
Downstream Sensitive Waters	Reference facility-specific FMP
BMP Installation	See Water Pollution Control Plan (WPCP)
Post-Maintenance Procedures	Conduct post-maintenance procedures as required by the WPCP including the following:  1. Demobilize equipment  2. Return temporary access/loading area(s) to pre-maintenance or habitat type  3. Remove temporary BMPs  4. Update maintenance record  5. Conduct post-maintenance site photo documentation
Other Notes	None

#### Debris/Trash Fence Repair and Maintenance Methods

Facility Group/Segment <sup>1</sup>	As-needed for all MWMP Facilities with existing debris/trash fence(s)
Description & Purpose	Repair and/or maintenance of existing facility debris/trash fences to
	original as-built or standard drawing
Maintenance Sites	Generally located upstream of bridge or culvert openings
Materials	Minimum 3" steel post, 5/8 inch steel tension cable, 9 gage
	galvanized steel wire fence, concrete
Expected Lifespan	N/A
Equipment <sup>2</sup>	Kubota or similar tractor, Bobcat/skid-steer, bulldozer/track-steer,
24001	Gradall/excavator, mini-excavator, loader, backhoe, cement truck,
	concrete pump, tow-behind mixer, vactor, fuel-powered hand tools
	(weed whipper), wheelbarrow/buckets, hand tools (shovels, post-hole
	digger)
Maintenance Procedures	Maintenance: Mechanized Equipment outside facility:
	1. Equipment (e.g., Gradall/excavator, backhoe) is stationed
	outside/above facility in access/loading area or within public right-of-
	way
	2. Equipment excavates work area directly in front of (downstream)
	and/or behind (upstream) debris/trash fence
	3. Equipment loads material (e.g., vegetation, debris, soil/sediment)
	from access/loading area into dump truck to be transported to
	approved disposal site
	Maintenance: Mechanized Equipment and/or crews using hand
	tools inside facility:
	1. Crew with hand tools (shovels or fuel-powered hand tools) and/or
	equipment (e.g., Bobcat/skid-steer, bulldozer/track-steer, loader,
	tractor) enters/is lowered into facility at access/loading area
	2. Crew/equipment excavates area directly in front of (downstream)
	and/or behind (upstream) debris/trash fence
	3. Crew/equipment pushes/transports material (e.g., vegetation,
	debris, soil/sediment) to access/loading area
	4. Equipment loads material from access/loading area into dump
	truck to be transported to approved disposal site
	Repair using hand tools and/or equipment:
	1. Crew/equipment (e.g., Bobcat/skid-steer, shovel) enters/is lowered
	into facility; or stationed outside/above facility in access/loading area
	or within public right-of-way

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<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various debris/trash fence repair jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

#### Debris/Trash Fence Repair and Maintenance Methods

	2. Crew/equipment prepares/excavates area where debris/trash
	fence is to be repaired
	3. Crew repairs/re-installs debris/trash fence with same or similar
	material
	4. Equipment loads material (e.g., vegetation, debris, soil/sediment)
	from access/loading area into dump truck to be transported to
	approved disposal site
	Repair of concrete footing for debris/trash fence:
	1. Crew/equipment (e.g., Bobcat/skid-steer with auger attachment,
	mini excavator, post-hole digger) prepares/excavates area where
	debris trash fence is to be repaired/re-installed
	2. Crew forms area for concrete footing and (if needed) place/tie reinforcement rebar.
	3. Crew pours concrete, places poles/supports, and finishes concrete
	4. Crew strings/attaches debris/trash fencing with same or similar
	material
	5. Equipment loads material (e.g., vegetation, debris, soil/sediment)
	from access/loading area into dump truck to be transported to
	approved disposal site
Maintenance Frequency	As-needed
Schedule	Approximately 1–20 working days
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s)
	shall conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources;
	if present, flag/delineate
	Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping
	procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Reference facility-specific FMP
Flow Management	As needed:
	Vactor or pump standing water from channel
	2. Install temporary dry-weather flow-diversion berm(s) across
	channel (upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s)
	downstream, allow for distributed discharge and infiltration
Downstream Sensitive	Reference facility-specific FMP
Waters	

#### Debris/Trash Fence Repair and Maintenance Methods

BMP Installation	See Water Pollution Control Plan (WPCP)
Post-Maintenance	Conduct post-maintenance procedures as required by the WPCP
Procedures	including the following:
	1. Demobilize equipment
	2. Return temporary access/loading area(s) to pre-maintenance or
	habitat type
	3. Remove temporary BMPs
	4. Update maintenance record
	5. Conduct post-maintenance site photo documentation
Other Notes	None

### Anchored Chain-link/wire Fence Installation and Maintenance Methods

	As-needed for MWMP Facilities that require post-maintenance
Facility Group/Segment <sup>1</sup>	erosion control
Description & Purpose	Installation of anchored chain-link/wire fence to dissipate incoming
	flows and reduce velocities to pre-maintenance levels.
	Methods are intended to be temporary (chain-link/wire fence would
	be removed following vegetation establishment)/semi-permanent
	(anchors for chain link/wire would be permanent).
	Anchored chain-link/wire reference: Public Works Standard Drawings
	– debris fence (City of San Diego Public Works 2016); FAO 1986.
Installation Sites	Generally located immediately upstream of stream segments where
	erosive velocities (above pre-maintenance conditions) are expected
General Design Guidelines	Anchored chain-link/wire fences are made of posts that are
	anchored into the ground and wire or chain-link fencing that is
	placed across the ditch as a temporary structure
	The fence is constructed either straight across the channel or in a
	crescent shape with its open end upstream
	Concrete footings may be permanent and re-used, as necessary,
	to re-install the fence
	The fences/check dams should be no taller than 3 feet
Materials	Stainless steel posts, chain-link/wire fencing, and/or concrete
	footings
Expected Lifespan	Approximately 2–6 years for semi-permanent applications
Equipment <sup>2</sup>	Cement truck and pumps, Bobcat/skid-steer, bulldozer/track-steer,
	Gradall/excavator, loader, backhoe, dump truck, trash pump, vactor,
	wheelbarrow, sweeper, fuel-powered hand tools

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<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various dissipator installation jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

### Anchored Chain-link/wire Fence Installation and Maintenance Methods

Installation Procedures	Anchored Chain link/wire Fence Installation (follow
Installation Procedures	Anchored Chain-link/wire Fence Installation (follow manufacturer's specification for installation and City
	engineering standards):
	1. With equipment (e.g., Bobcat/skid-steer, bulldozer/track-steer,
	Gradall/excavator) and/or hand tools (e.g., shovels), remove material
	(e.g., vegetation, debris, soil/sediment) within work area.
	Equipment/crew may work within channel or from an access area
	outside the channel, depending on facility characteristics. Reference
	facility-specific FMP for access areas.
	2. Prepare work area for installation
	3. Excavate area and backfill with suitable soil or concrete at the post
	location(s) per City engineering standards, if needed. Imported
	material may be pumped, wheel-barrowed or transported by
	truck/loader, etc. to work area. Onsite materials may also be used for
	aggregate or backfill to grade, if appropriate.
	4. Regrade work area using rake or similar hand tool to recontour
	any underlying surficial soil before fence is installed
	5. Install fence posts (and concrete footings when applicable) 1' to a
	maximum of 4' apart based on fence type
	6. Connect chain-link or wires to the fence posts
	7. Place/transport material in a portable trash bin, wheel-barrow, or
	by equipment to loading/access area, as needed
	8. Equipment loads material from access/loading area into dump
	truck to be transported to approved disposal site
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s)
	shall conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources;
	if present, flag/delineate
	2. Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping
	procedure
Diala	5. Conduct pre-maintenance site photo documentation
Biology	Reference facility-specific FMP
Flow Management	As needed:
	1. Vactor or pump standing water from channel
	2. Install temporary dry-weather flow-diversion berm(s) across
	channel (upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration
	downstream, andwiter distributed distributed distributed and infiltration

### Anchored Chain-link/wire Fence Installation and Maintenance Methods

Downstream Sensitive	Reference facility-specific FMP
Waters	
BMP Installation	See Water Pollution Control Plan (WPCP)
Post-Maintenance	Conduct post-maintenance procedures as required by the WPCP
Procedures	including the following:
	1. Demobilize equipment
	2. Return temporary access/loading area(s) to pre-maintenance or
	habitat type
	3. Remove temporary BMPs
	4. Update maintenance record
	5. Conduct post-maintenance site photo documentation
Other Notes	None

#### Anchored Wooden/Brushwood Fence Installation and Maintenance Methods

	As-needed for MWMP Facilities that require post-maintenance
Facility Group/Segment <sup>1</sup>	erosion control
Description & Purpose	Installation of anchored brushwood fence to dissipate incoming
	flows and reduce velocities to pre-maintenance levels.
	Methods are intended to be temporary/semi-permanent (anchored
	wooden/brushwood would degrade/integrate with stream
	bed/vegetation).
	Anchored wooden/brushwood fence references: FAO 1986.
Installation Sites	Generally located immediately upstream of stream segments where
	erosive velocities (above pre-maintenance conditions) are expected
General Design Guidelines	Anchored wooden check dams or brushwood fences are made of
	posts that are anchored into the ground and brush/wood that
	spans the ditch as a temporary structure
	The fence is constructed either straight across the channel or in a
	crescent shape with its open end upstream
	Concrete footings may be permanent and re-used, as necessary,
	to re-install the fence
	The fences/check dams should be no taller than 3 fet
Materials	Wooden or stainless steel posts, salvaged/imported trees and brush,
	planks/heavy boards, and/or concrete footings
Expected Lifespan	Approximately less than 2 years for temporary applications to up to
	6 years for semi-permanent applications
Equipment <sup>2</sup>	Cement truck and pumps, Bobcat/skid-steer, bulldozer/track-steer,
	Gradall/excavator, loader, backhoe, dump truck, trash pump, vactor,
	wheelbarrow, sweeper, fuel-powered hand tools

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<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various dissipator installation jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

### **Anchored Wooden/Brushwood Fence Installation and Maintenance Methods**

Installation Procedures	Anchored Wooden/Brushwood Fence Installation (follow
	manufacturer's specification for installation and City
	engineering standards):
	1. With equipment (e.g., Bobcat/skid-steer, bulldozer/track-steer,
	Gradall/excavator) and/or hand tools (e.g., shovels), remove material
	(e.g., vegetation, debris, soil/sediment) within work area.
	Equipment/crew may work within channel or from an access area
	outside the channel, depending on facility characteristics. Reference
	facility-specific FMP for access areas.
	2. Prepare work area for installation
	3. Excavate area and backfill with suitable soil or concrete at the post
	location(s) per City engineering standards, if needed. Imported
	material may be pumped, wheel-barrowed or transported by
	truck/loader, etc. to work area. Onsite materials may also be used for
	aggregate or backfill to grade, if appropriate.
	4. Regrade work area using rake or similar hand tool to recontour
	any underlying surficial soil before fence is installed
	5. Install fence posts (and concrete footings when applicable) 1' to a
	maximum of 4' apart based on fence type
	6. Use flexible branches to weave between the posts or set wooden
	planks between two rows of posts. Use wire to hold the top of the
	wooden check dam in place. Onsite materials may be salvaged for
	brushwood fence materials.
	7. Place/transport material in a portable trash bin, wheel-barrow, or
	by equipment to loading/access area, as needed
	8. Equipment loads material from access/loading area into dump
	truck to be transported to approved disposal site
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s)
	shall conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources;
	if present, flag/delineate
	2. Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping
	procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Reference facility-specific FMP

### **Anchored Wooden/Brushwood Fence Installation and Maintenance Methods**

Flow Management	As needed: 1. Vactor or pump standing water from channel 2. Install temporary dry-weather flow-diversion berm(s) across channel (upstream and downstream of maintenance area) 3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration
Downstream Sensitive Waters	Reference facility-specific FMP
BMP Installation	See Water Pollution Control Plan (WPCP)
Post-Maintenance Procedures	Conduct post-maintenance procedures as required by the WPCP including the following:  1. Demobilize equipment  2. Return temporary access/loading area(s) to pre-maintenance or habitat type  3. Remove temporary BMPs  4. Update maintenance record  5. Conduct post-maintenance site photo documentation
Other Notes	None

### Coir Mat Installation and Maintenance Methods

	As-needed for MWMP Facilities that require post-maintenance
Facility Group/Segment <sup>1</sup>	erosion control
Description & Purpose	Installation of Coir Mat to stabilize bed and banks as a result of increased post-maintenance velocities.  Coir Mats are open-weaved textiles made of natural fibers that can
	be used to stabilize disturbed bed and banks and allow vegetation growth.
Installation Sites	Generally located where erosive velocities (above pre-maintenance conditions) are expected
General Design Guidelines	<ul> <li>Coir mat is intended to be temporary to semi-permanent</li> <li>Will degrade/integrate with stream bed/vegetation</li> <li>The weight of the mat is determined by the velocity within the channel or ditch</li> <li>Seeding of the matting is dependent on the type of matting used and at the direction of the landscape architect</li> <li>Manufacturer's installation instructions and specifications should be followed. The Installation Procedures section below describes the general installation process.</li> </ul>
Materials	Coir mat, staples/hooks, or stakes
Expected Lifespan	Approximately less than 2 years for temporary applications to up to 6 years for semi-permanent applications
Equipment <sup>2</sup>	Bobcat/skid-steer, bulldozer/track-steer, Gradall/excavator, loader, backhoe, dump truck, trash pump, vactor, wheelbarrow, sweeper, fuel-powered hand tool

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<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various channel stabilization jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

# Coir Mat Installation and Maintenance Methods

Installation Procedures	Coir Mat Installation (follow manufacturer's specification for
	installation and City engineering standards):
	1. With equipment (e.g., Bobcat/skid-steer, bulldozer/track-steer,
	Gradall/excavator) and/or hand tools (e.g., shovels), remove material
	(e.g., vegetation, debris, soil/sediment) within work area.
	Equipment/crew may work within channel or from an access area
	outside the channel, depending on facility characteristics. Reference
	facility-specific FMP for access areas.
	2. Prepare work area for installation
	3. Excavate area and backfill with suitable soil per City engineering
	standards, if needed. Imported material may be pumped, wheel-
	barrowed or transported by truck/loader, etc. to work area. Onsite
	materials may also be used for aggregate or backfill to grade, if
	appropriate.
	4. Regrade work area using rake or similar hand tool to recontour
	any underlying surficial soil before coir mat is installed
	5. If the coir mat is a small opening mesh, the soil should be prepped
	and seeding should be done prior to installation of the matting
	6. Dig a small trench at the top and bottom of the slope or edges of
	, , , , , , , , , , , , , , , , , , , ,
	the channel/ditch to secure the matting
	7. Install the matting by overlapping the mats a minimum of 6 to 8
	inches and secure the mats with staples or stakes
	8. Secure both ends of the mat with stakes/staples/hooks and fill in
	the trenches
	9. If applicable, seed the matting
	10. Place/transport material in a portable trash bin, wheel-barrow, or
	by equipment to loading/access area, as needed
	11. Equipment loads material from access/loading area into dump
	truck to be transported to approved disposal site
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s)
	shall conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources;
	if present, flag/delineate
	2. Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping
	procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Reference facility-specific FMP

# Coir Mat Installation and Maintenance Methods

Flow Management	As needed: 1. Vactor or pump standing water from channel 2. Install temporary dry-weather flow-diversion berm(s) across channel (upstream and downstream of maintenance area) 3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s) downstream, allow for distributed discharge and infiltration
Downstream Sensitive Waters	Reference facility-specific FMP
BMP Installation	See Water Pollution Control Plan (WPCP)
Post-Maintenance Procedures	Conduct post-maintenance procedures as required by the WPCP including the following:  1. Demobilize equipment  2. Return temporary access/loading area(s) to pre-maintenance or habitat type  3. Remove temporary BMPs  4. Update maintenance record  5. Conduct post-maintenance site photo documentation
Other Notes	None

### One Rock Dam Installation and Maintenance Methods

	As-needed for MWMP Facilities that require post-maintenance
Facility Group/Segment <sup>1</sup>	erosion control
Description & Purpose	Installation of One Rock Dam to dissipate incoming flows and reduce
	velocities to pre-maintenance levels.
	Methods are intended to be permanently integrate with the facility
	bed and/or banks.
	One Rock Dam reference: Zeedyk (2006 and 2014).
Installation Sites	Generally located immediately upstream or where erosive velocities
	(above pre-maintenance conditions) are expected
General Design Guidelines	Velocity-reducing "dam" that is one-rock tall, several rows long,
	and extend the full width of the channel bed. The dam should not
	be taller than one third of the bankfull depth and rocks should be
	similar sized. In concept, flood flows will pack smaller-sized
	material in the gaps and gradually strengthen the structure.
	Site preparation will include removal of vegetation and
	approximately 6" of soil within installation area.
	Installation consists of placement of rock in tightly packed rows
	and possible compaction with equipment, if feasible.
Materials	Imported rock, salvaged rock from maintenance area, or soilcrete
	burlap bags with 10:1 soil:cement mix
Expected Lifespan	Approximately 5–10 years depending on sediment deposition
Equipment <sup>2</sup>	Bobcat/skid-steer, bulldozer/track-steer, Gradall/excavator, loader,
	backhoe, dump truck, trash pump, vactor, wheelbarrow, sweeper,
	fuel-powered hand tool

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<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various dissipator installation jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

# One Rock Dam Installation and Maintenance Methods

Installation Procedures	One Rock Dam Installation (follow City engineering standards):
	1. With equipment (e.g., Bobcat/skid-steer, bulldozer/track-steer,
	Gradall/excavator) and/or hand tools (e.g., shovels), remove material
	(e.g., vegetation, debris, soil/sediment) and up to the minimum layer
	thickness per the specification within work area. Equipment/crew
	may work within channel or from an access area outside the channel,
	depending on facility characteristics. Reference facility-specific FMP
	for access areas.
	2. Imported material (e.g., rocks) may be pumped, wheel-barrowed
	or transported by truck/loader, etc. to work area
	3. Use hand tools or equipment to compact/settle rock to stable
	position
	4. Place/transport material in a portable trash bin, wheel-barrow, or
	by equipment to loading/access area, as needed
	5. Equipment loads material from access/loading area into dump
	truck to be transported to approved disposal site
Additional Maintenance Information	
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s)
	shall conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources;
	if present, flag/delineate
	2. Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping
	procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Reference facility-specific FMP
Flow Management	As needed:
	1. Vactor or pump standing water from channel
	2. Install temporary dry-weather flow-diversion berm(s) across
	channel (upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s)
	downstream, allow for distributed discharge and infiltration
Downstream Sensitive	Reference facility-specific FMP
Waters	
BMP Installation	See Water Pollution Control Plan (WPCP)

# One Rock Dam Installation and Maintenance Methods

Post-Maintenance	Conduct post-maintenance procedures as required by the WPCP
Procedures	including the following:
	1. Demobilize equipment
	2. Return temporary access/loading area(s) to pre-maintenance or
	habitat type
	3. Remove temporary BMPs
	4. Update maintenance record
	5. Conduct post-maintenance site photo documentation
Other Notes	None

### Riprap Installation and Maintenance Methods

	As-needed for MWMP Facilities that require post-maintenance
Facility Group/Segment <sup>1</sup>	• •
	erosion control or replacement/repair of riprap
Description & Purpose	Installation and repair of Riprap to dissipate incoming flows and
	reduce velocities to pre-maintenance levels.
	Methods are intended to be permanently integrate with the facility
	bed and/or banks.
	Riprap reference: City of San Diego Drainage Design Manual.
Installation Sites	Generally located where erosive velocities (above pre-maintenance
	conditions) are expected
General Design Guidelines	Velocity-reducing dissipator that consist of a riprap/rock baffle,
	larger in scale than the one-rock dam and therefore able to
	withstand higher velocities/sheer stress
	Site preparation will include removal of vegetation and
	approximately 1–8 feet of soil within installation area
	Installation consists of placement of bedding and riprap piles and
	possibly compaction with equipment, if feasible
Materials	Angular rocks with minimum specific gravity of 2.65 is preferred,
	filter blanket material (granular material or non-woven geotextile
	filter fabric)
Expected Lifespan	Approximately 50+ years
Equipment <sup>2</sup>	Bobcat/skid-steer, bulldozer/track-steer, Gradall/excavator, loader,
	backhoe, dump truck, trash pump, vactor, wheelbarrow, sweeper,
	fuel-powered hand tool
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<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various dissipator installation jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

#### Riprap Installation and Maintenance Methods

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Installation Procedures	Riprap Installation and City engineering standards):
	1. Engineering/crew determines if Placement Method A or B (City of
	San Diego Drainage Design Manual) will be used (based on riprap
	sizing) and per maintenance plans
	2. With equipment (e.g., Bobcat/skid-steer, bulldozer/track-steer,
	Gradall/excavator) and/or hand tools (e.g., shovels), remove material
	(e.g., vegetation, debris, soil/sediment) and excavate to the minimum
	layer thickness per the specification within work area.
	Equipment/crew may work within channel or from an access area
	outside the channel, depending on facility characteristics. Reference
	facility-specific FMP for access areas.
	3. Install bedding layer per the specifications including filter fabric
	4. Imported material (e.g., riprap, rock) may be pumped, wheel-
	barrowed or transported by truck/loader, etc. to work area
	5. Equipment places riprap per Placement Method A or B
	6. Equipment moves rock in the work area to maintain appropriate
	grade
	7. Use hand tools or equipment to compact/settle rock to stable
	position
	8. Place/transport material in a portable trash bin, wheel-barrow, or
	by equipment to loading/access area, as needed
	9. Equipment loads material from access/loading area into dump
	truck to be transported to approved disposal site
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s)
	shall conduct the following on site:
	Review sensitive biological, historical, and water quality resources;
	if present, flag/delineate
	Conduct appropriate training
	Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping
	procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Reference facility-specific FMP
Flow Management	As needed:
1 10W Management	1. Vactor or pump standing water from channel
	Nation of pump standing water from channel     Install temporary dry-weather flow-diversion berm(s) across
	channel (upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s)
	downstream, allow for distributed discharge and infiltration
Downstream Sensitive	Reference facility-specific FMP
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Waters	

#### Riprap Installation and Maintenance Methods

BMP Installation	See Water Pollution Control Plan (WPCP)
Post-Maintenance	Conduct post-maintenance procedures as required by the WPCP
Procedures	including the following:
	1. Demobilize equipment
	2. Return temporary access/loading area(s) to pre-maintenance or
	habitat type
	3. Remove temporary BMPs
	4. Update maintenance record
	5. Conduct post-maintenance site photo documentation
Other Notes	None

#### Turf Reinforcement Mat Maintenance Methods

	As-needed for MWMP Facilities that require post-maintenance
Facility Group/Segment <sup>1</sup>	erosion control
Description & Purpose	Installation of Turf Reinforcement Mat (TRM) to stabilize bed and
	banks as a result of increased post-maintenance velocities.
	TRM are composite mats of non-degradable synthetic material that
	are incorporated into layered heavy-duty netting to create a flexible
	three-dimensional structure that provides new vegetation stability in
	adverse conditions.
Installation Sites	Generally located where erosive velocities (above pre-maintenance
	conditions) are expected
General Design Guidelines	TRM is intended to be permanent
	TRMs are frequently used to protect bed and banks from erosion
	while allowing vegetation growth
	Seeding is at the direction of the landscape architect
	Manufacturer's installation instructions and specifications should
	be followed. The maintenance procedures section below describes
	the general installation process.
Materials	TRM, pins/staples, or biodegradable stakes
Expected Lifespan	Less than 50 years
Equipment <sup>2</sup>	Bobcat/skid-steer, bulldozer/track-steer, Gradall/excavator, loader,
	backhoe, dump truck, trash pump, vactor, wheelbarrow, sweeper,
	fuel-powered hand tools

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<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various channel stabilization jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

# **Turf Reinforcement Mat Maintenance Methods**

Installation Procedures	TRM Installation (follow manufacturer's specification for
	installation and City engineering standards):
	1. With equipment (e.g., Bobcat/skid-steer, bulldozer/track-steer,
	Gradall/excavator) and/or hand tools (e.g., shovels), remove material
	(e.g., vegetation, debris, soil/sediment) and excavate to the minimum
	layer thickness per the specification within work area.
	Equipment/crew may work within channel or from an access area
	outside the channel, depending on facility characteristics. Reference
	facility-specific FMP for access areas.
	2. The soil should be prepped and seeding should be done prior to
	installation of the matting
	3. Dig a small trench at the top of slope and terminal end to secure
	the matting
	4. Install the matting by overlapping the mats a minimum of 4 to 6
	inches and secure the mats with staples or stakes
	5. Secure both ends of the mat with stakes/staples/hooks and fill in
	the trenches
	6. Seed the matting, if applicable
	7. Place/transport material in a portable trash bin, wheel-barrow, or
	by equipment to loading/access area, as needed
	8. Equipment loads material from access/loading area into dump
	truck to be transported to approved disposal site
	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s)
	shall conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources;
	if present, flag/delineate
	2. Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping
	procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Reference facility-specific FMP
Flow Management	As needed:
	1. Vactor or pump standing water from channel
	2. Install temporary dry-weather flow-diversion berm(s) across
	channel (upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s)
	downstream, allow for distributed discharge and infiltration
Downstream Sensitive	Reference facility-specific FMP
Waters	
BMP Installation	See Water Pollution Control Plan (WPCP)
BMP Installation	See Water Pollution Control Plan (WPCP)

# **Turf Reinforcement Mat Maintenance Methods**

Post-Maintenance	Conduct post-maintenance procedures as required by the WPCP
Procedures	including the following:
	1. Demobilize equipment
	2. Return temporary access/loading area(s) to pre-maintenance or
	habitat type
	3. Remove temporary BMPs
	4. Update maintenance record
	5. Conduct post-maintenance site photo documentation
Other Notes	None

### Wooden Check Dam Installation and Maintenance Methods

	As-needed for MWMP Facilities that require post-maintenance
Facility Group/Segment <sup>1</sup>	erosion control
Description & Purpose	Installation of wooden check dam to dissipate incoming flows and
	reduce velocities to pre-maintenance levels.
	Methods are intended to be temporary/semi-permanent (wooden
	check dam would degrade/integrate with stream bed/vegetation).
	Wooden check dam references: FAO 1986.
Installation Sites	Generally located immediately upstream of stream segments where
	erosive velocities (above pre-maintenance conditions) are expected
General Design Guidelines	Wooden check dams are made of posts and wood that spans the
	ditch as a temporary structure
	The check dam is constructed straight across the channel
	The check dams should be no taller than 2 feet
Materials	Wooden posts, salvaged/imported trees, or planks/heavy boards
Expected Lifespan	Approximately 3 years
Equipment <sup>2</sup>	Bobcat/skid-steer, bulldozer/track-steer, Gradall/excavator, loader,
	backhoe, dump truck, trash pump, vactor, wheelbarrow, sweeper,
	fuel-powered hand tools
Installation Procedures	Wooden Check Dam Installation (follow City engineering
	standards):
	1. With equipment (e.g., Bobcat/skid-steer, bulldozer/track-steer,
	Gradall/excavator) and/or hand tools (e.g., shovels), remove material
	(e.g., vegetation, debris, soil/sediment) within work area.
	Equipment/crew may work within channel or from an access area
	outside the channel, depending on facility characteristics. Reference
	facility-specific FMP for access areas.
	2. Install posts 1' to a maximum of 4' apart based on maintenance
	design plans
	3. Set wooden planks between two rows of posts. Use wire to hold
	the top of the wooden check dam in place.
	4. Place/transport material in a portable trash bin, wheel-barrow, or
	by equipment to loading/access area, as needed
	5. Equipment loads material from access/loading area into dump
	truck to be transported to approved disposal site

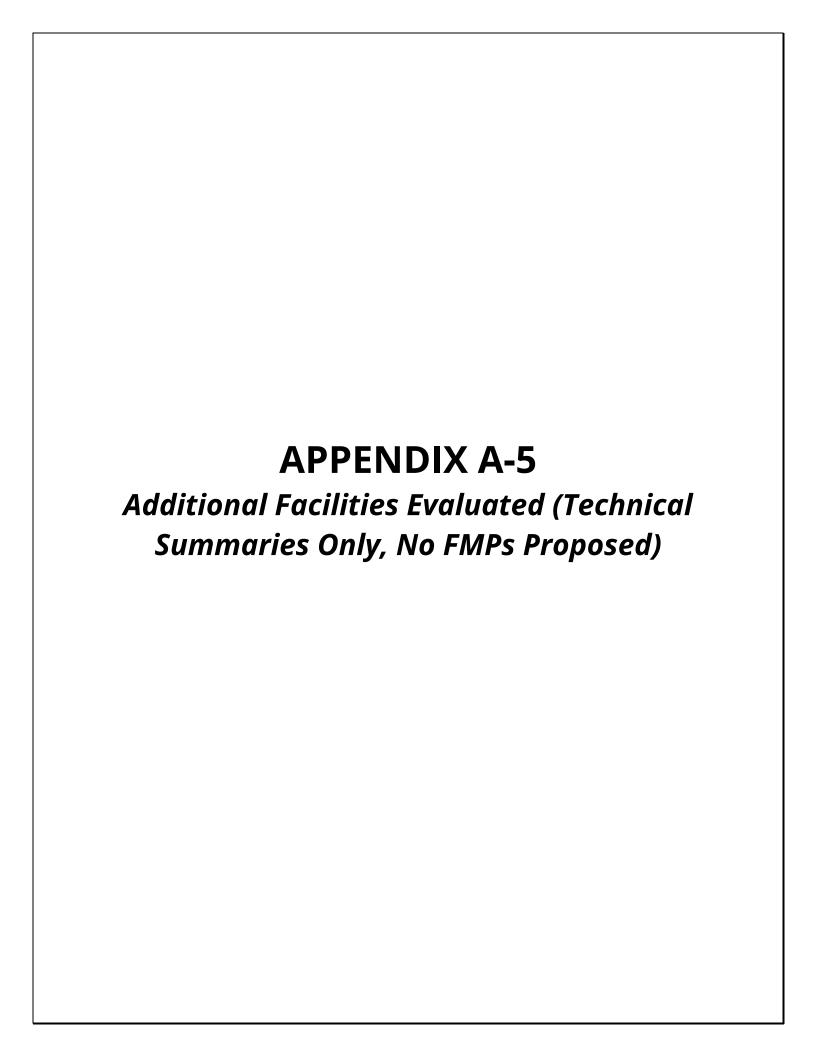
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<sup>&</sup>lt;sup>1</sup> Facility-specific FMPs provide details on existing plans or as-builts available for a segment or facility group and will show access, loading, staging and/or stockpiling areas.

<sup>&</sup>lt;sup>2</sup> The equipment list is typical of various dissipator installation jobs, but not all equipment listed will be used depending on the type of installation and the facility's characteristics

#### Wooden Check Dam Installation and Maintenance Methods

	Additional Maintenance Information
Pre-Maintenance Meeting	Prior to the start of any maintenance activity, a qualified specialist(s)
_	shall conduct the following on site:
	1. Review sensitive biological, historical, and water quality resources;
	if present, flag/delineate
	2. Conduct appropriate training
	3. Review Best Management Practices (BMP) installation
	4. If needed, review pre- and during-maintenance pumping
	procedure
	5. Conduct pre-maintenance site photo documentation
Biology	Reference facility-specific FMP
Flow Management	As needed:
	1. Vactor or pump standing water from channel
	2. Install temporary dry-weather flow-diversion berm(s) across
	channel (upstream and downstream of maintenance area)
	3. Position vactor/pump to capture any incoming or contained flows
	4. If pumping water through temporary hose(s) to location(s)
	downstream, allow for distributed discharge and infiltration
<b>Downstream Sensitive</b>	Reference facility-specific FMP
Waters	
BMP Installation	See Water Pollution Control Plan (WPCP)
Post-Maintenance	Conduct post-maintenance procedures as required by the WPCP
Procedures	including the following:
	1. Demobilize equipment
	2. Return temporary access/loading area(s) to pre-maintenance or
	habitat type
	3. Remove temporary BMPs
	4. Update maintenance record
	5. Conduct post-maintenance site photo documentation
Other Notes	None



### Technical Summary

# Los Peñasquitos Canyon Creek - Sorrento Facility Group

Segment Name (Facility number): Sorrento Valley 1 (2-01-000)



#### Sorrento Valley Segment 1 Detail

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of Los Peñasquitos Canyon Creek, upstream of the Los Peñasquitos Lagoon
Tributaries (listed from downstream to	Soledad Canyon Creek, Soledad Canyon Creek Unnamed Tributary, Los
upstream)	Peñasquitos Canyon Creek Unnamed Tributary, Carroll Canyon Creek
Facility Length	Approximately 2,347 feet
Top-of-Bank Width	Approximately 23–76 feet
Bottom Facility Width	Approximately 8–26 feet
Facility Depth	Approximately 2–12 feet
Adjacent Land Use	Industrial, Office, Open Space, Transportation
As-Built Drawing Number	None
Coastal Zone	CST-APP, N-APP-1



Figure 1: October 2010, looking upstream at the vegetation along the banks

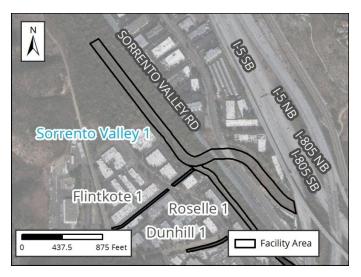


Figure 2: Vicinity Map of Sorrento Valley Segment 1

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Maintenance	Approximately 1998: Excavation of sediment and vegetation
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Prior to 2006: Unknown

January 2011 – March 2019: No maintenance conducted

#### **Past Regulatory Approvals**

**CEQA** 2011 MMP PEIR No. 42891

**CDP** CDP No. 6-99-101 (expired November 2017)

**SDP** SDP No. 2034245 (2017 Addendum)

**404** IP USACE File #SPL-2010-00985-MBS (expired December 2015)

**401** RWQCB 401 Cert No. R9-06C-062:643875:jebsen (expired December 2015)

**1602** CDFW SAA No. 1600-2006-0183-R5 (expires August 2026)

Mitigation for Previous Impacts El Cu

El Cuervo Famosa Slough

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

### **Current Conditions Affecting Facility Capacity**

In October 2010, moderate to dense vegetation and sediment vegetation was observed. Current conditions were reviewed in relation to the hydraulic analysis for this segment in 2018 and documented in the current conditions assessment memorandum in Appendix A of the Hydrology and Hydraulics Technical Report.

Hydrologic Peak Flows						
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	680	2,200	4,200	9,000	13,100	19,000
second [cfs])						

**Hydraulic Capacity of Facility** 

**Current Capacity** 2,200 cfs

Proposed MWMP Maintained Capacity N/A

Maintenance Recommendation No maintenance is recommended at this time

In-Stream Post-Maintenance Erosion Control Recommendation

N/A (no maintenance)

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	<ul> <li>Disturbed wetland (Arundo-dominated)</li> </ul>
	Natural flood channel
	Riparian forest (southern willow forest)
<b>Adjacent Vegetation</b>	Developed land
	Disturbed land
	Natural flood channel
	Ornamental plantings
Habitat and Wildlife	The channel has a high potential to support sensitive species, such as least Bell's vireo, Ridgeway's rail, and southern willow flycatcher, as well as other migratory birds due to the presence of extensive suitable habitat (e.g. riparian forest [southern willow forest]) both within and adjacent to the facility
МНРА	The channel is located almost entirely within the Multi Habitat Planning Area (MHPA) with direct connectivity to additional MHPA sections upstream and downstream within the Los Penasquitos Creek and Lagoon
Mitigation Within Facility	None

#### Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources	
Resource Identified in APE	Channel; c. 1953–1964 earthen channel
Potential Historical Resources	Yes
Constraint Identified	

#### **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-CR-1
Land Use (LU)	MM-CR-2
EP-LU-1	MM-CR-3
Solid Waste (SW)	MM-CR-4
EP-SW-2	Noise (NOI)
EP-SW-3	MM-NOI-1
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

### **Technical Summary**

# Soledad Canyon Creek -Sorrento Facility Group

Segment Names (Facility numbers):

Roselle 1 (2-03-000) (See Appendix A-1)

Roselle 2 (2-03-002) (See Appendix A-1)

SorValRd 1 (2-03-004)

SorValRd 2 (2-03-006)



#### Soledad Canyon Creek - Sorrento Facility Group Technical Summary

#### SorValRd Segment 1 Detail

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of Soledad Canyon Creek, immediately upstream of Soledad Canyon Creek (Segment 2)
Tributaries (listed from downstream to upstream)	No named tributaries
Facility Length	Approximately 5,283 feet
Top-of-Bank Width	Approximately 34–109 feet
Bottom Facility Width	Approximately 10–40 feet
Facility Depth	Approximately 6–15 feet
Adjacent Land Use	Construction, Industrial, Office, Open Space, Transportation, Vacant
As-Built Drawing Number	None
Coastal Zone	CST-APP, N-APP-1



Figure 1: July 2017, looking downstream at channel bottom near the upstream side of railroad bridge



Figure 2: Vicinity Map of SorValRd Segment 1

### Soledad Canyon Creek - Sorrento Facility Group Technical Summary

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance	Prior to 2011: Unknown January 2011 – March 2019: No maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	None	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Pro	evious Impacts	None

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity		The vegetation was observed to from light to moderate with the channel bottom lined with cobble and mostly clear of vegetation				
Hydrologic Peak Flo	ws					
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per second [cfs])	480	850	1,300	2,400	3,800	5,600
Hydraulic Capacity	of Facility					
Current Capacity			5,600 cfs			
Proposed MWMP Maintained Capacity			N/A			
Maintenance Recommendation			No maintenance is recommended at this time			
In-Stream Post-Maintenance Erosion Control Recommendation			N/A (no maintenance)			

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Disturbed wetland (Arundo-dominated)
	Natural flood channel
	Riparian forest (southern willow forest)
<b>Adjacent Vegetation</b>	Developed land
	Disturbed land
	Disturbed wetland (Arundo-dominated)
	Eucalyptus woodland
	Non-native grassland
	Ornamental plantings
	Riparian forest (southern riparian forest)
<b>Habitat and Wildlife</b>	The vegetation contained within the facility provides potential nesting and/or foraging
	habitat for raptors, migratory bird species, and sensitive bird species (e.g., Least Bell's vireo
	and southern willow flycatcher)
MHPA	Portions of the channel are located within the Multi Habitat Planning Area (MHPA)
Mitigation Within	None
Facility	

#### Historical, Archaeological, and Tribal Cultural Resource Summary

Archeological and Tribal Resources		
Resource Identified in APE	P-37-004609	
Resource Identified Adjacent to APE	None	
Resource Type	Prehistoric village	

Historical Resources			
Resource Identified in APE	None		
<b>Potential Historical Resources</b>	None		
Constraint Identified			

#### **Environmental Protocols and Mitigation Measures**

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-CR-1
Land Use (LU)	MM-CR-2
EP-LU-1	MM-CR-3
Paleontological Resources (PAL)	MM-CR-4
EP-PAL-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

#### SorValRd Segment 2 Detail

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of Soledad Canyon Creek, immediately upstream of Soledad Canyon Creek (SorVal Rd Segment 1)
Tributaries (listed from downstream to upstream)	No named tributaries
Facility Length	Approximately 1,473 feet
Top-of-Bank Width	Approximately 55–300 feet
Bottom Facility Width	Approximately 47–170 feet
Facility Depth	Approximately 6–9 feet
Adjacent Land Use	Commercial, Industrial, Office, Open Space, Public Facilities and Utilities, Transportation, Vacant
As-Built Drawing Number	10255-D
Coastal Zone	No



Figure 1: May 2019, looking downstream at vegetation density



Figure 2: Vicinity Map of SorValRd Segment 2

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance	Prior to 2011: Unknown January 2011 – March 2019: No maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	N/A	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Pro	evious Impacts	None

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

•		•	The vegetation was observed to from light to moderate with the channel bottom lined with cobble and mostly clear of vegetation				
Hydrologic Peak Flo	ws						
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year	
Q (cubic feet per second [cfs])	480	850	1,300	2,400	3,800	5,600	
Hydraulic Capacity of Facility					·		
Current Capacity			5,600 cfs				
Proposed MWMP Maintained Capacity		N/A					
Maintenance Recommendation		No maintenance is recommended at this time					
In-Stream Post-Maintenance Erosion Control Recommendation			N/A (no i	maintenance)			

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	Natural flood channel
	Riparian forest (southern willow forest)
Adjacent Vegetation	<ul> <li>Developed land</li> <li>Disturbed land</li> <li>Eucalyptus woodland</li> <li>Non-native grassland</li> <li>Ornamental plantings</li> <li>Riparian forest (southern riparian forest)</li> </ul>
Habitat and Wildlife	The vegetation contained within and adjacent the facility provides potential nesting and/or foraging habitat for raptors, migratory bird species, and sensitive bird species (e.g.,. Least Bell's vireo and southern willow flycatcher)
МНРА	The facility is adjacent to the Multi Habitat Planning Area (MHPA). The MHPA is located 50 feet directly downstream the channel's north western boundary.
Mitigation Within Facility	None

#### Historical, Archaeological, and Tribal Cultural Resource Summary

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources			
Resource Identified in APE	None		
<b>Potential Historical Resources</b>	None		
Constraint Identified			

#### **Environmental Protocols and Mitigation Measures**

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-CR-1
Land Use (LU)	MM-CR-2
EP-LU-1	MM-CR-3
Solid Waste (SW)	MM-CR-4
EP-SW-2	Noise (NOI)
EP-SW-3	MM-NOI-1
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

### **Technical Summary**

# Tecolote Creek - Morena Facility Group

Segment Name (Facility number): Morena 1 (3-04-101)



#### Morena Segment 1 Detail

Facility Type	Earthen ditch
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of Tecolote Creek unnamed tributary, immediately upstream of Tecolote Creek Channel
Tributaries (listed from downstream to	No named tributaries
upstream)	
Facility Length	Approximately 200 feet
Top-of-Bank Width	Approximately 15–25 feet
Bottom Facility Width	Approximately 2–5 feet
Facility Depth	Approximately 4–5 feet
Adjacent Land Use	Commercial, Industrial, Multi-Family Residential, Public Facilities and Utilities, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	None
Coastal Zone	No



Figure 1: May 2017, looking downstream, representative of thick vegetation in the channel

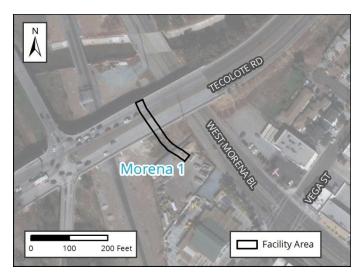


Figure 2: Vicinity Map of Morena Segment 1

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance Prior to 2011: Unknown
	January 2011 – March 2019: No maintenance conducted
	Facility modified as part of Mid-Coast Corridor Transit project
Past Regulatory A	Approvals
CEQA	2011 MMP PEIR No. 42891
CDP	N/A
SDP	SDP No. 2034245 (2017 Addendum)
404	None
401	None

Mitigation for Previous Impacts None

**1602** None

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity		The vegetation was observed to be dense with no evidence of sediment deposition				
Hydrologic Peak Flo	ws					
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per second [cfs])	35	44	50	56	66	72
Hydraulic Capacity of Facility						
Current Capacity			72 cfs			
Proposed MWMP Maintained Capacity		Capacity	N/A			
Maintenance Recommendation		No maintenance is recommended at this time				
In-Stream Post-Maintenance Erosion Control Recommendation		sion Control	N/A (no maintenance)			

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	Disturbed wetland
	Riparian forest
<b>Adjacent Vegetation</b>	Disturbed land
	Ornamental plantings
<b>Habitat and Wildlife</b>	There are no significant biological resources suitable for sensitive species use within or
	adjacent to the facility
MHPA	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA)
<b>Mitigation Within</b>	None
Facility	

#### Historical, Archaeological, and Tribal Cultural Resource Summary

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources	
Resource Identified in APE	Channel; c. 1953–1963 earthen channel
<b>Potential Historical Resources</b>	Yes
Constraint Identified	

#### **Environmental Protocols and Mitigation Measures**

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-HR-1
Paleontological Resources (PAL)	MM-HR-2
EP-PAL-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

### **Technical Summary**

# Murphy Canyon Creek - Stadium Facility Group

Segment Names (Facility numbers):

Stadium 1 (4-04-000) (See

Appendix A-1)

Stadium 2 (4-04-002) (See

Appendix A-1)

Murphy Canyon 1 (4-04-006) (See

Appendix A-1)

Murphy Canyon 2 (4-04-008)



#### **Murphy Canyon Segment 2 Detail**

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of Murphy Canyon Creek, immediately upstream of Murphy Canyon Creek (Murphy Canyon Segment 1)
Tributaries (listed from downstream to	No named tributaries
upstream)	
Facility Length	Approximately 1,563 feet
Top-of-Bank Width	Approximately 60–125 feet
Bottom Facility Width	Approximately 25–60 feet
Facility Depth	Approximately 8–17 feet
Adjacent Land Use	Commercial, Open Space, Public Facilities and Utilities, Transportation, Vacant
As-Built Drawing Number	None
Coastal Zone	No



Figure 1: March 2013, looking upstream



Figure 2: Vicinity Map of Murphy Canyon Segment 2

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance Prior to 2011: Unknown
	January 2011 – March 2019: No maintenance conducted
Past Regulatory A	Approvals
CEQA	2011 MMP PEIR No. 42891
CDP	N/A
SDP	SDP No. 2034245 (2017 Addendum)
404	None
401	None
1602	None
Mitigation for Pre	evious Impacts None

#### **Hydrology and Hydraulics Summary**

**Current Conditions Affecting** 

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

In March 2013, the vegetation was observed to be dense with little evidence of

Facility Capacity	_	sediment deposition. Current conditions were reviewed in relation to the hydraulic analysis for this segment in 2018 and documented in the current conditions assessment memorandum in Appendix A of the Hydrology and Hydraulics Technical Report.				
Hydrologic Peak Flo	ows					
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	300	680	1,100	1,700	2,400	3,000
second [cfs])						
Hydraulic Capacity of Facility						
Current Capacity			3,000 cfs			
Proposed MWMP Maintained Capacity			1	V/A		
Maintenance Recommendation		No maintenance is recommended at this time				
In-Stream Post-Maintenance Erosion Control Recommendation			N/A (no m	naintenance)		

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Eucalyptus woodland
	Riparian scrub (southern willow scrub)
<b>Adjacent Vegetation</b>	Coastal sage scrub
	Developed concrete-lined channel
	Disturbed coastal sage scrub
	Disturbed land
	Eucalyptus woodland
Habitat and Wildlife	The channel has a high potential to support sensitive species (e.g., least Bell's vireo), raptors, and other migratory birds due to the presence of extensive sensitive habitat (e.g., riparian scrub [southern willow scrub]) within and adjacent to the facility
МНРА	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA). The nearest
	MHPA boundary is located approximately 620 feet to the east of the channel.
Mitigation Within	None
Facility	

#### Historical, Archaeological, and Tribal Cultural Resource Summary

Archeological and Tribal Resources		
Resource Identified in APE	None	
Resource Identified Adjacent to APE	None	
Resource Type	N/A	

Historical Resources	
Resource Identified in APE	Channel; c. 1966–1972 earthen channel
Potential Historical Resources Constraint Identified	Yes

#### **Environmental Protocols and Mitigation Measures**

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-HR-1
Paleontological Resources (PAL)	MM-HR-2
EP-PAL-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

## **Technical Summary**

# Norfolk Canyon Creek - Fairmount Facility Group

### Segment Names (Facility numbers):

```
Fairmount 1 (4-08-008) (See Appendix A-1)
Fairmount 2 (4-08-011) (See Appendix A-1)
Fairmount 3 (4-08-014) (See Appendix A-1)
Fairmount 4 (4-08-017) (See Appendix A-1)
Baja 1 (4-08-105) (See Appendix A-1)
Aldine 1 (4-08-150)
```



#### Norfolk Canyon Creek - Fairmount Facility Group Technical Summary

#### Aldine Segment 1 Detail

Facility Type	Earthen ditch
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Upper reach of Norfolk Canyon Creek, immediately upstream of Norfolk Canyon Creek, South (Fairmount Segment 3)
Tributaries (listed from downstream to upstream)	No named tributaries
Facility Length	Approximately 1,240 feet
Top-of-Bank Width	Approximately 35 feet
Bottom Facility Width	Approximately 7 feet
Facility Depth	Approximately 7 feet
Adjacent Land Use	Open Space, Public Facilities and Utilities, Single-Family Residential, Transportation
As-Built Drawing Number	None
Coastal Zone	No



Figure 1: April 2017, looking downstream at vegetation, erosion in facility

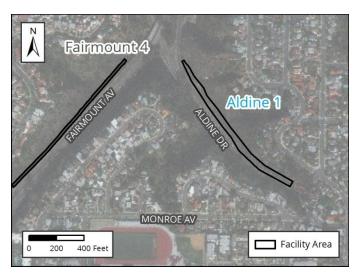


Figure 2: Vicinity Map of Aldine Segment 1

## Norfolk Canyon Creek - Fairmount Facility Group Technical Summary

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance Prior to 2011: Unknown
•	January 2011 – March 2019: No maintenance conducted
Past Regulatory A	Approvals
CEQA	2011 MMP PEIR No. 42891
CDP	N/A
SDP	SDP No. 2034245 (2017 Addendum)
404	None
401	None
1602	None
Mitigation for Pro	evious Impacts None

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

•		ried from light to on were also obs	_	th section of ro	ocky cobble. A few	
Hydrologic Peak Flo	WS					
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	280	359	419	503	563	624
second [cfs])  Hydraulic Capacity of Facility						
Curre	Current Capacity 105 cfs					
Proposed MWMP Maintained Capacity		N/A				
Maintenanc	e Recommend	<b>Idation</b> No maintenance is recommended at this time			this time	
In-Stream Post-Maintenance Erosion Control Recommendation		N/A (no maintenance)				

## Norfolk Canyon Creek - Fairmount Facility Group Technical Summary

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	<ul> <li>Disturbed wetland (palm-dominated)</li> </ul>
	Natural flood channel
<b>Adjacent Vegetation</b>	Chaparral
	Coastal sage scrub
	Developed land
	Disturbed land
	Disturbed wetland (palm-dominated)
	Eucalyptus woodland
Habitat and Wildlife	There is limited suitable habitat contained within the facility for wildlife. However, raptors could use the eucalyptus woodland present adjacent to the facility for nesting/roosting. Other sensitive bird species (e.g., coastal California gnatcatcher) could occur in sage scrub habitat adjacent to the ditch.
MHPA	The eastern side of the ditch is intersected by the Multi Habitat Planning Area (MHPA) near
	the center of the facility
<b>Mitigation Within</b>	None
Facility	

#### Historical, Archaeological, and Tribal Cultural Resource Summary

Archeological and Tribal Resources		
Resource Identified in APE	None	
Resource Identified Adjacent to APE	None	
Resource Type	N/A	

Historical Resources	
Resource Identified in APE	Channel; pre-1953 earthen channel
<b>Potential Historical Resources</b>	Yes
Constraint Identified	

#### Norfolk Canyon Creek - Fairmount Facility Group Technical Summary

#### **Environmental Protocols and Mitigation Measures**

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-HR-1
Land Use (LU)	MM-HR-2
EP-LU-1	Noise (NOI)
Paleontological Resources (PAL)	MM-NOI-1
EP-PAL-1	
Solid Waste (SW)	
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

### Technical Summary

# Auburn Creek - Home Facility Group

Segment Names (Facility numbers):

Home 1 (5-04-220) (See Appendix A-1)

Home 2 (5-04-224) (See Appendix A-1)

Home 3 (5-04-227) (See Appendix A-1)

Home 4 (5-04-229)

Home 5 (5-04-231) (See Appendix A-1)



#### **Home Segment 4 Detail**

Facility Type	Earthen and concrete channel
Substrate Detail	Stations 2162-2916: Earthen bottom, earthen left bank, and concrete right bank
Location Within Watershed	Lower reach of Auburn Creek, immediately upstream of Auburn Creek (Home, Segment 3)
Tributaries (listed from downstream to upstream)	Auburn Creek
Facility Length	Approximately 754 feet
Top-of-Bank Width	Approximately 30 feet
Bottom Facility Width	Approximately 12 feet
Facility Depth	Approximately 6 feet
Adjacent Land Use	Commercial, Industrial, Multi-Family Residential, Open Space, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	12728-2-L
Coastal Zone	No



Figure 1: March 2016, looking upstream at the double 6foot wide by 6-foot tall RCB culvert. Note the standing water and erosion at culvert outlet.



Figure 2: Vicinity Map of Home Segment 4

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	Prior to 2011: Unknown  January 2011 – March 2019: No maintenance conducted
Past Regulatory A	
	2011 MMP PEIR No. 42891
CDP	N/A
SDP	SDP No. 2034245 (2017 Addendum)
404	None
401	None
1602	None
Mitigation for Pro	evious Impacts None

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

•		2017, the vegetation observed in the channel was dense. A few ion were noted as well.				
Hydrologic Peak Flo	ws					
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per second [cfs])	120	290	430	630	950	1,200
Hydraulic Capacity of Facility						
Current Capacity 1,200 cfs						
Proposed MWMP Maintained Capacity		N/A				
Maintenance Recommendation		No maintenance is recommended at this time				
In-Stream Post-Maintenance Erosion Control Recommendation		N/A (no maintenance)				

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	<ul> <li>Developed concrete-lined channel</li> <li>Disturbed wetland (Arundo-dominated)</li> <li>Ornamental plantings</li> </ul>
Adjacent Vegetation	<ul> <li>Coastal sage scrub</li> <li>Developed concrete-lined channel</li> <li>Developed land</li> <li>Disturbed wetland (Arundo-dominated)</li> <li>Ornamental plantings</li> </ul>
Habitat and Wildlife	The channel area itself does not contain suitable vegetation for sensitive wildlife; however, suitable habitat for sensitive bird species, such as coastal California gnatcatcher, is present in the areas surrounding the facility
МНРА	The facility is adjacent to the Multi Habitat Planning Area (MHPA). The nearest MHPA boundary is located less than 5 feet directly south of the facility.
Mitigation Within Facility	None

#### Historical, Archaeological, and Tribal Cultural Resource Summary

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources	
Resource Identified in APE	Channel; 1956 earthen channel
Potential Historical Resources Constraint Identified	Yes

#### Auburn Creek - Home Facility Group Technical Summary

#### **Environmental Protocols and Mitigation Measures**

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Geologic Resources (GEO)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-GEO-1	MM-HR-1
Health and Safety/Hazards (HAZ)	MM-HR-2
DELETE	Noise (NOI)
EP-HAZ-3	MM-NOI-1
Land Use (LU)	
EP-LU-1	
Paleontological Resources (PAL)	
DELETE	
Solid Waste (SW)	
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

### **Technical Summary**

# Auburn Creek - Oakcrest Facility Group

Segment Name (Facility number):
Oakcrest 1 (5-04-245)



#### Oakcrest Segment 1 Detail

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Upper reach of Auburn Creek (unnamed tributary), upstream of Auburn Creek (unnamed tributary, Wightman, Segment 2)
Tributaries (listed from downstream to upstream)	No named tributaries
Facility Length	Approximately 1,121 feet
Top-of-Bank Width	Approximately 24–51 feet
Bottom Facility Width	Approximately 6.5–14 feet
Facility Depth	Approximately 5.6–6.5 feet
Adjacent Land Use	Multi-Family Residential, Public Facilities and Utilities, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	None
Coastal Zone	No



Figure 1: August 2017, looking upstream at RCP storm drain system outlet

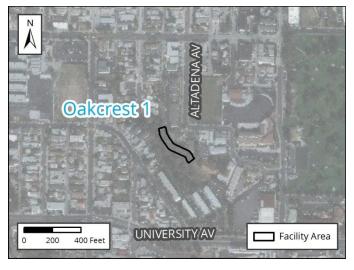


Figure 2: Vicinity Map of Oakcrest Segment 1

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Maintenance		Prior to 2011: Unknown
		January 2011 – March 2019: No maintenance conducted
Past Regulatory A	Approvals	
CEQA	None	
CDP	N/A	
SDP	None	
404	None	
401	None	
1602	None	
Mitigation for Pro	evious Impacts	None

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

<b>Current Conditions</b>	S Affecting	Dense vegeta	tion was observe	ed and little ev	idence of sedime	ent deposition.
<b>Facility Capacity</b>		Standing water was observed at the upstream culvert outlet.				
Hydrologic Peak Flo	)WS					
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	86	127	160	248	360	450
second [cfs])						
Hydraulic Capacity of Facility						
Curr	ent Capacity		450 cfs			
Proposed MWM	IP Maintained	Capacity	N/A			
Maintenance Recommendation		No maintenance is recommended at this time		this time		
In-Stream Post-Maintenance Erosion Control Recommendation		N/A (no maintenance)				

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Developed concrete-lined channel
	Natural flood channel
	Ornamental plantings
	Riparian forest (southern willow forest)
<b>Adjacent Vegetation</b>	Developed land
	Disturbed land
	Eucalyptus woodland
	Riparian forest (southern willow forest)
	Ornamental plantings
<b>Habitat and Wildlife</b>	Although this channel does contain some suitable vegetation for sensitive wildlife species
	(e.g., least Bell's vireo), the channel extents and area of vegetation present are limited such
	that it is unlikely for wildlife to use the channel for nesting or foraging
MHPA	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA)
Mitigation Within	Identified as potential compensatory mitigation areas. A compensatory mitigation plan has
Facility	not yet been prepared.

#### Historical, Archaeological, and Tribal Cultural Resource Summary

<b>Archeological and Tribal Resources</b>	
Resource Identified in APE	None
<b>Resource Identified Adjacent to APE</b>	None
Resource Type	N/A

Historical Resources	
Resource Identified in APE	Channel; pre-1972 earthen channel
Potential Historical Resources Constraint Identified	Yes

#### **Environmental Protocols and Mitigation Measures**

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-HR-1
Paleontological Resources (PAL)	MM-HR-2
EP-PAL-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

### **Technical Summary**

# South Chollas Creek - Euclid Facility Group

Segment Names (Facility numbers):

Euclid 1 (5-05-019)

Euclid 2 (5-05-021) (See Appendix A-1)



#### South Chollas Creek - Euclid Facility Group Technical Summary

#### **Euclid Segment 1 Detail**

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Middle reach of South Chollas Creek, upstream of South Chollas Creek (Ocean View Segment 2)
Tributaries (listed from downstream to upstream)	South Chollas Creek
Facility Length	Approximately 904 feet
Top-of-Bank Width	Approximately 42–93 feet
Bottom Facility Width	Approximately 8–29 feet
Facility Depth	Approximately 7–27 feet
Adjacent Land Use	Commercial, Industrial, Public Facilities and Utilities, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	None
Coastal Zone	No



Figure 1: April 2017, representative of earthen with cobble portion of channel

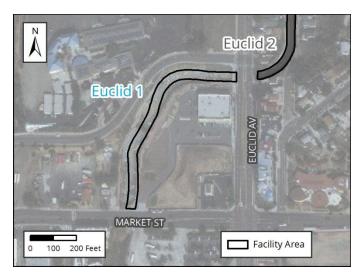


Figure 2: Vicinity Map of Euclid Segment 1

#### South Chollas Creek - Euclid Facility Group Technical Summary

#### **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	Prior to 2011: Unknown
	January 2011 – March 2019: No maintenance conducted
Past Regulatory A	Approvals
CEQA	2011 MMP PEIR No. 42891
CDP	N/A
SDP	SDP No. 2034245 (2017 Addendum)
404	None
401	None
1602	None
Mitigation for Pro	evious Impacts None

#### **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Affecting Facility Capacity		The channel was relatively clean with light vegetation and little evidence of sediment deposition in the riprap				
Hydrologic Peak Flows						
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	540	1,250	2,000	3,000	3,900	5,300
second [cfs])						
Hydraulic Capacity of Facility						
Current Capacity		1,250 cfs				
Proposed MWMP Maintained Capacity		N/A				
Maintenance Recommendation		No maintenance is recommended at this time				
In-Stream Post-Maintenance Erosion Control Recommendation		N/A (no maintenance)				

## South Chollas Creek - Euclid Facility Group Technical Summary

#### **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	Natural flood channel
<b>Adjacent Vegetation</b>	Developed land
	Disturbed land
	Disturbed wetland
	Eucalyptus woodland
	Ornamental plantings
	Riparian forest (coast live oak)
	Riparian forest (southern willow forest)
<b>Habitat and Wildlife</b>	There are no significant biological resources suitable for sensitive species use within the
	facility; however, sensitive species (e.g., least Bell's vireo) or other migratory species may
	use the riparian forest (southern willow forest) habitat downstream of the channel
MHPA	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA). The nearest
	MHPA boundary is located more than 1,000 feet east of the channel.
<b>Mitigation Within</b>	None
Facility	

#### Historical, Archaeological, and Tribal Cultural Resource Summary

Archeological and Tribal Resources		
Resource Identified in APE	None	
<b>Resource Identified Adjacent to APE</b>	None	
Resource Type	N/A	

Historical Resources	
Resource Identified in APE	Channel; c. 1964 earthen channel
Potential Historical Resources Constraint Identified	Yes

## South Chollas Creek - Euclid Facility Group Technical Summary

#### **Environmental Protocols and Mitigation Measures**

Environmental Protocols (EP)	Mitigation Measures (MM)	
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood	
	Character (AES)	
EP-BIO-1	MM-AES-1	
EP-BIO-2	Air Quality (AQ)	
EP-BIO-3a, 3b, 3c	MM-AQ-1	
EP-BIO-4	Biological Resources (BIO)	
EP-BIO-5	MM-BIO-1a	
EP-BIO-6	MM-BIO-2	
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural	
	Resources (HR and CR)	
EP-HAZ-3	MM-HR-1	
Paleontological Resources (PAL)	MM-HR-2	
EP-PAL-1	Noise (NOI)	
Solid Waste (SW)	MM-NOI-1	
EP-SW-2		
EP-SW-3		
EP-SW-4		
EP-SW-5		
EP-SW-6		
EP-SW-7		
EP-SW-8		
Water Quality (WQ)		
EP-WQ-1		

# Technical Summary

# South Chollas Creek Encanto Branch - Imperial Facility Group

Segment Names (Facility numbers):
Imperial 1 (5-05-304)
Imperial 2 (5-05-306) (See
Appendix A-1)



# **Imperial Segment 1 Detail**

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of the South Chollas Creek Encanto Branch, upstream of South Chollas Creek
Tributaries (listed from downstream to upstream)	South Chollas Creek Encanto Branch
Facility Length	Approximately 2,638 feet
Top-of-Bank Width	Approximately 95 feet
Bottom Facility Width	Approximately 22 feet
Facility Depth	Approximately 14 feet
Adjacent Land Use	Commercial, Industrial, Multi-Family Residential, Open Space, Other Residential, Public Facilities and Utilities, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	12898-D
Coastal Zone	No



Figure 1: April 2017, looking downstream of Orange Line bridge at vegetation



Figure 2: Vicinity Map of Imperial Segment 1

# **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance Prior to 2011: Unknown
•	January 2011 – March 2019: No maintenance conducted
Past Regulatory A	Approvals
CEQA	2011 MMP PEIR No. 42891
CDP	N/A
SDP	SDP No. 2034245 (2017 Addendum)
404	None
401	None
1602	None
Mitigation for Pro	evious Impacts None

## **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

		of vegetation was observed to range from medium to dense with of sediment deposition				
Hydrologic Peak Flo	)WS					
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	626	932	1,200	1,873	2,700	3,500
second [cfs])						
Hydraulic Capacity	of Facility					
Current Capacity		1,873 cfs				
Proposed MWM	IP Maintained	Capacity	apacity N/A			
Maintenance Recommendation		No maintenance is recommended at this time				
In-Stream Post-Maintenance Erosion Control Recommendation		N/A (no maintenance)				

# **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	Disturbed riparian forest (southern willow forest)
racinty vegetation	·
	Disturbed wetland
	Natural flood channel
<b>Adjacent Vegetation</b>	Coastal sage scrub
	Developed land
	Disturbed land
	Disturbed wetland (Arundo-dominated)
	Ornamental plantings
Habitat and Wildlife	Although not suitable for other sensitive bird species, the habitat contained within the facility may provide opportunities for nesting and/or foraging raptors or other migratory species
МНРА	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA). The nearest MHPA boundary is located approximately 350 feet north of the channel.
Mitigation Within Facility	None

# Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Resource Identified in APE P-37-016029	
Resource Identified Adjacent to APE None	
Resource Type Lithic artifact scatter	

Historical Resources	
Resource Identified in APE	Channel; c. 1966–1972 earthen channel
Potential Historical Resources Constraint Identified	Yes

# **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-HR-1
Solid Waste (SW)	MM-HR-2
EP-SW-2	Noise (NOI)
EP-SW-3	MM-NOI-1
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

# Technical Summary

# South Chollas Creek Encanto Branch - Jamacha Facility Group

Segment Names (Facility numbers):

Jamacha 1 (5-05-603) (See Appendix A-1)

Jamacha 2 (5-05-606)

Jamacha 3 (5-05-610)

Lobrico 1 (5-05-702)

Cadman 1 (5-05-802)



# Jamacha Segment 2 Detail

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of the South Chollas Creek Encanto Branch, upstream of South Chollas Creek Encanto Branch (Jamacha Segment 1)
Tributaries (listed from downstream to upstream)	South Chollas Creek Encanto Branch
Facility Length	Approximately 1,030 feet
Top-of-Bank Width	Approximately 20.5–39.5 feet
Bottom Facility Width	Approximately 5.5–17 feet
Facility Depth	Approximately 0.5–6 feet
Adjacent Land Use	Open Space, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	11251-L
Coastal Zone	No



Figure 1: July 2017, downstream of Beacon Drive culvert (3-foot-diameter RCP), looking west. Riprap apron and dense vegetation present.

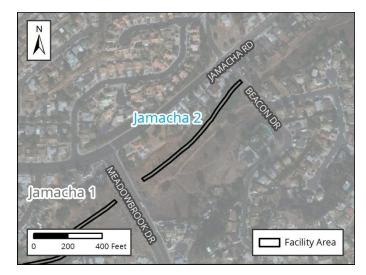


Figure 2: Vicinity Map of Jamacha Segment 2

# **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance Prior to 2011: Unknown
	January 2011 – March 2019: No maintenance conducted
Past Regulatory	Approvals
CEQA	2011 MMP PEIR No. 42891
CDP	N/A
SDP	SDP No. 2034245 (2017 Addendum)
404	None
401	None
1602	None
Mitigation for Pro	evious Impacts None

# **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Facility Capacity			n was observed to vary from light to dense with evidence of osition near the culverts			h evidence of
Hydrologic Peak Flo	)WS					
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	200	256	300	361	408	455
second [cfs])						
<b>Hydraulic Capacity</b>	of Facility					
Current Capacity		250 cfs				
Proposed MWM	IP Maintained	Capacity	N/A			
Maintenance Recommendation		No maintenance is recommended at this time				
In-Stream Post-Maintenance Erosion Control Recommendation		N/A (no maintenance)				

# **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Disturbed freshwater marsh
	Disturbed wetland
	Disturbed wetland (Arundo-dominated)
	Freshwater marsh
	Natural flood channel
<b>Adjacent Vegetation</b>	Coastal sage scrub
	Developed land
	Disturbed coastal sage scrub
	Disturbed land
	Disturbed wetland (Arundo-dominated)
	Non-native grassland
	Ornamental plantings
<b>Habitat and Wildlife</b>	There is limited suitable habitat contained within the facility for wildlife. However, raptors
	could use the ornamental vegetation present adjacent to the facility for nesting/roosting.
	Coastal sage scrub habitat is isolated and unlikely to support coastal California gnatcatcher.
MHPA	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA)
Mitigation Within	Identified as a potential compensatory mitigation area. A compensatory mitigation plan
Facility	has not yet been prepared.

# Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

<b>Archeological and Tribal Resources</b>	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources		
Resource Identified in APE	None	
<b>Potential Historical Resources</b>	None	
Constraint Identified		

# **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)		
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood		
	Character (AES)		
EP-BIO-1	MM-AES-1		
EP-BIO-2	Air Quality (AQ)		
EP-BIO-3a, 3b, 3c	MM-AQ-1		
EP-BIO-4	Biological Resources (BIO)		
EP-BIO-5	MM-BIO-1a		
EP-BIO-6	MM-BIO-2		
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural		
	Resources (HR and CR)		
EP-HAZ-3	Noise (NOI)		
Paleontological Resources (PAL)	MM-NOI-1		
EP-PAL-1			
Solid Waste (SW)			
EP-SW-2			
EP-SW-3			
EP-SW-4			
EP-SW-5			
EP-SW-6			
EP-SW-7			
EP-SW-8			
Water Quality (WQ)			
EP-WQ-1			

# **Jamacha Segment 3 Detail**

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of the South Chollas Creek Encanto Branch, upstream of South Chollas Creek Encanto Branch (Jamacha Segment 2)
Tributaries (listed from downstream to upstream)	South Chollas Creek Encanto Branch
Facility Length	Approximately 2,149 feet
Top-of-Bank Width	Approximately 9–55 feet
Bottom Facility Width	Approximately 2.5–32 feet
Facility Depth	Approximately .5–3.5 feet
Adjacent Land Use	Open Space, Single-Family Residential, Transportation
As-Built Drawing Number	None
Coastal Zone	No



Figure 1: July 2017, looking upstream from Beacon Drive culvert (3-foot-diameter RCP)

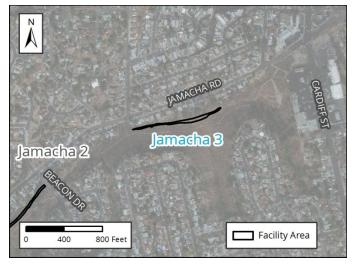


Figure 2: Vicinity Map of Jamacha Segment 3

# **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

History of Mainte	enance Prior to 2011: Unknown
	January 2011 – March 2019: No maintenance conducted
Past Regulatory A	Approvals
CEQA	2011 MMP PEIR No. 42891
CDP	N/A
SDP	SDP No. 2034245 (2017 Addendum)
404	None
401	None
1602	None
Mitigation for Pro	evious Impacts None

# **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

<u> </u>		of vegetation was observed to vary from light to dense with ediment deposition near the culverts				
Hydrologic Peak Flo	ws					
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per second [cfs])	178	227	266	320	362	403
Hydraulic Capacity of Facility						
Current Capacity		40 cfs				
Proposed MWMP Maintained Capacity			N/A			
Maintenance Recommendation		No maintenance is recommended at this time				
In-Stream Post-Maintenance Erosion Control Recommendation		N/A (no maintenance)				

# **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	Disturbed wetland		
	Natural flood channel		
<b>Adjacent Vegetation</b>	Developed land		
	Disturbed land		
	Ornamental plantings		
Habitat and Wildlife	There are no significant biological resources suitable for sensitive species use within or adjacent to the facility		
	, , , , , , , , , , , , , , , , , , ,		
MHPA	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA)		
<b>Mitigation Within</b>	Identified as a potential compensatory mitigation area. A compensatory mitigation plan has		
Facility	not yet been prepared.		

# Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources	
Resource Identified in APE	Channel; c. 1953 earthen channel
<b>Potential Historical Resources</b>	Yes
Constraint Identified	

# **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-HR-1
Paleontological Resources (PAL)	MM-HR-2
EP-PAL-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

# Cadman Segment 1 Detail

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Lower reach of the South Chollas Creek Encanto Branch, upstream of South Chollas Creek Encanto Branch (Jamacha Segment 1)
Tributaries (listed from downstream to	South Chollas Creek Encanto Branch
upstream)	
Facility Length	Approximately 398 feet
Top-of-Bank Width	Approximately 20–42 feet
Bottom Facility Width	Approximately 7–21 feet
Facility Depth	Approximately 2–7 feet
Adjacent Land Use	Commercial, Open Space, Parks, Public Facilities and Utilities, Single- Family Residential, Transportation, Vacant
As-Built Drawing Number	None
Coastal Zone	No



Figure 1: April 2016, looking downstream at the dense grass in channel



Figure 2: Vicinity Map of Cadman Segment 1

# **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

**History of Maintenance** Prior to 2011: Unknown

2011 - 2014: No maintenance conducted

2015/2016: Emergency excavation of sediment and vegetation

2017 - March 2019: No maintenance conducted

#### **Past Regulatory Approvals**

CEQA 2011 MMP PEIR No. 42891

CDP N/A

**SDP** SDP No. 2034245 (2017 Addendum)

**404** RGP 63 USACE File #SPL-2016-00944-RAG

**401** RGP 63 Verification No. R9-2016-0016

**1602** LSA Emergency Notification submitted 01/2016

Mitigation for Previous Impacts None

## **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Condition	s Affecting	The amount of vegetation was observed to vary from light to dense				
Facility Capacity						
Hydrologic Peak Flows						
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	275	351	411	495	559	623
second [cfs])						
Hydraulic Capacity of Facility						
Curr	ent Capacity	t <b>y</b> 125 cfs				

Current Capacity	125 cfs
Proposed MWMP Maintained Capacity	N/A
Proposed MWMP Maintained Capacity	N/A

Maintenance Recommendation	No maintenance is recommended at this time	
In-Stream Post-Maintenance Erosion Control	N/A (no maintenance)	
Recommendation		

# **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Disturbed freshwater marsh
	Disturbed wetland
	<ul> <li>Disturbed wetland (Arundo-dominated)</li> </ul>
	Freshwater marsh
	Natural flood channel
<b>Adjacent Vegetation</b>	Coastal sage scrub
	Developed land
	Disturbed coastal sage scrub
	Disturbed land
	Disturbed wetland (Arundo-dominated)
	Eucalyptus woodland
	Non-native grassland
	Ornamental plantings
	Riparian forest (coast live oak)
Habitat and Wildlife	There are no significant biological resources suitable for sensitive species use within the facility, but raptors or other migratory species may use the riparian forest (coast live oak),
	eucalyptus woodland, and coastal sage scrub habitat adjacent to the channel. Coastal sage
	scrub habitat is isolated and unlikely to support coastal California gnatcatcher.
МНРА	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA)
Mitigation Within	Identified as potential compensatory mitigation area. A compensatory mitigation plan has
_	not yet been prepared.
Facility	not yet been prepared.

# Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources		
Resource Identified in APE	None	
<b>Potential Historical Resources</b>	None	
Constraint Identified		

# **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Noise (NOI)
EP-HAZ-3	MM-NOI-1
Paleontological Resources (PAL)	
EP-PAL-1	
Solid Waste (SW)	
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

# Lobrico Segment 1 Detail

Facility Type	Earthen channel	
Substrate Detail	Earthen bottom and banks	
Location Within Watershed	Lower reach of the South Chollas Creek Encanto Branch, immediately upstream of South Chollas Creek Encanto Branch (Jamacha Segment 1)	
Tributaries (listed from downstream to	No named tributaries	
upstream)		
Facility Length	Approximately 344 feet	
Top-of-Bank Width	Approximately 4.25–14 feet	
Bottom Facility Width	Approximately 2–11 feet	
Facility Depth	Approximately .75–1.25 feet	
Adjacent Land Use	Commercial, Open Space, Parks, Public Facilities and Utilities, Single- Family Residential, Transportation, Vacant	
As-Built Drawing Number	0968-D & 27667-D	
Coastal Zone	No	



Figure 1: July 2017, looking downstream

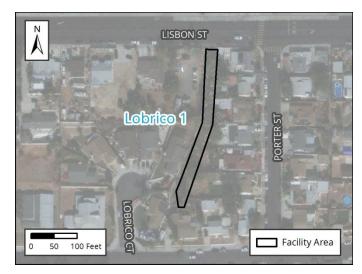


Figure 2: Vicinity Map of Lobrico Segment 1

# **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

**History of Maintenance** Prior to 2011: Unknown

2011 - 2014: No maintenance conducted

2015/2016: Emergency excavation of sediment and vegetation

2017 - March 2019: No maintenance conducted

#### **Past Regulatory Approvals**

**CEQA** NOE: Emergency Project No. 446595

CDP N/A

SDP Emergency Permit No. 1562098

**404** RGP 63 USACE File #SPL-2015-00649-RAG

**401** RGP 63 Verification No. R9-2015-0149;818163;lhonma

**1602** LSA Emergency Notification submitted 10/2015

Mitigation for Previous Impacts None

## **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

<b>Current Conditions Affecting</b>	
Facility Canacity	

The vegetation in the segment varied from light to heavy and up to 1.5 feet of sediment deposition was observed in portions of the segment. Bank erosion was also observed in several locations.

Hydrologic Peak Flows						
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	244	325	365	426	487	548
second (cfs1)						

**Hydraulic Capacity of Facility** 

Current Capacity 130 cfs

Proposed MWMP Maintained Capacity N/A

Maintenance Recommendation No maintenance is recommended at this time

In-Stream Post-Maintenance Erosion Control N/A (no maintenance)

Recommendation

# **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Disturbed wetland (Arundo-dominated)
<b>Adjacent Vegetation</b>	Developed land
	Disturbed freshwater marsh
	Disturbed land
	Disturbed wetland (Arundo-dominated)
	Natural flood channel
<b>Habitat and Wildlife</b>	There are no significant biological resources suitable for sensitive species use within or
	adjacent to the facility
MHPA	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA)
<b>Mitigation Within</b>	None
Facility	

# Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources	
Resource Identified in APE	None
Resource Identified Adjacent to APE	None
Resource Type	N/A

Historical Resources	
Resource Identified in APE	Channel; c. 1968–1971 earthen channel
<b>Potential Historical Resources</b>	Yes
Constraint Identified	

# **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Noise (NOI)
EP-HAZ-3	MM-NOI-1
Paleontological Resources (PAL)	
EP-PAL-1	
Solid Waste (SW)	
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

# Technical Summary

# Paleta Creek - Solola Facility Group

Segment Names (Facility numbers):

Solola 1 (5-06-020) (See Appendix A-1)

Solola 2 (5-06-023) (See Appendix A-1)

Cervantes 1 (5-06-025)



# **Cervantes Segment 1 Detail**

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Upper reach of Paleta Creek, immediately upstream of Paleta Creek (Solola Segment 2)
Tributaries (listed from downstream to upstream)	Paleta Creek
Facility Length	Approximately 2,581 feet
Top-of-Bank Width	Approximately 45 feet
Bottom Facility Width	Approximately 10 feet
Facility Depth	Approximately 7 feet
Adjacent Land Use	Open Space, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	17925-11-D
Coastal Zone	No



Figure 1: April 2017, looking downstream at vegetation

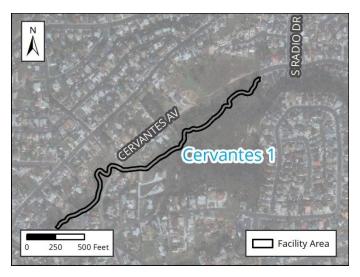


Figure 2: Vicinity Map of Cervantes Segment 1

# **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

None

History of Maintenance	June 2005: Emergency maintenance conducted March 2006: Minor maintenance conducted December 2007: Emergency maintenance conducted January 2008 – March 2019: No maintenance conducted
Past Regulatory Approvals	
<b>CEQA</b> None	
CDP N/A	
<b>SDP</b> None	
<b>404</b> None	
<b>401</b> None	
<b>1602</b> None	

# **Hydrology and Hydraulics Summary**

**Mitigation for Previous Impacts** 

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions Facility Capacity	Affecting	The vegetation was observed to range from light to dense and there was little evidence of sediment deposition			nd there was little	
Hydrologic Peak Flows						
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	43	100	160	250	390	470
second [cfs])						
Hydraulic Capacity of Facility						
Current Capacity 470 cfs						
Proposed MWM	posed MWMP Maintained Capacity N/A					
Maintenanc	Maintenance Recommendation         No maintenance is recommended at this time		this time			
In-Stream Post-Ma Reco	intenance Ero mmendation	sion Control	n Control N/A (no maintenance)			

# **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

<b>Facility Vegetation</b>	Disturbed coastal sage scrub
	Disturbed wetland
	Natural flood channel
	Riparian scrub (southern willow scrub)
<b>Adjacent Vegetation</b>	Developed land
	Disturbed coastal sage scrub
	Disturbed land
	Disturbed wetland
	Ornamental plantings
	Riparian scrub (southern willow scrub)
<b>Habitat and Wildlife</b>	There is limited suitable habitat for sensitive species, such as coastal California gnatcatcher
	and least Bell's vireo, within and adjacent to the facility. However, due to the disturbed
	nature of the site, the potential for these species to occur is low.
MHPA	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA)
Mitigation Within	None
Facility	

# Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

Archeological and Tribal Resources		
Resource Identified in APE	None	
Resource Identified Adjacent to APE	None	
Resource Type	N/A	

Historical Resources	
Resource Identified in APE	Channel; 1954 earthen channel
<b>Potential Historical Resources</b>	Yes
Constraint Identified	

# **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Historic, Archaeological, and Tribal Cultural
	Resources (HR and CR)
EP-HAZ-3	MM-HR-1
Paleontological Resources (PAL)	MM-HR-2
EP-PAL-1	Noise (NOI)
Solid Waste (SW)	MM-NOI-1
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	

# **Technical Summary**

# Tijuana River - Tocayo Facility Group

Segment Names (Facility numbers):

Tocayo 1 (6-02-115)

Tocayo 2 (6-02-118) (See Appendix A-1)



# Tocayo Segment 1 Detail

Facility Type	Earthen channel
Substrate Detail	Earthen bottom and banks
Location Within Watershed	Upper reach of Tijuana River unnamed tributary, immediately upstream of Tijuana River Estuary
Tributaries (listed from downstream to upstream)	Tijuana River Unnamed Tributary
Facility Length	Approximately 96 feet
Top-of-Bank Width	Approximately 30–50 feet
Bottom Facility Width	Approximately 6–20 feet
Facility Depth	Approximately 8 feet
Adjacent Land Use	Open Space, Single-Family Residential, Transportation, Vacant
As-Built Drawing Number	None
Coastal Zone	N-APP-2, DEF-CER



Figure 1: April 2017, looking upstream vegetation and outlet of double 10-foot by 4-foot RCB culvert



Figure 2: Vicinity Map of Tocayo Segment 1

# **Facility Maintenance History**

This section describes previous facility maintenance, regulatory approvals, and mitigation.

**History of Maintenance** Prior to 2011: Unknown

2011 – 2014: No maintenance conducted January 2015: Minor maintenance conducted

February 2015 - March 2019: No maintenance conducted

#### **Past Regulatory Approvals**

CEQA 2011 MMP PEIR No. 42891

CDP None

**SDP** SDP No. 2034245 (2017 Addendum)

404 None401 None

**1602** None

Mitigation for Previous Impacts None

## **Hydrology and Hydraulics Summary**

This section describes the current conditions in the facility related to hydrology/hydraulics, as well as analysis of hydraulic capacity before and after proposed maintenance, and the potential for erosion following maintenance.

Current Conditions	S Affecting	The vegetation was observed to be medium with the channel bottom mostly			bottom mostly	
<b>Facility Capacity</b>		clear of obstructions				
Hydrologic Peak Flo	ows					
Storm Event	2-year	5-year	10-year	25-year	50-year	100-year
Q (cubic feet per	684	875	1,023	1,227	1,375	1,523
second [cfs])						
Hydraulic Capacity of Facility						
Current Capacity 220 cfs						
Proposed MWM	IP Maintained	Capacity	N/A			
Maintenanc	e Recommend	ation	No maintenance is recommended at this time		his time	
	In-Stream Post-Maintenance Erosion Control Recommendation			N/A (no ma	iintenance)	

# **Biological Resource Summary**

This section describes the facility vegetation community, adjacent vegetation and land uses, and notes to illustrate special habitat and wildlife.

Facility Vegetation	Natural flood channel
<b>Adjacent Vegetation</b>	Developed concrete-lined channel
	Developed land
	Eucalyptus woodland
	Ornamental plantings
	Riparian forest (southern willow forest; concrete-lined)
Habitat and Wildlife	There is limited suitable habitat contained within the facility for wildlife. However, raptors could use the ornamental vegetation and eucalyptus woodland present adjacent to the facility for nesting/roosting.
МНРА	The facility is not within or adjacent to the Multi Habitat Planning Area (MHPA). The nearest MHPA boundary is located more than 1,000 feet south of the channel.
Mitigation Within Facility	None

# Historical, Archaeological, and Tribal Cultural Resource Summary

This section describes the historical, archeological, and tribal cultural resources identified in, or adjacent to, the Area of Potential Effect (APE) for this facility.

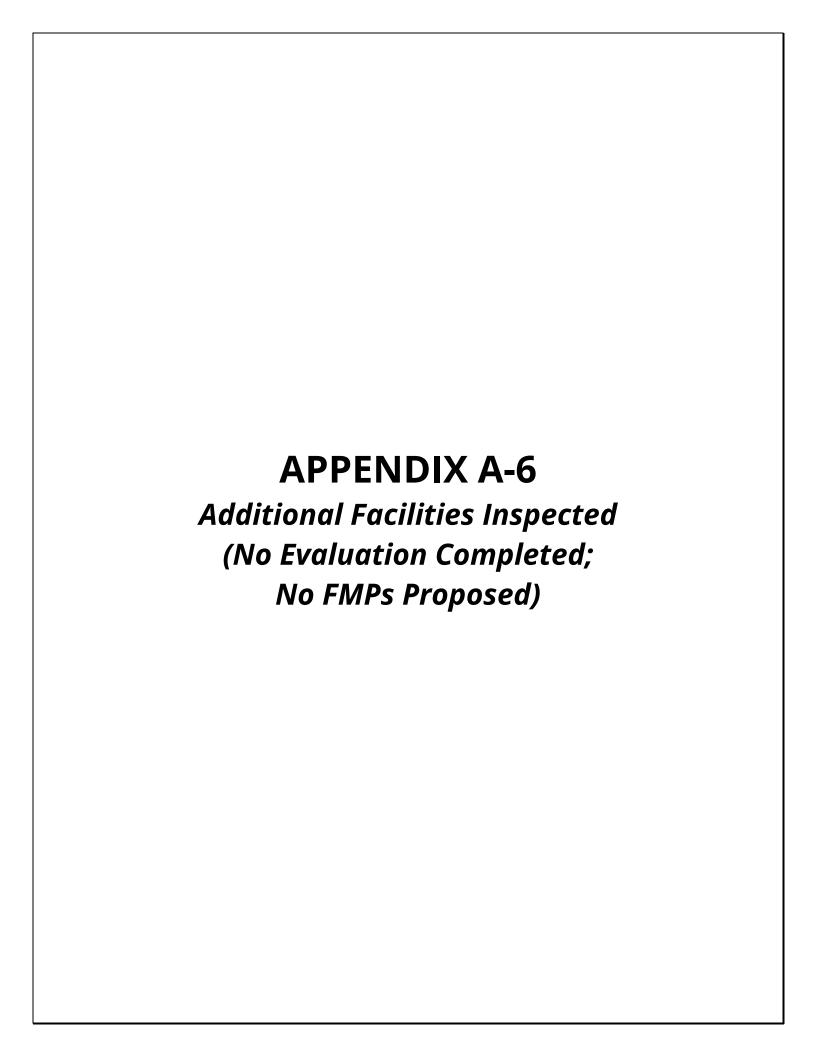
<b>Archeological and Tribal Resources</b>	
Resource Identified in APE	None
<b>Resource Identified Adjacent to APE</b>	None
Resource Type	N/A

Historical Resources		
Resource Identified in APE	None	
<b>Potential Historical Resources</b>	None	
Constraint Identified		

# **Environmental Protocols and Mitigation Measures**

This section lists the Environmental Protocols (EPs) and Mitigation Measures (MMs) and that are applicable to the proposed facility maintenance.

Environmental Protocols (EP)	Mitigation Measures (MM)
Biological Resources (BIO)	Aesthetics/Visual Effects and Neighborhood
	Character (AES)
EP-BIO-1	MM-AES-1
EP-BIO-2	Air Quality (AQ)
EP-BIO-3a, 3b, 3c	MM-AQ-1
EP-BIO-4	Biological Resources (BIO)
EP-BIO-5	MM-BIO-1a
EP-BIO-6	MM-BIO-2
Health and Safety/Hazards (HAZ)	Noise (NOI)
EP-HAZ-3	MM-NOI-1
Paleontological Resources (PAL)	
EP-PAL-1	
Solid Waste (SW)	
EP-SW-2	
EP-SW-3	
EP-SW-4	
EP-SW-5	
EP-SW-6	
EP-SW-7	
EP-SW-8	
Water Quality (WQ)	
EP-WQ-1	



### **APPENDIX A-6** Additional Facilities Inspected (Program-Level facilities)

#### APPENDIX A-6 ADDITIONAL FACILITIES INSPECTED (PROGRAM-**LEVEL FACILITIES)**

The following list includes additional facilities that are annually inspected where no routine maintenance or repair is proposed and a Facility Maintenance Plan (FMP) has not been prepared, but limited program-level activities may occur, such as minor maintenance or emergency maintenance. Changed conditions within any of these facilities may trigger the need to complete or update the project-level analyses to prepare an FMP to conduct future routine maintenance. Facilities with technical summaries included in Appendix A-5 where no routine maintenance is proposed (i.e., no FMP) are identified with an asterisk. In Figures 1-1 through 1-14, facilities that are blue and are identified in the legend as "Additional Facilities (Limited Program-Level Activities)" correspond to individual facility numbers from the following list.

#### San Dieguito River Watershed

• 1-04-250

#### Los Peñasquitos Watershed

•	2-01-000*	•	2-03-020
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•	2-01-003	•	2-03-180	•	2-03-484
	2 01 003		2 03 100		2 03 10 1

2-03-480

3-03-150

•	2-03-000	•	2-03-402	•	2-00-101

2-03-420

#### 2-03-010 2-03-440

#### **Mission Bay Watershed**

3-02-001

2-03-008

•	3-00-110	•	3-02-007	•	3-02-140
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•	3-00-130	•	3-02-009	•	3-02-150
	5 00 150		3 02 003		J 0J 0

- 3-00-135 3-02-012 3-02-152
- 3-00-140 3-02-014 3-03-110
- 3-02-016
- 3-02-003 3-02-018 3-04-001
  - 3-02-005 3-02-021 3-04-003

# **APPENDIX A-6 (Continued)**

•	3-04-005	•	3-04-150	•	3-04-200
•	3-04-007	•	3-04-165	•	3-04-260
•	3-04-101*	•	3-04-180		
San Di	ego River Watershed				
•	4-00-000	•	4-00-034	•	4-02-145
•	4-00-002	•	4-00-036	•	4-04-008*
•	4-00-004	•	4-00-038	•	4-04-030
•	4-00-006	•	4-00-040	•	4-04-033
•	4-00-008	•	4-00-042	•	4-04-150
•	4-00-010	•	4-00-044	•	4-06-105
•	4-00-012	•	4-00-046	•	4-06-900
•	4-00-014	•	4-00-048	•	4-07-013
•	4-00-016	•	4-00-050	•	4-07-015
•	4-00-018	•	4-00-052	•	4-07-019
•	4-00-020	•	4-00-054	•	4-07-104
•	4-00-022	•	4-00-056	•	4-07-155
•	4-00-024	•	4-00-058	•	4-07-252
•	4-00-026	•	4-00-060	•	4-08-005
•	4-00-028	•	4-00-062	•	4-08-102
•	4-00-030	•	4-00-064	•	4-08-150*
•	4-00-032	•	4-02-122		
Pueblo	o San Diego Watershed				
•	5-03-002	•	5-04-013	•	5-04-027
•	5-03-104	•	5-04-015	•	5-04-029
•	5-04-000	•	5-04-018	•	5-04-150
•	5-04-002	•	5-04-020	•	5-04-180
•	5-04-008	•	5-04-022	•	5-04-229*
•	5-04-011	•	5-04-025	•	5-04-235

### **APPENDIX A-6 (Continued)**

- 5-04-237
- 5-04-245\*
- 5-05-002
- 5-05-004
- 5-05-010
- 5-05-013
- 5-05-016
- 5-05-019\*
- 5-05-023
- 5-05-025
- 5-05-027

- 5-05-029
- 5-05-031
- 5-05-033
- 5-05-100
- 5-05-103
- 5-05-302
- 5-05-304\*
- 5-05-308
- 5-05-310
- 5-05-312
- 5-05-314

- 5-05-402
- 5-05-502
- 5-05-606\*
- 5-05-610\*
- 5-05-702\*
- 5-05-802\*
- 5-06-025\*
- 5-07-010
- 5-07-150

#### **Otay Watershed**

- 5-22-018
- 5-22-020
- 5-22-032
- 5-22-901

#### **Tijuana River Watershed Management Area**

- 6-02-115\*
- 6-04-100
- 6-04-255
- 6-06-900

<sup>\*</sup> Facilities where technical analysis was completed as part of the MWMP; included in Appendix A-5.

