WATER POLLUTION CONTROL PLAN

for

Nestor Channel Maintenance Task Order 26

Prepared for:

City of San Diego Transportation & Storm Water Department
2781 Caminito Chollas, MS 44
San Diego, CA 92105

Submitted by:

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Project Site Location:

Map No. 131: Grove Ave. (S) from 30th Street (W) to Paxton Dr. (E)
Map No. 132: Coronado Ave. (N) from 27th St. (W) to I-5 (E)
Map No. 133: Green St. from Coronado Ave. (S) to Elm St. (N)
Map No. 134: Cedar Street in San Diego (N), Thermal Avenue (W), Palm Ave. (S)

Contractor's Qualified Contact Person:

Appropriate City Employee TBD

WPCP Prepared by:

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WPCP Preparation Date:

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Project Information

Project Description

The project consists of clearing vegetation and sediment from the concrete and earthen channel in the Nestor Creek Channel. The Nestor Channel is located within the Otay River watershed and flows directly into the Otay River. The first area of maintenance begins on the east end of the channel parallel to 1330 30th St.; where it flows predominately west, downstream alongside Interstate (I)-5 with concrete-lined sections for approximately 1,150 feet. The second area of maintenance begins on the central section of the channel parallel to Mendoza Elementary School located at 2050 Coronado Ave.; where it flows predominately North, downstream alongside I-5 with earthen lined sections for approximately 1,340 feet. The third area of maintenance begins on the North end of the channel parallel to Palm Ave.; where it flows predominately Northwest, downstream parallel to I-5 with concrete and earthen lined sections for approximately 600 feet. Even with the Nestor Channel being concrete and earthen lined, the Individual Hydrologic and Hydraulic Analysis (IHHA) has determined that an erosive velocity will not be exceeded. Temporary velocity reducing check dams will be used at the start of each section of the project as-needed in the event that flows are present within the channel. The final condition for this concrete and earthen lined channel should be one that assists in reducing the flood event occurrence frequency by increasing the capacity of the channel and restoring the flow lines back to historic elevations. The channel is expected to be a stable concrete and earthen lined channel, under this condition, based on both prior maintenance history and the flow velocity calculations provided in the IHHA. Therefore, no post-maintenance stabilization measures are recommended.

The project will remove vegetation and sediment from the channel maintenance area. The project is not subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002) (CGP) and associated amendments because, as stated in the CGP, it consists of "routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility." This project will, however, comply with the San Diego Regional MS4 Permit (Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100). The maintenance work, methodologies, and Best Management Practices (BMPs) are listed in the Individual Maintenance Plan (IMP) Maintenance Methodology Tables and Master Maintenance Program (MMP) within the IMP.

Maintenance operations will be fully contained within the channel (See sheet 5-D of the IMP for methodology). For the remainder of the project, 5 access and loading areas and 3 staging areas have been designated. The first staging area will be located in the vacant lot North of 1330 30th St. The second Staging area will be located along the channel at Mendoza Elementary School located at 2050 Coronado Ave. The third staging area will be located in a parking area at Imperial Sands modular home park at 1810 Palm Ave. Access areas will be located along the channel and at upstream areas of the channel. Excavated material will be

trucked out daily. Fueling will be done at least 150' from waters of the U.S./State and equipment will be left onsite overnight. The adjacent road and parking lot, as well as surrounding streets will be swept by city street sweepers daily (at a minimum).

Unique Site Features

The site consists of five separate reaches of the Nestor Creek Channel. These reaches are as follows:

1. Map No. 131 (Reach 11 and 12): West of 1247 30th Street
    a. Trapezoidal, concrete-lined channel
    b. Trapezoidal, Soil-Lined Channel
2. Map No. 132 (Reach 9): Grove Ave. between 25th St. and 27th St.
    a. Rectangle earthen bottom, and concrete sided channel
3. Map No. 133 (Reach 4): North of Coronado Avenue to Elm Avenue
    a. Trapezoidal, soil-lined channel
4. Map No. 134 (Reach 1): North of Palm Avenue, West of Thermal Avenue and South of Cedar Street
    a. Rectangular, concrete-lined channel
    b. Trapezoidal, rip rap and soil lined channel

Project Schedule

Maps No. 131, No. 132, and No. 133 work will take 14 days, 7 days a week from 6:00AM to 6:00PM. Map No. 134 will take 7 days, 7 days a week from 6:00AM to 6:00 PM. The schedules for the maintenance activities are located within the IMP in the IMP Maintenance Methodology Tables. The start of work will be scheduled as early as possible in a reasonable timeframe, based on available staffing resources and regulatory permits, to minimize the potential exposure to rain. The schedule can be extended with written permission from the City of San Diego.

Potential Pollutant Sources

The primary maintenance activities, related materials, and wastes that have the potential to pollute storm water include:

- Exposed soil areas from channel clearing activities
- Fuel and other fluids from heavy equipment
- General maintenance waste materials, and
- Sediment and disturbed soil

Pollution Sources and Control Measures

The selected temporary sediment, erosion and materials management control BMPs will be implemented on the maintenance site. Implementation and locations of temporary BMPs are shown on the maintenance plan. The California Stormwater Quality Association (CASQA) Construction Stormwater BMP Handbook should be used as guidance in the application of the BMPs. The following lists of BMPs and narratives explain how the selected BMPs will be incorporated into the project.

Temporary Soil Stabilization Practices

TEMPORARY SOIL STABILIZATION BMPs				
BMP No.	***BMP***	***CHECK IF USED***	***CHECK IF NOT USED***	***IF NOT USED, STATE REASON***
EC-1	Scheduling	X		
EC-2	Preservation of Existing Vegetation	X		
EC-3	Hydraulic Mulch		X	No stockpiling or land disturbing activities anticipated.
EC-4	Hydroseeding		X	No stockpiling or land disturbing activities anticipated.
EC-5	Soil Binder		X	No stockpiling or land disturbing activities anticipated.
EC-6	Straw Mulch		X	No stockpiling or land disturbing activities anticipated.
EC-7	Geotextiles & Mats		X	No stockpiling or land disturbing activities anticipated.
EC-8	Wood Mulching		X	No stockpiling or land disturbing activities anticipated.
Temporary Concentrated Flow Conveyance Controls				
EC-9	Earth Dikes/Drainage Swales & Lined Ditches		X	Limited run-on areas are onsite and will be diverted by gravel bag berms as necessary.
EC-10	Velocity Dissipation Devices		X	Channel work will not require outlet protection/velocity dissipation devices.
EC-11	Slope Drains		X	There are no steep slopes on the project.

Selected Temporary Soil Stabilization BMPs

Soil disturbing activities will consist of the maintenance work in the channel. The City will ensure all necessary personnel and equipment will be made available during the specific timeframe of the maintenance operation. City crews will conduct all work within a 35 day period of time in order to minimize the timeframe of soil disturbing activities. Existing vegetation near the channel and along the banks will be preserved to the maximum extent practicable and any disturbance activities will be limited to the required maintenance activity areas. All excavated materials will be hauled directly to an appropriate disposal facility upon removal from the channel. No stockpiling activities are anticipated. No soil disturbing activities will be permitted outside the channel and access and loading areas.

The CASQA Construction Stormwater BMP Handbook should be used as guidance in the application of the BMPs. Locations of the BMPs are shown on the maintenance plan.

Sediment Control Practices

TEMPORARY SEDIMENT CONTROL BMPs				
BMP No.	***BMP***	***CHECK IF USED***	***CHECK IF NOT USED***	***IF NOT USED, STATE REASON***
SE-1	Silt Fence	X		
SE-2	Sediment Basin		X	Based on project configuration and size, sediment basins are not applicable
SE-3	Sediment Trap		X	Based on project configuration and size, sediment traps are not applicable
SE-4	Check Dam		X	Based on IHHA, check dams are not needed.
SE-5	Fiber Rolls	X		
SE-6	Gravel Bag Berm		X	Other sediment control BMPs will be used.
SE-7	Street Sweeping and Vacuuming-Daily	X		
SE-8	Sandbag Barrier	X		
SE-9	Straw Bale Barrier		X	Other sediment control BMPs will be used.
SE-10	Storm Drain Inlet Protection	X		

Selected Sediment Control BMPs

A majority of the project area is concrete or asphalt paved surfaces with small portions of landscaped parkway type areas. The only sediment disturbing activities associated with the maintenance work would be the removal of sediment from the channel. All excavated materials removed from the channel will be hauled directly to an appropriate disposal facility. Street sweeping will occur at least daily on the paved areas around the channel maintenance reaches and focused on the surrounding local streets. Storm drain inlet protection will be used for inlets located in the access and loading areas. No soil disturbing activities will be permitted outside the channel and access and loading areas.

In this channel, sandbag barriers will be placed at the downstream and/or upstream ends of the work area to prevent any sediment laden water from discharging to and from the site. Dewatering pumps (6" or smaller) will be used as needed to redirect any ponded or sediment

laden water that may accumulate upstream or the sand bag barriers, to the most southern/western discharge location of the project.

The CASQA Construction Stormwater BMP Handbook should be used as guidance in the application of the BMPs. Locations of the BMPs are shown on the maintenance plan.

Tracking Control Practices

TRACKING CONTROL BMPs				
BMP No.	***BMP***	***CHECK IF USED***	***CHECK IF NOT USED***	***IF NOT USED, STATE REASON***
TC-1	Stabilized Construction Entrance/Exit		X	Loading and Access Areas are paved
TC-2	Stabilized Construction Roadway		X	All roadways to be used are paved and stabilized.
TC-3	Entrance/Outlet Tire Wash		X	Other tracking control measures will be used
SE-7	Street Sweeping and Vacuuming	X		

Selected Tracking Control BMPs

Existing paved roads/parking lots will be utilized, inspected and maintained throughout the maintenance activities. Street sweeping will occur on paved areas (including parking lots and local streets) impacted by the maintenance activities at minimum once a day.

The CASQA Construction Stormwater BMP Handbook should be used as guidance in the application of the BMPs. Locations of the BMPs are shown on the maintenance plan.

Wind Erosion Controls

Materials excavated shall be damp and unaffected by wind. A sweeper will operate regularly on the local roadways to control potential dust created by truck traffic.

Non-Storm Water Management BMPs

NON-STORM WATER MANAGEMENT BMPs				
BMP No.	***BMP***	***CHECK IF USED***	***CHECK IF NOT USED***	***IF NOT USED, STATE REASON***
NS-1	Water Conservation Practice	X		
NS-2	Dewatering Operations	X		Dewatering pumps (6" or smaller) will remove any ponded water in channel prior to excavation.
NS-3	Paving and Grinding Operations		X	There are no paving or grinding operations associated with this project.
NS-4	Temporary Stream Crossing		X	There are no temporary stream crossings associated with this project.
NS-5	Clear Water Diversion		X	N/A
NS-6	Illicit Discharge/Illegal Dumping Reporting	X		
NS-7	Potable Water/Irrigation		X	No irrigation required; vegetated banks will not be disturbed.
Vehicle and Equipment Operations				
NS-8	Vehicle and Equipment Cleaning		X	Vehicle/equipment cleaning will be done offsite.
NS-9	Vehicle and Equipment Fueling		X	Fueling will be done at least 150' away from waters of the US/State.
NS-10	Vehicle and Equipment Maintenance		X	Vehicle/equipment maintenance will be done offsite.

Selected Non-Storm Water Management BMPs

Dewatering pumps will be used to divert potential run-on from dry weather flows into the channel. The dewatering pumps shall be placed at the upstream and/or downstream ends of the channel. Sandbag barriers will be utilized to obstruct and pond dry weather flows, such that the pumps may remove any ponded water. In addition to dry weather flows from the upstream watershed, the maintenance area within the channel may have standing water likely due to the need for maintenance. The ponded water in these areas will also be removed and contained by the pumps prior to excavation.

In the event dewatering pumps are needed, they are anticipated to operate continuously during maintenance.

Water will be conserved to the maximum extent practicable and any unplanned potable water discharges will be controlled following the guidance of NS-7. City Crews will notify the

Operations & Maintenance Superintendent of any illicit discharges or illegal dumping encountered during the maintenance operation.

The barriers obstructing flows are proposed to be constructed of sandbags. The barrier starting at 30th Street will be approximately 30 feet wide and three feet tall. The barrier starting at Coronado Avenue will be approximately 68 feet wide and three feet tall. The barrier starting at Palm Avenue will be approximately 28 feet wide and two feet tall. The normal channel flows will be restored to the original condition upon completion of the channel maintenance.

The CASQA Construction Stormwater BMP Handbook should be used as guidance in the application of the BMPs. Locations of the BMPs are shown on the maintenance plan.

Waste Management and Materials Pollution Control BMPs

WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs				
BMP No.	***BMP***	***CHECK IF USED***	***CHECK IF NOT USED***	***IF NOT USED, STATE REASON***
WM-1	Material Delivery and Storage	X		
WM-2	Material Use	X		No materials proposed for delivery to
WM-3	Stockpile Management	X		No Stockpiles proposed
WM-4	Spill Prevention and Control	X		
WM-5	Solid Waste Management	X		
WM-6	Hazardous Waste Management	X		
WM-7	Contaminated Soil Management		X	None is anticipated but this BMP will be followed if Contaminated Soil is found
WM-8	Concrete Waste Management		X	There is no concrete waste associated with this project.
WM-9	Sanitary/Septic Waste Management		X	No Temp restrooms proposed
WM-10	Liquid Waste Management	X		

Selected Waste Management and Materials Pollution Control BMPs

The BMPs selected above will be implemented on the project. Materials associated with the application of BMPs are the only material anticipated to be delivered, stored and/or used onsite. In the process of removing the excavated materials from the channel, city crews may encounter contaminated soil or other hazardous materials and will follow the guidance of the applicable BMP fact sheets.

Other Waste Management and Materials Pollution Control BMPs

The project will include the following activities that have the potential for pollutant discharges:

- Vehicle and equipment leaks

Vehicle and equipment cleaning is not allowed on the project site. Fueling will be done at least 150' away from waters of the US/State. Equipment will be inspected for fluid leaks and promptly cleaned up. There will be no storage of petroleum products or chemicals permitted onsite. Vehicles and equipment are routinely inspected for leaks and immediately serviced if necessary. If any leaks were noticed they will be cleaned up immediately with dry methods and disposed of as a regulated waste.

The CASQA Construction Stormwater BMP Handbook should be used as guidance in the application of the BMPs. Locations of the BMPs are shown on the maintenance plan.

Additional Maintenance Required by the City

1. The city shall notify California Department of Fish and Wildlife, in writing, at least five days prior to initiation of construction prior to completion of construction (project) activities. Notification shall be sent to CDFW's south coast office, Attn: Streambed Alteration Program-SM No. 1600-2011-0271-R5
2. Avoid the introduction of invasive plant species with physical erosion controls.
3. Prior to commencing any maintenance activity which may impact sensitive biological resources, the monitoring biologist shall verify that the following actions have been taken, as appropriate:
    - Fencing, Flagging, signage or other means to protect sensitive resources to remain after maintenance has been implemented
    - Noise attenuation measures needed to protect sensitive wildlife are in place and effective; and/or
    - Nesting Birds have been identified and necessary maintenance setbacks have been established if maintenance is to occur between January 15 and August 31.
4. If any wildlife is encountered during the course of maintenance, said wildlife shall be allowed to leave the maintenance area unharmed.

See Master Maintenance Program Protocol Requirements in IMP for additional descriptions of BMP.

Water Pollution Control Drawings

The water pollution control drawings (WPCDs) are considered the maintenance plans and are included as part of the IMP package. The maintenance plans show the locations of the BMPs and any additional instructions.

BMP Maintenance, Inspection, and Repair

The Qualified Contact Person will assign a monitor for daily inspection of the BMPs during maintenance activities. Each morning, the monitor will check the National Weather Service Forecast (http://www.srh.noaa.gov), complete a BMP inspection checklist, perform any necessary BMP maintenance or repairs, and report the results to the Qualified Contact Person. Sample forms are included in Appendix A. The completed BMP inspection checklists will be kept with the WPCP. A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs. Common maintenance and repair measures for BMPs include replacement or repair of compromised fiber rolls, silt fence, gravel/sand bags, or inlet protection measures, removal of accumulated sediment 1/3 of the BMP height, and removal of inlet protection prior to rain events to prevent flooding hazards.

References

California Regional Water Quality Control Board San Diego Region Order No. R9-2013-0001, NPDES No. CAS0109266, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4S) Draining the Watersheds within the San Diego and as Amended by R9-2015-0001.

CASQA 2009, *Stormwater BMP Handbook Portal: Construction*, November 2009, www.casqa.org

Project IMP and IHHA, prepared by RICK Engineering.

State Water Resources Control Board (2009). Order 2009-0009-DWQ, NPDES General Permit No. CAS000002: National Pollutant Discharges Elimination System (NPDES) California General Permit for Storm Water Discharge Associated with Construction and Land Disturbing Activities. Available on-line at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.

State Water Resources Control Board (2010). Order 2010-0014-DWQ, NPDES General Permit No. CAS000002: National Pollutant Discharges Elimination System (NPDES) California General Permit for Storm Water Discharge Associated with Construction and Land Disturbing Activities. Available on-line at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.

State Water Resources Control Board (2012). Order 2012-0006-DWQ, NPDES General Permit No. CAS000002: National Pollutant Discharges Elimination System (NPDES) California General Permit for Storm Water Discharge Associated with Construction and Land Disturbing Activities. Available on-line at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.

SWRCB Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002, Waste Discharge Requirements (WDRS) for Discharges of Storm Water Runoff Associated with Construction Activity, September 2009.

Appendix A – Sample BMP Inspection Form

WATER POLLUTION CONTROL PLAN INSPECTION FORM

SITE INFORMATION

Project: Nestor Creek Channel

Date: _____ **Time of Day:** _____

The information contained in this inspection report was gathered and evaluated by qualified personnel before submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Inspector Name: _____ **Inspector Signature:** _____

GENERAL INSPECTION INFORMATION

Location of work: _____ **Station Number:** _____

WPCP onsite? ☐ Yes ☐ No

Is site work occurring? ☐ Yes ☐ No

Description of Work: _____

Best Management Practice's Inspected and Implemented On-site

☐ Erosion Control	☐ Sediment Control	☐ Good Housekeeping	☐ Waste Management
☐ Tracking Control	☐ Spill Control/Containment	☐ Sampling	☐ Non-stormwater Control
☐ Sweeping / Dust	☐ Equipment Maintenance	☐ Hazardous Materials	☐ Site-specific Hazards

Additional Comments: Describe any BMP maintenance required, deficiencies, unusual conditions, situations or special requirements needed to do the work such as diversion of water, construction of staging area, replacement of bank material, presence of utilities, etc.

Channel Material Removed

Type Removed	Quantity (linear Feet)
Silt/Sand	
Debris	
Vegetation	

Stockpile Area Material Removed

Type	Quantity/Unit
Sediment	
Debris	
Vegetation	
Tires (#)	

Equipment

Equipment Number	Description	Idle/Down	Additional Remarks