

CITY OF POWAY

Jurisdictional Runoff Management Program

June 2025



Prepared by **DM**_{AX}

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Acronyms and Abbreviations

<u>Acronym/Abbreviation</u>	<u>Definition</u>
303(d) list	Clean Water Act Section 303(d) List of Water Quality Limited Segments
ASBS	Areas of Special Biological Significance
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
CASQA	California Stormwater Quality Association
CEQA	California Environmental Quality Act
CIP	Capital Improvement Program
City	City of Poway
CLRP	Comprehensive Load Reduction Plan
Construction General Permit	SWRCB Order No. 2009-0009-DWQ, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ
Copermittees	18 municipalities in San Diego County, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District
CWA	Federal Water Pollution Control Act (Clean Water Act)
DEH	County of San Diego Department of Environmental Health
ESA	Environmentally Sensitive Area
GIS	Geographic Information System
GPM	Gallons per Minute
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HPWQC	Highest Priority Water Quality Condition
HSA	Hydrologic Subarea
HU	Hydrologic Unit
IC/ID	Illegal Connection and Illegal Discharge
IDDE	Illegal Discharge Detection and Elimination
Industrial General Permit	SWRCB Industrial General Permit, Order No. 2014-0057-DWQ
IPM	Integrated Pest Management
JRMP	Jurisdictional Runoff Management Program
JURMP	Jurisdictional Urban Runoff Management Program
LID	Low Impact Development
LUP	Linear Underground Project

MDRA	Minor Development Review Application
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
MS4 Outfall Monitoring Program	Dry Weather Major MS4 Outfall Discharge Monitoring Program
Municipal Permit	RWQCB Order No. R9-2013-0001, as amended by Order No. R9-2015-0001
NAICS	North American Industrial Classification System
NOI	Notice of Intent
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
PMC or Municipal Code	Poway Municipal Code
Priority Project	Priority Development Project
RMA	Residential Management Area
RWQCB	California Regional Water Quality Control Board, San Diego Region
SIC	Standard Industrial Classification
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
Standard Development Project	Standard Project
Storm Water Ordinance	Stormwater Management and Discharge Control Ordinance
SUSMP	Standard Urban Stormwater Mitigation Plan
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
TTWQ	Threat To Water Quality
USEPA	United States Environmental Protection Agency
WDID	Waste Discharge Identification
WMA	Watershed Management Area
WQIP	Water Quality Improvement Plan
WQTR	Water Quality Technical Report

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Executive Summary

On May 8, 2013, the California Regional Water Quality Control Board, San Diego Region (RWQCB) adopted an updated National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2013-000, as amended by Order No. R9-2015-0001 (Municipal Permit). The Municipal Permit regulates discharges to storm water conveyance systems within 18 municipalities in San Diego County, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (collectively referred to as “Copermittees”). Order No. 2001-01, required each Copermittee, including the City of Poway (City), to develop a comprehensive Jurisdictional Urban Runoff Management Program. The recently issued Municipal Permit has changed the name of the program to the Jurisdictional Runoff Management Program (JRMP), and has also changed the requirements for which items needs to be included in the JRMP document. The new Municipal Permit requires Copermittees, including the City, to make significant changes to their JRMPs to meet new Municipal Permit requirements.

The JRMP is the City of Poway’s approach to improving water quality in rivers, bays, lakes, and ocean through reducing discharges of pollutants to the storm water conveyance system. The City’s storm water conveyance system, like that of most other jurisdictions across the United States, conveys runoff from rain, irrigation runoff, natural groundwater seepage, and other sources of water to water bodies without first being directed to a treatment plant. To reduce pollutants in these discharges to water bodies, the City implements or requires its residents, businesses, municipal facilities, and land owners to implement a variety of measures commonly referred to as best management practices (BMPs). Some examples of BMPs include covering potential pollutant sources to prevent contact with rain, employing erosion reduction techniques at construction sites, adjusting sprinklers to eliminate over-irrigation, sweeping streets and parking lots, and building green infrastructure techniques such as bioretention planters along streets.

Major components of the JRMP include the implementation of BMPs requirements, water quality monitoring, educational outreach efforts, municipal maintenance procedures, inspection and enforcement programs, and water quality monitoring procedures. The various components of the City’s updated JRMP are discussed below.

Introduction

The introduction includes a discussion of the general regulatory background leading up to the creation of this JRMP document and the general objectives of updating the JRMP document.

City setting information, land use statistics, and a map of the City's environmentally sensitive areas are included in this section.

Program Organization and Legal Authority

This section describes the City's legal authority to implement its storm water program. It also identifies and describes the departments within the City that conduct and oversee runoff management activities. An organizational chart that illustrates the relationships between the various City departments is also included.

Illegal Discharge Detection and Elimination

Newly updated prohibitions of various non-storm water discharges—that is, discharges of water that are not rain—and the City's approach to controlling such discharges are included in this section. These discharges can increase pollutant loads in the water that flows to the City's storm water conveyance system and eventually to receiving waters. The categories of non-storm water discharges the City has determined to be significant sources of pollutants are identified, and the appropriate control measures the City has identified to reduce the discharge of pollutants from such non-storm water discharges are discussed.

The processes by which illegal connections and illegal discharges are detected by the City are described in this section. This includes the receipt and recording of violation reports made by both the general public and City personnel regarding storm water pollution and the City's Dry Weather Major Municipal Separate Storm Sewer System Outfall Discharge Monitoring Program. The City's sanitary sewer overflow and other spill response and prevention methods are also described.

Development Planning

The development of urban areas has the potential to negatively impact the surrounding environment. The addition of impervious surfaces can alter the natural drainage patterns of the area, and development can facilitate the introduction of pollutants to the environment resulting from human activities. The City has incorporated water quality provisions into its General Plan. The City has recently developed a BMP Design Manual that establishes specific post-construction BMP requirements for development projects. This section also discusses the City's annual maintenance structural post-construction BMP verification process. Methods for maintaining a prioritized, watershed-based inventory of completed projects with structural post-construction BMPs and conducting associated maintenance inspections are also included in this section.

Construction Management

Information and regulations applicable to construction activities within the City and discusses updates made to the City's watershed-based inventory of the construction sites within the City are described in this section. Construction site inspection frequencies and methods are

presented. Specific requirements for the implementation of advanced treatment measures at sites that pose exceptional threats to water quality are found in this section. The construction and grading permit approval process and storm water related contract specifications for Capital Improvement Program projects are also discussed.

Industrial and Commercial Facilities

This section discusses how the City updates and maintains its watershed-based inventory of industrial and commercial facilities, including mobile businesses. The minimum BMPs for industrial and commercial facilities have been updated and are included in the City's BMP Manual (Appendix B). This section also includes a discussion of facility inspection frequencies, prioritization, and procedures.

Municipal Facilities

This section discusses the City's municipal facilities and the process for maintaining its watershed-based inventory. The minimum BMPs for municipal facilities, including special events, have been updated and are included in the BMP Manual (Appendix B). This section also includes a discussion of inspection frequencies and procedures for municipal site inspections.

Municipal Infrastructure

The City's routine infrastructure maintenance and operations are presented in this section, which includes information on street sweeping frequencies and prioritization and the associated BMPs. This City's efforts to control litter and sewage spills from entering its storm water conveyance system is also discussed. Landscape maintenance operations and BMPs are presented in this section.

Residential Areas

The residential inventory includes requirements based on the new Municipal Permit requirements. This section also provides a description of the newly updated residential oversight program and the oversight methods the City staff will use to implement the program. Minimum BMPs required to be implemented for residential areas and activities are included in the BMP Manual (Appendix B).

Education and Public Participation

Outreach efforts specifically tailored for target communities and activities within the City are discussed. The updated education programs and activities that the City uses to foster awareness and encourage behavioral changes relating to storm water activities are presented in this section. Information regarding educational programs conducted by the City, including content, form, and frequency, are discussed in detail in this section. This section describes the mechanisms that are used to encourage public participation in the City's storm water program and the development of this updated JRMP document.

Fiscal Analysis

The means by which the City funds its JRMP-related activities including jurisdictional, watershed, and regional activities is discussed in this section. The fiscal analysis method used under the 2007 Municipal Permit is still used and described here. This section lists the different departments of the City that are included in the storm water budget and provides the methods of reporting the yearly fiscal analysis in the Annual Report.

Reporting

Each year the City will develop an annual report on the implementation of its JRMP. Collectively, the Copermittees within each Watershed Management Area, as designated within the Municipal Permit, will submit a Water Quality Improvement Plan (WQIP) Annual Report. Transitional JRMP Annual Reports are required to be submitted to the RWQCB by October 31 of each year until the first WQIP Annual Report is required to be submitted (after the approval of the WQIP). After which, only WQIP Annual Reports will be submitted.

Conclusions and Recommendations

This section describes conclusions and recommendations that were drawn from updates made to the JRMP document.

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Date

Name, Title

Phone Number.

1 Introduction

The City of Poway (City) operates a storm water conveyance system that conveys runoff from rain during storms and helps prevent flooding of developed areas. During dry periods, water from natural groundwater seepage, irrigation runoff, and other “non-storm water” sources can be sources of flow in the storm water conveyance system. Water entering the storm water conveyance system from storms (“storm water”) and during dry periods (“non-storm water”) can also carry pollutants from activities such as industrial operations, construction, pesticide and fertilizer application, and littering. As the operator of a storm water conveyance system, the City is subject to a National Pollutant Discharge Elimination System (NPDES) permit issued by the California Regional Water Quality Control Board, San Diego Region (RWQCB). The NPDES permit requires the City to reduce pollutants in discharges from its storm water conveyance system to water bodies.

RWQCB Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit), requires the City of Poway and the other 20 municipal agencies subject to the Municipal Permit to prepare both jurisdictional and watershed scale plans that detail how they will comply with the new requirements. Each agency, including the City, prepares its own Jurisdictional Runoff Management Program (JRMP) document. The watershed plans, known as Water Quality Improvement Plans (WQIP), are collaboratively prepared by the municipal agencies and focus on a particular watershed.

The City is engaged in a number of activities that will cumulatively result in improved water quality. These activities include, but are not limited to, public education, employee training, water quality monitoring, storm water best management practice (BMP) development, inspections, and enforcement. The storm water program of the Development Services Department provides technical expertise and guidance to all City departments to ensure implementation and compliance with the Municipal Permit. The City’s Storm Water Pollution Prevention Program staff also coordinate annual reporting of all City JRMP-related activities and interfaces with the RWQCB regarding program audits, requests for information, and storm water permitting.

The City has participated in the preparation of WQIPs for the two Watershed Management Areas (WMAs) in which it has jurisdiction: Los Peñasquitos and San Dieguito. Figure 1-1 shows the portion of the City that is within each WMA. The WQIPs identify the highest priority water quality conditions (HPWQCs), or problems, and the corresponding numeric goals, strategies, and schedules to address those problems. In addition to documenting the City’s day-to-day operational activities and processes to improve water quality, the JRMP also includes enhanced WQIP strategies. These enhanced strategies are needed to further improve water quality in the

region to comply with numeric goals specified in the WQIPs, which are also required by the Municipal Permit. The full list of WQIP strategies is included in Appendix A.

1.1 Regulatory Background

The 1972 Federal Water Pollution Control Act (Clean Water Act) (CWA) established the NPDES permit program to regulate the discharge of pollutants from point sources to waters of the United States. Since then, considerable strides have been made in reducing conventional forms of pollution, such as pollution from sewage treatment plants and industrial facilities, through the implementation of the NPDES program and other federal, state, and local programs.

The adverse effects of some of the persistent toxic pollutants were addressed through manufacturing and use restrictions and through cleanup of contaminated sites. However, non-point source pollution from storm water runoff was largely unabated until the 1987 CWA amendments, which established a framework for regulating non-point source pollutants.

Because of the intermittent, variable, and unpredictable nature of storm water runoff, the United States Environmental Protection Agency, which administers the CWA, reasoned that the problems caused by storm water discharges were better managed at the local level. This management occurs through non-point source controls, such as the use of BMPs, to prevent the pollutants from entering storm water and runoff. The State implements the CWA and the California Porter-Cologne Water Quality Control Act through its agency, the State Water Resources Control Board (SWRCB), which uses a system of regional boards to implement these laws. As noted above, RWQCB is the local agency that issues and enforces the Municipal Permit applicable to the City of Poway.

The RWQCB issued the first iteration of the San Diego Municipal Permit in 1990, and it has been significantly revised multiple times since its inception. The City originally created its Jurisdictional Urban Runoff Management Program (JURMP) in 2002 in response to the 2001 Municipal Permit and revised it in 2008 as required by the 2007 Municipal Permit. An updated Municipal Permit was adopted on May 8, 2013, then amended on February 11, 2015 by the RWQCB. The 2013 Municipal Permit requires the 18 municipalities in San Diego County, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (Copermittees) to update their JURMPs by June 27, 2015. The 2013 Municipal Permit also replaced all references to “urban runoff” with “runoff” to emphasize the applicability of the Municipal Permit to all discharges to and from the Copermittees’ storm water conveyance systems, regardless of whether the source of a given discharge would generally be considered “urban”. Accordingly, the name of the JURMP has also been changed to “Jurisdictional Runoff Management Program,” or JRMP.

This revised JRMP document contains a comprehensive description of the City's storm water program, with updates to specific measures the City will implement or require to be implemented to comply with the Municipal Permit. This document is based on the most updated information available at the time this document was prepared. Each year, the City will submit a JRMP Annual Report to the RWQCB, and any changes to the City's JRMP will be noted in that document. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

In 1993, the City enacted the Stormwater Management and Discharge Control Program Ordinance (Storm Water Ordinance), codified in Poway Municipal Code Chapter 13.09. The City established the Storm Water Ordinance to protect the health, safety, and general welfare of residents and businesses through controlling non-storm water discharges and sources of pollution in storm water. The Storm Water Ordinance was amended in 2002, 2008, and again in 2015. The City has also included provisions with its grading ordinance of the Poway Municipal Code (Chapters 16.40-56) to control storm water pollution from sediments, erosion, and construction materials associated with construction activity.

The City has also established minimum BMP requirements for businesses, residents, construction and land development activities, and City operations included in the City's BMP Manual as Appendix B. The minimum BMPs have been revised to incorporate the new requirements in the Municipal Permit as part of the JRMP update. As required by the Municipal Permit, the City will be updating the post-construction BMP requirements for development projects. The City has been developing these new requirements collaboratively with the other Copermittees over the last two years. The new requirements are expected to be incorporated into the minimum BMPs by December 2015, unless directed to delay this process by the RWQCB. In the meantime, the existing minimum BMPs will continue to apply.

1.2 Purpose and Objectives

The primary purpose of this document is to present strategies the City will implement to reduce the discharge of pollutants from its storm water conveyance system to the maximum extent practicable in accordance with the Municipal Permit. To present the full picture of all the activities the City performs to improve water quality and meet the requirements of the Municipal Permit, the strategies identified in the WQIP for each of its WMAs are also included in the JRMP, as stated in the previous section.

1.3 City Setting

The City of Poway is located in central San Diego County, and is bordered by the City of San Diego and unincorporated portions of San Diego County. The City itself includes approximately 24,935 acres (39 square miles) and a population of approximately 50,000.

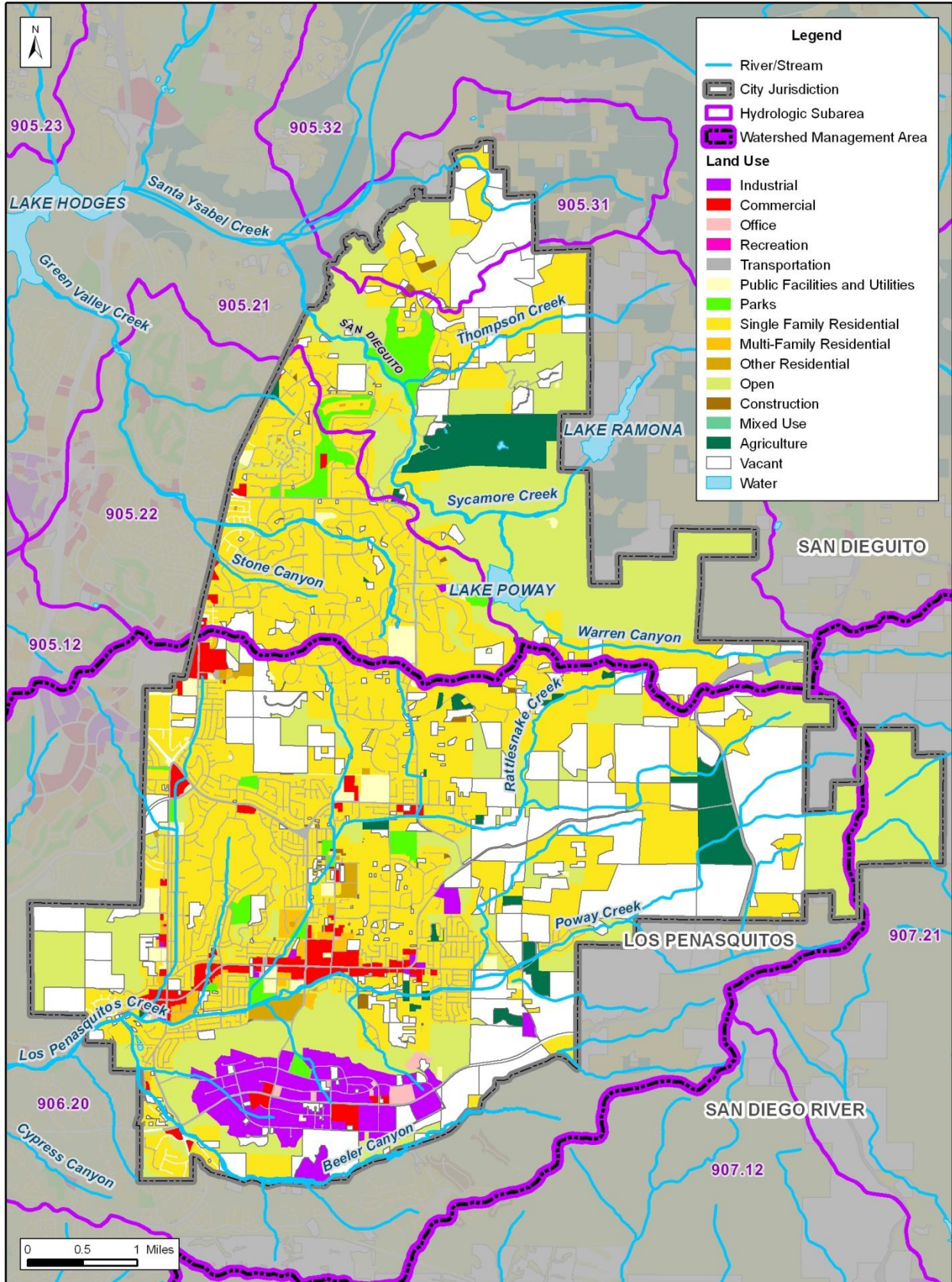
Land use within the City is mainly residential; other land uses in the City include transportation, industrial, commercial, streets, and undeveloped open spaces. Land use categories with the corresponding acreage percentage of land use in the City’s boundaries are included in Table 1-1 and shown in Figure 1-1.

Table 1-1. City of Poway Land Use

Land Use	Total Area (Acres)	Percentage
Single Family Residential	8,894	36%
Open	6,014	24%
Vacant	5,450	22%
Transportation	1,423	6%
Agriculture	757	3%
Industrial	756	3%
Commercial	472	2%
Parks	471	2%
Public Facilities and Utilities	306	1%
Multi-Family Residential	139	<1%
Other Residential	111	<1%
Water	54	<1%
Office	54	<1%
Construction	34	<1%
Total	24,935	100%

Source: 2014 San Diego Association of Governments land use data.

Figure 1-1. Land Use and Watersheds



Base Data Sources: SANDAG, SanGIS, and City of Poway.

1.3.1 Watersheds

The City lies entirely within two WMAs: the Los Peñasquitos WMA, hydrologic unit (HU) 905, and the San Dieguito WMA, HU 906. The northern portion of the City lies in the San Dieguito WMA, and the southern half of the City is part of the Los Peñasquitos WMA. Since only a small portion of eastern Poway lies in the San Diego River WMA, HU 907, which is designated as permanent undevelopable open space, the 2013 Municipal Permit does not designate the City of Poway as a Responsible Copermitttee for the San Diego River WMA. Table 1-2 summarizes the City’s hydrologic setting.

Table 1-2. City of Poway Watersheds

Watershed Management Area	HSA	Percentage of City within HSA	Receiving Water Bodies
Los Peñasquitos	906.20	61.7%	Beeler Creek, Los Peñasquitos Creek, Pomerado Creek, Poway Creek, Rattlesnake Creek, Silver Lake Drive Channel
San Dieguito	905.21	20.8%	Lake Hodges ¹ , Lake Poway, San Dieguito River ¹ , Sycamore Creek, Thompson Creek, Warren Canyon
	905.22	11.6%	Green Valley Creek, Stone Canyon Creek
	905.31	3.6%	San Dieguito River
San Diego River	907.21	2.3%	San Diego River ¹

Notes:

1. Water body is downstream of the City and outside the City’s jurisdictional boundaries.

1.3.2 Storm Water Conveyance System

The City maintains an inventory if its storm water conveyance structures, including inlets, pipes, and channels, in geographic information systems (GIS) format. A map of the City’s storm water conveyance system is included in Appendix C of this JRMP document.

1.3.3 Environmentally Sensitive Areas and Impaired Water Bodies

Environmentally sensitive areas (ESAs), as defined in the Municipal Permit, include but are not limited to the following:

- CWA Section 303(d) List of Water Quality Limited Segments (303(d) list)
- Areas designated as Areas of Special Biological Significance (ASBS) by the SWRCB and the RWQCB
- State Water Quality Protected Areas

- Water bodies designated with the Rare, Threatened, or Endangered Species (RARE) beneficial use by the SWRCB and the RWQCB
- Any other equivalent ESAs which have been identified by the Copermittees

Using the definitions above, it has been determined that the City of Poway contains the following ESAs:

- San Dieguito River
- Poway Creek
- Los Peñasquitos Creek
- Blue Sky Ecological Reserve
- Biological Core and Linkage Areas (Multiple Species Conservation Plan)

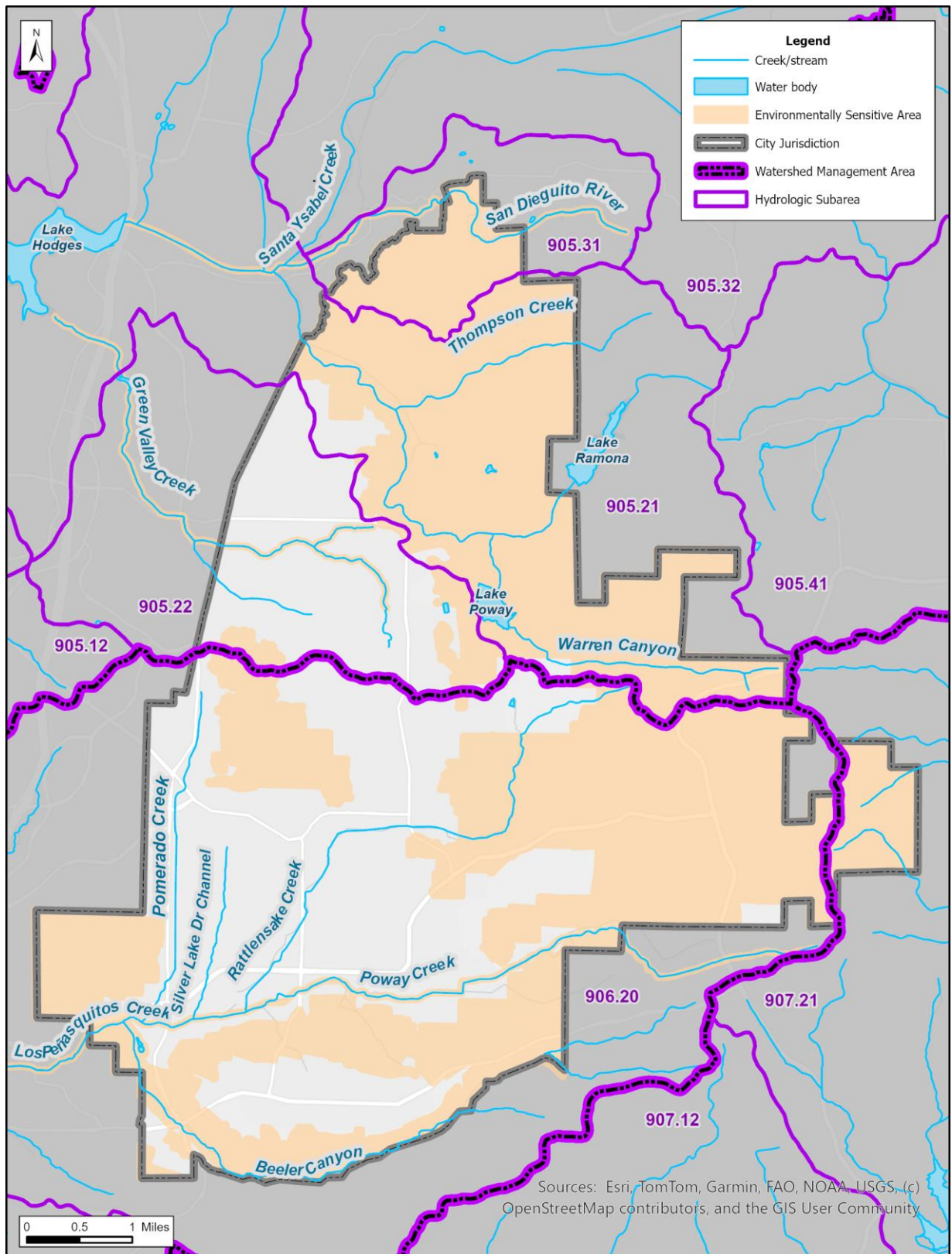
There are no ASBS or State Water Quality Protected Areas in the City’s jurisdiction. A map of the ESAs can be found in Figure 1-2. Table 1-3 lists pollutant categories associated with impaired water bodies within the City or farther downstream within the same hydrologic subarea (HSA). This table is used as a reference when assessing whether various inventoried sources, as described in later sections, may have the potential to contribute pollutants associated with 303(d) listed impairments.

Table 1-3. Pollutants of Concern

Water Body (HSA)	HPWQC and/or 303(d) Listed Impairment		Pollutant Categories
Los Peñasquitos WMA			
Los Peñasquitos Creek (906.20)	Indicator Bacteria ¹ Sedimentation/Siltation ¹ Selenium ²	Total Dissolved Solids ² Total Nitrogen as N Toxicity ^{2,3}	Bacteria/Viruses Nutrients Sediment
Poway Creek (906.20)	Indicator Bacteria ¹ Sedimentation/Siltation ¹	Selenium ² Toxicity ^{2,3}	Bacteria/Viruses Sediment
San Dieguito WMA			
Green Valley Creek (905.22)⁵	Indicator Bacteria ¹ Benthic Community Effects Bifenthrin Chloride Chlorpyrifos Cyfluthrin Manganese	Nitrogen Pentachlorophenol (PCP) Pyrethroids Sulfates Total Nitrogen as N Toxicity ^{2,3}	Bacteria/Virus Pesticides Metals Nutrients None
Sycamore Creek ⁴ , Thompson Creek ⁴ , Warren Canyon ⁴ (905.21)	Indicator Bacteria ¹ Color ³ Manganese ² Mercury ²	Nitrogen pH ² Phosphorus Turbidity ²	Bacteria/Virus Nutrients
San Dieguito River (905.31)	Indicator Bacteria ¹ Nitrogen	Phosphorus Total Dissolved Solids ² Toxicity ^{2,3}	Bacteria/Virus Nutrients

Notes:

1. Indicates a HPWQC for the WMA.
2. There are no known classes of businesses identified as sources of these pollutants. If source is discovered during a site inspection, the business will be prioritized as a high threat to water quality.
3. Condition has not been specifically associated with any particular pollutant at this time.
4. This water body is not 303(d) listed; however, it is located within the same HSA as Lake Hodges, which is 303(d) listed.
5. The portion of Green Valley Creek within the City's jurisdiction is not 303(d) listed but it is tributary to the 303(d) listed segment in 905.21. The [State Board's 2020-2022 Integrated Report 303\(d\) Map](#) incorrectly shows an unnamed tributary as a 303(d) listed portion of Green Valley Creek in the City of Poway. The City has identified Green Valley Creek based on the [San Diego Water Board's Basin Plan web map](#) and the [FEMA National Flood Hazard Layer Viewer](#) map.



Base Data Sources: City of Poway, D-Max Engineering, Inc., Federal Emergency Management Agency, San Diego Water Board, SanGIS, and USGS.

Figure 1-2. Environmentally Sensitive Areas

1.4 Report Organization

Section 1 Introduction

The introduction includes a general regulatory background leading up to the creation of this JRMP document. Land use statistics, City information, and information about ESAs within the City are included in this section.

Section 2 Program Organization and Legal Authority

This section identifies and describes the departments within the City that conduct and oversee JRMP-related activities and presents the City's storm water program organization.

Section 3 Illegal Discharge Detection and Elimination

This section describes the processes by which IC/IDs will be detected, investigated, and eliminated by the City. This section describes non-storm water discharge prohibitions and the City's approach to controlling such discharges.

Section 4 Development Planning

This section addresses how the City will reduce discharges of pollutants from development projects. Information regarding the City's General Plan, the City's newly updated post-construction BMP requirements, and related implementation methods are also included.

Section 5 Construction Management

This section provides a description on the prioritization of the City's watershed-based inventory of construction sites within the City. Updates to the construction BMPs are also described. Other program implementation information, including construction and grading permit approval process, contract specifications, and inspection procedures, is also included in this section.

Section 6 Industrial and Commercial Facilities

This section provides a description on the prioritization of the City's watershed-based inventory of industrial and commercial facilities within the City, including mobile businesses known to operate in the City. This section describes the minimum BMPs that are required to be implemented at industrial and commercial facilities. This section also includes a discussion of facility inspection frequencies and procedures.

Section 7 Municipal Facilities

This section provides a description on the updated prioritization of the City's watershed-based inventory of municipal facilities. A description of pollution prevention methods and minimum BMPs to be implemented at specific

municipal facilities and during specific municipal activities is included in this section. This section also includes a discussion of municipal inspection frequencies and procedures.

Section 8 Municipal Infrastructure

A description of storm water conveyance system and sanitary sewer maintenance, street sweeping, and landscape activities conducted by City staff and associated BMPs for each activity is included in this section.

Section 9 Residential Areas

The new requirements that have been incorporated into the residential inventory are included in this section. This section also provides a description of the newly updated residential oversight program and the oversight methods the City staff will use to implement the program.

Section 10 Education and Public Participation

This section describes the education programs and activities that will be used by the City including content, form, and frequency for each target community as described by the Municipal Permit. This section describes the mechanisms that will be used to encourage public participation in the City's JRMP.

Section 11 Fiscal Analysis

This section provides the methods of reporting the yearly fiscal analysis in the Annual Report. A description of the City's method of securing all necessary financial resources for the inclusion of all programs detailed in the JRMP is also included.

Section 12 Reporting

This section describes components of the City's JRMP that are required to be included in the Annual Report submission.

Section 13 Conclusions and Recommendations

This section describes conclusions and recommendations that were drawn from updates made to the JRMP document.

Section 14 References

Appendices

Appendix A Water Quality Improvement Plan Jurisdictional Strategies

Includes the City's jurisdictional strategies presented in the Los Peñasquitos and San Dieguito River Watershed Management Area WQIPs.

Appendix B Best Management Practice Manual

Provides BMPs for industrial, commercial, municipal, residential, and construction activities.

Appendix C Dry Weather Major MS4 Outfall Discharge Monitoring Program

Includes the City's storm water conveyance map, Dry Weather Major MS4 Outfall Discharge Monitoring procedures, and field datasheets.

Appendix D Enforcement Response Plan

Describes the enforcement mechanisms the City will utilize in order to ensure the implementation of its JRMP and to confirm its legal authority.

Appendix E Existing Development Retrofit and Stream Rehabilitation Program

This section discusses how the City will identify, prioritize, and implement potential projects for retrofitting areas of existing development and for rehabilitation streams, channel, and habitats.

Appendix F Municipal Facilities Inventory

Includes a list of inventoried municipal facilities with the facility information required by the Municipal Permit.

Appendix G Jurisdictional Runoff Management Program Annual Report Form

Includes a copy of the JRMP Annual Report Form from the Municipal Permit.

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2 Program Organization and Legal Authority

2.1 Introduction

As specified in Section E.1.a of California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit), the City of Poway (City) establishes, maintains, and enforces adequate legal authority within its jurisdiction to control pollutant discharges into and from its storm water conveyance system. The City established and updated local ordinances in the Poway Municipal Code (PMC), which provide legal authority for enforcing storm water requirements. The major ordinances relating to storm water include the following:

- City of Poway Stormwater Management and Discharge Control Program Ordinance (Storm Water Ordinance) (PMC Chapter 13.09)
- Grading and Erosion Control Ordinance (PMC Chapters 16.40- 16.56)

Where violations of the PMC the Municipal Permit are observed, administrative and judicial procedures may be employed to enforce storm water requirements. This legal authority empowers the City to:

1. Prohibit, prevent, and eliminate all illegal connections and illegal discharges (IC/IDs) to the City's storm water conveyance system.
2. Control the contribution of pollutants in discharges of runoff (storm water or non-storm water) from industrial and construction activity to the storm water conveyance system.
3. Regulate discharges from spills, dumping, and disposal of materials other than storm water into the storm water conveyance system. Section 3 of this document provides more information on discharge prohibitions.
4. Control the contribution of pollutants to the City's storm water conveyance system through interagency agreements, coordination, and cooperation with other owners of the storm water conveyance system.
5. Require compliance with conditions in its statutes, ordinances, permits, contracts, order, or other similar means to hold dischargers to the storm water conveyance system accountable for their contributions of pollutants or flows. The City also has the authority to require the use of best management practices (BMPs) to prevent or reduce the discharge of pollutants in storm water from the storm water conveyance system to the maximum extent practicable.

6. Necessitate documentation on the effectiveness of BMPs implemented to prevent or reduce the discharge of pollutants in storm water from its storm water conveyance system to the maximum extent practicable.
7. Use various enforcement measures, as discussed in the City's Enforcement Response Plan (Appendix D), to require compliance with its statutes, ordinances, permits, contracts, order, or similar means.
8. Conduct all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with its statutes, ordinances, permits, contracts, order, or similar means, which includes the authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from industrial facilities and construction sites discharging to the storm water conveyance system.

The City's Storm Water Ordinance references the City's updated BMP requirements included in the BMP Manual (Appendix B). The City also has litter and public nuisance ordinances which are not specific to storm water but may in some cases be used to support storm water program implementation.

2.2 Departmental Roles and Responsibilities

Personnel from various City departments are involved in the implementation of the City's storm water program. The primary departments that conduct JRMP-related activities are the Development Services Department and the Public Works Department. Smaller roles are played by the Administrative Services Department and the City Attorney's Office. A diagram of the departmental organization within the City is presented in Figure 2-1, at the end of this section. The following is a list of departments, divisions, and programs within the City that conduct JRMP-related activities. Only those departmental responsibilities and activities directly related to compliance with the Municipal Permit are mentioned below.

City Manager and City Council

- Adopt ordinance revisions to carry out new Municipal Permit requirements
- Secure fiscal resources and approve budgets
- Provide public participation at City Council meetings
- Review and approve related policies and plans as needed
- Enter into formal agreements with Copermittees to define management structure, responsibilities, cost sharing, and decision making procedures for implementation of the Municipal Permit
- Oversee implementation of JRMP across multiple departments

- Sign and certify reports submitted to the RWQCB

City Attorney

- Review and approve storm water related-documents and ordinances to ensure they are compliant with current laws and regulations
- Assist in the enforcement of the PMC
- Ensure and certify adequate legal authority
- Approve changes in the Jurisdictional Runoff Management Program (JRMP) document

City Clerk

- Maintain records applicable to previous and current JRMP implementation activities
- Process public record requests related to the Municipal Permit

Development Services Department

- Storm Water Program
 - Administer the City's JRMP
 - Maintain inventory and conduct inspections and enforcement of industrial and commercial facilities
 - Oversee illegal discharge detection and elimination efforts, including monitoring, investigation, enforcement, and Storm Water Hotline operation
 - Assist with training of municipal personnel
 - Provide storm water-related educational materials and outreach for target audiences
 - Maintain the structural post-construction BMP inventory and oversee maintenance tracking activities
 - Act as representative in Los Peñasquitos and San Dieguito watersheds and regional Copermittee management activities
 - Serve as liaison to City departments regarding implementation of the Municipal Permit and the City's JRMP
 - Coordinate JRMP Annual Report preparation
 - Provide information for JRMP document updates and JRMP Annual Reports
- Land Development Division
 - Modify development requirements as needed

- Implement and update post-construction BMP requirements
- Update construction site inventory
- Contribute to structural post-construction BMP maintenance tracking
- Responsible for Hydromodification Plan implementation
- Assist with development site enforcement
- Issue grading permits and conduct construction site inspections
- Contribute to education for new development and construction activities
- Provide information for JRMP document updates and JRMP Annual Reports
- Building & Safety Inspection Division
 - Receive and review development and redevelopment applications
 - Responsible for low impact development and Hydromodification Management Plan (HMP) development and implementation
 - Develop contract documents and administer contracts, including BMP requirements
 - Contribute to structural post-construction BMP maintenance tracking
 - Responsible for development site enforcement for building activities
 - Provide education for new development and construction activities
 - Provide information for JRMP document updates and JRMP Annual Reports
- Capital Projects Division
 - Ensure that public projects meet new development standards
 - Modify development requirements as needed
 - Assist with structural post-construction BMP maintenance tracking
 - Contribute to education and outreach for construction audience
 - Provide information for JRMP document updates and JRMP Annual Reports
- Code Compliance Division
 - Enforce the City's storm water regulations
 - Conduct inspections of industrial and commercial facilities as needed
 - Respond to storm water complaints received by the City's Storm Water Hotline

- Conduct IC/ID investigation and enforcement
- Provide information for JRMP document updates and JRMP Annual Reports
- Planning Division
 - Update the City's General Plan and Environmental Review process
 - Ensure land uses in the City comply with the PMC, General Plan, Council and Planning Commission policies, and State requirements
 - Review development proposals that come to the City in the form of planning applications and building permits
 - Ensure the City's minimum construction BMPs (Appendix B) are implemented for development sites that do not require grading
 - Verify that all structural post-construction BMPs included on a development site's plans are properly installed
 - Contribute to education and outreach for new development and construction activities
 - Provide information for JRMP document updates and JRMP Annual Reports
- Engineering Inspection Division
 - Maintain construction site inventory
 - Maintain inventory of municipal areas
 - Conduct inspections and regulate construction sites regarding erosion and other site management activities
 - Report non-compliant sites, including non-filers of the SWRCB Order No. 2009-0009-DWQ, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ
 - Inspect Priority Development Projects to verify proper installation of structural post-construction BMPs
 - Contribute to education and outreach for construction audience
 - Provide information for JRMP document updates and JRMP Annual Reports

Public Works Department

- Street Maintenance Division
 - Administer street sweeping program
 - Conduct preventative maintenance

- Operate and maintain the storm water conveyance system and municipal structural post-construction BMPs
- Manage pesticides, herbicides, and fertilizers as applicable
- Perform visual observations of non-storm water discharges and illegal connections in support of the City’s residential oversight program
- Provide education and outreach for municipal personnel and contractors
- Provide information for JRMP document updates and JRMP Annual Reports
- Sewer Collection Division
 - Responsible for the maintenance of the City’s sanitary sewer system
 - Respond to sewage spills and contain and clean up such spills to prevent or minimize discharge to the storm water conveyance system
 - Provide information for JRMP document updates and JRMP Annual Reports
- Water Transmission Division
 - Responsible for design, review, and approval of all publicly owned and maintained sewer infrastructure
 - Conducts plan checks and sewer permit issuance for private development wishing to connect to the public sewer system
- Parks and Landscape Maintenance Division
 - Manage pesticides, herbicides, and fertilizers
 - Implement and maintain BMPs at City parks
 - Contribute to education and outreach for municipal personnel
 - Provide information for JRMP document updates and JRMP Annual Reports
- Special Landscape Districts Division
 - Provides general, routine maintenance, and BMP implementation and maintenance to select municipal infrastructure
 - Provide information for JRMP document updates and JRMP Annual Reports

Safety Services Department

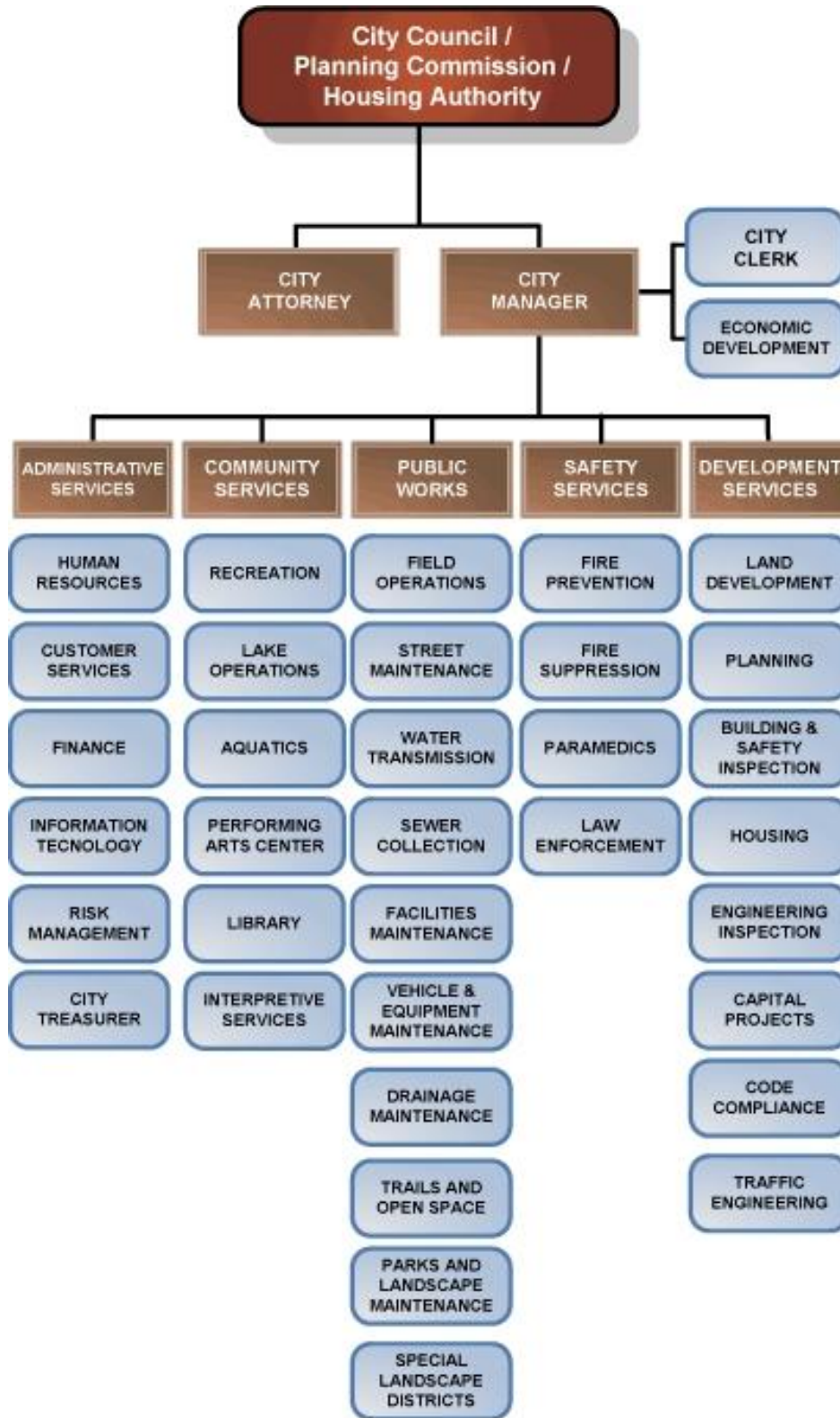
- Fire Suppression Division
 - Implement and maintain BMPs at fire-related facilities and during fire-rescue activities

- Contribute to education and outreach for municipal personnel
- Provide information for JRMP document updates and JRMP Annual Reports

Administrative Services Department

- City Treasurer
 - Assist with updates to the industrial and commercial facilities inventory through use of the business license list
- Finance Division
 - Identify and secure sources of funds for the implementation of the City's JRMP
 - Responsible for providing fiscal analysis information for JRMP Annual Reports
- Information Technology Division
 - Assists with the development, maintenance, and access of information about the City's infrastructure, facilities, and publicly-owned areas.

Figure 2-1. City of Poway Organizational Chart



3 Illegal Discharge Detection and Elimination

3.1 Introduction

The City of Poway (City) detects and eliminates illegal connections and illegal discharges (IC/IDs) and improper disposal of pollutants into the storm water conveyance system through the implementation of their storm water program, which oversees the City's illegal discharge detection and elimination efforts. Illegal connections and illegal discharges contribute pollutants to the City's storm water conveyance system, and ultimately receiving waters.

One goal of the City's storm water program is to actively seek and eliminate IC/IDs to the City's storm water conveyance system. This goal is achieved through dry weather major municipal separate storm sewer system (MS4) outfall monitoring, operating a public complaint hotline, enforcement, and education. Chapter 13.09 of the Poway Municipal Code, Stormwater Management and Discharge Control (Storm Water Ordinance) defines IC/IDs as follows:

- An *illegal connection* means a pipe, facility or other device connected to the storm water conveyance system or receiving waters, which has not been reviewed and authorized by the City; or a permitted/authorized pipe, facility or other device which conveys illegal discharges.
- An *illegal discharge* means any discharge to the storm water conveyance system or receiving waters that is prohibited by the Storm Water Ordinance. This includes, but is not limited to, discharges of non-storm water that are not exempt discharges listed in Poway Municipal Code Section 13.09.060 (also discussed in Section 3.2.2), discharges of irrigation runoff to the storm water conveyance system, any discharge from an illegal connection and any discharge that contains additional pollutants due to the absence of a required best management practice (BMP) or the failure of a BMP. Discharges that require a National Pollutant Discharge Elimination System (NPDES) permit that has not been issued or has not been acknowledged by the discharger to be applicable are illegal discharges. Discharges regulated under an applicable NPDES permit are illegal discharges for unless compliance with all applicable permit and Storm Water Pollution Prevention Plan conditions is maintained.

The City's illegal discharge detection and elimination efforts involve the City's Storm Water Pollution Prevention Program, Poway Sanitation District, Fire Department, Public Works Department, County of San Diego Department of Environmental Health (DEH), and members of the public.

The City investigates, inspects and appropriately follows-up on every IC/ID that is reported or detected to identify the source(s) of the discharge. Voluntary compliance and escalating enforcement mechanisms are implemented to eliminate the IC/ID once the source has been identified and education is provided to the discharger to prevent future IC/IDs, where feasible.

In support of illegal discharge detection and elimination efforts, the City conducts other programs that result in the discovery of IC/IDs such as the Dry Weather Major MS4 Outfall Discharge Monitoring Program (MS4 Outfall Monitoring Program) and industrial/commercial facility inspections (see Section 6 for additional information). The City maintains a public hotline for the purpose of reporting of non-storm water discharges to the storm water conveyance system and is responsible for ensuring the abatement of IC/IDs. Beyond monitoring and enforcement, the City relies on its Public Education and Participation Program to reduce discharges by raising public awareness and encouraging behaviors that reduce the amount of pollutants released to the storm water conveyance system (See Section 9 for additional information).

This section discusses prohibited discharges, non-storm water discharge exemptions (allowable discharges), and the City's procedures for IC/ID detection, prevention, response, and enforcement.

3.2 Non-Storm Water Discharges

Non-storm water discharges to the storm water conveyance system are prohibited unless the discharge has been authorized by a separate NPDES permit or are conditionally allowed by the Municipal Permit. Some categories of non-storm water discharges are allowed on the condition that they are addressed in accordance with the requirements of the Municipal Code and the Municipal Permit and are discussed Section 3.2.2.

The City will periodically review and evaluate conditionally allowed discharges to determine whether specified categories may be significant sources of pollutants to receiving waters. In certain cases, the City will prohibit the discharge category from entering the storm water conveyance system. Where a category of non-storm water discharge is determined to be a significant source of pollutants, the City will take appropriate enforcement measures, as discussed in the City's Enforcement Response Plan (Appendix D) and prohibit the discharge category from entering the storm water conveyance system or implement BMPs (see BMP Manual in Appendix B).

3.2.1 Prohibited Discharges

Irrigation runoff that reaches the City's storm water conveyance system is prohibited, as required by the Municipal Permit. Under the previous Municipal Permit, irrigation runoff was allowed unless it was shown to be a source of pollutants. Irrigation runoff includes intended or

unintended overspray and excessive application of irrigation water from sprinklers or hosing activities. Other examples of prohibited discharges include wash water power washing or hazardous materials, such as automotive fluids, that enter the storm water conveyance system.

The following two groups of non-storm water discharges are not allowed unless they have coverage under a separate NPDES permit, as required by Section E.2.a.(1)-(2) of the Municipal Permit.

- The following discharges of non-storm water to the storm water conveyance system will be considered illegal discharges unless the discharge has coverage under NPDES Permit No. CAG919002 (Order No. R9-2008-0002, or subsequent order) for discharges to surface waters other than San Diego Bay:
 - Uncontaminated pumped ground water.
 - Discharges from foundation drains and footing drains (if not covered under an NPDES permit, the discharge is only prohibited if the system is located at or below the groundwater table to actively or passively extract groundwater during any part of the year).
 - Water from crawl space pumps.

An application for the NPDES Permit No. CAG919002 can be found online at www.waterboards.ca.gov/sandiego. Any parties discharging the above non-storm water discharges must submit a Notice of Intent (NOI) to the SWRCB along with an initial sampling and monitoring report, a project map, and an application fee.

- Discharges of non-storm from water line flushing and water main breaks to the storm water conveyance system will be considered illegal discharges unless the discharge has coverage under an appropriate NPDES Permit (Order No. R9-2010-0003 or subsequent order).
 - This includes water line flushing and water main break discharges from water purveyors issued a water supply permit by the California Dept. of Public Health or federal military installations.
 - Discharges from recycled or reclaimed water lines to the storm water conveyance system will also be addressed as illegal discharges unless the discharge has coverage under a separate NPDES permit.

Section E.2.d.(3)(e) of the Municipal Permit requires that if the City is unable to identify and document the source of a recurring non-storm water discharge to or from the storm water conveyance system, then the City must address the discharge as an illegal discharge and update

its Jurisdictional Runoff Management Program (JRMP) as needed to address the common and suspected sources of the non-storm water discharge within its jurisdiction.

3.2.2 Conditionally Allowed Discharges

Conditionally allowed non-storm water discharges are described in Section E.2.a.(3)-(4) of the Municipal Permit and include the following:

- Discharges of non-storm water to the storm water conveyance system from the following categories will be considered illegal discharges only if the City or the RWQCB identifies the discharge as a source of pollutants to receiving waters:
 - Diverted stream flows
 - Rising ground waters
 - Uncontaminated ground water infiltration to storm water conveyance system
 - Springs
 - Flows from riparian habitats and wetlands
 - Discharges from potable water sources
 - Discharges from foundation drains and footing drains (only applies if the system is located above the groundwater table at all times of year and is only expected to discharge non-storm water under unusual circumstances)
- Discharges of non-storm water to the storm water conveyance system from the following categories will be controlled by the requirements listed below; otherwise, they will be addressed as illegal discharges.
 - Air conditioning condensation
 - Air conditioning condensation discharges have been identified as a source of pollutants, including copper, based on monitoring completed by the City, and are prohibited from entering the City's storm water conveyance system unless the following BMPs are followed in order.
 - Air conditioning condensation should be directed to the sanitary sewer if allowed. Contact the Development Services Department's Building Division at (858) 668-4645 to obtain a building permit to direct the condensation to the sanitary sewer system.
 - Air conditioning condensation discharges should be directed to onsite landscaped or pervious area to infiltrate or evaporate, without resulting in erosion or runoff to the storm water conveyance system or any

adjacent property. Directing discharges to landscaping close to a building foundation is not recommended.

- If the above BMP options are not feasible AND the discharge does not contain pollutants exceeding the California Toxics Rule (CTR), air conditioning condensation may enter the City storm water conveyance system. Condensation must be proven to contain no pollutants that contribute to CTR water quality exceedances with monitoring conducted using United States Environmental Protection Agency (EPA) standard protocols.
- Individual residential vehicle washing
 - Water associated with washing activities should not be allowed to enter City storm drains, curbs and gutters, or any other part of the City's storm water conveyance system drain system. When washing vehicles, boats, or other equipment in an area that may reach the storm water conveyance system, the following BMPs must be employed.
 - Use of a control nozzle or similar mechanism is required to minimize the quantity of water used.
 - Wash areas should not include any drains that connect to the storm water conveyance system. Designated washing areas may consist of a container, a berm, or a liner to collect and contain liquids and prevent runoff.
 - When washing is conducted, all wash water should be contained, captured, and disposed of appropriately. Contained water should be collected and captured using a wet vacuum or equivalent. Allowing contained water to evaporate is an acceptable method of disposal only if any remaining residue on pavement or other impervious areas is removed to prevent future pollutant discharges. Captured wash water may be disposed through the sanitary sewer system with the approval of the City's Public Works Department. Contact the Public Works Department at (858) 668-4700 for approval of any discharges to the sanitary sewer system.
 - Wash water containing oil, paint, or other hazardous waste shall be disposed of properly in accordance with applicable regulations.
 - If only biodegradable soaps and uncontaminated water are used, wash water may be directed to onsite landscaped or pervious area(s) to

infiltrate or evaporate, without resulting in erosion or runoff to the storm water conveyance system or any adjacent property. This can be accomplished by washing the vehicle on a landscaped area or using a berm to direct wash water to a landscaped area.

- If all applicable vehicle washing BMPs are employed and there is no landscaped area to direct wash water to, some uncontaminated water may be allowed to enter the storm water conveyance system.
- Dechlorinated swimming pool discharges
 - Residual chlorine, algaecide, filter backwash, or other pollutants from swimming pools must be eliminated prior to discharging to the storm water conveyance system.
 - Non-saline pool waters must be directed to landscaped areas or other pervious surfaces that can accommodate the volume of water, where feasible; otherwise, discharges of pool water to the storm water conveyance system are allowable as long as the discharge does not contain, or will not transport, pollutants to the storm water conveyance system, including public streets.

Table 3-2 at the end of this section summarizes appropriate disposal methods for common types of discharges.

Discharges determined by any authorized enforcement official or staff to be necessary to protect public health and safety are exempt from discharge prohibitions discussed in above, provided that any conditions set for such discharges imposed by the authorized enforcement official or staff are satisfied. In emergency circumstances, the determination of an authorized enforcement official or staff that a discharge is necessary may initially be oral but must be promptly confirmed in writing. In non-emergency situations, a prior written determination is required to exempt a discharge.

3.2.3 Firefighting Discharges

In accordance with Section E.2.a.(5) of the Municipal Permit, non-storm water discharged to the storm water conveyance system as a result of firefighting activities, both emergency and non-emergency activities, is considered an illegal discharge if the City or the RWQCB identifies the discharge as a significant source of pollutants to receiving waters. Firefighting discharges to the storm water conveyance system, not identified as a significant source of pollutants to receiving waters, must be addressed as follows and in accordance with the BMP Manual (Appendix B):

- Non-emergency firefighting discharges

- Building fire suppression system maintenance discharges (e.g. sprinkler line flushing) to the storm water conveyance system must be addressed as illegal discharges unless BMPs are implemented to prevent pollutants associated with such discharges to the storm water conveyance system.
- Non-emergency firefighting discharges (i.e., discharges from controlled or practice blazes, firefighting training, and maintenance activities not associated with building fire suppression systems) are subject to the municipal BMPs described in Appendix B of this JRMP document to reduce or eliminate pollutants in such discharges from entering the storm water conveyance system.
- Emergency firefighting discharges
 - During emergency situations, priority of efforts is directed toward life, property, and the environment (in descending order). The BMPs listed in Appendix B should be implemented, but should not interfere with immediate emergency response operations or impact public health and safety.

3.3 Preventing, Detecting, and Responding to IC/IDs

The primary objective of the City’s IDDE program is to actively seek and eliminate IC/IDs to the storm water conveyance system. Eliminating IC/IDs helps minimize potentially negative impacts of human activities on receiving water bodies. The City utilizes its municipal personnel to assist in actively seeking, identifying, and reporting IC/IDs during their daily activities.

Detection and prevention of IC/IDs is achieved through the following activities:

1. Operating a public complaint phone hotline and website.
2. Inspecting local businesses, municipal facilities, construction sites, and residential areas.
3. Conducting field screening of major storm water conveyance system outfalls.
4. Maintaining municipal storm drain and sanitary sewer systems.
5. Educating the local community.

3.3.1 Public Reporting of IC/IDs

To further aid the process of identifying illegal discharges, the City encourages the public, City, and contract staff to report IC/IDs. Citizens of Poway can file complaints using the public complaint hotline listed below, which is currently operated by City’s Public Works Department:

City of Poway Storm Water Hotline
(858) 668-4663

After hours, holidays and on weekends, these calls are answered through the Poway Sheriff's Department at (858) 513-2800. Alternatively, complaints may be reported to the San Diego County Regional Stormwater Hotline at (888) 846-0800 or watersheds@sdcounty.ca.gov. The hotline is answered Monday through Friday, 8:00 a.m. - 5:00 p.m. and provides a voice mail message for 24-hour public access in both English and Spanish. Relevant complaints received via the County hotline will be forwarded to the City's Public Works Department. The Public Works Department also accepts calls for sewage and spills and the Development Services Department Code Compliance Division accepts calls to report illegal dumping at (858) 668-4663.

Once a complaint is received, it is logged into an electronic database for documentation and tracking purposes. Investigations are initiated by Code Compliance or Public Works staff for complaints with details suggesting an actual or potential discharge to the storm water conveyance system or receiving waters. If investigators find evidence of a violation with the potential to release pollutants or an actual IC/ID, every effort is made to find the responsible party and inform them of the complaint and to take enforcement action, where appropriate.

Parties found to be responsible for a violation or IC/ID are required to clean up or remove pollutants to the maximum extent practicable. Any refusal by the responsible party to perform clean up of a violation or discharge will be handled by Code Compliance staff and appropriate enforcement actions will be taken. If determined to pose a serious threat to human health or the environment, the complaint is reported to the RWQCB in accordance with Section 1.1.(6) of Attachment B of the Municipal Permit.

The City validates, investigates, inspects, and appropriately follows-up on IC/IDs that are reported or detected, to identify the source(s) of the discharge. IC/IDs potentially harming human health are placed at the highest priority, with IC/IDs potentially threatening aquatic health or reaching a receiving water body as the next most important priority for investigation. Any call related to storm drains is considered urgent and is addressed as quickly as possible. See Section 3.3.4 and Appendix C for more information regarding IC/ID investigations. The City will use its enforcement authority as necessary to eliminate IC/IDs to the MS4 as discussed in the Enforcement Response Plan (Appendix D).

3.3.2 Spill Prevention, Response, and Reporting

The City implements spill prevention, response, and reporting mechanisms to prevent, respond to, contain, and clean up all sewage and other spills that discharge to, or may have the potential to discharge to, its storm water conveyance system. The City coordinates with spill response teams to prevent entry of spills into the storm water conveyance system to prevent the contamination of surface water, ground water, and soil to the MEP. If necessary, the City will coordinate with upstream and downstream Copermittees and/or agencies to prevent spills and illegal discharges into or from the City's storm water conveyance system. This section is

intended to provide an overview of the City's general spill prevention, response, and reporting actions. The City's Sanitary Sewer Management Plan (SSMP) should be the first point of reference when responding to sewer spills.

3.3.2.1 Sewage Spill Prevention

Spill prevention measures outlined below are implemented to prevent overflows, spills, and infiltration of sewage to the storm water conveyance system in agreement with Section E.2.b.(4)-(5) of the Municipal Permit.

Preventive Maintenance Activities

The City conducts routine maintenance activities, as discussed in Section 8 of this JRMP document, to prevent and limit infiltration of seepage from the sanitary sewer system to the storm water conveyance system which includes the following measures:

- Routine sanitary sewer and storm water conveyance system surveys.
- Thorough, routine preventive maintenance of both systems (annual cleaning of entire sanitary sewer system, and "high priority" sewer lines cleaned at least every two months, while some are cleaned monthly).
- Major MS4 outfall monitoring.
- Recording and responding to reports of potential sanitary sewer spills or leaks from the public and City staff.
- Video inspection of underground systems (televise sewer mains to visually detect any potential problems).
- Geographic information system (GIS) mapping of sewer and storm water conveyance system intersects.
- Alarm system at sewage pump stations.

Sewer System Management Plan

The City will continue to maintain and implement a SSMP in response to the SWRCB Order No. 2006-003-DWQ and RWQCB Order R9-2007-0005. The City will also continue to maintain a Sanitary Sewer Overflow Prevention Plan (SSOPP), which is included within the SSMP. The SSOPP describes the City's sewer system and addresses the organization and major activities of the City's wastewater operations. The SSOPP has been designed to prevent or minimize the potential for sanitary sewer overflows (SSOs).

3.3.2.2 Sewage Spill Response

The County Department of Environment Health (DEH) responds to sewage spills reaching a receiving water body. The regional Hazardous Materials Incident Response Team (HIRT)

handles all complaints received after normal business hours for the County DEH and other designated agencies within San Diego County including SSOs to receiving waters. The City contributes to the funding of the HIRT which was founded in 1981 by the Unified Disaster Council and is funded by a Joint Powers Agreement and services all unincorporated San Diego County areas, 18 municipalities, two military bases, and five Indian Reservations.

Spills from the City's sanitary sewer system entering the storm water conveyance system may be discovered during routine maintenance activities or observed and reported to the City by citizens and sewer and maintenance workers. Sewage spills are reported using the procedures outlined in the Sanitary Sewer Overflow Emergency Response Plan (SSOERP), which is included within the SSMP. The SSOERP describes the City's sewer system overflow response and notification procedures. Response actions are taken in accordance with the City's SSMP to address the spill.

The Municipal Permit also requires that sewage discharges that are caused by blockages or other problems within a privately owned lateral or failing septic systems are dealt with appropriately. If a spill from a private sewer lateral is not contained and no action is being taken by the responsible party to repair the lateral, the City will take necessary action to contain the spill, repair the lateral and bill the responsible party. The City's Code Enforcement handles citations.

The County DEH is responsible for responding to sewage spills due to failing septic systems at private residences. The City will work with the County DEH, as needed, to ensure spills are fully remediated. Depending on the nature of the spill, either the City of Poway or the County DEH takes action to control, contain, and clean up the discharged materials (Table 3-1). Corrective actions are implemented to the extent that they are applicable to the discharge; the following are common corrective actions:

- Interception and rerouting of sewage flows around the sewage line failure.
- Vactor truck recovery of SSO materials and wash down water.
- Cleanup of debris of sewage origin at the overflow site.

Table 3-1. Responsible Party for Sewage Spill Response

Source	Responsible Agency
Any spill reaching a receiving waterbody	County DEH
Any spill reaching storm water conveyance system	City of Poway, Public Works Dept. Water Utilities
Leaks and spills from publicly owned collection system	City of Poway, Public Works Dept. Water Utilities
Private residence (spills resulting from blockages of private laterals)	City of Poway, Public Works Dept. Water Utilities
Private residence (spills resulting from failing septic systems)	County DEH and/or Private Owner

3.3.2.3 Hazardous Materials Spill Response

The City’s Fire Department responds directly to spills or illegal dumping of hazardous materials, and provides support services to other agencies that encounter hazardous materials in their routine duties. The Fire Department operates 24 hours a day, seven days a week. The team’s duties include, but are not limited to, directing the containment and clean-up of spills that may enter surface waters or flow directly to the storm water conveyance system in accordance with the County’s Hazardous Waste Management Plan.

The regional HIRT responds jointly with the San Diego Fire & Life Safety Services Department, Hazardous Incident Response Team to investigate and mitigate chemical-related emergencies or complaints. Emergency response activities include mitigation, containment and control, and hazard identification, evaluating the threat to the public and the environment. HIRT is also responsible for handling all complaints received after normal business hours for the DEH.

3.3.2.4 Other Spill Prevention and Mitigation Procedures

The City coordinates spill prevention, containment, and response activities throughout all appropriate departments, programs, and agencies so that maximum water quality protection is available at all times. Spills are prevented and mitigated through the implementation and enforcement of minimum BMPs (Appendix B).

3.3.2.5 Spill/Discharge Reporting

Illegal discharges to the City’s storm water conveyance system are reported annually in the City’s JRMP Annual Report, which includes the number of discharges reported, detected, investigated, identified, and eliminated, and the number of associated enforcement actions. For SSOs and hazardous material spills and releases, the City’s SSMP and Hazardous Materials Response Plan shall be the first point of reference.

3.3.3 Dry Weather Major MS4 Outfall Discharge Monitoring

In 2013, the City of Poway began routine visual monitoring of discharges from major MS4 outfalls during dry weather to detect non-storm water and IC/IDs from its storm water conveyance system. A “major outfall” is defined as an outfall that is 36 inches in diameter or drains an industrial area and is at least 12 inches in diameter.

Under the 2007 Municipal Permit, the City conducted field screening at all monitoring sites and tested any water present at the sites for various common storm water pollutants. The 2013 Municipal Permit emphasizes the identification and elimination of dry weather discharges from the City’s outfalls instead of on pollutants in discharges. By working towards eliminating or reducing dry weather flows, the City of Poway is able to concentrate on reducing and eliminating a wide range of pollutants that may be transported to receiving waters.

The City has implemented procedures to investigate and inspect segments of its storm water conveyance system that have a reasonable potential of receiving, containing, or discharging pollutants due to IC/IDs or other non-storm water sources. All IC/IDs found during field work will be investigated immediately by monitoring staff and appropriate follow-up and/or enforcement actions are taken as necessary. Additional information regarding dry weather major MS4 outfall monitoring procedures, IC/ID investigations, and prioritization of investigations are included in Appendix C.

Note that other monitoring requirements specified in the Municipal Permit include wet weather MS4 outfall and receiving water monitoring. Those activities are completed by contractors through watershed level programs for which cost is shared among the responsible parties in the watershed. For that reason, the details of those programs are not discussed in this section.

3.3.3.1 Storm Water Conveyance System Map

As part of the City’s JRMP and major MS4 outfall monitoring program, the City has updated and continues to maintain a storm water conveyance system map (included in Appendix C) which contains the City’s major MS4 outfalls that displays the following information:

- All storm water conveyance system segments owned, operated, and maintained by the City, and that includes MS4 outfall monitoring locations and drainage basins.
- All known locations of inlets that discharge and/or collect runoff into the City’s storm water conveyance system.
- All known locations of connections with other storm water conveyance systems not owned or operated by the City (e.g. Caltrans storm water conveyance systems).
- All known locations of MS4 outfalls and private outfalls that discharge runoff collected from areas within the City’s jurisdiction.

- All segments of receiving waters within the City’s jurisdiction that receive and convey runoff discharged from the City’s MS4 outfalls.
- Locations of the inventoried major MS4 outfalls within the City’s jurisdiction, pursuant to Section D.2.a.(1) of the Municipal Permit.
- Locations of the non-storm water persistent flow MS4 outfall monitoring stations, identified pursuant to Section D.2.a.(1) of the Municipal Permit.

In accordance with Section E.2 of the Municipal Permit, each watershed within the City’s jurisdiction contains at least one monitoring station. If field staff note inaccuracies in the map during field screening, the inaccuracies will be reported to the appropriate City staff so that updates can be made. The need for updates to the map will be assessed at least annually, and at that time updates will be made where necessary. The GIS files used in developing the City’s storm water conveyance system map will be made available to RWQCB staff upon request.

3.3.4 IC/ID Source Identification

In addition to the investigation procedures described in the dry weather MS4 outfall monitoring procedures (Appendix C), the City may also employ the following methods in order to identify the source of an IC/ID:

Review of Plans

As-built drawings for the area of concern may be obtained to verify connections. However, an illegal connection is likely to have occurred after the as-built drawings were created, so additional techniques should also be employed.

Dye Testing

Dye testing is useful to confirm hydraulic connections between the potential source and the location downstream. Fluorescent dye is discharged at the source of the potential IC/ID and is monitored downstream. This method is used only when necessary because the public and appropriate regulatory agencies in the surrounding area need to be informed of the cause of the water discoloration.

Smoke Testing

Smoke testing can be used only on underground storm water conveyance facilities, to determine potential hydraulic connections between the source and downstream location. Again, the public and appropriate agencies need to be informed of the cause for smoke coming from the storm water conveyance system.

Video Monitoring

Mobile video cameras may be used to record observations in an underground storm water conveyance facility. The public and regulatory agencies generally do not need to be informed prior to initiating this kind of investigation.

Confined Space Entry

In some cases, underground conveyances are large enough that a crew trained in confined space entry may investigate the section of pipe or culvert in question instead of using video monitoring. All applicable health and safety regulations must be followed. The public and regulatory agencies, however, generally do not need to be informed prior to initiating a confined space entry.

Potential Sewage IC/IDs

Further testing of suspected sewage-related flows is conducted when visual and odor observations do not adequately confirm the presence of sewage.

- Ammonia - Sewage frequently contains ammonia levels of 30 mg/L or greater. Typically, this can be measured with an inexpensive field screening kit.
- Bacteria - Sewage generally has high levels of total and fecal coliforms and Enterococci. Sewage treatment plants and many laboratories routinely conduct these indicator analyses.

3.4 Eliminating IC/IDs

Action is taken to eliminate all detected IC/IDs and their sources as soon as possible after detection. IC/IDs that pose a serious threat to public health or the environment are eliminated immediately. IC/IDs that are not deemed to pose serious threats to public health or the environment are eliminated through an escalating series of enforcement actions, which are described in the Enforcement Response Plan (Appendix D).

Remove Illegal Connections

The City takes appropriate action to ensure the disconnection, blockage, or diversion of a pipe, facility, or other device connected to the storm water conveyance system or receiving waters, which has not been authorized by the City. Examples of appropriate actions may include the following:

- Plug sinks and drains that are discharging illegal materials to the storm water conveyance system, where appropriate.
- Divert illegal discharges to the sanitary sewer if approved by the City or other wastewater authority, or treat on-site.

Note that in some cases special permits from the local wastewater authority are needed before material can be discharged to the sanitary sewer system in addition to the City's approval.

Discontinue Illegal Discharges

From the information gathered during investigation of an IC/ID, City enforcement officials ensure the IC/ID is eliminated, establish required corrections, evaluate applicable storm water BMPs, provide suggestion to prevent future IC/IDs, and take appropriate enforcement action as described in the City's Enforcement Response Plan (Appendix D). The City takes immediate action towards the elimination of detected IC/IDs to the City's storm water conveyance system which may include the referral to the appropriate City department or other agency for abatement, or working with a responsible party for an IC/ID, if one is identified during investigation.

When a discharge originates from a source outside the City's jurisdiction, the City does not have legal authority to require that the discharge be eliminated. The City will notify the responsible agency with jurisdiction over the source of the discharge so that that agency can take action to eliminate the discharge. In the event that the responsible agency is not responsive or otherwise does not eliminate the discharge in a timely manner, the City will notify the RWQCB as well.

If a responsible party has been identified during an IC/ID investigation, the responsible party is required to take appropriate action to eliminate the IC/ID and to perform any necessary clean-up or remediation in accordance with the City's BMP Manual (Appendix B). Any refusal by the responsible party to perform necessary actions to eliminate the IC/ID will be handled by Code Compliance staff and appropriate enforcement action will be taken. If a responsible party is identified, but neglects to perform the necessary corrective action, the City may bill the responsible party for abatement costs. Additionally, the City will perform abatement of an IC/ID to the City's storm water conveyance system if a responsible party is not identified.

Appropriate remedial actions that may be taken to eliminate discharges may include the following:

- Redirect non-hazardous discharges to the sanitary sewer, collection container, or onsite landscaped or pervious area(s) to infiltrate or evaporate, without resulting in erosion or runoff to the storm water conveyance system or any adjacent property.
- Redirect hazardous discharges to a collection container for reuse or disposal via a licensed hazardous waste disposal service.

Note that discharges to the sanitary sewer system are subject to conditions and approval by the City's Public Works Department. In some cases special permits from the local wastewater

authority are needed before material can be discharged to the sanitary sewer system in addition to approval by the Public Works Department.

3.5 Record Keeping

The City will maintain records and a database of the following information for non-storm water discharge and illegal connection investigations:

- Location of incident, including hydrologic subarea, portion of storm water conveyance system receiving the non-storm water or illegal discharge, and point of discharge or potential discharge from storm water conveyance system to receiving water.
- Source of information initiating the investigation (e.g., public reports, staff or contractor reports and notifications, field screening, etc.).
- Date the information used to initiate the investigation was received.
- Date the investigation was initiated.
- Dates of follow-up investigations.
- Identified or suspected source of the illegal discharge or connection, if determined.
- Known or suspected related incidents, if any.
- Result of the investigation.
- If a source cannot be identified and the investigation is not continued, document the response pursuant to the requirements of Municipal Permit Section E.2.d.(3).

3.6 Enforcement

The City will take action in accordance with its Enforcement Response Plan (Appendix D), to eliminate IC/IDs. If the source of a non-storm water discharge to the storm water conveyance is natural (i.e. non-anthropogenic), then the City will document the data and evidence necessary to demonstrate to the RWQCB that the discharge arises from a natural source and does not require enforcement or further investigation. The Municipal Permit requires that violations are corrected within 30 calendar days of the time the violations were discovered, or prior to the next rain event, whichever is sooner. When a violation cannot be resolved within 30 calendar days, the City will document the reason why the violation took additional time to resolve.

Table 3-2. Methods for Addressing Common Types of Non-Storm Water Discharges¹

Discharge Type	Capture and Have Disposed of by Certified Hauler	Discharge to Sewer	Direct to Landscaping	Retain and Reuse	Modify Activity Implementation to Prevent Discharge	Obtain NPDES Permit for Discharge to MS4	Implement Required BMPs Before Discharge to MS4	Allowable if not Identified as Pollutant Source
Uncontaminated pumped ground water		X	X	X		X		
Water from crawl space pumps		X	X	X		X		
Discharges from foundation drains and footing drains ²		X	X	X		X		
Discharges from foundation drains and footing drains ³								X
Water line flushing and water main breaks						X		
Discharges from recycled or reclaimed water lines						X		
Diverted stream flows								X
Rising ground waters								X
Uncontaminated ground water infiltration to MS4								X
Springs								X
Flows from riparian habitats and wetlands								X
Discharges from potable water sources								X
Air conditioning condensate		X	X	X			X ⁴	
Residential vehicle washing		X	X		X		X ⁴	
Dechlorinated swimming pool water		X	X				X ⁴	
Saline swimming pool water	X		X					
Building fire suppression system maintenance	X ⁵						X ⁵	

Table 3-2. Methods for Addressing Common Types of Non-Storm Water Discharges¹ (continued)

Discharge Type	Capture and Have Disposed of by Certified Hauler	Discharge to Sewer	Direct to Landscaping	Retain and Reuse	Modify Activity Implementation to Prevent Discharge	Obtain NPDES Permit for Discharge to MS4	Implement Required BMPs Before Discharge to MS4	Allowable if not Identified as Pollutant Source
discharges								
Non-emergency firefighting discharges	X	X	X				X ⁴	
Emergency firefighting discharges							X ⁶	
Irrigation runoff			X	X	X			
Non-residential vehicle washing	X	X	X ^{7,8}	X				
Cleaning water not containing added chemicals (e.g., from power washing, hosing, etc.)	X	X	X	X				
Cleaning water containing added chemicals (e.g., mop water)	X	X						
Release of stored storm water from construction sites							X	

Notes: "X" indicates an acceptable discharge method.

1. The methods for addressing the discharges discussed in this table are based on the requirements of the Municipal Permit and the Municipal Code and present the more common types of discharges and associated disposal methods; however, the City maintains the legal authority to require a different disposal method of these discharges especially if the discharge has been identified as a significant source of pollutants.
2. If designed to be located at or below the groundwater table to actively or passively extract groundwater during any part of the year.
3. If designed to be located above the groundwater table at all times of the year and only expected to discharge non-storm water under unusual circumstances.
4. Only allowable if methods that would completely prevent the discharge have already been used to the extent feasible.
5. Discharges that include anticorrosion additives, antifreeze, or other sources of pollutants may not be discharged to the MS4, even if BMPs are implemented.
6. During emergency situations, priority of efforts should be directed toward life, property, and the environment (in descending order). BMPs should not interfere with immediate emergency response operations or impact public health and safety.
7. Only applies to discharges that do not include any additives that may contain pollutants.
8. Non-residential vehicle washing that occurs on an occasional basis may be discharged to landscaping. Designated vehicle wash areas and other facilities or activities that regularly wash higher volumes of vehicles may not discharge wash water to landscaping as the method of preventing discharge to the MS4.

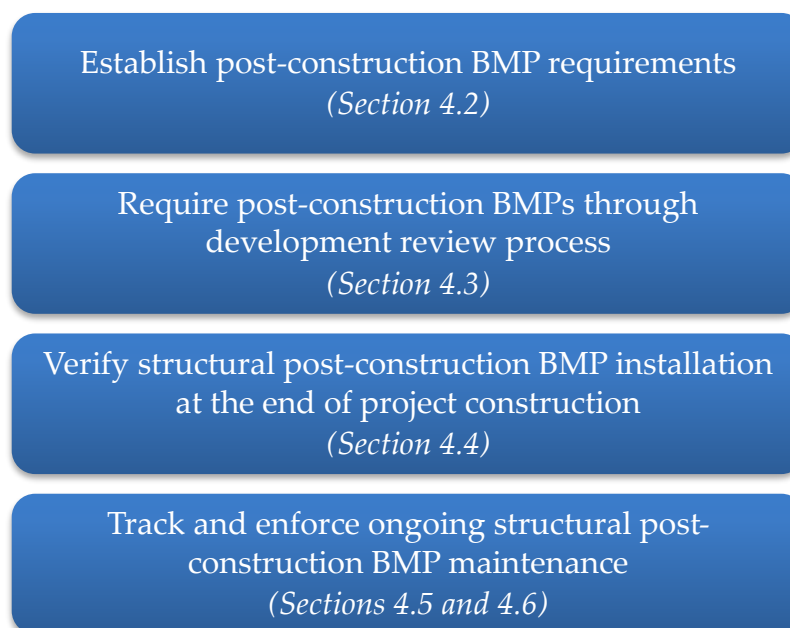
4 Development Planning

4.1 Introduction

Development projects can result in increased runoff volumes and increased levels of pollutants in runoff relative to pre-development conditions. The addition of impervious surfaces, such as pavement or rooftops, during development can be a key contributor toward flow runoff volume increases. Increased runoff volumes may increase stream flow rates and durations, which in turn can lead to increased erosion in local rivers and streams. This process is referred to as hydromodification. Increases in impervious surfaces may also result in increased conveyance of sediment and other pollutants to local water bodies.

To address these conditions, the City of Poway (City) has established design standards for new development and redevelopment projects that require the use of permanent storm water control measures, including Low Impact Development (LID) measures and other structural post-construction best management practices (BMPs), to reduce the potential for pollutants to impact storm water quality and to control storm water discharges (both flow and duration). Figure 4-1 identifies the major components of the City's program to reduce development projects' impacts on the quality and quantity of storm water discharges, listed in sequential order. The figure also identifies the section(s) of this chapter in which the component is discussed in more detail.

Figure 4-1. Overview of Approach to Reduce Storm Water Impacts from Development Projects



4.2 Development Project Requirements

Poway Municipal Code (PMC) Chapter 13.09, Stormwater Management and Discharge Control (Storm Water Ordinance), and PMC chapters 16.100-16.105, Standard Urban Stormwater Mitigation Plan (SUSMP) require development projects within the City to incorporate post-construction BMPs into their designs. The requirements of these chapters and the City's BMP Manual are based on the Model SUSMP and the Hydromodification Plan, both developed through a regional effort including the City and the 20 other municipal agencies in San Diego County (collectively, "Copermittees").

The Copermittees are currently developing a revised set of post-construction BMP requirements, the BMP Design Manual, to address the requirements in Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit). The new BMP Design Manual is expected to be incorporated into the BMP Manual in place of the existing post-construction BMP requirements by December 2015. Until then, the existing post-construction requirements in the City's SUSMP remain in effect.

Any development project that does not obtain prior lawful approval before the new requirements go into effect must update its design to comply with the new requirements. The City considers a project with any of the following as having "lawful prior approval":

- A vesting tentative map
- A development agreement
- A permit has already been issued and construction has already started

The City will continue to apply this definition of prior lawful approval, although the definition may be revised if the RWQCB incorporates a revised definition of prior lawful approval into the Municipal Permit via a future amendment.

4.2.1 Types of Development

The City uses the following categories into which site improvements may be classified:

- Development Projects
 - Priority Development Projects
 - Standard Development Projects
- Non-Development Projects

All development projects are classified as either as Priority Development Projects (Priority Projects) or as Standard Development Projects (Standard Projects). Projects with an elevated potential impact on storm water quality are considered Priority Projects, and are defined in the

PMC Chapter 16.100. This determination is based on a number of factors such as the amount of impervious area created, the proposed land use, and conditions of the existing land.

Not all site improvements are considered “development projects” under the Municipal Permit, since not all improvement work involves activities that have the potential to come in contact with storm water. For example, work that occurs only on the interior of a building is not considered a development project for storm water purposes. Projects that are not considered development projects are classified as Non-Development Projects, and are not subject to the requirements discussed in the following section.

4.2.2 BMP Requirements for All Development Projects

The City has established a set of minimum post-construction BMP requirements that apply to both Priority Projects and Standard Projects. Those requirements are outlined below; the requirements are applied to projects where applicable and feasible:

- Source control BMPs that reduce storm water pollutants of concern in runoff, including but not limited to storm drain stenciling and signage, properly designated and covered material and trash storage areas, and the use of efficient irrigation systems.
- LID BMPs that provide retention, slow runoff, minimize impervious footprint, direct runoff into landscaping, and promote water conservation.
- Provide buffer zones or other buffers for natural water bodies.
- Grading and construction activities must implement all requirements outlined in the PMC and in the City’s BMP Manual.
- Submittal of proof of ongoing long term maintenance for all structural post-construction BMPs.

The City’s BMP Manual (Appendix B) provides more detailed information about the minimum BMP requirements for development projects.

4.2.3 Alternative Compliance Option

As noted earlier, the requirements in the City’s SUSMP will continue to apply until the new BMP Design Manual, which incorporates the requirements of the 2013 Municipal Permit, goes into effect. Under the 2013 Municipal Permit requirements, each Copermittee, including the City of Poway, has the option to develop an alternative compliance program. An alternative compliance program would allow project proponents that cannot meet the requirements solely through onsite BMPs to satisfy the requirements by implementing additional BMPs offsite. All Copermittees, including the City of Poway, are currently funding a study to collect technical information on approaches to evaluate water quality equivalency among multiple BMPs. Additional work to develop a crediting system based on the water quality equivalency study

results is also expected to be necessary to support the creation of an alternative compliance program.

Once the studies of water quality equivalency and crediting approaches have been finalized, the City will evaluate the feasibility of establishing an alternative compliance program. In the meantime, the City will reserve the right to consider proposals to satisfy post-construction BMP requirements through an alternative to the standard onsite compliance approach. Private project developers and current or future land owners will be responsible for all expenses for preparing documentation and analyses to show how the proposed approach meets Municipal Permit requirements and for all expenses related to BMP construction and long-term operation and maintenance. The City will also typically require the project proponent to obtain approval from the RWQCB for the proposed design before the City will approve it.

Additional details regarding retrofit and rehabilitation projects are included in Appendix E.

4.3 Project Review and Approval

The City has an established multi-departmental review and verification process for all new development and redevelopment projects. Through the implementation of development project requirements in the BMP Design Manual and application of the procedures detailed below, the City will mitigate the negative impacts of runoff from development projects to the maximum extent practicable. City staff review all development projects for minimum storm water BMP requirements, as shown in Figure 4-2 at the end of this subsection.

4.3.1 Planning Phase

During the planning phase, development project proponents may request a pre-application meeting with City staff, prior to submitting a project application. If a pre-application meeting is held, a determination on whether a project is likely to be a Standard Project or Priority Project is typically made during the meeting. Project conceptual plans are submitted to the City's Planning Division for preliminary review and/or processing. The project proponent must include the appropriate documents at this stage for the project application to be deemed complete. A complete project application will include the post-construction storm water-related documents listed in Table 4-1.

Table 4-1. Summary of Required Post-Construction Storm Water Documents

Document	Description and Notes
Checklist for New Development and Redevelopment Projects	Used to determine whether a development project is a Priority Project or a Standard Project.
Grading Plan Checklist	Used to verify that source control and LID BMPs are proposed to be implemented, where feasible.
Post-construction BMP plan (WQTR or SWQMP) ¹	Describes post-construction BMPs and includes supporting calculations. The reports for Priority Projects require some components not required for Standard Projects.
Operation and Maintenance (O&M) Plan	Describes how structural post-construction BMPs will be maintained after construction has been completed.
Hydrology and Hydraulics (H&H) Study	Generally focused on flood control, but provides supporting calculations and information that may be used in review of proposed structural post-construction BMP design.

Notes:

¹ These documents are called Water Quality Technical Reports (WQTR) under current requirements. Expected to be called Storm Water Quality Management Plan (SWQMP) after the BMP Manual is revised to incorporate the new BMP Design Manual.

Planning Division staff maintain coordination with the project proponent throughout the permitting process. Planning Division staff review the conceptual project, the existing and proposed General Plan and Zoning designations, and informational studies, and determine the level of review process.

All development projects are discussed by the City’s Development Review Committee which consists of representatives from the Planning Division, Engineering Division, Fire Department, and Public Works Department. The various departments provide the Planning Division with specific project conditions for permit approval that address project issues, including water quality. This submittal includes the post-construction BMP plan (WQTR or SWQMP). The post-construction BMP plan documents how all required site design, source control and structural post-construction BMPs have been incorporated into the project design.

The governing bodies provide conditional approval to acceptable projects for the applicable permit. A final post-construction BMP plan (WQTR or SWQMP) is required before the planning phase is concluded. Once a project has been conditionally approved, the project proponent begins the plan check process.

4.3.2 Land Development Plan Check Phase

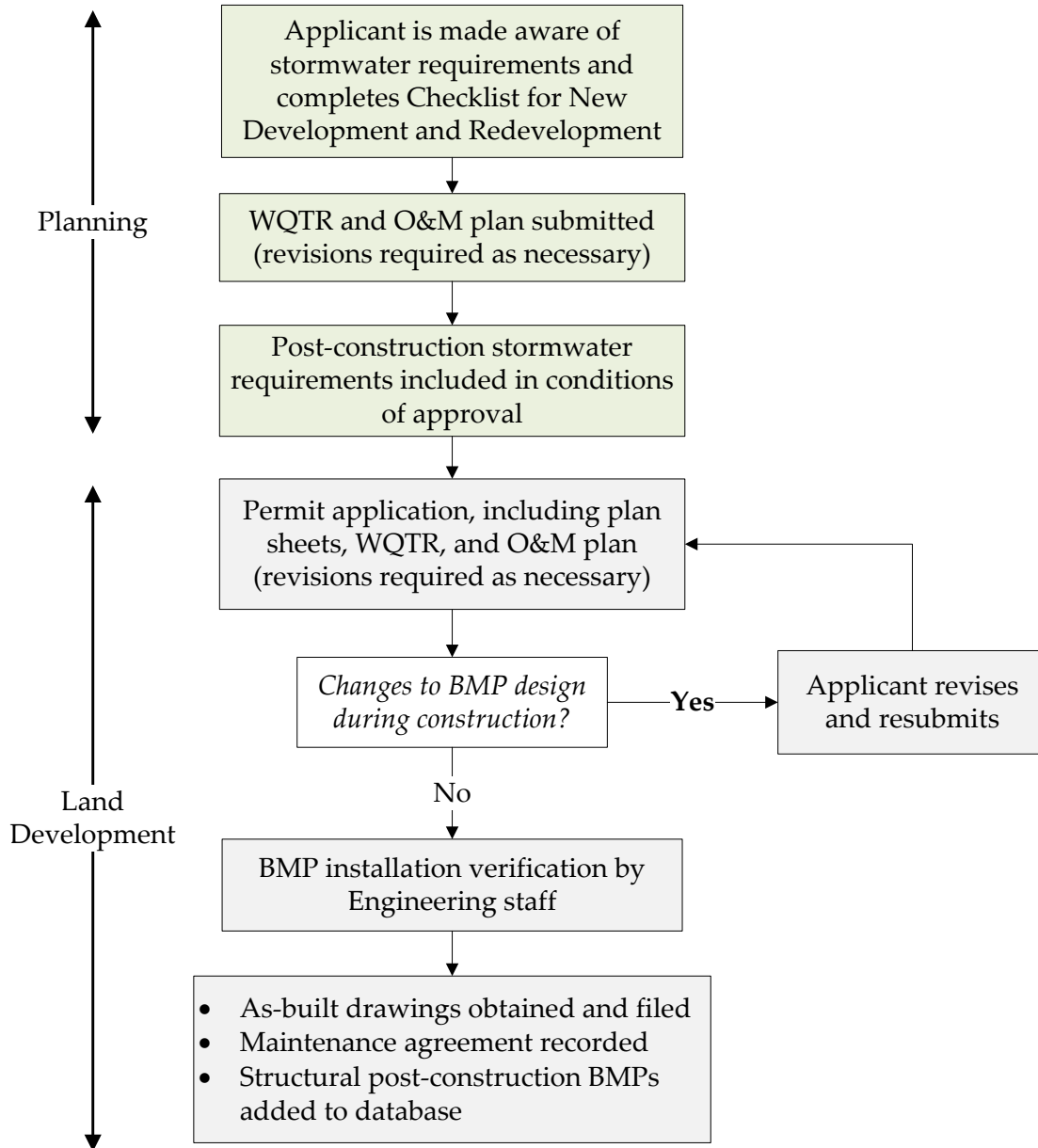
During the plan check phase, the project proponent submits plans and studies that describe the project proposal in detail. This submittal includes plan sheets and the post-construction BMP plan (WQTR or SWQMP). The City’s website (poway.org) and the BMP Design Manual

provides more detail on what is required to be included in a post-construction BMP plan and with project plans.

Several departments review the project submittals for conformance with the conditions of approval, engineering, zoning, public right-of-way, building code, and other requirements. During plan check reviewers check that the structural post-construction BMPs proposed in the post-construction BMP plan (WQTR or SWQMP) are consistent with the final WQTR or SWQMP approved during the planning stage (Section 4.3.1) and with the submitted plans. Reviewers also check that all proposed structural post-construction BMPs are clearly shown on applicable plan sheets and that cross sections are included where necessary. This provides clear direction to the contractor and also helps City staff verify structural post-construction BMPs have been constructed per plans during the verification inspection at the end of project construction (Section 4.4). Once the plan check process is complete and the project plans are approved for all of the applicable permits, the permits are issued, and construction may begin.

At the conclusion of project construction, before occupancy permits are granted or construction securities are returned, a City inspector will make a final inspection of the construction site using the single plan BMP sheet to verify installation of all required BMPs for the project, as described in more detail later in Section 4.4.

Figure 4-2. Typical Priority Development Project Review and Approval Process



4.4 Verification of Structural Post-Construction BMPs

Engineering Division inspectors inspect the final completion of structural post-construction BMPs that are associated with engineering permits (grading permits and public improvement permits) and Capital Improvement Program (CIP) projects. Engineering Division inspectors also inspect the construction and installation of BMPs that are associated with private development that requires a demolition or building permit. During the inspection, inspectors compare the project as constructed to the approved plans to verify the structural post-constructed BMPs have been constructed per the plans.

Prior to certifying a project ready for occupancy or returning the applicant's bonds, City staff verify that structural post-construction BMPs have been constructed consistent with approved development plans. The Certificate of Occupancy will not be issued to private projects unless the proposed structural post-construction BMPs have been inspected and signed off as being constructed properly. In the case of CIP projects, the City may withhold operational acceptance or notification of completion until structural post-construction BMPs installation is verified.

4.5 Structural Post-Construction BMP Tracking and Maintenance Verification

Following construction and approval of structural post-construction BMPs, the City takes measures to verify that they are being maintained as designed. The program activities described below apply to structural post-construction BMPs on both privately-owned and City-owned Priority Project sites.

4.5.1 Inventory Tracking

The City verifies proper installation of structural BMPs at a Priority Project and the project construction is finished, the project is added to the City's structural post-construction BMP inventory. The City maintains this inventory in an electronic watershed-based database which is updated at least annually. This database includes the following information:

- Project address and hydrologic subarea.
- Structural post-construction BMP type(s).
- Structural post-construction BMP location(s).
- Approximate project size.
- Date of construction (as-built plans date).
- Contact information for responsible parties of BMP maintenance.
- Inspection results, enforcement actions, and resolutions.

When added to the City's electronic database, each Priority Project with structural post-construction BMPs is assigned an inspection priority of either "high" or "standard." Consistent with Municipal Permit Provision E.3.e.(2)(b), the City assigns a "high" inspection priority to Priority Projects based on the following criteria:

- 1) Total project size is more than 20 acres.
- 2) Project has established a poor compliance history. For prioritization purposes, poor compliance history is defined as being in violation of the City's requirements for structural post-construction BMP maintenance for the previous two consecutive reporting years.
- 3) City staff also have discretion to designate a project as high priority based on other factors, as needed, if deemed necessary to protect water quality.

Projects that do not meet any of the above criteria are assigned a priority of "standard."

4.5.2 Maintenance Verification and Inspections

4.5.2.1 Annual Maintenance Verification

Operation and maintenance checklists are required with a project's SWQMP, and can be used by responsible parties to guide maintenance activities. In addition, the City will implement an annual certification program to verify that structural post-construction BMPs associated with Priority Projects are, in fact, being maintained as designed. Each year, responsible parties for Priority Projects will be required to submit a certification form to the City, documenting dates of inspection/maintenance for each BMP on site. Certification forms should be returned to the City prior to the rainy season (before October 1st).

4.5.2.2 Maintenance Inspections

Structural post-construction BMPs installed at development projects will be subject to inspection by City inspectors to ensure the BMPs are being maintained and operating as designed. Each year, all high priority projects will be inspected prior to the start of the rainy season. Any projects that do not provide sufficient documentation to verify that appropriate maintenance work has been performed through the annual maintenance verification program described above in a given fiscal year will be inspected before the start of the next wet season (October 1 of the following fiscal year). Additional Standard Projects may be inspected based on site compliance history and City staff professional judgment.

Inspections will include examination of all structural post-construction BMPs at the site to verify that each structural post-construction BMP is in working order, being maintained properly, and is in compliance with all applicable City ordinances and permits. Results of the inspection are provided to the responsible party (e.g., property owner, manager, or tenant), and

appropriate enforcement actions will be initiated as necessary. Section 4.6 provides more details on the enforcement process. Inspection results, as well as corrective actions and follow-up inspections, are recorded in the City's electronic database.

4.6 Enforcement

City staff will use a range of enforcement methods to ensure all structural post-construction BMPs on its inventory are properly maintained. Generally, written warnings will be issued to initiate corrective actions. Escalated enforcement, through use of NOVs or administrative citations may also be used. The City's Enforcement Response Plan (Appendix D) provides details on the process for initiating enforcement actions due to post-construction BMP maintenance deficiencies. Corrections of any observed violations are required to be corrected within 30 calendar days of the time the violations were discovered, or prior to the next rain event, whichever is sooner. When a violation cannot be resolved within 30 calendar days, the City will document the reason why the violation took additional time to resolve. Note that enforcement measures related to ensuring structural post-construction BMPs are built per the plans, prior to the completion of project construction, are discussed in Section 4.5.

5 Construction Management

5.1 Introduction

Construction activities include clearing, grubbing, grading, stockpiling, excavation, building, landscaping, utility installation, and street improvements. All of the pollutants, such as sediment and trash, potentially generated by these and other construction-related activities can impact the City of Poway's (City) storm water conveyance system, as well as the receiving waters and watersheds to which they drain. The construction management component of the City's Jurisdictional Runoff Management Program (JRMP) identifies the pollutants that may exist at active construction sites and presents a range of best management practices (BMP) and supporting administrative processes designed to eliminate or reduce them.

As a measure to protect water quality in its watersheds, the City treats certain construction sites as high priority. High priority sites receive more frequent inspections by City staff than other construction sites in order to reduce discharges of sediment. This should help protect Los Peñasquitos Lagoon, which is downstream of the City and listed as impaired for excessive sediment/siltation accumulation. It should also positively impact bacteria loads to receiving waters, the highest priority water quality condition in both the San Dieguito and Los Peñasquitos Watershed Management Areas (WMAs). Reducing sediment discharges is expected to reduce discharges of bacteria since bacteria is often transported along with sediment.

The cooperation of various responsible parties, such as construction site owners and developers, is key to the continued success of Poway's JRMP in complying with California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit). To secure their cooperation, the City has reviewed and/or updated its local ordinances and guidance documents as an authorized form of legal enforcement. The following sections detail how the City will meet the minimum requirements outlined in Section E.4 of the Municipal Permit to eliminate or reduce the release of pollutants into the storm water conveyance system and adjacent water bodies to the maximum extent practicable.

5.2 Best Management Practice Requirements

5.2.1 Minimum BMP Requirements

Construction sites within the City's jurisdiction are required to implement and maintain BMPs in the following categories, where applicable, as required by the Municipal Permit:

- Project Planning
- Erosion Control
- Sediment Control
- Run-on and Runoff Control
- Good Site Management (“Housekeeping”), including Waste Management
- Non-Storm Water Management
- Active/Passive Sediment Treatment Systems

The City uses the California Stormwater Quality Association (CASQA) BMP fact sheets as its standards. The City’s BMP Manual (Appendix B) provides more detail on the BMP requirements, including identifying how the CASQA BMPs align with the Municipal Permit BMP categories listed above. The BMP Manual also identifies which CASQA BMPs are likely applicable to each phase of construction, and projects are required to schedule in advance which BMPs may be applicable to each phase. The City’s requirements are based on three major phases of construction, as defined below:

- **Grading:** Demolition, right-of-way work, site preparation and earthmoving, earthwork, construction or relocation of above ground and below ground utilities, construction or relocation of below ground structures, work associated with construction of above ground structures more than five feet from the structures, dewatering, and hydrostatic testing of utilities and fire systems.
- **Vertical:** Construction of above ground structures in the area within five feet from structures, stucco, framing, mechanical, roofing, painting, drain flushing, and fire system testing (hydrants, sprinklers).
- **Finish:** Roadways, slurry seal, asphalt, concrete, walkways, parking lots, landscaping, painting, striping, traffic and lighting facilities, architectural.

The City requires a complete set of BMPs at all sites, with an emphasis on an effective combination of both erosion control BMPs and sediment control BMPs to reduce discharges of sediment. Sediment control BMPs alone are not considered acceptable. All implemented BMPs must be properly maintained until they are removed. The BMPs selected for each project must be appropriate to the types of work proposed, including the different phases of construction. Construction projects may also be subject to the requirements of the statewide Construction General Permit, State Water Resources Control Board Order No. 2009-0009-DWQ, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ (Construction General Permit).

The City may require additional BMPs to be implemented at construction sites beyond those listed in the BMP Manual as necessary to prevent pollutants from discharging from construction sites to the City's maximum extent practicable standard. This may include active treatment systems, as described in the BMP Manual (Appendix B).

5.3 Project Approval Process

All land developments projects that will disturb soil are required to complete an Erosion Control Plan. The Development Services Department reviews the Erosion Control Plan for consistency with the minimum BMP requirements listed in the City's BMP Manual (Appendix B). The City uses a standard checklist to guide its reviews of Erosion Control Plans. The Erosion Control Plan is included as part of the grading plan submittal to the Development Services Department, and a grading permit is not issued until the grading plan submittal, including the Erosion Control Plan, is approved. The City also requires projects subject to the Construction General Permit to provide proof of coverage before construction work may begin. Construction projects that do not require grading are required to submit a Minor Development Review Application (MDRA) and are required to implement the City's minimum BMP requirements.

Note that the Construction General Permit requires projects to complete a Storm Water Pollution Prevention Plan (SWPPP), which includes components similar to the Erosion Control Plan. When a project is subject to the Construction General Permit, the City reviews the Erosion Control Plan rather than the SWPPP; however, the City will review the map in the SWPPP. While the City confirms private projects have obtained coverage under the Construction General Permit where required, the City does not review SWPPPs for private projects. The City reviews the Erosion Control Plan rather than the SWPPP because the Erosion Control Plan specifically address the City's minimum BMP requirements, while the SWPPP is a much longer document including both BMPs and a significant amount of additional information required by the Construction General Permit. The City also focuses its review on the Erosion Control Plan because the required erosion control bond is based on the Erosion Control Plan. The erosion control bond creates a maintenance funding mechanism that assures funds will be available to repair or construct BMPs in the event of default by the responsible party. The City reviews SWPPPs for Capital Improvement Program (CIP) projects since the City is the legally responsible party under the Construction General Permit. Aside from this difference, both CIP projects and private projects go through the same review and approval steps.

5.4 Construction Site Inventory and Prioritization

The City maintains a watershed-based inventory of active construction sites within its jurisdiction. The inventory includes details on each construction site, including project name,

location, and construction site priority. Privately-owned development projects are added to the City's construction inventory when grading permits or MDRA permits are approved. CIP projects are added to the construction inventory when a project begins construction. Completed projects are removed from the inventory upon finalization, as reported by City inspectors. The City's construction inventory is updated on a regular basis (and at least quarterly). The City uses an electronic database to maintain its inventory, which includes the following components required by the Municipal Permit:

- Contact information for each site (e.g., name, address, phone, and email for the owner and contractor)
- Basic site information including location (address and hydrologic subarea (HSA)), Waste Discharge Identification (WDID) number (if applicable), size of the site, and approximate area of disturbance
- Whether the site is considered high priority
- Project start and completion dates
- Required inspection frequency
- Date of permit issuance
- Any enforcement actions administered to the site

All construction sites within the City's jurisdiction are assigned a priority of high, medium, or low priority, summarized in Table 5-1. The City maintains the right to re-prioritize a construction site's assigned Threat to Water Quality (TTWQ) if any of the prioritization factors change throughout the course of construction. The City designates projects that represent a high threat to water quality with a "high" site priority and has aligned the local definition of "high threat to water quality" to the risk determination approach of the Construction General Permit. The Construction General Permit determines risk level based on project specific sediment risk and receiving water risk, which addresses the required factors of Municipal Permit Section E.4.b.(2). Whether or not a construction project is located within, is directly adjacent to (within 200 feet of), or discharges directly to a receiving water within an environmentally sensitive area is also a factor in determining a construction site's priority.

Table 5-1. Criteria to Identify High Priority Construction Projects

Construction General Permit Criterion	Environmentally Sensitive Area ¹	Site Priority
Risk Level 2 or 3 LUP Type 2 or 3	Yes or No	High ²
Risk Level 1 or LUP Type 1	Yes	High
	No	Medium
All other projects	Yes	Medium
	No	Low

Notes: LUP – Linear Underground/Overhead Project

¹ Located within, directly adjacent to (within 200 feet of), or discharging directly to a receiving water within an environmentally sensitive area. See Section 1 of this JRMP document for more information about the City’s environmentally sensitive areas.

² All construction sites with coverage under the State’s Construction General Permit (Order No. 2022-0057-DWQ) in the Los Peñasquitos WMA will be assigned a High TTWQ.

5.4.1 Inspection of Construction Sites

The City has an established inspection program to evaluate proper BMP implementation at construction sites within the City’s jurisdiction. The inspection program is designed to confirm sites reduce the discharge of pollutants in storm water to the maximum extent practicable and effectively prohibit non-storm water discharges.

Pre-construction meetings are typically held with the contractor before work begins. During these meetings City staff discuss BMP requirements, including how they are likely apply over the life of the construction project as it progress from one phase to another. Contractors are also informed that City inspectors have the authority to require implementation of all BMPs the inspector deems necessary to reduce pollutant discharges to the maximum extent practicable, even if those BMPs are not explicitly shown on the project’s Erosion Control Plan.

Once construction starts, Engineering Inspection Division staff are tasked with performing regularly scheduled site inspections to ensure BMPs are implemented consistent with the Erosion Control Plan and the City’s minimum BMP requirements during each stage of development.

5.4.2 Inspection Frequency

The criteria used to determine a construction site’s priority discussed in Section 5.4 were developed to correspond to the inspection frequencies established by the City. Table 5-2, below, presents the construction site priorities and their corresponding inspection frequencies for the wet (October 1 through April 30) and dry (May 1 through September 30) seasons.

Table 5-2. Construction Site Inspection Frequency

Construction Site Priority	Wet Season Inspection Frequency	Dry Season Inspection Frequency
High	Every two weeks	As needed
Medium	Monthly	
Low	As needed	

The City re-evaluates a construction site’s priority and subsequent inspection frequency on a regular basis, particularly when grading activities are being conducted during the wet season. The City maintains the right to inspect a site as often as deemed necessary. The need for additional inspections can vary depending on site conditions, previous violations, history of developer or contractor past performance, and/or weather patterns. The number of inspections performed at each construction site will be tracked to ensure all construction sites in the City’s inventory are being inspected at the appropriate frequency

In addition to the City’s routine construction site inspections, the City inspects major construction projects prior to rain events when there is at least a 50% chance of rain per the National Oceanic and Atmospheric Administration (NOAA) within 48 hours. During pre-rain event inspections, the inspector examines the site’s BMPs, reviews the site’s Weather-Triggered Action Plan (minimum BMP requirement), and completes a Pre-Rain Event Inspection Checklist. If an inspector finds that a site is noncompliant, the inspector will take necessary enforcement actions as described in the City’s Enforcement Response Plan to ensure compliance with the City’s ordinances and BMP Manual.

The City’s construction inspection program is expected to reduce discharges of sediment and other pollutants associated with construction projects. Inspecting sites before predicted storms leads to sites with better BMP implementation during the time when BMP implementation is most critical at a construction site. Most discharges of sediment from construction sites occur when it rains. Frequent, regular interaction with site responsible parties will allow City inspectors to ensure appropriate BMPs are in place as construction activities and phases change over time. This will help reduce discharges of sediment and other pollutants from construction sites.

5.4.3 Inspection Procedure

Site inspections performed by Engineering Inspection Division staff evaluate compliance with the City’s minimum BMP requirements, as required through applicable ordinances and permits. Inspection findings are documented on the City’s construction inspection form. At a minimum, inspections include the following components.

- Assessment of the implementation of all required minimum BMPs and any additional BMPs required by the City, whether required through ordinances or permits. This assessment includes evaluating the adequacy and effectiveness of implemented BMPs, including how they are maintained.
- Assessment of whether project proponents are making appropriate adjustments when BMP inefficiencies are found as a result of self- or City-conducted inspections.
- Visual observations of actual or potential discharges of sediment or construction related materials from the site.
- Visual observations to evaluate presence of non-storm water discharges.
- Visual observations of actual or potential illegal connections.
- Verification of coverage under the Construction General Permit (Notice of Intent and/or WDID number) during initial inspections, when applicable.

When an inspection finds a site is noncompliant, the City follows up with the site until compliance is confirmed. Enforcement actions are taken as necessary to bring about compliance, as discussed in Section 5.6 and in the Enforcement Response Plan (Appendix D).

5.4.4 Inspection Tracking

Each inspection form, which includes site photos, is stored electronically. The number of inspections performed at each construction site will be tracked in the City's construction project database to ensure all construction sites in the City's inventory are being inspected at the appropriate frequency. Inspection records will include the following information, at a minimum:

- Site name, location (address and HSA), and WDID number (if applicable).
- Inspection date.
- Approximate amount of rainfall since last inspection.
- Description of problems observed with BMPs and indication of need for BMP addition/repair/replacement and any scheduled re-inspection, and date of re-inspection.
- Descriptions of any other specific inspection comments which must, at a minimum, include rationales for longer compliance time.
- Description of enforcement actions issued in accordance with the City's Enforcement Response Plan.
- Resolution of problems noted and date problems were fixed.

Inspection records and related documentation will be made available to RWQCB staff upon request.

5.5 Enforcement

The City enforces its construction BMP requirements at all construction sites in its jurisdiction. When violations are observed and documented during a site inspection, City implements appropriate enforcement measures discussed in the City's Enforcement Response Plan (Appendix D). Enforcement can range from verbal warnings to more severe enforcement, including Stop Work Orders.

City inspectors will typically seek to resolve incidents of observed noncompliance within 72 hours. Additional enforcement actions will be taken as necessary to bring about compliance when the required corrections are not made within the initial 72 hour timeline. In cases where the violation cannot be resolved within 30 calendar days, the reason additional time was needed for case resolution will be documented and kept in the project's file. The RWQCB will be notified within five days whenever a stop work order or other escalated enforcement action is taken. See the Enforcement Response Plan for additional details on escalated enforcement actions. When a site is subject to the Construction General Permit, City staff may also collaborate with RWQCB staff on enforcement actions.

6 Industrial and Commercial Facilities

6.1 Introduction

Approximately 37 percent of the land area in the City of Poway (City) is classified as industrial or commercial. Figure 1-1 shows where industrial and commercial areas are located. The City requires industrial and commercial facilities or areas to implement pollution prevention methods, also known as best management practices (BMPs), to reduce discharges of pollutants to the storm water conveyance system. The required BMPs are listed in the City's BMP Manual (Appendix B) and have been developed based on the requirements of the Municipal Permit.

The City has incorporated strategies, outlined in the San Dieguito and Los Peñasquitos Watershed Management Areas (WMAs) Water Quality Improvement Plans (WQIPs), to address the highest priority water quality conditions (HPWQCs) for these WMAs.

6.2 Industrial and Commercial Facility Inventory

6.2.1 Background

A watershed-based inventory of known industrial and commercial businesses (collectively, "facilities") and areas within the City's jurisdiction has been developed and will be updated annually. The factors used to determine if a facility should be included on the inventory are listed in Section 6.2.3.

6.2.2 Data Sources

The City maintains and updates the industrial and commercial inventory at least annually. The purpose of the industrial and commercial inventory is to assist in identifying pollutants that may be associated with these facilities, and to prioritize according to their potential impacts to the storm water conveyance system and receiving waters. Initial information used to update the inventory is gathered from the following sources and merged into one electronic database:

- City business license listings
- City list of businesses operating on leased municipal property
- California Regional Water Quality Control Board, San Diego Region (RWQCB) list of businesses with individual National Pollutant Discharge Elimination System (NPDES) permits
- State Water Resources Control Board (SWRCB) list of facilities covered under the SWRCB Industrial General Permit, Order No. 2014-0057-DWQ (Industrial General Permit).

- Complaints filed for unregistered businesses

6.2.3 Inventoried Facilities

Commercial and industrial facilities and areas are identified from the data sources described above and are classified as inventoried or not inventoried based on the following factors:

- Type of activity (Standard Industrial Classification (SIC) or North American Industrial Classification System (NAICS) code)
- Materials used at the facility
- Wastes generated
- Pollutant discharge potential
- Whether the facility is subject to the General Industrial Permit or any individual NPDES permit
- Any other relevant factors

Facilities with the potential to discharge pollutants into the storm drain system and impact local water quality are included on the inventory generally includes industrial and commercial facilities or areas consistent with the following list:

- **Industrial Facilities**
- Industrial Facilities, as defined at 40 Code of Federal Regulations § 122.26(b)(14)
- Facilities subject to the Industrial General Permit or other individual NPDES permit.
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986
- Active Landfills
- This includes hazardous waste treatment, disposal, storage and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair, or painting
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling

- Contractors with significant storage yards
 - Painting and coating
 - Cement mixing or cutting
 - Masonry
 - Landscaping
 - Pest control services
 - Other contractors
- Eating or drinking establishments, including food markets
- Botanical or zoological gardens and exhibits
- Nurseries and greenhouses
- Golf courses, parks and other recreational areas/facilities
- Cemeteries
- Marinas
- Building material retailers and storage
- Animal facilities
- Portable sanitary services

Mobile businesses known to operate within the City’s jurisdiction are also included on the City’s industrial and commercial inventory. Unlicensed mobile businesses are identified and added to the inventory based on incidents reported to the Storm Water Hotline and violations directly observed by City or contract staff. Examples of mobile businesses include the following:

- Mobile vehicle washing
- Mobile carpet, drape or furniture cleaning
- Pool and fountain cleaning
- Power washing services

Other industrial or commercial facilities that the City determines may contribute a significant pollutant load to the storm water conveyance system may also be inventoried.

6.2.4 Inventory Data Management

The City maintains its industrial and commercial facility inventory through the use of a geographic information system based data management system in accordance with Municipal

Permit Section E.5.a. At a minimum, the inventory includes, where applicable, the following information for industrial and commercial facilities within its jurisdiction:

1. Name and location (hydrologic subarea (HSA) and address).
2. Classification as industrial or commercial.
3. Status of facility or area as active or inactive. Inactive areas include areas on the inventory that may not be accessible for inspection (i.e., under construction or under temporary closure), but should remain on the inventory.
4. Identification if a business is a mobile business.
5. SIC and/or NAICS code(s).
6. Industrial General Permit Notice of Intent (NOI) and/or Waste Discharge Identification number.
7. Pollutants generated and potentially generated by the facility or area.
8. Whether the facility or area is adjacent to an environmentally sensitive area (ESA). “Adjacent to” is defined as being within 200 feet of an ESA. This is in accordance with past procedure and with the most recent definition provided by the RWQCB, which is found in Order No. R9-2007-0001. A map of ESAs is included in Figure 1-2.
9. Whether the facility or area is tributary to and within the same HSA as a water body segment listed as impaired on the Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) list) and generates pollutants for which the water body segment is impaired. This process is described in Section 6.2.5 below.

The City maintains a map showing the location of inventoried industrial and commercial areas, watershed boundaries, and water bodies. The potential pollutants generated listed in the industrial and commercial inventory are based on the Copermittees’ 2011 Long Term Effectiveness Assessment (County of San Diego). Potential pollutants associated with each facility may be adjusted in the future based on data collected during inspections.

6.2.5 Inventory Prioritization

Section E.5.c.(1)(a) of the Municipal Permit requires that inspections are performed at an appropriate frequency to confirm that BMPs are implemented to reduce the discharge of pollutants to the storm drain system to the maximum extent practicable and are effective in reducing non-storm water discharges. The inspection frequencies are required to take into consideration the potential for a facility or area to discharge non-storm water and pollutants and reflect the priorities set forth in the WQIPs. Facilities with any of the following characteristics are considered high priority:

1. History of non-compliance
2. Identified as a potential source of pollutants associated with a downstream impairment or a HPWQC

Each of the above characteristics is described in more detail on the following page.

History of non-compliance history

Facilities that are known to have a history of poor compliance with the City's minimum BMP requirements are classified as high priority. Compliance is based on the results of a facility's most recent inspection, and poor compliance means one or more significant BMP deficiencies or illicit discharges were identified during the inspection and required the City to take follow-up action to resolve the deficiencies. If in future inspections, these facilities develop a satisfactory pattern of compliance, a lower priority may be assigned.

Identified as a potential source of pollutants associated with a downstream impairment or a HPWQC

Facilities that are determined to contribute significant bacteria loads are assigned a high threat to water quality (TTWQ) for inspection, since bacteria is the HPWQC for the San Dieguito and Peñasquitos WMAs. Additionally, facilities located within the Los Peñasquitos WMA that are determined to be a significant source of sediment are also considered high TTWQ sites since these pollutants have been identified as potential stressors contributing to a HPWQC of the Los Peñasquitos WMA. Table 1-3 summarizes the HPWQCs and 303(d) listings relevant to Poway.

Common potential pollutants that may be generated at typical industrial and commercial facilities are listed in Table 6-1, at the end of this section. This table is used to assign default potential pollutants for new facilities or areas; however, the facility's actual potential pollutants may change depending on inspection results.

The City classifies facilities that have obtained, or should obtain coverage, under the Industrial General Permit as medium TTWQ since industrial sites tend to have a greater potential to discharge pollutants due to the nature of the activities and outdoor exposure.

Based on the above criteria, each site is prioritized for inspection as a high, medium, or low TTWQ. Figure 6-1, at the end of this section, is a flow chart illustrating the prioritization process. Section 6.4.1 includes the specific inspection frequencies associated with each category.

6.3 Best Management Practice Requirements

Pollution prevention methods are used as an initial mechanism for reducing discharges of pollutants into the City's storm water conveyance system. Often, the most cost effective and simple solution to reducing pollution is to implement BMPs at the source. The City has updated and continues to require the implementation of minimum site and activity specific BMPs which

are outlined in the BMP Manual in Appendix B. The City's Stormwater Management and Discharge Control Ordinance (Storm Water Ordinance) also gives authorized enforcement staff the authority to require additional BMPs beyond the minimum BMPs where necessary to reduce discharges of pollutants to the maximum extent practicable. Businesses can also be required to develop and implement site-specific BMP plans.

Consistent with WQIP strategies to reduce discharges of bacteria (see Appendix A), the minimum required BMPs prohibit irrigation runoff, which can transport bacteria, and require sediment and erosion control to reduce potential for mobilization of soil particles and bacteria associated with sediment.

In addition to the BMP Manual, the City has developed programs to identify, prioritize, and implement potential projects to retrofit areas of existing development, including municipal areas, and to rehabilitate streams, channels, and habitat. Appendix E of this document describes these two programs in further detail.

6.4 Best Management Practice Implementation

The City inspects inventoried industrial and commercial facilities to require compliance with the BMP Manual and the Storm Water Ordinance. The City also provides education and outreach to businesses to make them aware of and encourage compliance with the requirements, as described in Section 10.

6.4.1 Inspection Frequency

The frequency of inspections is based on the facility's TTWQ established through the prioritization process described in Section 6.2.5 and displayed in Figure 6-1. The City's inspection program is designed to meet the following Municipal Permit objectives:

- Inspect all inventoried industrial and commercial facilities or areas at least once every five years. These inspections may be either onsite inspections or drive-by inspections.
- Annually complete a number of onsite inspections equal to 20 percent of the total number of inventoried facilities. If multiple onsite inspections are completed at a facility in a given year, including follow-up inspections or inspections in response to a hotline call, those inspections may be counted toward the 20 percent requirement. Drive-by inspections, as defined in Section 6.4.3.2, are not counted toward the 20 percent requirement.

All inventoried facilities will be inspected a least once every five years. Inspections completed during the transitional period will be counted towards the 20 percent onsite inspection per year requirement of the Municipal Permit. It is expected that high priority facilities will be inspected more than once every five years; generally they will be inspected annually. Medium and low priority facilities are inspected at least once every five years.

Based upon inspection findings, the City will implement all follow-up actions (i.e., education and outreach, follow-up inspections, enforcement) necessary to require and confirm a facility's compliance with the City's minimum BMP requirements. Enforcement actions are discussed in Section 6.5 and in the City's Enforcement Response Plan (Appendix D).

6.4.2 Inspection Data Management

City inspectors track all inspections and follow-up inspections at inventoried industrial and commercial facilities and retain all inspection records in an electronic database. Information from the database will be made available to RWQCB staff upon request.

Inspection records include, at a minimum:

- Name and location of facility or area (address and HSA) consistent with the inventory name and location.
- Inspection and re-inspection date(s).
- Inspection method(s) (i.e. onsite, drive-by).
- Observations and findings from the inspection(s).

For onsite inspections of existing development the records also include:

- Description of any problems or violations found during the inspection(s).
- Description of enforcement actions issued in accordance with the Enforcement Response Plan.
- The date BMP deficiencies or violations were resolved.

6.4.3 Inspection Methods Overview

Inspections of industrial and commercial facilities are typically conducted by designated storm water compliance inspection staff or contractors. Note that while contract staff may be used to complete inspections, only City staff may issue enforcement actions like Notices of Violation and citations. Inspections of industrial and commercial facilities include either an onsite or drive-by inspection, and are tracked by the City in an electronic database (i.e., TrakIt). Inspectors utilize a Storm Water Quality Inspection for Industrial/Commercial Facilities form.

An inspection is typically initiated as a result of one of the following:

- An inspection is necessary to meet the inspection frequency requirements of the Municipal Permit, as described in Section 6.4.1.
- To investigate a potential illicit discharge as reported through the Storm Water Hotline or based on MS4 outfall monitoring.
- As a follow-up to a previous inspection during which a violation was noted.

6.4.3.1 *Onsite Inspections*

Onsite inspections include the following components:

- Visual inspection for the presence of non-storm water discharges, actual or potential discharges of pollutants, and actual or potential illicit connections.
- Determining whether description of the facility or area in the inventory has changed, and making corresponding updates if necessary.
- Assessment of the implementation of the minimum BMPs, including preventing non-storm water discharges as required by the Storm Water Ordinance.
- Verification of coverage under the Industrial General Permit, when applicable.

Often, the inspector will obtain information from the facility representative or other responsible individual while on site. If the information requested is not available for verification at the time of the inspection, the inspector will verify the information via telephone or email after the inspection.

During the site visit, areas in which pollutant sources and pollutant-generating activities are exposed to direct precipitation, storm water run-on, or non-storm water discharges will be assessed. Inspectors will evaluate the effectiveness of the business' actions to determine if they comply with the City's BMP requirements. Inspectors also look for evidence of illicit discharges, such as ongoing leaks or recent spills, or discharges/connections not authorized under an NPDES permit. After the inspection, the facility representative and/or the responsible party is provided a written inspection summary for their records.

6.4.3.2 *Drive-by Inspections*

Drive-by inspections include the following components:

- Visual inspection for the presence of non-storm water discharges, actual or potential discharges of pollutants, and actual or potential illicit connections.
- Determining whether description of the facility or area in the inventory has changed, and making corresponding updates if necessary.

Drive-by inspections are generally faster than onsite inspections. Their use can allow the City to oversee a large area in a comparatively short amount of time. They can also be used at lower priority businesses to satisfy the Municipal Permit requirement that all businesses are inspected at least once every five years.

The main focus for drive-by inspections is inspecting the discharge points of a facility for evidence of non-storm water discharges by driving through the area. Identified non-storm water discharges are further investigated to determine if they are illicit discharges. If an inspector

determines more extensive investigation is needed, an onsite inspection may be completed. Whenever an illicit discharge is identified, the responsible party is contacted, and the illicit discharge is required to be eliminated.

6.4.3.3 Mobile Business Oversight

Mobile businesses are subject to the same prohibitions and enforcement mechanisms as stationary industrial and commercial facilities. Mobile businesses are inspected by the City on an as needed basis. Triggers for these inspections are expected to be in response to incident reports received via the Storm Water Hotline and direct visual observations by City staff or members of the public. Mobile businesses are subject to the same minimum BMP requirements and enforcement mechanisms as stationary industrial and commercial facilities.

6.5 Enforcement

The City enforces its legal authority for all its inventoried existing development, as necessary, to achieve compliance in accordance with the Municipal Permit and the Enforcement Response Plan included in Appendix D of this JRMP document. If any storm water violations are observed during an inspection, the procedure described in the Enforcement Response Plan shall be followed to ensure compliance with BMP requirements and other Municipal Permit requirements. More specifically, corrections of the observed violations are required to be corrected within 30 calendar days of the time the violations were discovered, or prior to the next rain event, whichever is sooner. When a violation cannot be resolved within 30 calendar days, the City will document the reason why the violation took additional time to resolve. Note that the City maintains the authority to require facilities to prepare SWPPPs or to conduct sampling and analysis where deemed necessary by the City.

6.5.1 Identification of Industrial Non-filers

The RWQCB will be notified whenever an inspector finds a facility that is potentially subject to the Industrial General Permit, but has not filed the appropriate documentation with the SWRCB. Notification to the RWQCB will be given within five calendar days of the inspector's being aware. Such "non-filers" may be identified based on comparing the City's list of industrial facilities, as identified by SIC codes listed in the Industrial General Permit, with the facilities listed on the State's Storm Water Multiple Application and Report Tracking System website (<https://smarts.waterboards.ca.gov>) as having filed for coverage or exemption. Non-filers also may be identified in the field based on inspection results (e.g., if a facility that had filed for a non exposure exemption is found to have significant BMP implementation violations). Written notification will be provided by email to RB9_Nonfilers@waterboards.ca.gov.

Table 6-1. Potential Pollutants at Industrial and Commercial Facilities¹

Category	Heavy Metals ²	Organics	Oil & Grease ²	Sediment	Pesticides	Nutrients	Oxygen Demanding Substances	Bacteria/ Viruses	Trash
Aggregates	PO	UL	UL	L	UL	UL	PO	UL	UL
Air Transit	PO	PO	PO	PO	UL	UL	UL	UL	UL
Airfields	L	PO	L	PO	UL	UL	PO	UL	PO
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Paint/Body	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical/Zoological Exhibits	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Carpet/Furniture Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	L	L	L	PO	PO	PO
Ground Transportation	L	PO	L	PO	UL	UL	PO	UL	PO
Landfills	PO	PO	PO	L	PO	PO	L	L	L
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Manufacturing, Biotech/Pharmaceutical	UL	PO	UL	PO	UL	UL	PO	UL	PO
Manufacturing, Chemicals	UL	PO	PO	PO	PO	UL	PO	UL	PO
Manufacturing, Concrete	PO	UL	PO	L	UL	UL	PO	UL	PO
Manufacturing, Electronics	PO	UL	PO	PO	UL	UL	PO	UL	PO
Manufacturing, Equipment	PO	UL	PO	PO	UL	UL	PO	UL	PO
Manufacturing, Fabric/Clothes	UL	UL	UL	PO	UL	UL	PO	PO	PO

Table 6-1. Potential Pollutants at Industrial and Commercial Facilities¹ (continued)

Category	Heavy Metals ²	Organics	Oil & Grease ²	Sediment	Pesticides	Nutrients	Oxygen Demanding Substances	Bacteria/ Viruses	Trash
Manufacturing, Fabricated Metal	L	UL	PO	PO	UL	UL	PO	UL	PO
Manufacturing, Food/Drink	UL	UL	PO	PO	UL	UL	PO	L	PO
Manufacturing, Misc.	PO	PO	PO	PO	UL	UL	PO	UL	PO
Manufacturing, Paper	UL	UL	UL	PO	UL	UL	PO	PO	PO
Manufacturing, Plastic/Rubber	UL	PO	PO	PO	UL	UL	PO	UL	PO
Manufacturing, Primary Metal	L	UL	PO	PO	UL	UL	PO	UL	PO
Manufacturing, Stone/Glass	UL	UL	UL	L	UL	UL	PO	UL	PO
Manufacturing, Structural Steel	L	UL	UL	PO	UL	UL	PO	UL	PO
Manufacturing, Wood/Furniture	UL	UL	UL	PO	UL	UL	PO	PO	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nurseries/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Other Contractor	PO	PO	PO	PO	UL	UL	PO	UL	PO
Other Recreation	UL	UL	UL	UL	UL	UL	PO	PO	L
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Publically Owned Treatment Works	PO	UL	UL	PO	UL	PO	L	UL	PO
Power Generation	PO	PO	PO	L	UL	UL	UL	UL	UL
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Printing	PO	PO	UL	PO	UL	UL	PO	PO	PO
Recycling	L	PO	PO	L	PO	PO	PO	UL	PO
Sewage Sludge	PO	PO	PO	PO	PO	L	L	L	PO
Vehicle Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Vehicle Washing	PO	L	PO	PO	UL	UL	PO	UL	PO

Table 6-1. Potential Pollutants at Industrial and Commercial Facilities¹ (continued)

Category	Heavy Metals ²	Organics	Oil & Grease ²	Sediment	Pesticides	Nutrients	Oxygen Demanding Substances	Bacteria/Viruses	Trash
Vehicle/Equipment Rental	L	UL	L	PO	UL	UL	PO	UL	PO
Waste Management	PO	PO	PO	L	UL	PO	L	L	L
Water Transit	PO	L	PO	PO	UL	PO	PO	PO	PO
Wholesale Food	UL	UL	PO	PO	UL	UL	L	PO	PO
Wholesale/Storage/Warehousing	UL	UL	PO	PO	UL	UL	PO	PO	PO

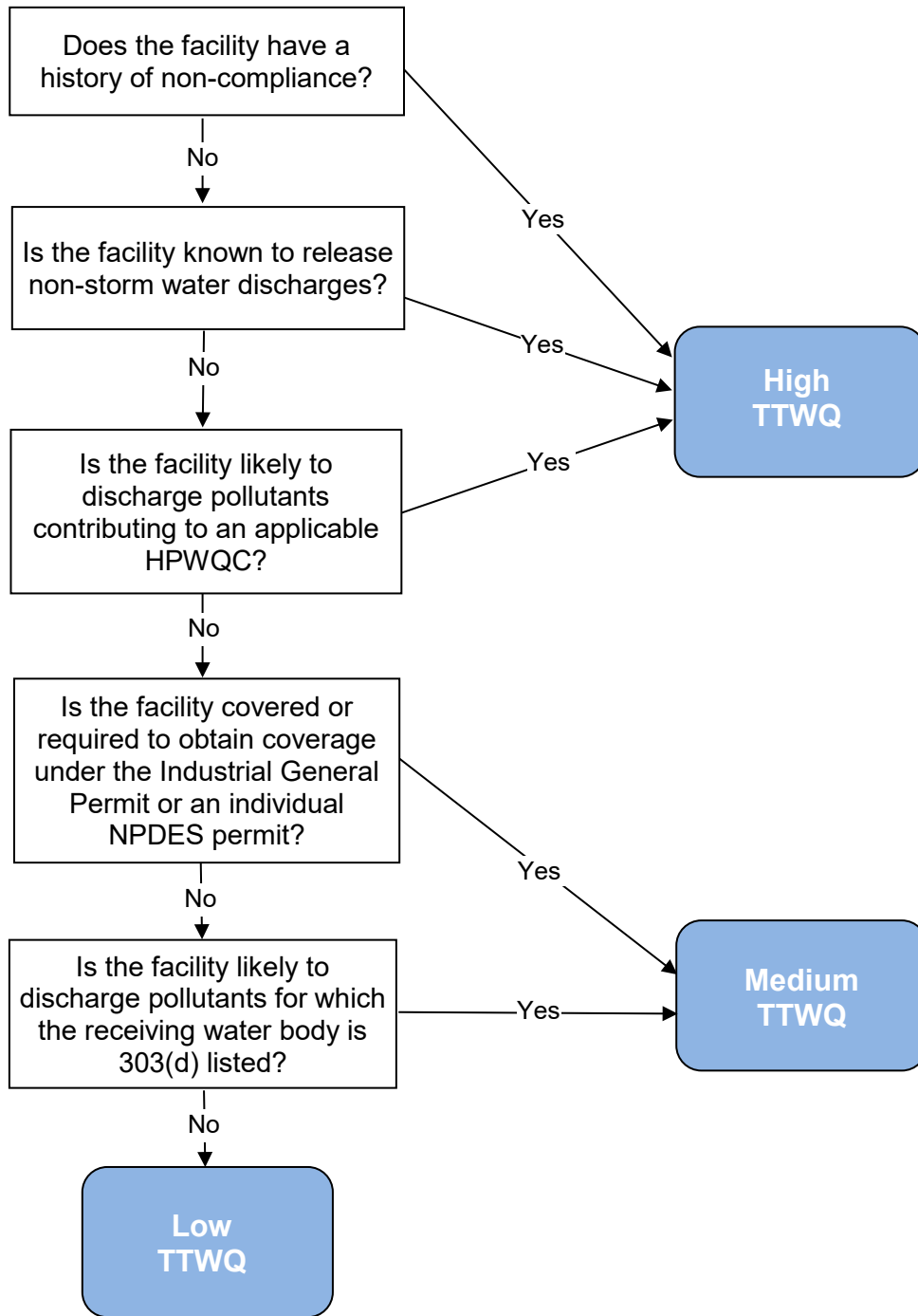
Notes:

L - Likely, PO - Possible, UL- Unlikely

¹ This table is based on tables in the Copermittees' Baseline Long-Term Effectiveness Assessment (County of San Diego, 2011) and on the field experience of D-Max Engineering, Inc. D-Max has conducted more than 24,000 industrial and commercial facility inspections during which pollutant discharge potentials were assessed.

² Discharge of heavy metals and oil and grease is possible if the facility has onsite parking.

Figure 6-1. Prioritization Flow Chart for Inventoried Industrial and Commercial Facilities



Note: The City reserves the right to assign higher TTWQ ratings than those dictated by this flow chart if deemed appropriate. See Section 6.2.5 for additional details.

Figure 6-1. Prioritization Flow Chart for Inventoried Industrial and Commercial Facilities



Note: The City reserves the right to assign higher TTWQ ratings than those dictated by this flow chart if deemed appropriate. See Section 6.2.5 for additional details.

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7 Municipal Facilities

7.1 Introduction

The City of Poway (City) maintains a number of public parks, administration buildings, fire stations, reservoirs, sewage pump stations, and a number of other City-owned properties. This section discusses storm water best management practices (BMPs) and programs associated with these facilities. An inventory of the facilities is included in Appendix F. The City also conducts activities and operations such as street and sidewalk repair, painting, storm water conveyance system maintenance, and sanitary sewer maintenance. Storm water BMPs and programs associated with these activities are described in Section 8.

7.2 Municipal Inventory

7.2.1 Inventoried Facilities

The City maintains and updates, at least annually, a watershed-based inventory of the municipal facilities within its jurisdiction that has the potential to contribute pollutants and non-storm water discharges to the City's storm water conveyance system. The municipal facilities inventory includes the following information in Appendix F, where applicable:

1. Name and location (hydrologic subarea (HSA) and address).
2. Status of facility or area as active or inactive. Inactive areas include areas on the inventory that may not be accessible for inspection (i.e., under construction or under temporary closure), but should remain on the inventory.
3. Standard Industrial Classification (SIC)/North American Industry Classification System (NAICS) code(s).
4. Industrial General Permit Notice of Intent (NOI) and/or Waste Discharge Identification number.
5. Pollutants generated and potentially generated by the facility.
6. Whether the facility or area is adjacent to an environmentally sensitive area (ESA) (within 200 feet). "Adjacent to" is defined as being within 200 feet of an ESA. This is in accordance with past procedure and with the most recent definition provided by the California Regional Water Quality Control Board, San Diego Region (RWQCB), which is found in Order No. R9-2007-0001. A map of ESAs is included in Figure 1-2.
7. Whether the facility or area is tributary to and within the same HSA as a water body segment listed as impaired on the Clean Water Act Section 303(d) List of Water Quality

Limited Segments (303(d) list) and generates pollutants for which the water body segment is impaired.

The City maintains a map showing the location of inventoried municipal facilities, watershed boundaries, and water bodies. The potential pollutants generated listed in the municipal inventory (Appendix F) are based on the Copermittees' 2011 Long Term Effectiveness Assessment (County of San Diego). Potential pollutants associated with each facility may be adjusted in the future based on data collected during inspections.

Further information regarding fixed municipal facilities is included below.

Parks and Recreational Facilities

The City maintains a number of parks, landscaped areas, and other recreational areas for use by the general public. Recreational facilities are defined as facilities that support outdoor activities such as sports fields. Municipal personnel are typically responsible for park maintenance activities such as landscaping, waste removal and control, and the maintenance of any facilities on the grounds of the park such as restrooms or facilities that support concession capabilities.

Public Works Operational Facilities

Public works yards are important in maintaining the functionality of many publicly offered services. Public works also maintains permanent Treatment Control Best Management Practice basins. The City maintains different facilities that support the activities of the City's Public Works Department including general operations centers and storage yards. The City's Public Works Material Handling Yard consists of a hazardous waste material storage and transfer area, material storage areas, a concrete mixing area, and concrete-lined holding basins used for the decanting of waste collected from streets and the storm water conveyance system. Since a portion of this facility (about ¼ acre) is used as hazardous waste storage facility, the Material Handling Yard is covered under the Industrial General Permit (Industrial General Permit). Hence, a Storm Water Pollution Prevention Plan is kept onsite and City and contract staff perform routine monitoring of dry and wet weather discharges from the site.

Potable Water Facilities

Providing residents of the City with potable water is an essential activity conducted by the City. Potable water facilities in the City include reservoirs, and pump stations to remove pollutants from raw water sources such as reservoirs. Potable water facilities are included on the City's inventory in two entries: City-owned potable water reservoirs and City-owned potable water stations.

Wastewater Facilities

The City provides wastewater collection and transmission for its residents and facilities. The City's collection system includes a network of approximately 170 miles of pipeline. There are

pump stations and several metering stations within the City. City-owned sewage pump stations are included on the City's inventory as one entity. The majority of sewage is conveyed to the Point Loma Wastewater Treatment Plant in the City of San Diego, and a portion is treated at San Diego's recycled water facility and returned to Poway for landscape irrigation use in the South Poway Business Park.

Fire Station Facilities

Fire fighting capability is an essential element of municipal activities conducted in the City. Fire fighting activities are conducted during non-emergency and emergency fire fighting activities in the field. Other fire fighting activities include equipment maintenance. Fire fighting personnel are trained on how to implement BMPs during fire fighting activities.

Other Fixed Facilities

The City maintains a number of public buildings such as administrative buildings, community centers, and recreation centers. The City implements BMPs to reduce or eliminate the pollutants generated at these facilities.

Special Events

The City hosts a number of special events in the City. The City issues Special Events Permits to private organizations that wish to use the City's parks, streets, and civic center for various events. Special events typically have a high density use of people per square foot raising the potential for pollutant releases at special events. Some potential pollutants associated with special events include:

- Trash from booth operation
- Bacteria and oxygen demanding substances from food preparation and consumption
- Oil and grease from hydraulic rides
- Chemicals and bacteria from portable restrooms

7.2.2 Inventory Prioritization

Although the 2013 Municipal Permit¹ does not specifically require the prioritization of municipal facilities, as did the 2007 Municipal Permit, Section E.5.c.(1)(a) of the Municipal Permit requires that inspections are performed at an appropriate frequency to confirm that BMPs are implemented to reduce the discharge of pollutants to the storm water conveyance system to the maximum extent practicable and are effective in reducing non-storm water discharges to the storm water conveyance system. The inspection frequencies are required to

¹ California Regional Water Quality Control Board, San Diego Region Order No. R9-2013-0001, as amended by Order No. R9-2015-0001

take into consideration the potential for a facility or area to discharge non-storm water and pollutants and should reflect the priorities set forth in the Water Quality Improvement Plans. In order to ensure municipal facilities are inspected at an appropriate frequency in accordance with the Municipal Permit, the City will prioritize municipal facilities for inspections as having either high, medium, or low threat to water quality (TTWQ). Based on the criteria listed below, each municipal facility is prioritized as having a high, medium, or low TTWQ. Figure 7-1 at the end of this section is a flow chart illustrating the municipal inventory prioritization process.

Exposure to storm water

All material handling equipment and machinery, raw materials, intermediate products, final products, and by-products exposed to storm water are evaluated to determine the potential to discharge pollutants in storm water.

Non-storm water discharges

Though some non-storm water discharge categories are allowed by the Municipal Permit, they can negatively affect water quality by transporting pollutants into receiving waters. Non-storm water discharges were evaluated to determine whether they are a significant source of pollutants and whether the discharges may continue to be exempted from the prohibitions of the Municipal Permit.

Proximity and sensitivity of receiving water bodies

All facilities directly discharging to or within 200 feet of an ESA are considered a medium TTWQ at least. Additionally, municipal facilities that are found to be, or are likely to be, a significant source of a pollutant associated with a highest priority water quality condition (HPWQC) for the Los Peñasquitos or San Dieguito Watershed Management Areas (WMAs) will be assigned a high TTWQ for inspection. For instance, municipal facilities located within the Los Peñasquitos WMA that are determined to be a significant source of bacteria or sediment are high TTWQ sites since these pollutants have been identified as potential stressors contributing to the HPWQCs of the Los Peñasquitos WMA. Table 1-3 provides a summary of the water bodies within the City's jurisdiction and the relevant 303(d) listed impairments and HPWQCs. Appendix F includes the municipal facilities inventory which indicates each facility's likelihood of discharging common storm water pollutants.

7.3 Best Management Practice Requirements

7.3.1 Minimum Best Management Practices

The implementation, operation, and maintenance of BMPs by municipal facilities are required by the City in order to prevent pollutants from entering its storm water conveyance system. The City has designated a list of minimum BMP requirements for all municipal facilities and activities; collectively, the BMPs are listed in the City's BMP Manual found in Appendix B of

this document, which also applies to special event venues. These BMPs have been updated to reflect practices that address the City's HPWQCs designated in the WQIPs.

If a facility is found to be a significant source of pollutants and the City's minimum BMPs are not adequate in preventing the discharge of pollutants to the storm water conveyance system, the City will require the implementation of additional BMPs, when feasible, so that discharges of pollutants are reduced to the maximum extent practicable. The City may also elect to prepare a written BMP plan for the facility.

In addition to the BMP Manual, the City has developed programs to identify, prioritize, and implement potential projects to retrofit areas of existing development, including municipal areas, and to rehabilitate streams, channels, and habitat. Appendix E of this document describes these two programs in further detail.

7.3.2 Additional Best Management Practice Requirements for Special Events

In addition to implementing the City's BMP Manual (Appendix B), event organizers and sponsors should train event staff on and notify vendors of their storm water pollution prevention responsibilities and ensure compliance with all applicable regulations outlined in the Poway Municipal Code. The following BMPs include additional BMP requirements for special events that are expected to generate significant trash and litter, where applicable:

- Proper management of trash and litter including extra trash receptacles situated throughout the event site and emptied throughout the day.
- City staff are available for the duration of the event for immediate trash removal.
- Other BMPs and post-event clean-up activities are considered and implemented when necessary and where applicable, and include, but are not limited to the following:
 - Street sweeping following the special event.
 - Providing temporary screens on catch basins and storm drain inlets.
 - Cleaning catch basins and inlets after the special event, and prior to a rain event.
 - Temporary fencing to prevent windblown trash from entering adjacent water bodies and storm water conveyance system channels.

7.4 Best Management Practice Implementation

The City conducts regular inspections of its inventoried municipal facilities to ensure compliance with the BMP Manual and applicable local ordinances and permits and to reduce the discharge of pollutants in storm water.

7.4.1 Inspection Frequency

In general, the City inspects high TTWQ municipal facilities annually, and medium and low TTWQ facilities are inspected at least once within the Municipal Permit term, which is expected to be a five-year period. These inspections may be either onsite or drive-by inspections. At a minimum, 20 percent of inventoried existing development (i.e., inventoried industrial, commercial, municipal, and residential areas) receive onsite inspections each year. Drive-by inspections may be conducted for low and medium priority facilities where appropriate. An overview of inspection procedures is included in the following section.

Based upon inspection findings, the City will implement all follow-up actions (i.e. education and outreach, re-inspection, enforcement) necessary to require and confirm compliance with the applicable BMPs, local ordinances, and permits, and in accordance with the City's Enforcement Response Plan (Appendix D). See Section 7.5 for more information regarding enforcement. While regular inspections are one mechanism for ensuring BMPs are implemented at municipal facilities, it is not the only mechanism. If BMP deficiencies are observed outside of an inspection, City staff are trained to correct any observed issues within a timely manner, or to report the issue to the appropriate person for correction.

7.4.2 Inspection Procedures

Inspections of municipal facilities are conducted by City personnel or contract staff with inspection and enforcement authority. Inspections include either an onsite or drive-by inspection, and are tracked using the City's electronic database. Facility inspections are the primary mechanisms used to verify implementation of the designated BMPs at municipal facilities and activities. Inspectors utilize a Storm Water Quality Inspection for Municipal Facilities inspection form.

All routine inspections of facilities will include, at minimum, visual inspections for the presence of non-storm water discharges, actual or potential discharges of pollutants, actual or potential illegal connections, and verification that the description of the facility or area in the inventory has not changed. Additionally, onsite inspections will include, at a minimum:

- Verification of any applicable SIC/NAICS code(s) and coverage under the Industrial General Permit, when applicable.
- Assessment of the implementation of the City's minimum BMPs and any other required additional BMPs.
- Assessment of compliance with applicable local ordinances (Stormwater Management and Discharge Control Ordinance) and permits related to non-storm water and storm water discharges and runoff.

Municipal facilities with noted BMP deficiencies are typically provided an opportunity to implement corrective actions during the inspection. If deficiencies in BMP implementation are found during an inspection, the corrective action(s) will be reported both verbally, if a facility representative is present, and in writing. Corrective actions and the resolution status of the necessary corrections are documented electronically. If any violations are found during the inspection, inspectors will take and document appropriate actions in accordance with the Enforcement Response Plan (Appendix D). See Section 7.5 for more information.

7.4.3 Inspection Data Management

City inspectors track all inspections and re-inspections at all inventoried municipal facilities and retain all inspection records in an electronic database. Information from the database will be made available to RWQCB staff upon request.

Inspection records will include, at a minimum:

- Name and location of facility or area (address and HSA) consistent with the inventory name and location.
- Inspection and re-inspection date(s).
- Inspection method(s) (i.e. onsite, drive-by).
- Observations and findings from the inspection(s).

For onsite inspections of municipal facilities, the records will also include, as applicable:

- Description of any BMP deficiencies or violations found during the inspection(s).
- Description of enforcement actions issued in accordance with the Enforcement Response Plan (Appendix D).
- The date BMP deficiencies or violations were resolved.

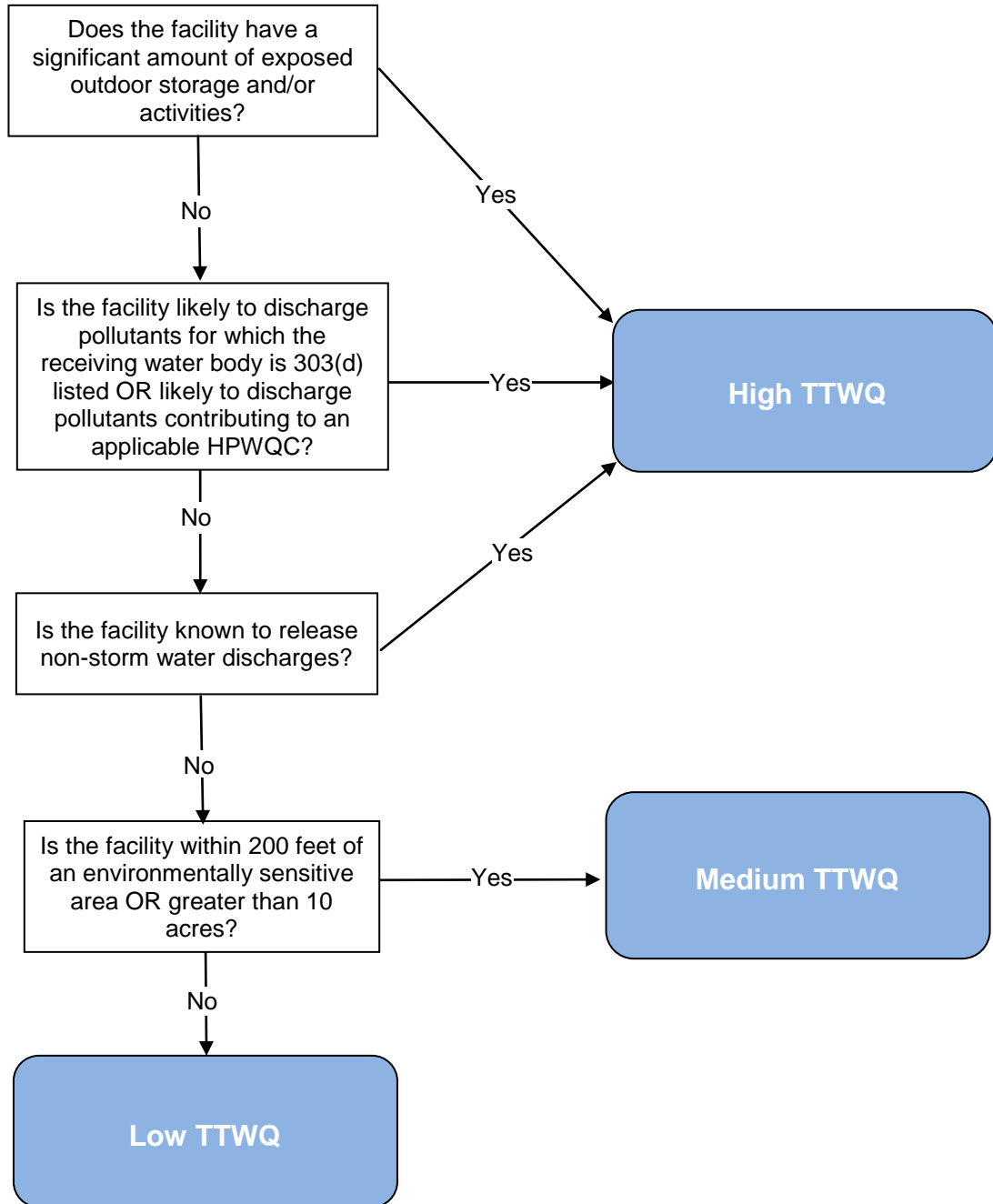
7.4.4 Special Event Inspections

The City allows individuals/private organizations to use City property for special events. Where applicable, hosts and patrons of the event are responsible for implementing the BMPs listed in Section 7.3.2 and in the BMP Manual in Appendix B. As previously mentioned, City staff are available for the duration of the special event for immediate trash removal and to ensure the event does not contribute illegal discharges to the City's storm water conveyance system. If an inspection is performed at an event, City staff complete the special event inspection form and discuss any observed BMP deficiencies with the event's responsible party(ies).

7.5 Enforcement

The City enforces its legal authority for all its municipal facilities, as necessary, to achieve compliance in accordance with the Municipal Permit and the Enforcement Response Plan (Appendix D). If any storm water violations are observed during an inspection, the procedure described in the Enforcement Response Plan will be followed to ensure compliance with BMP requirements and other Municipal Permit requirements. More specifically, corrections of the observed violations are required to be corrected within 30 calendar days of the time violations were discovered, or prior to the next rain event, whichever is sooner. When a violation cannot be resolved within 30 calendar days, the City will document the reason why the violation took additional time to resolve.

Figure 7-1. Municipal Inventory Prioritization Process



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8 Municipal Infrastructure

8.1 Introduction

The City of Poway (City) carefully manages pollution prevention measures to reduce or potentially eliminate the discharge of pollutants to or from its storm water conveyance system from municipal areas and activities. The City regularly conducts activities with potential to introduce pollutants to storm water, such as street and sidewalk repair, painting, and graffiti removal. However, the City also performs a number of activities that are beneficial to water quality such as street sweeping, inspections of municipal facilities, storm water conveyance system maintenance, and regular upkeep of the sanitary sewer system to prevent sanitary sewer overflows (SSOs).

In accordance with Section E.5.b.(1)(c) of California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit), the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in runoff from municipal activities. Storm water pollution prevention activities for existing municipal facilities were discussed in Section 7. This section, in accordance with Section E.5.b.(1)(c) of the Municipal Permit, describes municipal infrastructure-related pollution prevention activities.

8.2 Roads, Streets, and Parking Facilities

8.2.1 Background

Roads and streets are an integral part of any functional City. Roads and streets can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from surrounding areas. They also act as part of the City's storm water conveyance system, due to the presence of roadside ditches or curb and gutter. Regular maintenance is necessary to reduce and control the level of pollutants commonly associated with roads and streets, such as sediment, metals, litter, and debris. The City is divided into eight zones for road operation and maintenance activities. Each year, one of the eight zones is inspected and assessed for maintenance needs, which includes the assessment of public streets, paved roads, and unpaved roads.

Other related City activities include building new roads and streets, resurfacing existing roads and streets. All construction projects conducted by the City are completed in accordance with the City's BMP Manual (Appendix B) and with Section 5 of this document. Public roads and

streets, within the City's jurisdiction, as one complete entity, are included in the municipal inventory in Appendix F and are inventoried using geographic information system (GIS).

8.2.2 Best Management Practices

Similar to fixed municipal facilities, the City implements the minimum BMPs in the BMP Manual (Appendix B) when conducting maintenance of roads, streets, and parking facilities within the City's jurisdiction. Street sweeping and cleaning continues to be the main BMP that is implemented for these facilities, which is discussed in the next section.

The City maintains unpaved roads and implements BMPs to prevent the transportation of sediment into the storm water conveyance system. Unpaved roads are stabilized utilizing vegetation, gravel, structural containment such as curbs, or other equivalent measures. In the event that any pervious areas are disturbed or otherwise become destabilized, temporary erosion control measures will be installed. Erosion control BMPs will be maintained until the area can be more permanently stabilized. If negative impacts to receiving waters associated with runoff from road and streets are noted, the City will take the measures necessary to mitigate the negative impacts. In accordance with the Los Peñasquitos and San Dieguito Water Quality Improvement Plans (WQIPs), the City plans to increase maintenance on access roads and trails by proactively monitoring for erosion and completing minor repair and slope stabilization.

8.2.2.1 Street Sweeping

The City's street sweeping program has been adjusted to coordinate street sweeping with trash and recycling pick-up schedules. Although there is no specific minimum sweeping frequency required under the Municipal Permit, all public roads and streets with curb and gutter in the City's jurisdiction are swept twice per month, as part of the City's jurisdictional strategies included in the San Dieguito and Los Peñasquitos WQIPs (Appendix A).

The street sweeping debris is collected and contained at the City's Public Works Material Handling Yard and protected from storm water runoff. The material is then disposed of through an approved disposal facility. The City trains street sweeping personnel on the importance of identifying and reporting illegal connections and illegal discharges (IC/IDs). Since street sweeping is conducted twice per month, it provides the City with further means to observe, respond to, and potentially prevent IC/IDs.

8.3 Storm Water Conveyance System

8.3.1 Background

The primary function of the storm water conveyance system is to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. In order to reduce the

transportation of pollutants into receiving water bodies, the City regularly maintains its storm water conveyance system to ensure that it remains both fully functional and free of pollutants to the maximum extent practicable. The City's storm water conveyance system consists of streets, curbs, catch basins, inlets, pipes of varying material, natural creeks and streams, concrete channels, culverts.

The City's storm water conveyance system management program includes responding to complaints received by the City's Storm Water Hotline, detecting and eliminating IC/IDs, inspecting and maintaining the storm water conveyance system by cleaning, removing sediment, debris, and excessive vegetation, by repairing and/or replacing damaged or failing storm water conveyance system structures, and by providing signage on storm drain inlets warning of effects of illegal dumping. The City trains and requires field staff on BMP implementation, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance, and/or discharge control. The City's storm water conveyance system, as one complete entity, is included in the municipal inventory in Appendix F and is inventoried using GIS.

8.3.2 Maintenance

The City maintains a comprehensive storm water conveyance system maintenance program and continually assesses the results of the program to ensure it is effective in reducing and eliminating pollutants from being transported to receiving waters. In accordance with the City's jurisdictional WQIP strategies (Appendix A), the City's storm water conveyance system maintenance activities include the following:

- Trash and debris are removed from all drainage facilities at least annually.
- Clean open channels and repair scour ponds to reduce pollutant loads and invasive plants as needed. The City removes silt after sufficient accumulation from creeks, desilting basins, detention basins, and rock-lined channels when needed. Permits are required for such work, and the City obtains all applicable permits before removing silt from the aforementioned storm water conveyance system facilities.
- Construction or repairs to non-emergency storm water facilities is conducted as needed. The City proactively repairs and replaces corrugated metal pipe storm water conveyance system components, with a focus on pipes in open canyons.
- Construction or repair of emergency storm water facilities is conducted as needed.

The City's current inspection/cleaning schedule is sufficient in ensuring that catch basins and inlets are generally less than 33% of capacity full and that self-cleaning storm water conveyance system facilities are cleaned immediately. The City utilizes a Vactor truck during storm water conveyance system maintenance to collect both dry and liquid debris from catch basins and

inlets. When feasible, work is performed when conditions are dry to prevent the transportation of pollutants. The City also respond to reports made by citizens or municipal personnel regarding storm water conveyance system facilities that require inspection/cleaning that is beyond regular maintenance activities.

Municipal personnel handle materials and waste removed during maintenance activities in a manner that will not release the material to the storm water conveyance system in accordance with the City's BMP Manual (Appendix B). The City keeps records to document all storm water conveyance system maintenance activities and inspections.

Record keeping for preventative maintenance, cleaning, and inspections contain the following information:

- Dates of inspections
- Items inspected
- Locations of facilities inspected or cleaned
- Overall amount of material removed (estimated in either volume or dry weight)
- Disposal site
- Problems noted
- IC/IDs detected
- Corrective action required
- Date corrective action was taken

8.3.3 Best Management Practices

Municipal staff performing storm water conveyance system maintenance regularly implement the required BMPs listed in the City's BMP Manual (Appendix B) and perform equipment inspection to eliminate and reduce illegal discharges and the transportation of pollutants into the storm water conveyance system. Temporary structural BMPs are used as necessary during routine and emergency storm water conveyance system maintenance, when feasible. The City uses a Vactor truck to collect both dry and liquid debris from catch basins and inlets, along with a vacuum capture system to prevent the transport of material within the storm water conveyance system.

The City's Public Works Department also maintains a number of treatment control BMPs, such as detention basins, filter inserts, and curb inlet protection, which are included in the regular maintenance of the storm water conveyance system. The City currently maintains 12 active flood control detention basins (seven static and five mechanical basins) for the purpose of reducing the peak flow in various areas of the City, specifically industrial areas, and minimizing pollutant loads to receiving waters. Five of these basins have been retrofitted for use as regional treatment control BMPs.

8.4 Sanitary Sewer System

8.4.1 Background

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health.

The Public Works Department conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduce the potential for an SSO and help prevent and eliminate sewage from entering the storm water conveyance system. The City's sanitary sewer system, as one complete entity, is included in the municipal inventory in Appendix F and is inventoried using GIS.

8.4.2 Maintenance

The City conducts regular maintenance of the sanitary sewer system to prevent SSOs and other leaks that may occur due to system malfunction. The City has identified critical maintenance areas, which will continue to be cleaned on a regular schedule to prevent future problems. These areas and their associated maintenance frequencies are identified in the Sewer System Management Plan (SSMP). The City's Sanitary Sewer Overflow Emergency Response Plan, which is a component of the SSMP, describes the City's activities and personnel organization when responding to an SSO.

The City seeks to reduce and eliminate sewage from the sanitary sewer system from entering the storm water conveyance system through routine preventative maintenance of both systems which includes the following activities:

- Flow metering throughout the City's sanitary sewer system to monitor flow depths and potential capacity concerns.
- Use video cameras in storm drains to check pipe conditions if there is a potential problem.
- Implement a rehabilitation program for aged sewer pipes and use of polyvinyl chloride (PVC) pipes for new construction.
- Replace, repair, or reline corrugated metal pipe storm drains with concrete, high density polyethylene, SDR35, or C905 pipes.

8.4.3 Best Management Practices

The City's SSMP includes procedures for responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediating existing sewer lines as necessary and proper disposal of hazardous waste. City staff implement the SSMP and the City's BMP Manual (Appendix B) for municipal areas and activities, including sanitary sewer maintenance. Similar to the storm water conveyance system maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Temporary structural BMPs will be used during routine and emergency maintenance, where applicable.

8.5 Landscape Maintenance

8.5.1 Background

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be discharged to storm water conveyance systems. Transport of these pollutants is often a result of one or more of the following: (1) runoff from excessive irrigation after application; (2) application of chemicals during or prior to storm events; (3) overspray from chemical applications that may eventually enter the storm water conveyance system. In addition to introducing pollutants to the storm water conveyance system, improper pesticide and herbicide use can cause harm to non-target flora and fauna.

The City has developed and continues to implement a program aimed at preventing or reducing pesticides, herbicides, and fertilizers from entering the storm water conveyance system. The City implements a variety of BMPs to reduce or eliminate the amount of pollutants entering the storm water conveyance system from municipal parks and recreation facilities. City personnel implement general waste management BMPs, and patrons of the facility are encouraged to properly dispose of trash and pet waste.

8.5.2 Best Management Practices

The City regularly checks landscape irrigation systems and maintains them as needed. Runoff is reduced by proper irrigation programming, including using shorter irrigation cycle times at a higher frequency instead of single long cycles. Sprinklers are also adjusted to eliminate overspray. Runoff is reduced by proper irrigation programming, including the use of Cal-Sense smart irrigation systems and limiting irrigation after the application of fertilizers and pesticides.

The federal Pesticide, Fungicide and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The

regulations generally include: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs. In addition to the minimum BMPs listed in the City's BMP Manual (Appendix B), the following BMPs will continue to be implemented to reduce pollutants from pesticides, herbicides, and fertilizers:

- City personnel who participate in the application of pesticides are trained and licensed (Qualified Applicator License) and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- Agricultural pest control businesses working for the City are supervised by a Qualified Applicator Licensee who has a current Qualified Applicator Certificate.
- Every two years, Qualified Applicator Certificate holders must show proof that they have secured a minimum of 20 hours of continuing education. Agricultural Pest Control Advisors must have secured a minimum of 40 hours continuing education.
- City staff record the applications of all chemical agents by noting the locations, type, and quantity of chemicals used. Monthly reports of pesticide usage are prepared and submitted to the Department of Agriculture.
- The Qualified Applicator Certificate holder conducts monthly inspections to monitor storage, handling, and disposal of the pesticides.
- Personnel who participate in the application of herbicides for the City are trained and follow guidelines set by the County Agricultural Commission.
- Runoff is reduced by proper irrigation programming, including the use of Cal-Sense smart irrigation systems and limiting irrigation after the application of fertilizers and pesticides.
- Employees are trained to follow pesticide, herbicide and fertilizer labels, and the material safety data sheet(s). All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides and fertilizers are not applied during or directly prior to storm events or irrigation, unless the fertilizer is pre-emergence and needs irrigation to enter the top layer of soil. If pre-emergence fertilizer is used, a controlled amount of irrigation is used to ensure no fertilizer runs off.
- Only pesticides that are quickly absorbed into the soil or plants are used.
- Whenever practicable, integrated pest management techniques are implemented and native vegetation is used.

- Alternative products to control insects, fungi, and weeds are considered for use to minimize the use of pesticides/herbicides.
- Pesticides are not to be sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- Unused portions of chemicals are disposed of in accordance with the pesticide and fertilizer labels and applicable regulations.

8.6 Mobile Maintenance Activities

8.6.1 Background

The City conducts a number of other routine maintenance activities that are not designated to one specific location. Because such activities are not confined to a fixed facility, where BMPs may be permanently implemented, BMPs are actively implemented during all mobile municipal activities. Routine mobile maintenance activities include the following:

- Power washing
- Street and sidewalk repair
- Street striping
- Waste removal
- Traffic light maintenance
- Painting
- Parking meter maintenance
- Landscape/right-of-way maintenance
- Graffiti removal

8.6.2 Best Management Practices

City field crews are routinely trained to implement the City's minimum BMPs (Appendix B) during all mobile activities. City personnel involved in mobile maintenance activities are trained to identify and eliminate IC/IDs and to report them to the appropriate persons without delay.

As discussed in Section 8.5 of this document, the City uses fertilizers on many landscaped areas. Since nutrients are a common component in fertilizers, the City implements many BMPs in order to mitigate potential discharges of nutrients. The City continually monitors the use of fertilizers and pesticides and if existing BMPs are found to be deficient, City personnel adjust BMPs to achieve a higher level of pollutant reduction when possible. If the City determines that mobile activities may be significant sources of pollutants to the storm water conveyance system, then City staff will make further improvements to BMPs as needed.

9 Residential Areas

9.1 Introduction

Approximately 37 percent of the City of Poway (City) has a residential land use designation, which includes single-family residences, multi-family residences, and a small portion of other residential areas, such as mobile home parks. Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the quality of receiving waters in and around the City. As a result, the City will implement a number of activities to reduce storm water pollutants from residential areas.

9.2 Residential Inventory

The City has divided its residential areas into residential management areas (RMAs) as part of the existing development inventory, as required by the California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit). The residential inventory (Table 9-1) has been formatted to capture the following information, as required by the Municipal Permit:

1. RMA name and hydrologic subarea (HSA).
2. Status of area as active or inactive. Inactive areas include areas on the inventory that may not be accessible for inspection (i.e., under construction or under temporary closure), but should remain on the inventory.
3. Identification if the area is or includes a Common Interest Area (CIA)/Home Owners Association (HOA), or mobile home park.
4. Pollutants generated and potentially generated by the area.
5. Whether the area is adjacent to an environmentally sensitive area (ESA). "Adjacent to" is defined as being within 200 feet of an ESA. This is in accordance with past procedure and with the most recent definition provided by the RWQCB, which is found in Order No. R9-2007-0001.
6. Whether the area is tributary to and within the same HSA as a water body segment listed as impaired on the Clean Water Act 303(d) List of Water Quality Limited Segments (303(d) list) and generates pollutants for which the water body segment is impaired.

The City maintains a map showing the location of inventoried residential areas, watershed boundaries, and water bodies (Figure 9-1). The potential pollutants generated listed in the

residential inventory are based on the Copermittees' 2011 Long Term Effectiveness Assessment (County of San Diego). Potential pollutants associated with each RMA may be adjusted in the future based on data collected during inspections. The presence or absence of CIA, HOA, or mobile businesses will also be updated based on future evaluations.

9.3 Best Management Practice Requirements

The City has updated the minimum best management practices (BMPs) required for residents. Residents are required to eliminate or reduce a number of different types of non-storm water discharges and to take other actions, such as proper use of pesticides and fertilizers and pet waste management, to reduce discharges of pollutants. Notably, consistent with the Municipal Permit, irrigation runoff, which was previously an allowable discharge under the 2007 Municipal Permit, is now considered an illegal discharge. The full list of required residential BMPs is included in the BMP Manual (Appendix B).

9.4 Program Implementation

The City's residential program primarily focuses on addressing the highest priority water quality conditions (HPWQCs) established within the Water Quality Improvement Plans (WQIPs) for the San Dieguito and Peñasquitos watershed management areas (WMAs). At this time, the HPWQC for the San Dieguito WMA is bacteria and for the Los Peñasquitos WMA the HPWQCs are bacteria and sediment.

The main focus of the City's residential program is reducing non-storm water discharges. Reducing non-storm water discharges is expected to reduce discharges of pollutants from the City's storm water conveyance system to downstream water bodies. It also is consistent with the 2013 Municipal Permit's increased emphasis on eliminating non-storm water discharges, including irrigation runoff, and with water conservation efforts being taken in response to the State's ongoing drought.

The City's residential program is a new effort initiated to meet 2013 Municipal Permit requirements, and as the program matures and as regulatory drivers change, the program itself also may change through an adaptive management process. Inspection, monitoring, hotline call, and enforcement data collected will be used to evaluate the effectiveness of the City's residential oversight program in reducing non-storm water discharges to the City's storm water conveyance system. To ensure the required inspection frequencies are being met, storm water staff routinely evaluate collected data. Regular evaluation will also assist in identifying potential gaps in the City's residential oversight program, which will allow the City to focus or adjust efforts and resources as needed.

9.4.1 Water Quality Improvement Plan Strategies

The San Dieguito WMA WQIP was updated in FY 21. In accordance with the new WQIP strategy, the City conducts enhanced residential inspections to identify nutrient sources and non-stormwater flows within the San Dieguito WMA. Additional RMA inspections are completed via drive-by inspections each year to identify nutrient sources and non-stormwater discharges related to non-commercial agricultural operations, such as private orchards and small-scale animal keeping. Each active RMA in the San Dieguito WMA is inspected at least once every five years. If issues are observed, the RMA will be inspected the following year. The City provides education and enforcement as applicable to target proper management of potential nutrient sources.

9.4.2 Residential Education

Education and outreach is a key mechanism used to increase residents' rates of BMP implementation. In addition to its own programs, the City contributes to regional education programs run collectively by all municipal agencies in San Diego County. This coordination helps provide more uniform messaging across the region. Consistent with the overall residential program emphasis described above, the City's residential outreach efforts will focus on reducing non-storm water discharges, such as irrigation runoff. Section 10 of this document provides more detail on education and outreach efforts.

9.4.3 Residential Oversight Mechanisms

The primary method through which BMP implementation in RMAs is assessed is through routine storm water conveyance system maintenance and inspection. Specifically, storm drain inlet inspections performed by Public Works staff throughout the City, including residential areas, will be used to meet the Municipal Permit requirement to inspect each RMA to evaluate compliance with the City's storm water requirements at least once every five years. The City's Public Works staff inspect all storm drain inlets annually to assess the need for maintenance (i.e., debris removal, grate replacements, storm drain stenciling, etc.). The inspection of storm drain inlets allows the City to also assess the area for the presence of non-storm water discharges and illegal connections to the storm drain conveyance system.

The City's Public Works staff use a grid system based on the California Coordinate System to organize the areas within the City that require regular storm drain inspection and cleaning. For this reason, the RMAs have been organized in the same manner, as displayed in Figure 9-1 at the end of this section. During each storm drain inlet inspection, Public Works staff record if a non-storm water discharge is observed at the inlet on a field inspection sheet. As seen in the map in Figure 9-1, the northernmost portion of the City, which includes the Maderas Golf Course and Country Club, does not fall within an established RMA although there are some residences in this area.

If a non-storm water discharge or an illegal connection is observed during the inspection of a storm drain inlet, Public Works staff will document the discharge on the field inspection sheet and will attempt to eliminate any IC/IDs, where possible. If the IC/ID cannot be eliminated in the field, Public Works staff will refer the IC/ID to the City's Code Compliance staff for follow up.

The City's Storm Water Hotline is another mechanism for overseeing RMAs and for reporting residential violations of the City's Storm Water Ordinance. The hotline number and email address are advertised through various media as part of the City's storm water education program.

If a potential residential storm water violation is reported to the City or observed by City or contract staff, storm water staff will typically visit the area where the violation was reportedly observed, depending on the nature of the complaint. Normally, evaluation will only be performed in response to validated complaints. More information on the Storm Water Hotline and procedures for responding to reports of illegal discharges are provided in Section 3.

Results from the residential oversight program will be used to help refine educational efforts, as described in Section 9.4.1, where appropriate. Illegal discharges discovered will be addressed through the City's enforcement process, as described in Section 9.5.

9.5 Enforcement

When storm water violations traced to residential areas are discovered, the procedure described in the City's Enforcement Response Plan (Appendix D) will be followed to ensure compliance with the Municipal Code. Where possible, voluntary compliance will be achieved through engaging and educating residents. Particularly in cases when residents are unaware of new requirements, the City will initially take an educational approach to build a more effective partnership with the community. When education is not sufficient to attain compliance, enforcement actions, such as written warnings, are implemented. Escalated enforcement measures, such as administrative citations, will also be used where necessary to bring about compliance.

The City will typically seek to resolve violations within 30 calendar days of their first observed occurrence, or prior to the next rain event, whichever is sooner. Obvious illegal discharges that may present an immediate threat to human or environmental health do not have 30 calendar days to attain compliance and must be eliminated as soon as possible, as described in Section 3. Violations, their date of resolution, and enforcement actions taken are documented in an electronic database. Whenever a violation cannot be resolved within 30 calendar days, the rationale for why a longer period was needed to attain compliance will also be recorded, as required by the Municipal Permit.

Table 9-1. City of Poway Residential Management Areas

RMA Grid Number	RMA Page Number	Status	Hydrologic Subarea(s)	CIA, HOA, or Mobile Home ¹	Adjacent to ESA	Pollutants Potentially Generated ²						
						Metals	Oil & Grease	Sediment	Nutrients	Bacteria	Dissolved Minerals	Organics
274-1749	Page 1	Active	906.20	N	Y	L	L	L	L	L	L	L
274-1755	Page 2	Active	906.20	N	Y	L	L	L	L	L	L	L
278-1749	Page 3	Active	906.20	N	Y	L	L	L	L	L	L	L
278-1755	Page 4	Active	906.20	N	Y	L	L	L	L	L	L	L
278-1761	Page 5	Active	906.20	N	Y	L	L	L	L	L	L	L
282-1743	Page 6	Active	906.20	N	Y	L	L	L	L	L	L	L
282-1749	Page 7	Active	906.20	N	Y	L	L	L	L	L	L	L
282-1755	Page 8	Active	906.20	N	Y	L	L	L	L	L	L	L
282-1761	Page 9	Active	906.20	N	Y	L	L	L	L	L	L	L
282-1767	Page 10	Active	906.20	N	Y	L	L	L	L	L	L	L
286-1743	Page 11	Active	906.20	N	Y	L	L	L	L	L	L	L
286-1749	Page 12	Active	906.20	N	Y	L	L	L	L	L	L	L
286-1755	Page 13	Active	906.20	N	Y	L	L	L	L	L	L	L
286-1761	Page 14	Active	906.20	N	Y	L	L	L	L	L	L	L
286-1767	Page 15	Active	906.20	N	Y	L	L	L	L	L	L	L
290-1749	Page 18	Active	906.20	N	Y	L	L	L	L	L	L	L
290-1755	Page 19	Active	906.20	N	N	L	L	L	L	L	L	L
290-1761	Page 20	Active	906.20	N	Y	L	L	L	L	L	L	L
290-1767	Page 21	Active	906.20	N	Y	L	L	L	L	L	L	L
290-1773	Page 22	Active	906.20	N	Y	L	L	L	L	L	L	L
290-1779	Page 23	Active	906.20	N	Y	L	L	L	L	L	L	L
294-1749	Page 24	Active	906.20	N	Y	L	L	L	L	L	L	L
294-1755	Page 25	Active	906.20	N	Y	L	L	L	L	L	L	L

Table 9-1. City of Poway Residential Management Areas (continued)

RMA Grid Number	RMA Page Number	Status	Hydrologic Subarea(s)	CIA, HOA, or Mobile Home ¹	Adjacent to ESA	Pollutants Potentially Generated ²						
						Metals	Oil & Grease	Sediment	Nutrients	Bacteria	Dissolved Minerals	Organics
294-1761	Page 26	Active	906.20	N	Y	L	L	L	L	L	L	L
294-1767	Page 27	Active	906.20	N	Y	L	L	L	L	L	L	L
294-1773	Page 28	Active	906.20	N	Y	L	L	L	L	L	L	L
294-1779	Page 29	Active	906.20	N	Y	L	L	L	L	L	L	L
298-1749	Page 30	Active	906.20	N	Y	L	L	L	L	L	L	L
298-1755	Page 31	Active	906.20	N	Y	L	L	L	L	L	L	L
298-1761	Page 32	Active	906.20	Y	Y	L	L	L	L	L	L	L
298-1767	Page 33	Active	906.20	N	Y	L	L	L	L	L	L	L
298-1773	Page 34	Active	905.21, 906.20	N	Y	L	L	L	L	L	L	L
298-1779	Page 35	Active	906.20	N	Y	L	L	L	L	L	L	L
302-1749	Page 36	Active	905.22, 906.20	N	Y	L	L	L	L	L	L	L
302-1755	Page 37	Active	905.22, 906.20	Y	Y	L	L	L	L	L	L	L
302-1761	Page 38	Active	905.22, 906.20	Y	Y	L	L	L	L	L	L	L
302-1767	Page 39	Active	905.21, 905.22, 906.20	N	Y	L	L	L	L	L	L	L
302-1773	Page 40	Active	905.21, 906.20	N	Y	L	L	L	L	L	L	L
302-1779	Page 41	Active	905.21	N	Y	L	L	L	L	L	L	L

Table 9-1. City of Poway Residential Management Areas (continued)

RMA Grid Number	RMA Page Number	Status	Hydrologic Subarea(s)	CIA, HOA, or Mobile Home ¹	Adjacent to ESA	Pollutants Potentially Generated ²						
						Metals	Oil & Grease	Sediment	Nutrients	Bacteria	Dissolved Minerals	Organics
306-1749	Page 42	Active	905.22	Y	Y	L	L	L	L	L	L	L
306-1755	Page 43	Active	905.22	Y	Y	L	L	L	L	L	L	L
306-1761	Page 44	Active	905.21, 905.22	Y	Y	L	L	L	L	L	L	L
310-1749	Page 48	Active	905.22	Y	Y	L	L	L	L	L	L	L
310-1755	Page 49	Active	905.21, 905.22	Y	Y	L	L	L	L	L	L	L
310-1761	Page 50	Active	905.21, 905.22	Y	Y	L	L	L	L	L	L	L
314-1749	Page 52	Inactive	905.22	Y	N	L	L	L	L	L	L	L
314-1755	Page 53	Active	905.21, 905.22	Y	Y	L	L	L	L	L	L	L
314-1761	Page 54	Active	905.21, 905.22	Y	Y	L	L	L	L	L	L	L
314-1767	Page 55	Active	905.21	Y	Y	L	L	L	L	L	L	L
318-1755	Page 56	Active	905.21, 905.22, 905.31	Y	Y	L	L	L	L	L	L	L
318-1761	Page 57	Active	905.21, 905.31	Y	Y	L	L	L	L	L	L	L
318-1767	Page 58	Active	905.21	Y	Y	L	L	L	L	L	L	L
322-1755	Page 59	Active	905.21, 905.31	Y	Y	L	L	L	L	L	L	L

Table 9-1. City of Poway Residential Management Areas (continued)

RMA Grid Number	RMA Page Number	Status	Hydrologic Subarea(s)	CIA, HOA, or Mobile Home ¹	Adjacent to ESA	Pollutants Potentially Generated ²						
						Metals	Oil & Grease	Sediment	Nutrients	Bacteria	Dissolved Minerals	Organics
322-1761	Page 60	Active	905.21, 905.31	Y	Y	L	L	L	L	L	L	L
322-1767	Page 61	Active	905.21, 905.31	Y	Y	L	L	L	L	L	L	L
286-1773	Page 16	Inactive	906.2	N	Y	PO	PO	PO	PO	PO	PO	PO
290-1743	Page 17	Inactive	906.2	N	Y	PO	PO	PO	PO	PO	PO	PO
306-1767	Page 45	Inactive	905.21, 905.22	N	Y	PO	PO	PO	PO	PO	PO	PO
306-1773	Page 46	Inactive	905.21	N	Y	PO	PO	PO	PO	PO	PO	PO
306-1779	Page 47	Inactive	905.21	N	Y	PO	PO	PO	PO	PO	PO	PO
310-1767	Page 51	Inactive	905.22	N	Y	PO	PO	PO	PO	PO	PO	PO
314-1749	Page 52	Inactive	906.2	Y	N	PO	PO	PO	PO	PO	PO	PO

Notes: MS4 = Inspected through storm drain inspection and maintenance activities

RMA = residential management area; CIA = common interest area; HOA = home owner’s association; ESA = environmentally sensitive area; L = likely

-RMAs are considered inactive if there is no developed residential land use.

-All RMAs are considered to be tributary to downstream water bodies listed as impaired on the 303(d) list and generating pollutants for which the water body segment is impaired.

¹ Presence of any CIAs, HOAs, and mobile home parks within each RMA are determined during RMA inspections.

² Based on the 2011 Long Term Effectiveness Assessment (County of San Diego).

10 Education and Public Participation

10.1 Introduction

Routine daily activities can potentially contribute pollution to urban runoff and consequently affect the quality of the receiving waters. While some individual activities may not have a significant effect on water quality, collectively these activities may contribute a significant amount of pollutants to receiving waters. Receiving water quality is a concern to all, because not only can water degradation have a negative effect on public health and safety, but it can also negatively affect the aquatic environment, riparian habitat, tourist and beach oriented economies, property values, and the aesthetic value of the area surrounding the water body.

Education is an important step in working toward improving receiving water quality both locally and regionally. By increasing public awareness and encouraging a change in both the attitude and the behavior of the general public and the regulated community, the City of Poway (City) may reduce or eliminate storm water pollution caused by common daily activities.

Public participation also plays an important role in achieving the goals of the City's Jurisdictional Runoff Management Program (JRMP). Involving the general public and school children in the storm water program helps improve storm water awareness among individuals, and may lead to improved water quality. Collaboration between the City and the community may also help foster a sense of shared responsibility in protecting water quality both locally and regionally. The City encourages public participation through the programs discussed in this section. Educational programs and activities are tailored to meet the needs of the following target audiences:

- Municipal departments and personnel
- Construction site operators
- Industrial and commercial facility owners and operators
- Residential community, general public, and school children

The goal of this section is to ensure education and outreach is being conducted to the City's targeted audiences in accordance with the California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit¹ and in accordance with the strategies described in the Water Quality Improvement Plans (WQIPs) for the San Dieguito and Los Peñasquitos Watershed Management

Areas (WMAs). Additionally, this section outlines the strategies, methods, and communication tools the City employs to encourage public participation, awareness, knowledge, and retention of storm water best management practices (BMPs) in an effort to improve overall water quality.

10.2 Municipal Staff Training

The City educates and trains City employees and contractors on applicable storm water regulations to assure that proper storm water management practices are applied to all municipal projects and activities. It is important for all City staff and contractors to be aware of storm water regulations so that their knowledge can be shared with citizens throughout the community. All municipal staff are encouraged to report non-storm water discharges. The City continues to update its educational program to include information regarding plan review practices and current best management practice (BMP) technologies. Educational opportunities include annual training sessions, on the job training, weekly and monthly staff meetings, and citywide emails and newsletters. Municipal personnel are also made aware of any storm water related workshops or additional training seminars that are available. The following sections summarize key municipal staff training and education on storm water-related issues.

10.2.1 Municipal Development Planning and Construction Activities

The City will offer an education program so that planning and development review personnel, construction and maintenance crews, building department, code enforcement, grading review personnel, inspectors, and other responsible construction personnel have an understanding of the following, where appropriate:

- Laws, regulations, permits, and requirements
 - Federal, state, and local water quality laws and regulations applicable to development projects
 - State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ (Construction General Permit)
 - Municipal Permit
 - RWQCB's General National Pollutant Discharge Elimination System (NPDES) Permit for Ground Water Dewatering
 - RWQCB's 401 Water Quality Certification Program
 - Statewide General NPDES Utility Vault Permit

- Requirements of the City's BMP Design Manual including treatment options, Low Impact Development (LID) BMPs, source control, and applicable tracking mechanisms
- General storm water concepts
 - Detecting, reporting, and eliminating illegal connections and illegal discharges (IC/IDs)
 - Short- and long-term water quality impacts associated with urbanization (i.e., land-use decisions, development)
 - Integration of LID BMP requirements into the local regulatory program(s) and requirements
 - Inspection, plan review, and enforcement policies and procedures
 - Distinction between the storm water conveyance system and the sanitary sewer system
- Best management practices
 - BMP types: facility or activity specific, source control, and treatment control
 - Pollution prevention, safe alternatives, and recycling
 - Good housekeeping and proper waste disposal
 - Spill response, containment, and recovery
 - Non-storm water disposal alternatives
 - Non-storm water discharge prohibitions
 - BMP maintenance and implementation
 - Methods of minimizing impacts to receiving water quality resulting from development, including the following:
 - Storm water management plan development and review
 - Methods to control downstream erosion impacts
 - Identification of pollutants of concern
 - LID BMP techniques
 - Source control BMPs
 - Selection of the most effective treatment control BMPs for the pollutants of concern

- Other topics
 - Public reporting mechanisms
 - Water conservation
 - Enforcement procedures

10.2.2 Municipal Industrial/Commercial Activities

The City will provide training for its municipal personnel responsible for conducting storm water compliance inspections and enforcement of industrial and commercial facilities. Training sessions are held as needed. Training and educational programs include the following topics:

- Laws, regulations, permits, and requirements
 - Federal, state, and local water quality laws and regulations applicable to industrial and commercial sites
 - SWRCB Order No. 2014-0057-DWQ (Industrial General Permit)
 - Municipal Permit
- General storm water concepts
 - Inspection, Storm Water Pollution Prevention Plan and monitoring results review, and enforcement policies and procedures
 - Distinction between the storm water conveyance system and the sanitary sewer system
- Best management practices
 - BMP types: facility or activity specific, source control, and treatment control
 - Detecting, reporting, and eliminating IC/IDs
 - Non-storm water discharge prohibitions
 - Pollution prevention, safe alternatives, and recycling
 - Good housekeeping and proper waste disposal
 - Spill response, containment, and recovery
 - Non-storm water disposal alternatives
 - BMP maintenance and implementation
- Other topics
 - Public reporting mechanisms

- Enforcement procedures
- Water conservation

10.2.3 Other Municipal Activities

The City provides training to City departments and contractors that may perform activities within the City where pollutants might be generated, as needed. Training sessions and workshops may cover the following topics, where applicable:

- Laws, regulations, permits, and requirements
- General storm water concepts
- Best management practices
- Other topics

10.3 Educational Outreach

In accordance with Section E.7 of the Municipal Permit and the strategies described in the San Dieguito and the Los Peñasquitos WQIPs, the City provides a comprehensive storm water education program that promotes and encourages behaviors that reduce storm water pollution. The City employs the efforts discussed in this section in an effort to develop sustainable behavior changes in target communities and activities that may contribute watershed pollutants of concern. The general storm water education for all target audiences, including previously mentioned municipal personnel, covers the following topics, where appropriate:

- Laws, regulations, permits, and requirements
 - Federal, state, and local water quality laws and regulations
- General storm water concepts
 - Impacts of urban runoff on receiving waters
 - Distinction between the storm water conveyance system and the sanitary sewer system
 - Non-storm water discharge prohibitions
- Best management practices
 - Detecting, reporting, and eliminating IC/IDs
 - Pollution prevention and safe alternatives
 - Reduction of pollutants associated with pesticides, herbicides, and fertilizers
 - Good housekeeping practices

- Proper waste disposal
- Non-storm water disposal alternatives
- Non-storm water discharge prohibitions
- Methods to reduce the impact of residential and charity car washing
- Other topics
 - Public reporting mechanisms
 - Integrated Pest Management (IPM) techniques
 - Water conservation

10.3.1 Construction Site Operators

Construction site operators can alter the landscape and natural flow of storm water runoff and generally create increased amounts of impervious surface. During such activities, construction site owners, developers, and employees could potentially discharge a number of different types of pollutants to receiving waters. It is important that this sector be educated to ensure that BMPs are incorporated during the site design stage, throughout the construction process, and during the post-construction phase to reduce impacts from construction and development.

Activities that may be a high threat to receiving water quality include:

- Land clearing or alteration, resulting in higher erosion rate
- Exposed soil and material storage stockpiles
- Earthwork, demolition, and generation of dust from construction traffic
- Other pollutants (e.g., waste and materials)

Potential impacts of activities:

- Alteration of impervious area and natural drainage patterns
- Sedimentation of storm water runoff
- Pollutant transport
- Water degradation in receiving waters
- Degradation of aquatic and riparian ecosystems

The City will educate construction site owners and developers through the distribution of factsheets, and by hosting workshops, as needed. Topics included in training sessions and distributed information will include the following, where applicable:

- Laws, regulations, permits, and requirements

- Federal, state, and local water quality laws and regulations
- Construction General Permit
- RWQCB General NPDES Permit for Ground Water Dewatering
- RWQCB 401 Water Quality Certification Program
- General storm water concepts
 - Detecting, reporting, and eliminating IC/IDs
 - Short- and long-term water quality impacts associated with urbanization (e.g. land-use decisions, development, construction)
 - Distinction between the storm water conveyance system and the sanitary sewer system
- Best management practices
 - Pollution prevention, safe alternatives, and recycling
 - Good housekeeping and proper waste disposal
 - Spill response, containment, and recovery
 - Non-storm water disposal alternatives
 - Non-storm water discharge prohibitions
 - BMP maintenance and implementation
 - Proper implementation of erosion and sediment control and other BMPs to minimize the impacts to receiving water quality resulting from construction activities
 - Methods of minimizing impacts to receiving water quality resulting from development and construction, including:
 - Storm water management plan development and review
 - Methods to control downstream erosion impacts
 - Identification of pollutants of concern
 - LID BMP techniques
 - Source control BMPs
 - Selection of the most effective treatment control BMPs for the pollutants of concern
- Other topics

- Public reporting mechanisms
- Water conservation

10.3.2 Industrial Facility Operators

Many activities from industrial owners and operators are considered a high threat to water quality due to the nature of the industry (e.g., manufacturing facilities, oil and gas facilities, hazardous waste treatment facilities, landfills, recycling facilities, transportation facilities, etc.). Pollutants may be generated from day to day operations, and have the potential to enter storm water runoff if business activities are not conducted properly or without the use of BMPs.

The City will provide an educational program for industrial owners and operators through the use of print media and printed materials, which includes the following topics, where appropriate:

- Laws, regulations, permits, and requirements
 - Federal, state, and local water quality laws and regulations
 - Industrial General Permit
 - Short- and long-term water quality impacts associated with urbanization
- General storm water concepts
 - Detecting, reporting, and eliminating IC/IDs
 - Distinction between the storm water conveyance system and the sanitary sewer system
- Best management practices
 - BMP types: facility or activity specific, source control, and treatment control
 - Pollution prevention, safe alternatives, and recycling
 - Good housekeeping and proper waste disposal
 - Spill response, containment, and recovery
 - Non-storm water disposal alternatives
 - Non-storm water discharge prohibitions
 - BMP maintenance and implementation
- Other topics
 - Public reporting mechanisms
 - IPM techniques

- Water conservation

The City may include educational material to industrial businesses upon issuance and/or re-issuance of a business license, distribute educational material during inspections and/or complaint investigations, and may conduct workshops as needed. Municipal storm water personnel keep educational material in their City vehicles and distribute as necessary to industrial facilities.

10.3.3 Commercial Facility Operators

Commercial sites include a wide range of businesses including, but not limited to, restaurants, gas stations, automotive businesses, landscapers, and mobile businesses. Pollutants may be generated from day to day operations, and have the potential to enter storm water runoff if business activities are not conducted properly or without the use of BMPs. The City will continue to provide an educational program for commercial owners and operators through the use of print media and printed materials, which includes the following topics, where appropriate:

- Laws, regulations, permits, and requirements
 - Federal, state, and local water quality laws and regulations
 - Short- and long-term water quality impacts associated with urbanization
- General storm water concepts
 - Detecting, reporting, and eliminating IC/IDs
 - Distinction between the storm water conveyance system and the sanitary sewer system
- Best management practices
 - BMP types: facility or activity specific, source control, and treatment control
 - Pollution prevention, safe alternatives, and recycling
 - Good housekeeping and proper waste disposal
 - Spill response, containment, and recovery
 - Non-storm water disposal alternatives
 - Non-storm water discharge prohibitions
 - BMP maintenance and implementation
- Other topics
 - Public reporting mechanisms

- IPM techniques
- Water conservation

Similar to industrial businesses, the City may include educational material to commercial businesses upon issuance and/or re-issuance of a business license, distribute educational material during inspections and/or complaint investigations, and may conduct workshops as needed. Municipal storm water personnel keep educational material in their City vehicles and distribute as necessary to commercial facilities.

10.3.4 Residential Community, General Public, and School Children

Residential areas make up a large portion of the land use in the City, and therefore even small pollutant discharges can be magnified significantly and have the potential to affect the quality of the receiving waters. Activities such as residential car washing and over-irrigation have the potential to contribute pollutants such as heavy metals, detergents, and nutrients to receiving water bodies. Providing residents with appropriate educational materials may help to increase overall awareness, and encourage residents to change harmful behaviors and subsequently reduce the potential for pollutants to enter the storm water conveyance system and reach receiving water bodies. The following methods will be used to educate and inform residents, general public, and school children about storm water related issues.

The City will educate local residents and the general public so that they have an understanding of the following topics, where appropriate:

- Laws, regulations, permits, and requirements
- General storm water concepts
 - Detecting, reporting, and eliminating IC/IDs
 - Distinction between the storm water conveyance system and the sanitary sewer system
- Best management practices
 - Pollution prevention, safe alternatives, and recycling
 - Good housekeeping and proper waste disposal
 - Spill response, containment, and recovery
 - Non-storm water disposal alternatives
 - Non-storm water discharge prohibitions
 - BMP maintenance and implementation
 - Methods to reduce irrigation runoff of landscapes

- Proper use of fertilizer and pesticides
- Use of drought tolerant plants
- Proper pet waste disposal
- Methods to reduce the impact of residential and charity car-washing
- Other topics
 - Pool dechlorination techniques
 - Proper disposal of household hazardous waste (HHW)
 - Community outreach events and activities
 - Public reporting mechanisms
 - IPM techniques
 - Water conservation

Community Events and Outreach

Community events and outreach, such as flyers, brochures, website postings, advertisements, and other educational materials are an important part of disseminating storm water information. Community events and outreach programs raise awareness of storm water issues that exist in the City and encourage the public to improve local water quality by making a few simple changes to regular routines. The City will provide educational information and training to residents through the following media, where appropriate:

- Educational factsheets which describe storm drain protection measures and BMPs for the specific activity and the types of pollutants that the activity may generate
- Distribution of promotional materials (e.g., door hangers, etc.)
- Booths at public events
- Use of the Enviroscape watershed model, when applicable, and when model is available
- Mass media (through partnerships with other Copermittees or with other organizations)

Additionally, in accordance with the San Dieguito and Los Peñasquitos WQIPs, “I Love a Clean San Diego” will staff street fair booths twice per year and the City will increase the number of trash and recycling bins during high-traffic public events and in public parks.

School Education

Educating the City’s youngest residents is important in two ways: ideally, the good habits/behaviors learned will be carried into adulthood, and secondly, children may educate their families and friends around them with the information they have learned. Children are

impressionable at a young age, and are therefore more likely to act upon the knowledge given to them now and throughout their lives.

The City will educate school children by collaborating with other organizations to offer a variety of education programs for school children. As part of the City's WQIP jurisdictional strategies, fourth graders will be educated through "I Love a Clean San Diego" about eight times per year. Potential storm water-related topics may include the following, where appropriate:

- Water cycle and conservation
- Impact of urbanization
- Difference between the storm water conveyance system and the sanitary sewer system
- Beach postings and closures
- Pollutant types entering receiving waters
- Proper trash disposal and recycling
- Car washing impacts
- General pollution prevention techniques
- Local wetlands, creeks, lakes, and rivers – plants and wildlife

10.3.5 Targeted Education

Targeted communities include audiences or activities the City has determined may require increased educational efforts. The following factors contribute to the determination and evaluation of targeted communities:

1. Gaps in outreach efforts: the City implements a variety of educational efforts through various media; however, there may be certain audiences or activities requiring additional educational outreach. The City will regularly evaluate their education and public participation efforts to identify gaps in education and outreach efforts in order to provide a comprehensive storm water education program.
2. Activities generating pollutants of concern: Some water bodies within the City are on the 2010 Clean Water Act Section 303(d) List of Water Quality Limited Segments for a variety of pollutants. Specifically, bacteria and sediment are high priority pollutants within the City's watersheds, which can be transported through both non-storm water and storm water runoff. Activities and behaviors commonly associated with these pollutants will be targeted by the City educational outreach.
3. Non-storm water discharges: Consistent with the goals of the Municipal Permit, the City will focus on communities and activities that may, or are known to, contribute non-storm water discharges to the City's storm water conveyance system in order to prevent pollutants from being transported downstream. Some categories of non-storm water discharges were previously allowed under the 2007 Municipal Permit. The City will

focus on providing education regarding newly prohibited non-storm water discharges, such as irrigation runoff, to audiences affected by the Municipal Permit changes.

Based on the criteria described above, the City will target the following communities and high-risk activities.

Over-irrigation

The City will develop educational materials and an outreach program that target irrigation runoff. Any reports of over-irrigation to the City are referred to the City's Public Works Department. Information regarding the City's water conservation efforts, including information on rebates for installing "smart landscapes" or "smart irrigation controllers" is included on the City's Water Conservation webpage.

Individual Residential Car Washing

As discussed in Section 3 of this JRMP document, residents are required to implement BMPs while car washing, as feasible, and must minimize the amount of pollutants from entering the City's storm water conveyance system. Incidents of improper car washing are typically identified during residential inspections and during the municipal separate storm sewer system (MS4) outfall monitoring program. The City will target residential areas that continue to be a problem with additional educational materials and any necessary enforcement measures.

10.4 Public Participation Programs

Community involvement plays an important role in achieving the goals of the JRMP. The participation of the general public and school children in implementing storm water programs helps improve storm water awareness among individuals and may lead to improved water quality. Collaboration between the City and the community helps foster a sense of shared responsibility in protecting water quality both locally and regionally. Some programs, such as cleanup events, have direct water quality benefits. When the public has the opportunity to become more involved, there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the City and the watershed. Finally, they provide important feedback to the City regarding the concerns of the public and issues that may be overlooked. The City encourages public participation through the programs discussed in this section.

Cleanup Events

The public is encouraged to participate in organized creek and waterway cleanups such as the annual Creek to Bay Cleanup. Typically, such events are designed to remove trash and debris that may otherwise contaminate receiving waters. Cleanups may be organized by the City or other interested parties such as high schools, volunteer groups, or other outside agencies. The City also encourages individuals to participate in the Adopt-A-Park and Adopt-A-Trail

programs, for which large numbers of volunteers regularly pick up trash and debris in the City's parks, trails, and open spaces. The City also hosts an Annual Fall Self-Haul Clean-up and an Annual Spring Self-Haul Cleanup to prevent illegal dumping that may pollute receiving waters.

Public Reporting

The City encourages citizens to report any observed IC/IDs or any other activity that contributes pollutants to the City's storm water conveyance system to the City's Storm Water Hotline by phone at (858) 668-4700 or via the City's website (poway.org). The City advertises the Storm Water Hotline and regional hotline numbers on various educational materials targeted at residents and businesses; the regional storm water hotlines are (888) 846-0800 and (888) 844-6525. The County of San Diego staffs both of these hotlines Monday through Friday, 8:00 a.m. - 5:00 p.m and are available to the public 24 hours a day.

Household Hazardous Waste Collection and Used Oil Recycling

Residents are required to dispose of HHW and used oil properly. Residents may dispose of HHW and used oil at the Poway HHW Collection Facility at 12325 Crosthwaite Circle. Used oil may also be disposed of at a number of certified used oil collection centers in the City. Information about HHW and used oil disposal can be found on the City's website (poway.org) or through www.earth911.com. Additionally, the City may collaborate with outside agencies to promote used oil recycling through special collection events and educational outreach.

Materials accepted at the City's HHW Collection Facility include:

- Household cleaning products (e.g., aerosols, drain openers, oven cleaners, wood and metal polish)
- Automotive products (e.g., gasoline, antifreeze, oil and fuel additives, air conditioning refrigerants, cleaners, car batteries)
- Home maintenance and improvement products (e.g., solvents, paint thinners, lighter fluids, adhesives, latex (water-based) and oil-based paints, stains, sealants)
- Lawn and garden products
- Home-generated sharps
- Fluorescent light bulbs and other mercury-containing lamps
- Electronic devices
- Residential cooking oil
- Miscellaneous (e.g., household batteries, pool chemicals, thermostats, propane canisters)

Education programs are often focused on informing the public of waste collection facilities and used oil recycling centers. HHW events may be advertised in the City's newsletter, *Poway Today*, the local paper, the *Poway News-Chieftain*, or posted on the City's website.

Workshops

The City encourages public participation in any City hosted or regionally hosted storm water-related workshops. During City hosted workshops, City personnel encourage attendees to actively participate in the workshops by providing feedback and recommendations, voicing concerns, and asking questions.

Public participation in the updating, development, and implementation of the JRMP

Once the JRMP document is adopted, the City will encourage public participation in the implementation and any future updates to the JRMP by encouraging the public to provide comments. To promote participation, the City will notify the public of opportunities to provide recommendations on and to participate in updating the City's highest priority water quality conditions, numeric goals, and water quality improvement strategies and their effectiveness set forth in the WQIPs.

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11 Fiscal Analysis

11.1 Introduction

California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001, (Municipal Permit) requires the City of Poway (City) to secure the resources necessary to implement its Jurisdictional Runoff Management Program (JRMP). This includes the actions the City has committed to in the Water Quality Improvement Plans (WQIP) for the Los Peñasquitos and San Dieguito Watershed Management Areas (WMAs). Those actions, referred to as “strategies” in the WQIPs, are summarized in Appendix A of this document.

The City is also responsible for reporting a storm water program fiscal analysis, including information about expenditures and funding sources, to the RWQCB each year. To satisfy this requirement, each department or division involved in the storm water program compiles financial information and provides it to the storm water staff within the Development Services Department, which analyzes the fiscal information and reports the findings to the RWQCB.

11.2 Municipal Permit Compliance Funding Needs and Sources

Each budget cycle estimated costs for implementing the storm water program are prepared as part of the budget process. The specific amounts allocated and their corresponding funding sources are set in each year’s final adopted budget.

11.2.1 Funding Needs

The storm water program funding needs are primarily driven by the following regulations:

- The Municipal Permit, including the JRMP requirements of Section E and the WQIP requirements of Section B.
- The bacteria total maximum daily load (TMDL) for the San Dieguito River which is incorporated into the Municipal Permit and which the San Dieguito WQIP has been prepared to address.
- The sediment TMDL for the Los Peñasquitos Lagoon which is incorporated into the Municipal Permit and which the Los Peñasquitos WQIP has been prepared to address.

The activities necessary to comply with these regulations are described in the JRMP. Examples of these activities include street sweeping, storm drain cleaning, maintaining structural treatment devices, water quality monitoring, and inspecting construction sites and businesses to

verify they are implementing appropriate measures to protect water quality. The City's WQIP jurisdictional strategies are listed in Appendix A.

11.2.2 Funding Sources

Through the budgeting process the City identifies sources of funding to comply with storm water requirements. Specific funding sources are set during each budget process and are subject to change over time. The main sources of funding in the past, which are also anticipated to be the main funding sources in future years, are discussed below.

Regional programs include Copermittee shared costs for monitoring, education, and other regional expenses, as well as City staff time to participate in regional meetings. Watershed costs include meeting participation and the City's portion of watershed cost shares.

The City anticipates primarily using funds from the General Fund, with supplemental funding from developer deposits and fees and registration and inspection fees for funding its JRMP. Developer fees are contingent on the number of development projects in the City and the fees are only used for reviews and similar services provided for those development projects. The City collects a storm water surcharge on all water users which has been in effect since July 2002. The City has planned for additional funding to be devoted to WQIP costs. It is anticipated that this additional funding will come from the General Fund.

11.3 Fiscal Analysis Reporting

As part of the required annual reporting process each year, the City will prepare a summary of expenditures from the reporting period and a list of funding sources for both the current and upcoming fiscal years. The list of funding sources will identify legal restrictions that apply to proposed funding sources where applicable.

Information necessary to complete the fiscal analysis each year will be collected from each responsible department or division. In accordance with Municipal Permit Section E.8 (Fiscal Analysis), the City will report storm water expenditures for capital projects, operation and maintenance, and staffing. Staffing and operation and maintenance costs mainly relate to day to day program activities, such as storm drain cleaning, reviewing plan submittals for development projects, and enforcing compliance with the storm water requirements in the Municipal Code. Capital project expenditures commonly include the cost of installing Low Impact Development features or other structural water treatment devices.

To allow sufficient time to complete the annual report, each department or division will summarize its storm water program activities and expenses in an internal reporting form and submit it to the storm water group by the City's established internal data collection deadline.

This internal deadline will be determined by storm water staff each year upon commencement of JRMP annual reporting coordination.

The City will report its fiscal analysis information in its JRMP annual reports until the RWQCB approves the WQIPs. The deadline for JRMP annual report submittal during the transitional period is October 31 following the end of the fiscal year. For example, FY 2015 ends on July 1, 2015, and the FY 2015 JRMP annual report is due to the RWQCB on October 31, 2015. After the WQIPs are approved, the JRMP annual report forms (included in Appendix G) and fiscal analysis data will not be provided directly to the RWQCB on their own. Instead, they will be included as part of the WQIP annual reports. The City's fiscal analysis data will be included in the WQIP annual report for each of the two WQIPs to which the City is a party. The WQIP annual reports for each reporting period are due January 31 of the following year. For example, the FY 2018 WQIP annual reports will be due on January 31, 2019. It is anticipated that the WQIPs will be approved during FY 2016 and that the first WQIP annual reports will be due in January 2017.

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12 Reporting

12.1 JRMP Annual Reports

Section F.3.b.(1) of the California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. 2015-0001 (Municipal Permit) requires that the City of Poway (City) documents compliance with the Municipal Permit through annual reporting which assists with communicating to the RWQCB and to the public the implementation status of the City's Jurisdictional Runoff Management Program (JRMP). At the end of each reporting period (i.e., July 1 to June 30), the City will submit a JRMP annual report form to the RWQCB by October 31 of each year for each respective Watershed Management Area (WMA) in which the City is part of. The annual report form, included as Appendix G of this document, requires the City to report the information discussed within this section.

During the period before the Water Quality Improvement Plans (WQIP) for the San Dieguito and Los Peñasquitos WMAs are approved, referred to as the "transitional period" in the Municipal Permit, the City will submit its JRMP annual reports directly to the RWQCB. Once the WQIPs are approved, JRMP annual reports will be submitted to the RWQCB through the WQIP annual reporting process. It is anticipated that the WQIPs will be approved during the 2015-2016 fiscal year and that the first WQIP annual reports will be due in January 2017.

The JRMP and annual reporting process involves a range of staff from different departments, such as Public Works and Development Services, who are responsible for implementing and collecting data for their storm water program component. Although storm water staff facilitate and monitor the overall program throughout the year, they rely on several key departments and divisions to achieve compliance and accurately document it for the annual report. Discussion for each of the subsections that follow is in order of sections on the JRMP annual report form.

12.1.1 Legal Authority

In each annual report the City must confirm that adequate legal authority has been established and is being maintained within its jurisdiction to control pollutant discharges into and from its storm water conveyance system. As part of the first WQIP annual report, the City will submit a formal certification of legal authority, as required by Municipal Permit Section E.1.b. That certification statement must be signed by a Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative.

12.1.2 JRMP Document Update

It will be reported in the JRMP annual report if any updates to the JRMP document were required or recommended by the RWQCB during the reporting period. The City must confirm that the JRMP document was in fact updated accordingly and made available, within the reporting period, on the Regional Clearinghouse, a website used for the collection and distribution of information developed and maintained by the Copermittees. If an update was required or recommended, and was not made available on the Regional Clearinghouse within the reporting period, the City will attach a schedule for the completion of the update and/or posting of the updated document on the Regional Clearinghouse with the JRMP annual report.

12.1.3 Illegal Discharge Detection and Elimination Program

The total number of non-storm water discharges and that were reported by the public, detected by the City or contract staff, investigated, and/or eliminated in each of the City's WMAs within the reporting period will be recorded on the annual report form. Additionally, the total number of identified sources of non-storm water discharges and illegal discharges, the number of illegal connections and illegal discharges identified and/or eliminated, and the number of associated enforcement and escalated enforcement actions taken will be reported.

All non-storm water discharges are considered illegal discharges unless the source is identified as one of the categories of non-storm water discharges discussed in Section 3 of this document. If a non-storm water discharge is identified but not included in one of the categories of non-storm water discharges listed in Section 3, then the discharge is both a non-storm water discharge and an illegal discharge.

12.1.4 Development Planning Program

The City is also required to report in the annual report whether or not an update to its Best Management Practice (BMP) Design Manual was required or recommended by the RWQCB during the reporting period. If an update was required or recommended, the City must confirm whether or not the update was completed and made available on the Regional Clearinghouse within the reporting period. If no update was required or recommended, an answer is not required. If the required or recommended update was not completed and/or made available on the Regional Clearinghouse, the City must attach a schedule for the completion of the update and/or posting of the updated document on the Regional Clearinghouse.

In addition, several items related to the program shall be reported, such as, for the development and redevelopment projects that are reviewed, the total number projects submitted for review during the reporting period must be reported. Of these projects, the number that are Priority Development Projects (Priority Projects), as defined under Section E.3.b.(1) of the Municipal Permit, and the number of Priority Projects that were approved and/or granted occupancy

during the reporting year, regardless of when the project was originally submitted for review. Any projects that were approved during the fiscal year and granted any exemptions from the BMP Design Manual requirements and/or allowed to implement alternative compliance options in accordance with Municipal Permit Section E.3.c.(3) must also be reported.

A count of completed Priority Projects in the City's inventory, high priority Priority Project structural BMP inspections, Priority Project structural BMP violations, and associated enforcement and escalated enforcement actions, shall also be included in the City's JRMP annual report form.

12.1.5 Construction Management Program

The number of construction sites in the City's inventory, active and inactive sites in inventory, construction sites closed/completed during the reporting period, construction site inspections and violations, and the number of enforcement and escalated enforcement actions issued are reported on the annual report form.

12.1.6 Existing Development Program

The City must also report on several items related to its oversight in areas of existing development within its jurisdiction. The information that must be separated into four categories of existing development: municipal, commercial, industrial, and residential. For each category, totals will be included for the number of facilities or areas in inventory, routine and follow-up inspections, violations, and enforcement and escalated enforcement actions.

12.1.7 Fiscal Analysis and Supplemental Data

Each year the City prepares a fiscal analysis summary, as described in Section 11, and submits it along with the JRMP annual report form. Once the WQIP annual reporting process begins, additional supplemental descriptions of the City's progress in implementing WQIP strategies will also likely need to be prepared and submitted.

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13 Conclusions and Recommendations

Based on experience gained through implementing programs as required by California Regional Water Quality Control Board, San Diego Region Order No. R9-2007-0001, the City of Poway (City) has updated its Jurisdictional Runoff Management Program (JRMP) to both improve upon storm water programs in the City and to meet the requirements of RWQCB Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit). Under the new Municipal Permit, the City has also developed a number of new programs. The City anticipates assessing and refining these new programs as well as continuing to assess and improve existing ones so that the City's program is implemented to the maximum extent practicable. Continually working to improve existing programs and implementing additional programs may be effective in reducing or eliminating pollutant runoff from the variety of areas and activities discussed throughout the JRMP document. The City will continue to work with the other Municipal Permit Copermittees to develop methods to foster and assess long-term success in regional water quality improvement.

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14 References

- California Regional Water Quality Control Board, San Diego Region, 1994. *Water Quality Control Plan for the San Diego Basin*. Originally published in 1994, with amendments on or before through April 4, 2011.
- California Regional Water Quality Control Board, San Diego Region, 2007. Order No. R9-2007-0001; NPDES No. CAS0108758. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority*.
- California Regional Water Quality Control Board, San Diego Region, 2013. Order No. R9-2013-0001, as amended by Order No. R9-2015-0001; 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 Region*.
- California Stormwater Quality Association, 2009. *California Storm Water BMP Handbook – Construction*.
- California Stormwater Quality Association, 2014. *California Storm Water BMP Handbook – Industrial & Commercial*.
- California Stormwater Quality Association, 2003. *California Storm Water BMP Handbook – Municipal*.
- City of Poway, *Poway Comprehensive Plan Volume One - The General Plan 1991*. Originally published in 1991, with amendments effective through May 21, 2013.
- County of San Diego, *Long-Term Effectiveness Assessment San Diego Stormwater Copermittees Urban Runoff Management Programs Final Report*, June 2011. Submitted on behalf of the Copermittees of RWQCB Order No. R9-2007-0001.
- State Water Resources Control Board, 2009. Water Quality Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ; NPDES Order No. CAS000002. *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*.
- State Water Resources Control Board, 2014. Water Quality Order No. 2014-0057-DWQ; NPDES Order No. CAS000001. *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities*.

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Appendix A

Water Quality Improvement Plan Jurisdictional Strategies

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City of Poway
Water Quality Improvement Plan Jurisdictional Strategies

LP	LP ID	SDG	SDG ID	Strategy	Implementation Approach/Level of Effort	Location	Implementation or Construction Year	JRMP Section
Jurisdictional Strategies								
Development Planning								
All Development Projects								
Yes	PW-1	Yes	PW-1	For all development projects, administer a program to ensure implementation of source control BMPs to minimize pollutant generation at each project and implement LID BMPs to maintain or restore hydrology of the area, where applicable and feasible.	Refer to JRMP.	City-wide	FY16	4
Priority Development Projects (PDPs)								
Yes	PW-2	Yes	PW-2	For PDPs, administer a program requiring implementation of on-site structural BMPs to control pollutants and manage hydromodification. Includes confirmation of design, construction, and maintenance of PDP structural BMPs.	Refer to JRMP.	City-wide	FY16	4
Yes	PW-3	Yes	PW-3	Update BMP Design Manual procedures to determine nature and extent of storm water requirements applicable to development projects and to identify conditions of concern for selecting, designing, and maintaining appropriate structural BMPs.	Refer to JRMP.	City-wide	FY16	4
Yes	PW-3.1	Yes	PW-3.1	Amend BMP Design Manual for trash areas. Require full four-sided enclosure, siting away from storm drains and cover.	Implemented through the Minor Development Review process and the plan check process.	City-wide	FY16	4
Yes	PW-4	Yes	PW-4	Administer an alternative compliance program to on-site structural BMP implementation (includes identifying Watershed Management Area Analysis [WMAA] candidate projects). Refer to Section 4.2.5. and Appendix M (SDG), N (LP) for further details.	Refer to JRMP.	City-wide	FY16	4
Construction Management								
Yes	PW-5	Yes	PW-5	Administer a program to oversee implementation of BMPs during the construction phase of land development. Includes inspections at an appropriate frequency and enforcement of requirements.	Refer to JRMP; Perform daily inspections during construction.	City-wide	FY16	5
Existing Development								
Commercial, Industrial, Municipal, and Residential Facilities and Areas								
Yes	PW-6	Yes	PW-6	Administer a program to require implementation of minimum BMPs for existing development (commercial, industrial, municipal, and residential) that are specific to the facility, area types, and PGAs, as appropriate. Includes inspection of existing development at appropriate frequencies and using appropriate methods.	Refer to JRMP; Commercial/industrial/municipal are inspected annually, with municipal receiving more frequent inspections by staff.	City-wide	FY16	6, 7, 8, 9, BMP Manual (Appendix B)
Yes	PW-6.1	Yes	PW-6.1	Review policies and procedures to ensure discharges from swimming pools meet permit requirements.	Annually review policies and procedures.	City-wide	Prior to FY16	3
Yes	PW-6.2	Yes	PW-6.2	Track stationary and mobile businesses through communication with Business Licensing Division.	Maintain through the City's Commercial/Industrial program.	City-wide	FY16	6
Yes	PW-7	Yes	PW-7	Promote and encourage implementation of designated BMPs with all new construction.		City-wide	FY16	4, 5
Yes	PW-7.1	Yes	PW-7.1	Promote MWD and other groups to encourage implementation of water conservation programs that improve water quality by reducing over-irrigation with smart products or turf replacement and capturing rain water in residential areas.	Collaborate with MWD to promote their SoCal WaterSmart rebates and products such as weather based irrigation controllers, rotating sprinkler nozzles, soil moisture sensor system, rain barrels, and turf removal. Collaborate with San Diego County Water Authority (SDCWA) to promote their Water Smart irrigation system checkups and turf replacement incentives.	City-wide	FY16	9, 10
Yes	PW-8	Yes	PW-8	Promote and encourage implementation of designated BMPs in commercial areas.	Collaborate with MWD and promote their SoCal WaterSmart rebates and products such as weather based irrigation controllers, rotating sprinkler nozzles, soil moisture sensor system, rain barrels, and turf removal.	City-wide	FY16	6, 10

City of Poway
Water Quality Improvement Plan Jurisdictional Strategies

LP	LP ID	SDG	SDG ID	Strategy	Implementation Approach/Level of Effort	Location	Implementation or Construction Year	JRMP Section
Yes	PW-9	Yes	PW-9	Implement program to investigate illegal grading on private property.	Program to investigate reports of illegal grading. Maintain records of reported illegal gradings and immediately investigate. If activity violates grading or stormwater regulation, issued a "Stop Work" notice and must obtain grading permit and correct stormwater violations. Reports are tracked in "Trackit" software as a code violation and bi-monthly meetings to discuss the status of reports. Grading cases are subject to a strict timeline of action, and enforcement is upped until either compliance, or a Notice of Violation is filed against the property. If it is a stormwater issue, the City's on-call stormwater contractor corrects the issue and City liens the property for payment.	City-wide	FY16	5, Enforcement Response Plan (Appendix D)
MS4 Infrastructure								
Yes	PW-10	Yes	PW-11	Implementation of operation and maintenance activities (inspection and cleaning) for MS4 and related structures (catch basins, storm drain inlets, detention basins, etc.).	Refer to JRMP.	City-wide	FY16	8
Yes	PW-10.1	Yes	PW-11.1	Perform catch basin cleaning.	Inspect and clean catch basins annually.	City-wide	FY16	8
Yes	PW-10.2	Yes	PW-11.2	Clean open-channels and repair scour ponds to reduce pollutant loads and invasive plants and animals.	Inspect and clean open channels and scour ponds.	City-wide	FY16	8
Yes	PW-10.3	Yes	PW-11.3	Proactively repair and replace corrugated metal pipe (CMP) MS4 components to provide source control from MS4 infrastructure.	Implement CMP replacement program with an emphasis on pipes in open canyons.	City-wide	FY16	8
Yes	PW-11	Yes	PW-12	Implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers and identify sewer leaks and areas for sewer pipe replacement.	Program implemented through sewer maintenance and inspection program.	City-wide	FY16	8
Roads, Street, and Parking Lots								
Yes	PW-12	Yes	PW-13	Implement operation and maintenance activities for public streets, unpaved roads, paved roads, and paved highways.	Refer to JRMP; The City of Poway is divided into 7 zones for road operation and maintenance activities; rotational cycle: one zone inspected each year	City-wide	FY16	8
Yes	PW-12.1	Yes	PW-13.1	Implement street sweeping.	Refer to JRMP; all areas swept twice per month.	City-wide	FY16	8
Yes	PW-12.2	Yes	PW-13.2	Increase maintenance on access roads by proactively monitoring for erosion and completing minor repair and slope stabilization.		City-wide	FY16	8
Yes	PW-12.3	Yes	PW-13.3	Increase maintenance on access trails by proactively monitoring for erosion and completing minor repair and slope stabilization.		City-wide	FY16	8
Yes	PW-13	No	N/A	Enhance street sweeping through route optimization (sweep all routes twice per month).		Los Peñasquitos Creek Subwatershed	FY18	8
Pesticide, Herbicides, and Fertilizer BMP Program								
Yes	PW-14	Yes	PW-14	Require implementation of BMPs to address application, storage, and disposal of pesticides, herbicides, and fertilizers on commercial, industrial, and municipal properties. Includes education, permits, and certifications.	Refer to JRMP.	City-wide	FY16	6, 7, 8, 9, 10, BMP Manual (Appendix B)
Retrofit and Rehabilitation in Areas of Existing Development								
Yes	PW-15	Yes	PW-15	Develop and implement a strategy to identify candidate areas of existing development appropriate for retrofitting projects and facilitate the implementation of such projects.		City-wide	TBD	Retrofit & Rehabilitation Program (Appendix E)
Yes	PW-16	Yes	PW-16	Develop and implement a strategy to identify candidate areas of existing development for stream, channel, or habitat rehabilitation projects and facilitate implementation of such projects.		City-wide	TBD	Retrofit & Rehabilitation Program (Appendix E)

City of Poway
Water Quality Improvement Plan Jurisdictional Strategies

LP	LP ID	SDG	SDG ID	Strategy	Implementation Approach/Level of Effort	Location	Implementation or Construction Year	JRMP Section
Illicit Discharge, Detection, and Elimination (IDDE) Program								
Yes	PW-17	Yes	PW-17	Implement Illicit Discharge, Detection, and Elimination (IDDE) Program per the JRMP. Requirements include: maintaining an MS4 map, using municipal personnel and contractors to identify and report illicit discharges, maintaining a hotline for public reporting of illicit discharges, monitoring MS4 outfalls, and investigating and addressing any illicit discharges.	Refer to JRMP.	City-wide	FY16	3
Public Education and Participation								
Yes	PW-18	Yes	PW-18	Implement a public education and participation program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences.	Refer to JRMP.	City-wide	FY16	10
Yes	PW-18.1	Yes	PW-18.1	Target school-based education and outreach.	Through "I Love a Clean San Diego," give school presentations to fourth-graders eight times per year.	City-wide	FY16	10
Yes	PW-18.2	Yes	PW-18.2	Conduct education through community-based organizations.	Through "I Love a Clean San Diego," staff street fair booths twice per year.	City-wide	FY16	10
Yes	PW-18.3	Yes	PW-18.3	Review City storm water website and identify and implement required updates to reflect WQIP and JRMP revisions.	Review City storm water website, identify and implement required updates to reflect WQIP and JRMP revisions.	City-wide	Prior to FY16	10
Yes	PW-18.4	Yes	PW-18.4	Target human behavior in parks and other public areas including trash reduction or other high impact behavior to habitat, wildlife, and water quality.	Implement trash reduction programs by increasing the number of trash and recycling bins during high-traffic public events and in public parks.	City-wide	FY16	10
Yes	PW-18.5	Yes	PW-18.5	Collaborate with regional education and outreach efforts.	Participate in Regional Think Blue campaign and collaborate with other regional efforts to provide consistent message or efficiency in training for targeted audiences.	City-wide	FY16	10
Enforcement Response Plan								
Yes	PW-19	Yes	PW-19	Implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Enforcement Response Plan.	Refer to JRMP.	City-wide	FY16	Enforcement Response Plan (Appendix D)
Green Infrastructure								
Yes	PW-22	No	N/A	0.26 ac have been identified as potential opportunities for green infrastructure implementation on public parcels.	Construction, operation, and maintenance of 0.26 ac of bioretention and permeable pavement.	Los Peñasquitos Creek Subwatershed	FY22	Retrofit & Rehabilitation Program (Appendix E)
Green Streets								
Yes	PW-23	No	N/A	32.42 acres of permeable pavement and 32.47 acres of bioretention have been identified as potential opportunities for green street projects.	Construction, operation and maintenance of 32.42 acres of permeable pavement and 32.47 acres of bioretention for green streets.	Los Peñasquitos Creek Subwatershed	FY22	Retrofit & Rehabilitation Program (Appendix E)
Multiuse Treatment Areas								
Infiltration and Detention Basins								
Yes	PW-24	No	N/A	Community Detention Basin	Community Detention Basin is already in place.	Community Rd	In place	Retrofit & Rehabilitation Program (Appendix E)
Yes	PW-25	No	N/A	Gate Detention Basin	Gate Detention Basin is already in place.	Gate Dr.	In place	Retrofit & Rehabilitation Program (Appendix E)
Yes	PW-26	No	N/A	Kirkham Detention Basin	Kirkham Detention Basin is already in place.	Kirkham Way	In place	Retrofit & Rehabilitation Program (Appendix E)

City of Poway
Water Quality Improvement Plan Jurisdictional Strategies

LP	LP ID	SDG	SDG ID	Strategy	Implementation Approach/Level of Effort	Location	Implementation or Construction Year	JRMP Section
Yes	PW-27	No	N/A	Stotler Detention Basin	Stotler Detention Basin is already in place.	Stotler Ct	In place	Retrofit & Rehabilitation Program (Appendix E)
Yes	PW-28	No	N/A	Stowe Detention Basin	Stowe Detention Basin is already in place.	Stowe Dr	In place	Retrofit & Rehabilitation Program (Appendix E)
Yes	PW-29	No	N/A	If interim load reduction goals are not met and additional multiuse treatment areas are required, a constructed wetland system can be implemented in the open space adjacent to Carriage Road.	Construction, operation and maintenance of a Constructed Wetland System that would treat approximately 9567 acres of drainage area on 1.7 acres of available space (APN 3175012400).	Open space adjacent to Carriage Rd	FY22	Retrofit & Rehabilitation Program (Appendix E)
Yes	PW-30	No	N/A	If interim load reduction goals are not met and additional multiuse treatment areas are required, a dry extended detention basin can be implemented in Hilleary Park.	Construction, operation and maintenance of a Dry Extended Detention Basin that would treat approximately 138 acres of drainage area on 1.6 acres of available space (APN 3171020700).	Hilleary Park	FY22	Retrofit & Rehabilitation Program (Appendix E)
Additional Watershed Opportunities								
Yes	PW-31	No	N/A	Through adaptive management and additional analysis in the future, the City will identify and implement one or more of the following opportunities to meet numeric goals: 1) new strategies not yet identified, 2) implement 28.8 acres with a total storage volume of 57.7 ac-ft. of multiuse treatment area projects on private parcels and/or through public-private partnerships, 3) MS4 outfall repair and relocation, 4) slope stabilization, 5) stream restoration, or 6) increased implementation of nonstructural or/and green infrastructure BMPs.	Through adaptive management and additional analysis in the future, the City will identify and implement one or more of the following opportunities to meet numeric goals: 1) new strategies not yet identified, 2) implement 28.8 acres with a total storage volume of 57.7 ac-ft. of multiuse treatment area projects on private parcels and/or through public-private partnerships, 3) MS4 outfall repair and relocation, 4) slope stabilization, 5) stream restoration, or 6) increased implementation of nonstructural or/and green infrastructure BMPs.	Los Peñasquitos Creek Subwatershed	FY26, FY33	Retrofit & Rehabilitation Program (Appendix E)
Stream, Channel, and Habitat Rehabilitation Projects								
Yes	PW-33	No	N/A	Rattlesnake Creek Project (stabilization of ephemeral tributary segment to Rattlesnake Creek)	This project involves the stabilization of a section of an ephemeral tributary to Rattlesnake Creek, which is located west of Midland Road, between Kentfield Drive and Norwalk Street. The project will involve grading in order to widen the channel bottom and contour the banks. It will include installation of rip rap, turf reinforcement matting, concrete pillow blocks, and a headwall, landscape removal and replacement, temporary BMPs, a temporary diversion system, and temporary irrigation.	West of Midland Rd, between Kentfield Dr and Norwalk St	2016 (estimated)	Retrofit & Rehabilitation Program (Appendix E)

Appendix B

Best Management Practice (BMP) Manual

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City of Poway
Best Management Practice Manual

June 2015



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1 Introduction

1.1 BMP Manual

This Best Management Practice (BMP) Manual (hereafter, “Manual”) supports the City of Poway’s (City) Stormwater Management and Discharge Control Program Ordinance (Storm Water Ordinance), codified as Poway Municipal Code (PMC) Chapter 13.09. The Manual also supports as the water quality protection provisions of PMC Chapters 16.40-56 and 16.100-105. Moreover, the Manual is not a stand-alone document but must be read with applicable parts of the aforementioned chapters of the PMC (collectively, “Ordinances”). In general, this Manual categorically and explicitly establishes what dischargers must do to comply with the Ordinances and to receive permits for projects and activities that are subject to them. The Manual and the Ordinances have been prepared to provide the City with the respective legal authority and administrative actions necessary to comply with the requirements of California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit).

1.2 Purposes and Use

The Manual establishes minimum storm water management requirements and controls to address the highest priority water quality conditions (HPWQCs) in the Water Quality Improvement Plans (WQIPs) for the San Dieguito and Los Peñasquitos Watershed Management Areas (WMAs). Further, the Manual supports the following objectives stated in Section 13.09.020 of the Storm Water Ordinance:

- A. To establish requirements for discharges into the stormwater conveyance system, receiving waters, and the environment;
- B. To protect, to the maximum extent practicable, life, property, receiving waters, aquatic life, and the environment from loss, injury, degradation, or damage by discharges from within the City’s jurisdiction;
- C. To protect the stormwater conveyance system from damage; and
- D. To meet the requirements of state and federal law and the [Municipal] Permit

In both the San Dieguito and Los Peñasquitos WMAs, bacteria has been identified as the highest priority water quality condition. During dry weather conditions, non-storm water flows transport bacteria and other pollutants. For this reason, the City has minimum requirements to effectively prohibit non-storm water discharges and will implement activities to reduce them. Because sediment transports bacteria, the City has also designed program activities to reduce discharges of sediment, primarily during wet weather conditions. Additionally, sediment has been identified as a HPWQC for the Los Peñasquitos WMA. Efforts to reduce sediment

discharges are intended to reduce bacteria levels in storm water discharges in both WMAs, and sediment levels in the Los Peñasquitos WMA. These efforts are anticipated to reduce sediment loading in nearby receiving waters.

The requirements described in the Manual are primarily in the form of BMPs to be used to reduce the amount of pollutants discharged to the City's storm water conveyance system. The Manual is intended to provide direction to residents, businesses, contractors, developers, and City staff about what is necessary to meet the City's storm water requirements. All terms used in the Manual have the same meaning as defined in PMC Chapter 13.09, unless otherwise noted.

2 Other Potentially Applicable Regulations

The Manual describes storm water BMPs required by the City of Poway. Some actions and activities associated with storm water BMP requirements may be subject to additional requirements or approvals, such as other City departments or non-municipal agencies. Other agencies, such as the RWQCB, the US Army Corps of Engineers, and the County of San Diego Department of Environmental Health, may also have applicable requirements. Complying with the BMPs described in the Manual does not ensure compliance with all other regulatory requirements, including requirements of other agencies. Dischargers are responsible for determining what other requirements may apply, if any, and taking actions as necessary to comply with them.

Discharges to the sanitary sewer system may require approval from the City's Public Works Department. Call (858) 668-4700 for more information. Structural improvements to properties, such as building an overhead canopy, may require City permits. Contact Development Services Department's Building Services Division at (858) 668-4645 for more information.

The RWQCB and State Water Resources Control Board (SWRCB) issue permits and conditional waivers for a number of activities that have potential to impact storm water discharges. Consideration may be given to the following permits and waivers:

- State of California Industrial General Permit, SWRCB Order No. 2014-0057-DWQ
- State of California Construction General Permit, SWRCB Order No. 2009-0009-DWQ
- Groundwater Dewatering Permit, RWQCB Order No. R9-2010-003¹
- Permit for Discharges of Hydrostatic Test Water or Potable Water, RWQCB Order No. R9-2010-003

¹ This order is expected to be replaced by a new order in 2015. The most recent version is Tentative Order No. R9-2015-0013. The RWQCB's proposed schedule would result in the new order going into effect on October 1, 2015.

- Utility Vault Dewatering Permit, SWRCB Order No. 2014-0174-DWQ
- Conditional Waiver No. 1, Discharges from On-site Disposal Systems
- Conditional Waiver No. 2, “Low Threat” Discharges to Land
- Conditional Waiver No. 3, Discharges from Animal Operations
- Conditional Waiver No. 4, Discharges from Agricultural and Nursery Operations
- Conditional Waiver No. 5, Discharges from Silvicultural Operations
- Conditional Waiver No. 6, Discharges of Dredged or Fill Materials Nearby or Within Surface Waters
- Conditional Waiver No. 7, Discharges of Solid Wastes to Land
- Conditional Waiver No. 8, Discharges of Solid Wastes to Land
- Conditional Waiver No. 9, Discharges of Slurries to Land
- Conditional Waiver No. 10, Discharges of Emergency/Disaster Related Wastes
- Conditional Waiver No. 11, Aerially Discharged Wastes Over Land

Information on the most current requirements for RWQCB and SWRCB permitting and waivers can be obtained from the following website: <http://www.waterboards.ca.gov/sandiego/>

3 Minimum BMP Requirements

This section presents minimum BMP requirements for the following land uses, activities, and projects within the City:

- Industrial, commercial, and municipal facilities or areas
- Residential areas
- Construction sites
- Development projects (post-construction BMPs)

These are the minimum BMP requirements that must be implemented for applicable activities. However, additional consideration should be given to the following:

- Due to site-specific conditions, some BMP requirements reference terms such as “where applicable” or “where feasible.” These terms require that BMPs be implemented at the discretion and with the final determination made by City personnel or their designees (i.e., contract staff). City staff or their designees also have the authority to require additional BMPs, if necessary, to comply with the Storm Water Ordinance and/or the Municipal Permit.

- References to “CASQA Factsheets” refer to factsheets in manuals prepared by the California Stormwater Quality Association (CASQA). CASQA materials can be accessed at www.casqa.org. Some materials may not be viewable without a paid subscription.

3.1 Industrial, Commercial, and Municipal

Minimum BMP requirements for industrial, commercial, and municipal sites and activities are provided in Table 1. These BMPs have been developed, and are supported by, factsheets adopted by the CASQA². City exceptions to the procedures described in the CASQA factsheets are identified in footnotes. Where any conflict may exist between CASQA factsheets and requirements in the Manual or the PMC, the requirements of the Manual and the PMC shall prevail. Complying with the BMPs described in the Manual does not ensure compliance with all other regulatory requirements, including requirements of other agencies. See Section 2 for more information about other potentially applicable requirements.

² CASQA (2015). *Stormwater Best Management Practice Portal: Industrial and Commercial*. www.casqa.org.

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
<p>These best management practices (BMPs) are applicable to all industrial, commercial, and municipal facilities and activities. The BMPs listed in this table are the minimum required BMPs; however, additional tools and education may be necessary to facilitate BMP implementation onsite. Additional BMPs may include 1) developing a written BMP plan, 2) conducting regular training on BMP implementation, and 3) stenciling storm drains. A BMP plan is a site-specific or mobile activity-specific written plan that identifies applicable BMPs and provides clear instructions on proper BMP implementation. Staff should be regularly trained on the minimum BMP requirements and how they are met for a particular facility or activity. Storm drain stenciling promotes storm water awareness and may include concrete stamps, painted stencils, signs, and the installation of ceramic or plastic tiles. Storm drain signage should include a message similar to “No Dumping – Drains to Ocean”.</p>			
<p>Discharge Control</p>			
1	Eliminate illegal connections to the storm water conveyance system.	Illegal connections are man-made physical connections to the storm water conveyance system that convey an illegal discharge. Find and abate all illegal connections to the storm water conveyance system through properly approved procedures, permits, and protocols.	SC-10, SC-44
2	Eliminate illegal non-storm water discharges.	Non-storm water (water other than rain) shall not be discharged to the City of Poway’s (City) storm water conveyance system. To eliminate illegal discharges, do not allow any solid or liquid material except uncontaminated storm water to enter City storm drains, curb gutters along City streets, or any other part of the City’s storm water conveyance system. Non-storm water discharged to the storm water conveyance system as a result of emergency or non-emergency firefighting activities, both emergency and non-emergency activities, is considered an illegal discharge if the City or the California Regional Water Quality Control Board, San Diego Region (RWQCB) identifies the discharge as a significant source of pollutants to receiving waters. Other limited exceptions may apply. During emergency situations, priority of efforts is directed toward life, property, and the environment (in descending order). The City’s minimum BMPs should be implemented, but should not interfere with immediate emergency response operations or impact public health and safety.	SC-10, SC-11, SC-44

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
3	Properly dispose of process and wash water.	All process water and wash water shall be contained, captured, and reused, or properly disposed of to the sanitary sewer, an appropriate waste hauler, or to landscaping or other pervious surfaces.	SC-10, SC-41 ³
4	Eliminate the discharge of vehicle and equipment wash water.	<p>This BMP is applicable to all industrial, commercial, and municipal facilities and activities, regardless of whether the activity is conducted by the facility owner/operator, lessee, contractor, or other persons. Water associated with washing activities shall not be allowed to enter City storm drains, curbs and gutters, or any other part of the City’s storm water conveyance system. When washing is conducted outside permanent designated wash areas, all wash water must be contained, captured, and disposed of appropriately.</p> <p>Designated washing areas may consist of a container, a berm, or a liner to collect and contain liquids and prevent runoff. Use of a control nozzle or similar mechanism is required to maximize control over the quantity of water used. Allowing contained water to evaporate is an acceptable method of disposal only if any remaining residue is removed to prevent future pollutant discharges. Captured wash water may be disposed through the sanitary sewer system with the approval of the City’s Public Works Department. Contact the Public Works Department at (858) 668-4700 for approval of any discharges to the sanitary sewer system; businesses are responsible for obtaining necessary permits. Wash water containing oil, paint, or other hazardous waste should be disposed of properly in accordance with applicable regulations.</p> <p>If only biodegradable soaps and uncontaminated water are used, wash water may be directed to onsite landscaped or pervious area(s) to infiltrate or evaporate, without resulting in erosion or runoff to the storm water conveyance system or any adjacent property. This can be accomplished by washing the vehicle on a landscaped area or using a berm to direct wash water to a landscaped area.</p>	SC-10, SC-21

³ Factsheet SC-41 - Building & Grounds Maintenance, states (in regards to pressure washing), "If soaps or detergents are not used, and the surrounding area is paved, wash runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in the catch basin to trap the particles in wash water runoff." Non-stormwater discharges of this nature, even if filtered, are not allowed to enter the storm water conveyance system. Wash water must be contained, collected, and disposed of properly.

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
5	Properly dispose of water from fire sprinkler maintenance activities.	Fire sprinkler system discharges containing corrosion inhibitors, fire suppressants, or antifreeze shall be disposed through the sanitary sewer system, not the storm water conveyance system. Fire sprinkler system discharges without corrosion inhibitors, fire suppressants, or antifreeze shall be disposed through the sanitary sewer, if practicable. When not practicable to discharge to the sanitary sewer system due to the presence of prohibited contaminants, the water shall be collected and disposed of by an appropriately certified party. When not practicable to discharge to the sanitary sewer system for reasons other than the presence of prohibited contaminants, the water shall not be discharged unless adequate precautions have been taken to prevent the transport of pollutants to the storm water conveyance system.	SC-10, SC-41
6	Eliminate irrigation runoff.	Irrigation runoff to the storm water conveyance system shall be eliminated through proper landscape maintenance and watering practices. All irrigation water and associated pollutants from nurseries, garden centers, and similar facilities shall be prevented from reaching City storm drains, curb gutters along City streets, or any other part of the City’s storm water conveyance system.	SC-10 ⁴ , SC-41
7	Properly dispose of discharges from swimming pools, spas, fountains, reflective pools, and filter backwash.	Swimming pool, spa, fountain, reflective pool, and filter backwash water shall be properly disposed of to prevent pollutants from entering the storm water conveyance system. Discharge swimming pool, spa, and fountain water to the storm water conveyance system only if the water is dechlorinated, has a pH level in the 7-8 range, is within ambient temperature, has no algae or suspended solids, and is not saline.	SC-10, BG-63 ⁵

⁴ Factsheet SC-10 – Non-Stormwater Discharges states that “landscape irrigation drainage and landscape watering” may be discharged to the storm drain with conditions; however, in accordance with the Municipal Permit, no irrigation runoff may be discharged to the City’s storm water conveyance system.

⁵ Factsheet BG-63 – Mobile Cleaning – Swimming Pools & Spas states that pools, spas, or fountain discharges to the storm water conveyance system are not permitted; however, discharges of this nature are permitted if the conditions described in BMP 7 are met.

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
8	Control air conditioning condensation discharges.	<p>Air conditioning condensation discharges shall be controlled from reaching City storm drains, curb gutters along City streets, or any other part of the City’s storm water conveyance system and are prohibited from entering the City’s storm water conveyance system unless the following BMPs are followed in order.</p> <ol style="list-style-type: none"> 1. Air conditioning condensation should be directed to the sanitary sewer if allowed. Contact the Development Services Department’s Building Services at (858) 668-4645 to obtain a building permit to direct the condensation to the sanitary sewer system. 2. Air conditioning condensation discharges should be directed to onsite landscaped or pervious area to infiltrate or evaporate, without resulting in erosion or runoff to the storm water conveyance system or any adjacent property. Directing discharges to landscaping close to a building foundation is not recommended. 3. If the above BMP options are not feasible AND the discharge does not contain pollutants exceeding the California Toxics Rule (CTR), air conditioning condensation may enter the City storm water conveyance system. Condensation must be proven to contain no pollutants that contribute to CTR water quality exceedances. 	SC-10, SC-42
9	Eliminate floor mat cleaning discharges.	<p>Floor mats shall be cleaned in a manner such that there is no discharge to City storm drains, curb gutters along City streets, or any other part of the City’s storm water conveyance system. Indoor wash areas, mop sinks, or indoor floor drains may be designated as wash areas for floor mats if these areas drain to the sanitary sewer system.</p>	SC-10, SC-21
10	Eliminate pumped groundwater, foundation, and footing drain discharges.	<p>Pumped groundwater, including water from crawl space pumps is prohibited unless a separate National Pollutant Discharge Elimination System (NPDES) permit has been obtained to cover the discharge, or the RWQCB has determined in writing that no permit is needed. Discharges from foundation and footing drains that are at or below the groundwater table are also prohibited, unless covered by an NPDES permit, or the RWQCB has determined in writing that no permit is needed.</p>	SC-10

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
11	Minimize rising groundwater, diverted stream flows, uncontaminated groundwater infiltration, springs, riparian habitat/wetland flows, potable water sources, and foundation/ footing drain discharges.	Discharges from rising groundwater, diverted stream flows, riparian habitat and wetlands, uncontaminated groundwater infiltration to the storm water conveyance system, springs, and potable water sources are exempt unless they are identified as a source of pollutants to receiving waters by the City or the RWQCB.	SC-10
12	Direct runoff from pavement, rooftops, and other impervious surfaces to landscaped areas.	Runoff from pavement, rooftops, and other impervious surfaces shall be directed to landscaped or pervious area(s) to infiltrate or evaporate, where suitable areas exist onsite. Energy dissipation and erosion control measures shall be used to prevent erosion and sediment transport. Where possible, divert runoff collected on roofs, canopies, and other coverings from discharging into areas of potential pollutant use or storage. Downspouts should be directed to avoid critical areas such as loading/unloading areas, fueling, fabrications, lead tool, and dye storage of hazardous waste storage areas. If possible, divert run-on generated by neighboring facilities or adjacent properties before it can enter the site grounds. This should be done in such a manner as to prevent flooding of adjacent property. Berming, diversion ditches, and dikes can direct flow away from the site.	SC-10
13	Regularly clean and maintain structural BMPs, including LID installations, to ensure proper performance.	BMPs implemented, including Low Impact Development (LID) and structural BMPs, must be inspected at a minimum annually, and properly operated and maintained. All installed LID or structural BMPs shall be inspected at a minimum of once annually for proper function and maintained to confirm the BMP is serving the purpose for which it was intended.	SC-44

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
Erosion and Sediment Control			
14	Protect unpaved areas, including landscaping, from erosion using vegetative or physical stabilization.	Exposed soils that are actively eroding or prone to erosion due to disturbance shall be protected from erosion. Significant accumulations of eroded soil shall be removed or contained to prevent sediment transport in runoff to the storm water conveyance system.	SC-40, SC-42
Good Housekeeping			
15	Regularly clean parking areas.	Paved parking lots, roads, and driveways located on the property shall be cleaned as needed to prevent pollutants from entering the City’s storm water conveyance system, including the curb and gutter. Sweeping is the preferred method of cleaning. Wet cleaning methods, such as mopping or power washing, may be substituted for sweeping if all wash water is contained, captured, and disposed of appropriately.	SC-41, SC-43, BG-62 ⁶
16	Implement good housekeeping to keep site free of trash and debris.	Outdoor areas shall be cleaned as needed to keep them free of accumulations of trash, sediment, litter, and other debris.	SC-41
17	Keep storm drain inlets and under drains free of sediment, trash, and debris.	Accumulated materials shall be removed from on-site storm drains and under drains at least once per year.	SC-44

⁶ Factsheet BG-62 – Mobile Cleaning – Surface Cleaning, states (in regards to pressure washing) that screened, or filtered, wash water can be discharged to a gutter, street, or storm drain. Non-stormwater discharges of this nature, even if filtered, are not allowed to enter the storm water conveyance system, which includes the streets and gutters. Wash water must be contained, collected, and disposed of properly.

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
Material Storage and Handling			
18	Provide and maintain secondary containment to catch spills if storing potential liquid pollutants in outdoor areas.	Drums and other containers shall be kept in good condition and securely closed when not in use. Effective secondary containment shall be provided and maintained for all containers of liquid with the potential to leak or to spill onto outdoor areas to prevent leaks or spills from discharging pollutants to the storm water conveyance system. Secondary containment shall also be provided for all liquids during transport to prevent spills due to leaks or punctures. A variety of methods are available, including but not limited to: containers, curbs, and vendor products. To maintain the effectiveness of secondary containment, regularly remove and appropriately dispose of spills, precipitation, or other liquids that accumulate in the secondary containment. Provide liquid storage containers with covers to prevent precipitation from accumulating in or causing overflows from the secondary containment. If evidence of spills due to inadequate containment is observed, the City enforcement official may specify a minimum required containment capacity. Other applicable regulations may apply to the use of secondary containment, especially for hazardous materials, which are regulated by the County of San Diego Department of Environmental Health.	SC-20, SC-31
19	Cover, contain, and/or elevate materials stored outside that may become a source of pollutants in storm water or non-storm water.	Materials stored outdoors shall be covered, contained, and/or elevated to prevent storm water and non-storm water from contacting and/or transporting materials and pollutants to the storm water conveyance system. Some examples of cover are roofs, awnings, and tarps. Where coverage is not feasible or is cost prohibitive, alternative approaches such as installing berms around the stored materials, directing runoff to pervious areas, or installing treatment devices may be allowed. Note that installing structural coverage will usually require obtaining permits from the City prior to installation. To determine applicable regulations and whether a permit would be required, contact the Development Services Department's Building Services at (858) 668-4645.	SC-20, SC-33

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
20	Properly store and dispose of hazardous materials.	Hazardous materials and wastes shall be stored, managed, and disposed in accordance with federal, state, and local laws and regulations. Hazardous materials and wastes and their primary storage containers shall also be stored such that they will not come into contact with storm water, even if leaks or spills occur. Hazardous materials and wastes generated by business activities are additionally regulated by the County of San Diego Department of Environmental Health. Disposal of hazardous wastes using an authorized hazardous waste collection service is required. Store hazardous materials and wastes, and their primary storage containers, with sufficient cover and/or containment to prevent contact with storm water. See BMPs 18 and 19 for additional details regarding storage.	SC-20, SC-31, SC-33
21	Label containers to prevent mishandling of hazardous materials and other potential pollutants.	Outdoor containers and storage areas of pollutants shall be labeled to facilitate proper material handling and spill response. Hazardous materials and wastes shall be clearly labeled in accordance with all applicable regulations.	SC-31
22	Reduce the amount of liquid cleaning agents and solvents used.	Reduce potential for pollution from cleaning agents such as soaps and detergents used in any maintenance operations including vehicles, equipment, aircraft or ship cleaning, metal work, and painting practices. Use products other than liquid cleaning agents to the maximum extent practicable; Substitute cleaning methods such as wire brush scraping or using a bake oven. Reuse solvents and use sparingly; pre-soak parts in "dirty" solvents before placing in fresh solvent to reduce volume of solvent used.	SC-22
23	Protect storage containers from being damaged by vehicles.	Prevent vehicle impact damage to storage containers by installing bollards, traffic barriers, fences, and curbs to protect containers stored in locations accessible to vehicles. Vehicles may damage storage containers leading to ruptures and cracks that may lead to significant spills and leaks.	SC-31

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
Pesticide and Fertilizer Management			
24	Properly manage pesticides and fertilizers.	Pesticides and fertilizers shall be applied in strict accordance with manufacturer’s label, as authorized by U.S. Environmental Protection Agency. Chemicals shall be stored safely in covered and contained areas. See BMPs 18 and 19 for additional details regarding storage. Waste products shall be disposed of in accordance with the manufacturer’s label and applicable hazardous waste regulations. The use of integrated pest management (IPM) principles is encouraged to reduce or eliminate use of chemicals. For more information about integrated pest management, see the University of California Statewide IPM Program at http://www.ipm.ucdavis.edu .	SC-35, SC-41, BG-40
Outdoor Work Areas			
25	Implement controls to minimize pollution from exposed outdoor work areas.	Activities that may generate pollutants shall be conducted in covered, contained areas, or equivalent measures taken to prevent the discharge of associated pollutants. In order to avoid contaminating storm water runoff, the following precautions shall be taken as appropriate: (1) move activities indoors;(2) cover areas where outdoor activities are performed, including building canopies; (3) protect areas where outdoor activities are performed from runoff from upstream areas, including building berms; (4) prevent spills or by-products from escaping contained areas; (5) do not conduct outdoor activities that may generate pollutants when it is raining; (6) protect storm drain inlets and ensure adequate spill response materials are readily available; and, (7) thoroughly clean outdoor work areas at least daily to remove accumulated sediment, debris, oil and grease, particulate matter, and other pollutants. Structural treatment devices shall also be installed to remove pollutants from contaminated runoff if source control BMPs are not effective.	SC-20, SC-30, SC-32, SC-34, SC-42
Spill Prevention and Response			
26	Prevent or capture liquid leaks from vehicles or equipment.	Leaking vehicles or equipment shall be repaired promptly. Drip pans or other equivalent means shall be used to capture spills or leaks of oil and other fluids from vehicles awaiting maintenance and during maintenance activities. Captured fluids shall be disposed of in accordance with applicable hazardous materials regulations.	SC-11, SC-22

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
27	Immediately clean up spills.	Spills shall be cleaned up immediately and prevented from entering the storm water conveyance system. Dry cleaning methods such as the use of rags and absorbents are preferred cleaning methods. Spills that enter a storm drain and cannot be fully recovered shall be reported promptly to the City's Storm Water Hotline at (858) 668-4700.	SC-11
28	Maintain a readily accessible spill cleanup kit that is appropriate for the type of materials stored onsite.	Materials and equipment appropriate for the type and quantity of potential spills shall be kept onsite and with any mobile activities as a spill cleanup kit. Keep cleanup materials in close proximity to locations where spills may occur, with instructions for use clearly displayed.	SC-11, SC-22
29	Drain fluids from inoperable vehicles and store or dispose of appropriately.	Oil, antifreeze, and other fluids shall be drained from inoperable vehicles intended for recycling or long-term storage that are stored outside. Drained fluids shall be disposed of in accordance with applicable hazardous materials regulations.	SC-22
30	Temporarily protect storm drains from non-storm water discharges while conducting activities that have the potential to result in a discharge.	If activities conducted cannot be fully contained or minor failures in containment would potentially result in discharges of non-storm water to the storm water conveyance system, temporary measures shall be used to protect storm drains. Any activity-related materials that enter the storm water conveyance system shall be removed promptly and disposed of appropriately (in accordance with other minimum BMPs).	SC-10, SC-44
Waste Management			
31	Keep trash/waste storage areas free of exposed trash, sediment, and debris.	Stored waste shall be protected from contact with storm water and non-storm water. Disposal areas for trash and other wastes shall be cleaned as frequently as necessary to keep these areas free of loose trash, litter, debris, liquids, powders, and sediment. Liquid waste, hazardous waste, medical waste, universal waste, and other items prohibited by current regulations shall not be placed in solid waste dumpsters. Dry cleaning methods such as sweeping are preferred. If wet cleaning methods are used, all wash water must be contained, captured, and disposed of appropriately. See BMP 4 for information on appropriate wet cleaning practices.	SC-34, SC-41

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
32	Protect waste storage areas from contact with storm water and non-storm water flows onto the property.	Stored trash and other wastes shall be protected from contact with storm water and non-storm water flows. Trash and other wastes shall be contained to prevent transport of trash off site, and to keep surrounding areas and on site storm drains free of trash and other wastes. Waste containers for oils, grease, fats, or tallow shall be kept indoors where feasible.	SC-34, BG-30
33	Properly store and dispose of green waste.	Green waste shall be properly stored and disposed of such that it will not be transported to the storm water conveyance system by storm water or non-storm water runoff.	SC-34, BG-40
34	Manage animal waste and animal washing in a manner that prevents transport of wastes and wash water off-site.	Animals and animal waste shall be managed and stored in a manner that prevents animal waste and wash water from entering the storm water conveyance system. Collect and dispose of animal waste to the trash or the sanitary sewer, as appropriate.	SC-34, BG-10

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3.2 Residential

Table 2 below presents the minimum required BMPs for residential sites and sources. The City's BMP standards are based on the CASQA BMP factsheets. City exceptions to the procedures described in the factsheets are identified in footnotes. Where any conflict may exist between CASQA factsheets and requirements in the Manual or the PMC, the requirements of the Manual and the PMC shall prevail. Complying with the BMPs described in the Manual does not ensure compliance with all other regulatory requirements, including requirements of other agencies. See Section 2 for more information about other potentially applicable requirements.

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Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources⁷

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
Discharge Control			
1	Eliminate illegal connections to the storm water conveyance system.	Illegal connections are man-made physical connections to the storm water conveyance system that convey an illegal discharge. Find and abate all illegal connections to the storm water conveyance system through properly approved procedures, permits, and protocols.	SC-10, SC-44
2	Eliminate illegal non-storm water discharges.	Non-storm water (water other than rain) shall not be discharged to the City of Poway's (City) storm water conveyance system. To eliminate illegal discharges, do not allow any solid or liquid material except uncontaminated storm water to enter City storm drains, curb gutters along city streets, or any other part of the City storm water conveyance system.	SC-10, SC-11, SC-44
3	Properly dispose of wash water.	All process water and wash water shall be contained, captured, and reused, or properly disposed of to the sanitary sewer, an appropriate waste hauler, or to landscaping or other pervious surfaces.	SC-10, SC-41 ⁸

⁷ To the extent practicable, the City's established minimum BMPs for industrial, commercial, municipal sites/sources shall also be implemented for any industrial/commercial type of activities conducted at a residence where appropriate.

⁸ Factsheet SC-41 - Building & Grounds Maintenance, states (in regards to pressure washing), "If soaps or detergents are not used, and the surrounding area is paved, wash runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in the catch basin to trap the particles in wash water runoff." Non-storm water discharges of this nature, even if filtered, are not allowed to enter the storm water conveyance system. Wash water must be contained, collected, and disposed of properly.

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

<p>4</p>	<p>Properly dispose of vehicle and equipment wash water.</p>	<p>Water associated with washing activities should not be allowed to enter City storm drains, curbs and gutters, or any other part of the City’s storm water conveyance system. When washing vehicles, boats or other equipment in an area that may reach the storm water conveyance system, the following BMPs must be employed.</p> <ul style="list-style-type: none"> • Use of a control nozzle or similar mechanism is required to minimize the quantity of water used. • Wash areas should not include any drains that connect to the storm water conveyance system. Designated washing areas may consist of a container, a berm, or a liner to collect and contain liquids and prevent runoff. • When washing is conducted all wash water should be contained, captured, and disposed of appropriately. Allowing contained water to evaporate is an acceptable method of disposal only if any remaining residue on pavement or other impervious areas is removed to prevent future pollutant discharges. Captured wash water may be disposed through the sanitary sewer system with the approval of the City’s Public Works Department. Contact the Public Works Department at (858) 668-4700 for approval of any discharges to the sanitary sewer system. • Wash water containing oil, paint, or other hazardous waste shall be disposed of properly in accordance with applicable regulations. • If only biodegradable soaps and uncontaminated water are used, wash water may be directed to onsite landscaped or pervious area(s) to infiltrate or evaporate, without resulting in erosion or runoff to the storm water conveyance system or any adjacent property. This can be accomplished by washing the vehicle on a landscaped area or using a berm to direct wash water to a landscaped area. • If all applicable vehicle washing BMPs are employed and there is no landscaped area to direct wash water to, some uncontaminated water may be allowed to enter the storm water conveyance system. 	<p>SC-10, SC-21</p>
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Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

5	Properly dispose of water from fire sprinkler maintenance activities.	Fire sprinkler system discharges containing corrosion inhibitors, fire suppressants, or antifreeze shall be disposed through the sanitary sewer system, not the storm water conveyance system. Fire sprinkler system discharges without corrosion inhibitors, fire suppressants, or antifreeze shall be disposed through the sanitary sewer, if practicable. When not practicable to discharge to the sanitary sewer system due to the presence of prohibited contaminants, the water shall be collected and disposed of by an appropriately certified party. When not practicable to discharge to the sanitary sewer system for reasons other than the presence of prohibited contaminants, the water shall not be discharged unless adequate precautions have been taken to prevent the transport of pollutants to the storm water conveyance system.	SC-10, SC-41
6	Eliminate irrigation runoff.	Irrigation runoff to the storm water conveyance system shall be eliminated through proper landscape maintenance and watering practices. All irrigation water and associated pollutants from nurseries, garden centers, and similar facilities shall be prevented from reaching City storm drains, curb gutters along City streets, or any other part of the City’s storm water conveyance system.	SC-10 ⁹ , SC-41
7	Properly dispose of discharges from swimming pools, spas, fountains, reflective pools, and filter backwash.	Swimming pool, spa, fountain, reflective pool, and filter backwash water shall be properly disposed of to prevent pollutants from entering the storm water conveyance system. Discharge swimming pool, spa, and fountain water to the storm water conveyance system only if the water is dechlorinated, has a pH level in the 7-8 range, is within ambient temperature, has no algae or suspended solids, and is not saline.	SC-10

⁹ Factsheet SC-10 – Non-Storm Water Discharges states that “landscape irrigation drainage and landscape watering” may be discharged to the storm drain with conditions; however, in accordance with RWQCB Order No. R9-2013-0001 (Municipal Permit), no irrigation runoff may be discharged to the City’s storm water conveyance system.

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

8	Control air conditioning condensation discharges.	<p>Air conditioning condensation discharges shall be controlled from reaching City storm drains, curb gutters along City streets, or any other part of the City’s storm water conveyance system and are prohibited from entering the City’s storm water conveyance system unless the following BMPs are followed in order.</p> <ol style="list-style-type: none"> 1. Air conditioning condensation should be directed to the sanitary sewer if allowed. Contact the City’s Development Services Department’s Building Services at (858) 668-4645 to obtain a building permit to direct the condensation to the sanitary sewer system. 2. Air conditioning condensation discharges should be directed to onsite landscaped or pervious area to infiltrate or evaporate, without resulting in erosion or runoff to the storm water conveyance system or any adjacent property. Directing discharges to landscaping close to a building foundation is not recommended. 3. If the above BMP options are not feasible AND the discharge does not contain pollutants exceeding the California Toxics Rule (CTR), air conditioning condensation may enter the City storm water conveyance system. Condensation must be proven to contain no pollutants that contribute to CTR water quality exceedances. 	SC-10, SC-42
9	Eliminate pumped groundwater, foundation, and footing drain discharges.	<p>Pumped groundwater, including water from crawl space pumps is prohibited unless a separate National Pollutant Discharge Elimination System (NPDES) permit has been obtained to cover the discharge, or the California Regional Water Quality Control Board, San Diego Region (RWQCB) has determined in writing that no permit is needed. Discharges from foundation and footing drains that are at or below the groundwater table are also prohibited, unless covered by an NPDES permit, or the RWQCB has determined in writing that no permit is needed.</p>	SC-10

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

10	Minimize rising groundwater, diverted stream flows, uncontaminated groundwater infiltration, springs, riparian habitat/wetland flows, potable water sources, and foundation/footing drain discharges.	Discharges from rising groundwater, diverted stream flows, riparian habitat and wetlands, uncontaminated groundwater infiltration to the storm water conveyance system, springs, and potable water sources are exempt unless they are identified as a source of pollutants to receiving waters by the City or the RWQCB.	SC-10
11	Direct runoff from pavement, rooftops, and other impervious surfaces to landscaped areas.	Runoff from pavement, rooftops, and other impervious surfaces shall be directed to landscaped or pervious area(s) to infiltrate or evaporate, where suitable areas exist onsite. Energy dissipation and erosion control measures shall be used to prevent erosion and sediment transport.	SC-10
12	Regularly clean and maintain structural BMPs, including LID installations, to ensure proper performance.	BMPs implemented, including Low Impact Development (LID) and structural BMPs, must be inspected at a minimum annually, and properly operated and maintained. All installed LID or structural BMPs shall be inspected at a minimum of once annually for proper function and maintained to confirm the BMP is serving the purpose for which it was intended.	SC-44

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

Erosion and Sediment Control			
13	Protect unpaved areas, including landscaping, from erosion using vegetative or physical stabilization.	Exposed soils that are actively eroding or prone to erosion due to disturbance shall be protected from erosion. Significant accumulations of eroded soil shall be removed or contained to prevent sediment transport in runoff to the storm water conveyance system.	SC-40, SC-42
Good Housekeeping			
14	Regularly clean parking areas.	Paved parking lots, private roads, and driveways located on the property shall be cleaned as needed to prevent pollutants from entering the City’s storm water conveyance system, including the curb and gutter. Sweeping is the preferred method of cleaning. Wet cleaning methods, such as mopping or power washing, may be substituted for sweeping if all wash water is contained, captured, and disposed of appropriately.	SC-41, SC-43
15	Implement good housekeeping to keep site free of trash and debris.	Outdoor areas shall be cleaned as needed to keep them free of accumulations of trash, sediment, litter, and other debris.	SC-41
16	Keep storm drain inlets and under drains free of sediment, trash, and debris.	Accumulated materials shall be removed from on-site storm drains as needed to keep them free of trash, sediment, litter, and other debris.	SC-44
Material Storage and Handling			
17	Reduce the amount of liquid cleaning agents and solvents used.	Reduce potential for pollution from cleaning agents such as soaps and detergents used in any maintenance operations. Use products other than liquid cleaning agents to the maximum extent practicable. Substitute non-toxic or less-toxic cleaning agents.	SC-22

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

Pesticide and Fertilizer Management			
18	Properly manage pesticides and fertilizers.	Pesticides and fertilizers shall be applied in strict accordance with manufacturer’s label, as authorized by U.S. Environmental Protection Agency. Chemicals shall be stored safely in covered and contained areas. Waste products shall be disposed of in accordance with the manufacturer's label and applicable hazardous waste regulations. The use of integrated pest management (IPM) principles is encouraged to reduce or eliminate use of chemicals. For more information about integrated pest management, see the University of California Statewide IPM Program at http://www.ipm.ucdavis.edu .	SC-35, SC-41
Spill Prevention and Response			
19	Prevent or capture liquid leaks from vehicles or equipment.	Leaking vehicles or equipment shall be repaired promptly. Drip pans or other equivalent means shall be used to capture spills or leaks of oil and other fluids from vehicles awaiting maintenance and during maintenance activities. Captured fluids shall be disposed of in accordance with applicable hazardous materials regulations.	SC-11, SC-22
20	Immediately clean up spills.	Spills shall be cleaned up immediately and prevented from entering the storm water conveyance system. Dry cleaning methods such as the use of rags and absorbents are preferred cleaning methods. Spills that enter a storm drain and cannot be fully recovered shall be reported promptly to the City's Storm Water Hotline at (858) 668-4700.	SC-11
21	Drain fluids from inoperable vehicles and store or dispose of appropriately.	Oil, antifreeze, and other fluids shall be drained from inoperable vehicles intended for recycling or long-term storage that are stored outside. Drained fluids shall be disposed of in accordance with applicable hazardous materials regulations.	SC-22
22	Temporarily protect storm drains from non-storm water discharges while conducting activities that have the potential to result in a discharge.	If activities conducted cannot be fully contained or minor failures in containment would potentially result in discharges of non-storm water to the storm water conveyance system, temporary measures shall be used to protect storm drains. Any activity-related materials that enter the storm water conveyance system shall be removed promptly and disposed of appropriately (in accordance with other minimum BMPs).	SC-10, SC-44

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

Waste Management			
23	Keep trash/waste storage areas free of exposed trash, sediment, and debris.	Stored waste shall be protected from contact with storm water and non-storm water. Disposal areas for trash and other wastes shall be cleaned as frequently as necessary to keep these areas free of loose trash, litter, debris, liquids, powders, and sediment. Liquid waste, hazardous waste, medical waste, universal waste, and other items prohibited by current regulations shall not be placed in solid waste dumpsters. Dry cleaning methods such as sweeping are preferred. If wet cleaning methods are used, all wash water must be contained, captured, and disposed of appropriately. See BMP 3 for information on appropriate wet cleaning practices.	SC-34, SC-41
24	Protect waste storage areas from contact with storm water and non-storm water flows on to the property.	Stored trash and other wastes shall be protected from contact with storm water and non-storm water flows. Trash and other wastes shall be contained to prevent transport of trash off site, and to keep surrounding areas and on site storm drains free of trash and other wastes.	SC-34
25	Properly store and dispose of green waste.	Green waste shall be properly stored and disposed of such that it will not be transported to the storm water conveyance system by storm water or non-storm water runoff.	SC-34
26	Manage animal waste and animal washing in a manner that prevents transport of wastes and wash water off-site.	Animals and animal waste shall be managed and stored in a manner that prevents animal waste and wash water from entering the storm water conveyance system. Collect and dispose of animal waste to the trash or the sanitary sewer, as appropriate.	SC-34

3.3 Construction

Table 3 presents the minimum BMPs required for construction sites within the City's jurisdiction. The City's BMP standards are based on the CASQA BMP factsheets. Where any conflict may exist between CASQA factsheets and requirements in the Manual or the PMC, the requirements of the Manual and the PMC shall prevail. Complying with the BMPs described in the Manual does not ensure compliance with all other regulatory requirements, including requirements of other agencies. See Section 2 for more information about other potentially applicable requirements.

Construction site BMPs are required to be implemented in an effective combination of BMPs that are site specific, construction phase appropriate, and seasonally appropriate. Dry season (May 1 through September 30) BMP implementation must plan for and address rain events that may occur in the dry season. City staff have the authority to require additional BMPs to prevent discharges of pollutants and to prevent non-storm water discharges to the City's storm water conveyance system from construction sites year round. Construction sites also must adhere to the requirements of all applicable additional SWRCB or RWQCB general or site-specific NPDES permits for construction activities (see Section 2) at the time of construction.

Additional Erosion and Sediment Control Requirements

In addition to the minimum BMPs listed in the table below, construction projects are also required to comply with the following requirements:

1. All construction sites, including grading projects less than one acre and non-grading projects, are required to prepare a Weather-Triggered Action Plan, which involves site representatives documenting existing site conditions and the actions that will be taken prior to a rain event to prevent pollution discharges. An approved Weather-Triggered Action Plan must be prepared at the start of each project and updated in the event that a predicted storm event has a 50% chance of rain. The proponent must have the capacity to deploy the standby BMPs within 48 hours of the predicted storm event.
2. The faces of cut-and-fill slopes and the project site shall be prepared and maintained to control against erosion. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted upon approval of the City Engineer.
3. Where necessary, temporary and/or permanent erosion control devices such as desilting basins, check dams, cribbing, riprap, or other devices or methods as approved by the City Engineer shall be employed to control erosion, prevent discharge of sediment, and provide safety.

4. Temporary desilting basins constructed of compacted earth shall be compacted to a relative compaction of 90 percent of maximum density. A gravel bag or plastic spillway must be installed for overflow, as designed by the engineer of work, to avoid failure of the earthen dam. A soils engineering report prepared by the soils engineer, including the type of field testing performed, location and results of testing shall be submitted to the City Engineer for approval upon completion of the desilting basins.
5. Desilting facilities shall be provided at drainage outlets from the graded site, and shall be designed to provide a desilting capacity capable of containing the anticipated runoff for a period of time adequate to allow reasonable settlement of suspended particles.
6. Desilting basins shall be constructed around the perimeter of projects, whenever feasible, and shall provide improved maintenance access from paved roads during wet weather. Grading cost estimates must include maintenance and ultimate removal costs for temporary desilting basins.
7. The erosion control provisions shall take into account drainage patterns during the current and future phases of grading.
8. The permittee or owner shall be responsible for control of erosion on all areas of grading until acceptance of the completed grading by the City Council. This responsibility extends to completed and occupied lots.
9. All removable protective devices shown shall be in place at the end of each working day when there is a 50 percent chance of rain within a 48-hour period. If the developer does not provide the required installation or maintenance of erosion control structures within two hours of notification at the 24-hour number on the plans, the City Engineer may order City crews or the City's Contractor to do the work or may issue contracts for such work and charge the cost of this work along with reasonable overhead charges to the cash deposits or other instruments implemented for this work without further notification to the owner. No additional work on the project, except erosion control work, may be performed until the full amount drawn from the deposit is restored by the developer.
10. At any time of year, an inactive site shall be fully protected from erosion and discharges of sediment. A site is considered inactive if construction activities have ceased for a period of 14 or more consecutive days.

Maximum Disturbed Area for Erosion Controls

The City requires that temporary or permanent erosion controls be implemented before a construction site has disturbed a total of 17 acres, unless the disturbance of a larger area is approved in writing by the City Engineer. This 17 acre maximum is comparable to the current Caltrans soil disturbance limitation of 750,000 square feet. If the site is in compliance with applicable storm water regulations and has adequate control practices implemented to prevent storm water pollution, the City has the option to give the site written authorization to disturb beyond the 17 acre maximum. The City will require, as necessary, additional controls for construction sites allowed to disturb more than 17 acres, which could include additional BMPs, increased inspection frequency, and/or stronger penalties for non-compliance.

Advanced Treatment Methods

For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, should adequately control sediment discharges from the site. However, if it is determined that a site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, thus resulting in an exceptional threat to water quality, advanced treatment will be required. The term "advanced treatment," as used in this section, includes both active and passive sediment treatment systems.

A site is considered to pose an exceptional threat to water quality if it meets all of the following criteria:

- Is located within, adjacent to, or a portion of the site is within 200 feet of waters listed on the Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) list) for sedimentation or turbidity impairments;
- Disturbance is greater than five acres, including all phases of the development;
- Disturbed slopes are steeper than 4:1 (horizontal: vertical) and higher than 10 feet that drain toward the 303(d) listed receiving water;
- Contains a predominance of soils with U.S. Department of Agriculture – National Resources Conservation Service Erosion factor K greater than or equal to 0.4.

Applicants may perform a Revised Universal Soil Loss Equation or Modified Universal Soil Loss Equation analysis to prove to the City Engineer's satisfaction that advanced treatment is not required. Treatment effluent water quality shall meet or exceed the water quality objectives for turbidity, and any other parameter deemed necessary by the City Engineer as listed in the most recent Water Quality Control Plan for the San Diego Basin for Inland Surface Waters and Lagoons and Estuaries (Basin Plan) for the appropriate hydrologic unit.

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Table 3. Minimum Best Management Practices (BMPs) for Construction Sites

BMP Categories	Required, Where Applicable ¹	CASQA BMP Factsheet No.	CASQA BMP Factsheet Name	Municipal Permit BMP Categories						
				Project Planning	Erosion Control	Run-on & Runoff Control	Sediment Control	Housekeeping	Non-Storm Water Management	Active/ Passive Sediment Treatment
Project Planning	Yes	EC-1	Scheduling	x						
Erosion Control	Yes, Select Effective Combination as Applicable ^{2,3}	EC-3	Hydraulic Mulch ³		x					
		EC-6	Straw Mulch ³		x					
		EC-8	Wood Mulching ³		x					
		EC-4	Hydroseeding		x					
		EC-2	Preservation of Existing Vegetation ³	x	x					
		EC-7	Geotextiles and Mats ³		x					
		EC-14	Compost Blankets ³		x					
	EC-5	Soil Binders ³		x						
	Yes, Select Effective Combination as Applicable ²	EC-9	Earth Dikes and Drainage Swales			x				
		EC-10	Velocity Dissipation Devices			x				
		EC-11	Slope Drains			x				
	Yes	EC-12	Stream Bank Stabilization		x					
	Alternative that May Be Considered ⁴	EC-15	Soil Preparation Roughening ³		x					
EC-16		Non-Vegetative Stabilization ³		x						

Table 3. Minimum Best Management Practices (BMPs) for Construction Sites (continued)

BMP Categories	Required, Where Applicable ¹	CASQA BMP Factsheet No.	CASQA BMP Factsheet Name	Municipal Permit BMP Categories						
				Project Planning	Erosion Control	Run-on & Runoff Control	Sediment Control	Housekeeping	Non-Storm Water Management	Active/Passive Sediment Treatment
Sediment Control	Yes, Select Effective Combination as Applicable ^{2, 5}	SE-1	Silt Fence ⁶				x			
		SE-2	Sediment Basin ⁷				x			
		SE-3	Sediment Traps ⁷				x			
		SE-6	Gravel Bag Berm				x			
		SE-4	Check Dam				x			
		SE-5	Fiber Rolls ⁶				x			
	Yes	TC-1	Stabilized Construction Entrance/Exit				x			
	At Discretion of City ⁸	TC-2	Stabilized Construction Roadway				x			
	At Discretion of City ⁸	TC-3	Tire Wash				x			
	Yes	SE-10	Storm Drain Inlet Protection				x			
	Alternative that May Be Considered ⁹	SE-12	Manufactured Linear Sediment Controls				x			
		SE-13	Compost Socks and Berms				x			
		SE-14	Biofilter Bags				x			
	At Discretion of City ⁸	WE-1	Wind Erosion Control				x			
At Discretion of City ^{7, 10}	SE-11	Active Treatment Systems ¹⁰							x	
Waste Management and Good Housekeeping	Yes	WM-3	Stockpile Management					x		
	Yes	WM-8	Concrete Waste Management					x	x	
	Yes	NS-8	Vehicle and Equipment Cleaning					x	x	
	Yes	NS-10	Vehicle and Equipment Maintenance					x	x	
	Yes	WM-5	Solid Waste Management					x		
	Yes	SE-7	Street Sweeping and Vacuuming				x	x		
	Yes	WM-1	Material Delivery & Storage					x		
	Yes	WM-4	Spill Prevention & Control					x		

Table 3. Minimum Best Management Practices (BMPs) for Construction Sites (continued)

BMP Categories	Required, Where Applicable ¹	CASQA BMP Factsheet No.	CASQA BMP Factsheet Name	Municipal Permit BMP Categories						
				Project Planning	Erosion Control	Run-on & Runoff Control	Sediment Control	Housekeeping	Non-Storm Water Management	Active/ Passive Sediment Treatment
Waste Management and Good Housekeeping (continued)	Yes	WM-6	Hazardous Waste Management					x		
	Yes	WM-10	Liquid Waste Management					x	x	
	Yes	NS-9	Vehicle and Equipment Fueling					x	x	
	Yes	WM-9	Sanitary/Septic Waste Management					x	x	
	Yes	NS-1	Water Conservation Practices						x	
	Yes	NS-2	Dewatering Operations						x	
	Yes	NS-3	Paving and Grinding Operations						x	
	Yes	NS-4	Temporary Stream Crossing						x	
	Yes	NS-5	Clear Water Diversion						x	
	Yes	NS-6	Illegal Connection/Discharge						x	
	Yes	NS-7	Potable Water/Irrigation ¹¹						x	
	Yes	NS-11	Pile Driving Operations						x	
	Yes	NS-12	Concrete Curing						x	
	Yes	NS-13	Concrete Finishing						x	
	Yes	NS-14	Material Over Water						x	
	Yes	NS-15	Demolition Adjacent to Water						x	
	Yes	NS-16	Temporary Batch Plants						x	
	Yes	WM-2	Material Use					x		
	Yes	WM-7	Contaminated Soil Management					x		

Notes:

1. BMPs marked as required do not need to be included in plans or implemented if demonstrated not to be applicable satisfactory to City staff.
2. A combination of the BMPs within these categories that will be effective, as determined by City staff, shall be proposed. Typically not all BMPs within the category will be necessary to provide an effective combination. In some cases only one BMP from the category may be necessary to be effective.
3. The City requires erosion control BMPs to be applied to areas that have been inactive for at least 14 days.

Table 3. Minimum Best Management Practices (BMPs) for Construction Sites (continued)

4. These BMPs may be included as part of the overall effective combination of erosion control BMPs if approved by City staff.
5. An effective combination of sediment control BMPs includes both full perimeter protection and sediment control within the boundaries of the site.
6. Silt fence and fiber rolls shall be staked into the ground as shown in the CASQA factsheet to be effective. Therefore, they may not be used in paved areas or other areas where staking is not possible; gravel bags (SE-6) or compost socks (SE-13) shall be used instead.
7. Sediment basins and traps shall be sized per CASQA and City standards. Sediment basins and traps shall be maintained after storms in accordance with the CASQA factsheets unless otherwise directed by City staff. Due to site drainage patterns, sediment basins and traps are often located where permanent post-construction BMPs will eventually be installed. All accumulated sediment from the construction phase shall be removed prior to final installation of permanent post-construction BMPs to maintain the as-designed percolation rate.
8. These BMPs are not required to be included in plans or implemented unless specifically directed to be included by City staff to meet the maximum extent practicable standard.
9. These BMPs may be included as part of the overall effective combination of sediment control BMPs if approved by City staff.
10. Active treatment systems may be required for Construction General Permit Risk Level 3 sites, as necessary to meet Construction General Permit standards. They may also be required for other sites at the discretion of City staff.
11. The CASQA factsheet implies some irrigation runoff may be acceptable. However, irrigation runoff discharges are considered illegal discharges and are prohibited per PMC.

3.4 BMP Requirements for Development Projects

The City's BMP requirements for new and re-development projects are presented in PMC Chapters 16.100-105, which is available on the City's website (poway.org). These BMPs include, but are not limited to, site design, source control, and post-construction structural BMPs (e.g., flow control or treatment control devices).

3.4.1 Notice of Upcoming Changes to Requirements

By 2016, the City anticipates adopting updated BMP requirements for new and re-development projects that will be consistent with the Municipal Permit adopted in 2013. The updated requirements and associated guidance document (referred to as the "BMP Design Manual" in the Municipal Permit) are being prepared cooperatively with staff from multiple San Diego County municipalities and other interested parties. The City will be publishing notices and informing the development community of these new requirements as they near coming into effect. Project proponents that anticipate acquiring City approvals for construction toward the end of 2015, or initiating construction near then, are advised to contact the City Engineering Department to evaluate applicability of the new requirements.

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Appendix C

Dry Weather Major MS4 Outfall Discharge Monitoring Program

Contents:

- Appendix C.1. Dry Weather Major MS4 Outfall Discharge Monitoring Procedures
- Appendix C.2. MS4 and Monitoring Locations Map

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Appendix C.1.

Dry Weather Major MS4 Outfall Discharge Monitoring Procedures

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Dry Weather Major MS4 Outfall Discharge Monitoring Procedures

1 Introduction

In accordance with the California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit), the City of Poway (City), along with 18 municipalities in San Diego County, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (collectively referred to as “Copermittees”), is required to monitor discharges from its major municipal separate storm sewer system (MS4) outfalls during dry weather. Weather is considered dry if the preceding 72 hours has been without measurable precipitation (> 0.1 inch).

The Municipal Permit defines a major MS4 outfall as a single pipe with an inside diameter of at least 36 inches or its equivalent (i.e., discharge from a single conveyance other than a circular pipe which is associated with a drainage area of more than 50 acres); or, as any outfall that discharges from a single pipe with an inside diameter of at least 12 inches or its equivalent (i.e., discharge from other than a circular pipe associated with a drainage area of at least 2 acres) that receives runoff from an area zoned for industrial activity (based on comprehensive zoning plans or equivalent).

This procedural document describes field protocols for conducting routine dry weather MS4 outfall monitoring and for investigations to identify sources of water observed during monitoring.

2 Major MS4 Outfall Inventory

The City has identified the major outfalls within its jurisdiction and maintains an inventory of them as required by the Municipal Permit. In cases where a major outfall is permanently inaccessible (e.g., due to private property constraints, safety concerns, etc.), the nearest accessible upstream location within the MS4 is designated as a proxy for the monitoring site. The major MS4 outfall inventory includes the following information for each monitoring location:

- Latitude and longitude of major MS4 outfall (or the upstream proxy site)
- Watershed Management Area (WMA)
- Hydrologic subarea (HSA)
- Outfall size (inches)
- Accessibility (i.e. safety and without disturbance of critical habitat)
- Approximate drainage area (acres)

- Classification of whether the outfall is known to have persistent, transient, or no dry weather discharges. Persistent flow is defined in the Municipal Permit as the presence of flowing, pooled, or ponded water more than 72 hours after a measureable rainfall event of 0.1 inch or greater during three consecutive monitoring and/or inspection events. All other flowing, pooled, or ponded water is considered transient.

3 Routine Dry Weather Major MS4 Outfall Site Visits

During each site visit, a field datasheet (Attachment 1) is completed. The steps involved in obtaining the information to complete the datasheet are listed in the following sections.

3.1 Site Location and Documentation

The first task in conducting a routine site visit is locating the site. This is achieved by using GPS coordinates and the location description provided by the major outfall monitoring site inventory. A hand-held GPS device is used in the field to verify or update coordinates. Once the site has been located and verified, photos are taken to document the condition of the site. Photos are taken facing upstream and downstream of the site and are taken such that they sufficiently display any water present and notable landmarks when possible.

3.2 Atmospheric Conditions

Weather conditions and rainfall information are recorded on the field datasheet. It is important to record the nature of the tide (i.e., incoming, outgoing, high) and its height if the outfall may be tidally influenced. Since monitoring is only permitted to be conducted during dry weather, it is important to document that the monitoring is being completed during dry weather conditions: >72 hours since the last rain, or <72 hours since the last ran and ≤ 0.1 inches of precipitation. If neither of those conditions are met, then dry weather monitoring cannot be conducted. The field team should then stop work until dry weather conditions apply again.

3.3 Flow Measurements

At each site, the outfall is assessed for the presence of water. If a site has flowing or ponded water, sampling staff will observe whether the flow reaches the receiving water body. If the sampling site is upstream of the outfall due to accessibility constraints, it is usually not possible to visually observe whether the flow reaches the receiving water body. In these cases, the "Unknown" option is selected on the datasheet.

At sites with flowing water, the flow rate is also measured and recorded on the field datasheet in gallons per minute (gpm). If the site location is within a manhole, width, depth and velocity measurements cannot be precisely determined and the flow rate must be estimated. If an outfall has ponded water, the flow is recorded as zero gpm. If an outfall is dry, the flow rate is recorded as "Dry."

There are several methods that can be used to measure the rate of flow, but the most commonly used is the velocity-area (“leaf float”) method. This is done by using a stop watch or equivalent to measure the time it takes for a leaf or similar object to float across a pre-measured distance of flowing water. The flow rate can then be calculated by using width, depth, and velocity measurements.

The three methods used to measure flow rate and a description of each are included below:

Velocity-area method (“leaf float”) - The most common method for measuring the discharge of a channel is the velocity-area method. This method requires the physical measurement of the cross-sectional area and the velocity of the flowing water. Discharge is determined as the product of the area times the velocity:

$$\text{Flow rate (ft}^3\text{/sec, or cfs) = Velocity (ft/sec) x Depth (ft) x Width (ft)}$$

The leaf float method involves using a stop watch to measure the time (in seconds) it takes for a leaf or similar object to float across a pre-measured distance (in feet) of the surface of the flowing water. The flow rate can then be calculated by using the equation above. A correction factor between 0.5 and 0.8 should be applied to the flow rate calculation while in the field, based on the width and depth of the flow, as well as the roughness of the conveyance surface material. In general, the rougher the conveyance surface material, the lower the correction factor that must be applied to the flow rate.

Filling a bottle or known volume method - The rate can be determined by measuring the diameter of the outfall and the length of time it takes to fill a 1 liter bottle or any other container with a known volume. Dividing the volume by the time gives a flow rate. Appropriate conversion factors are then applied to convert that flow rate to gpm or cfs if needed. For example, 1 liter per second is equal to 15.85 gpm.

Partially filled pipe method - This method is applicable to discharges from circular pipes. All measurements should be converted to ft before calculation so that the final flow rate is given in cfs. The water depth and inside pipe diameter are measured, then the following approach is applied using the partially filled pipe formula chart in Table 1.

- Calculate D/d
 - D = water depth (ft) and d = inside pipe diameter (ft)
- Find the tabulated (Ta) value on the partially filled pipe formula chart below using the D/d value (e.g., If D/d = 0.26 then Ta =0.1623)
- Find the area using the formula $a = Ta \cdot d^2$
- Calculate flow: Q (flow, cfs) = a (ft²) x Velocity (ft/sec)
Convert to gpm as follows: 1 cfs = 448.8 gpm

Table 1. Calculating the Area of the Cross Section of a Circular Pipe Flowing Partially Full

D/d	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.0000	0.0013	0.0037	0.0069	0.0105	0.0147	0.0192	0.0242	0.0294	0.0350
0.1	0.0409	0.0470	0.0534	0.0600	0.0668	0.0739	0.0817	0.0885	0.0951	0.1039
0.2	0.1118	0.1199	0.1281	0.1365	0.1440	0.1535	0.1623	0.1711	0.1800	0.1890
0.3	0.1982	0.2074	0.2187	0.2280	0.2355	0.2450	0.2540	0.2642	0.2780	0.2836
0.4	0.2934	0.3032	0.3130	0.3220	0.3328	0.3428	0.3527	0.3627	0.3727	0.3827
0.5	0.3980	0.4030	0.4130	0.4230	0.4330	0.4430	0.4520	0.4620	0.4720	0.4820
0.6	0.4920	0.5020	0.5120	0.5210	0.5310	0.5400	0.5500	0.5590	0.5690	0.5780
0.7	0.5870	0.5960	0.6050	0.6140	0.6230	0.6320	0.6400	0.6490	0.6570	0.6660
0.8	0.6740	0.6810	0.6890	0.6970	0.7040	0.7120	0.7190	0.7250	0.7320	0.7360
0.9	0.7450	0.7500	0.7560	0.7610	0.7660	0.7710	0.7750	0.7790	0.7820	0.7840
D = Depth of water		a = area of water in partially filled pipe								
d = diameter of the pipe		Ta = Tabulated Value					Then $a = Ta \cdot d^2$			

Source: County of San Diego, May 2011. *Dry Weather and MS4 Analytical and Field Screening Monitoring Procedures Manual*

3.4 Observations

Observations for odor, color, clarity, and floatables are assessed and recorded on a field datasheet. When the site is dry, the option “na (dry)” is marked, meaning “not analyzed” and/or “dry site”.

Odor: Choose any of the following options that is most representative of the site conditions: none, sewage, sulfides, petroleum, manure, other. Note that “sulfides” indicates the distinct rotten egg smell associated with hydrogen sulfide gas. A petroleum odor usually refers to a smell of gasoline/diesel. Any time a sewage or petroleum odors are noted, some additional source investigation should be completed and/or the appropriate authorities (sewer agency or County of San Diego Department of Environmental Health) should be notified.

Color: Choose one of the following options most representative of the water when viewed *in situ*: none, yellow, brown (silty), white (milky), gray, other.

Clarity: If the water has minimal or no turbidity, mark “Clear.” For more turbid water, the clarity options “Cloudy” and “Murky” are distinguished as follows:

- If the field team views the water at the site and can see more than 4” below the surface of the water, the clarity field is marked as “Cloudy (> 4” vis).” When visibility is limited to less than 4” below the surface of the water, it is marked as “Murky (<4” vis).”

Floatables: Select one or more of the following: none, trash, bubbles/foam, sheen, algae, biofilms, other. Only materials present on or very close to the surface of the water shall be included for this observation. For example, if trash is observed well below the water

surface or at a dry site, trash should not be marked as a floatable. However, trash would still be recorded in the trash assessment section in these cases.

Observations of deposits, vegetation, and biology noted at the site, and the structural condition of the outfall, are recorded for all sites, even if the site is dry.

Deposits: Select one or more of the following: none, coarse particulate, fine particulate, stains/minerals, oily deposit, other. Coarse particulates include particles such as sand or gravel and fine particulates include any particulates that are smaller than the coarse particulates, such as from the presence of clay sediment. Stains or oily deposits, if observed, may require upstream source investigations if they appear recent. Mineral deposits can result in orange/red deposits and oil deposits are black in color.

Vegetation: Sites within manholes will almost always have no vegetation, so “none” should be marked on the datasheet. If the vegetation is observed as less than what is typical for the site, due to excessive erosion or plant removal for instance, the site is considered to have “Limited” vegetation. Sites with vegetation that is overgrown and is impeding, or may impede, flow from the site, or that may contribute to other water quality issues, are considered to have “Excessive” vegetation. Sites observed with typical vegetation for the site are marked as “Normal.”

Biology: Select all applicable options (more than one can be selected). Note that additional categories of organisms can also be notes by writing them in next to the “Other” option.

Structural Condition: “Damaged” means that the outfall structure is cracked, has partially collapsed, or is otherwise in need of repair. “Scour Pond” means an unpaved area just downstream of the outfall has been eroded by outfall discharges such that a depression that allows water to collect and pond has formed. Scour ponds may be sources of bacteria. “Erosion” means there is evidence of erosion at or downstream of an outfall that could either result in a blockage or to water quality issues. “Blockage” means the flow path through the outfall is significantly obstructed. Outfalls to which none of the above apply and that are in good structural condition are marked as “Normal.”

3.5 Trash Assessments

Trash assessments are performed for a designated area around each outfall visited for field screening. The area of assessment is determined using the best professional judgment of the field team, and usually includes an area with a length and width of approximately five to fifteen feet. If observed trash, or other observed pollutants, at the site is determined to pose a threat to human health or the environment, the reporting and response procedures described in the

Section 3 of the City’s Jurisdictional Runoff Management Program (JRMP) document will be followed. Site trash assessment is conducted utilizing the trash rating system summarized in Table 2, which was adopted by the Copermittees’ Regional Monitoring Workgroup in 2013.

Table 2. Trash Assessment Ratings

Copermittee Data Sharing Format Trash Assessment Ratings
None (0 pieces observed)
Low (<50 pieces observed)
Medium (50-400 pieces observed)
High (>400 pieces observed)

4 Discharge Source Investigation

The discharge source is assessed for all sites that have ponded or flowing water. If a site has flowing water, an upstream investigation may be necessary to determine the source of the discharge. The discharge source is traced upstream with the assistance of the City’s MS4 map. While the Municipal Permit requires source investigations for sites with ponded water, sources usually cannot be located since the upstream MS4 line is typically dry at the time of the upstream investigation. Observations and notes are recorded on the field datasheet for evidence of an illegal connection or an illegal discharge, discharge source, basis for source identification, and source elimination.

4.1 Evidence of Obvious Illegal Connections and Illegal Discharges

Evidence of illegal connections and illegal discharges (IC/ID) is documented on the field datasheet by listing physical characteristics of the discharge, such as odor, color, clarity, floatables, deposits, high flow rate, non-standard connection, or anything else that may indicate an IC/ID. For example, murky water may indicate washing activity or discharge from a construction site upstream. Follow up investigations are conducted immediately in cases where obvious IC/IDs are observed.

4.2 Discharge Sources

Potential sources of non-stormwater discharges include groundwater, seepage, irrigation runoff, vehicle washing, wet cleaning or power washing, construction, pool or spa discharge, tidal, water line break, National Pollutant Discharge Elimination System (NPDES) permitted discharge, other, or unable to determine. Examples of NPDES permitted discharges include line flushing by local water utilities and groundwater dewatering conducted after obtaining a discharge permit from the California Regional Water Quality Control Board, San Diego Region (RWQCB). More than one source may be recorded if observed during the upstream

investigation. If the site is dry, then “na” (not applicable) should be checked on the field datasheet.

If the field crew identifies the source as a controllable source of non-stormwater or illegal discharge or connection, the City’s Enforcement Response Plan will be implemented to prohibit and eliminate the discharge or connection to the MS4. If the City suspects the source of the non-stormwater discharge as natural in origin (i.e. non-anthropogenically influenced) and in conveyance into the MS4, then the City will document and provide the data and evidence necessary to demonstrate to the RWQCB that it is natural in origin and does not require further investigation.

4.3 Basis for Source Identification

The basis for source identification is noted on the datasheet as an observed discharge, indirect evidence, historical data, or other. A definition of each basis is included below. If the site is dry, or the source is unable to be determined, “na” should be marked on the datasheet.

- **Observed Discharge:** During the upstream investigation, water is seen discharging to a structure which drains to the site. An example is irrigation runoff from landscaping flowing to a curb inlet upstream from the site.
- **Indirect Evidence:** An active discharge is not observed, but there is evidence of a recent discharge that may have contributed to water observed at the site. An example is a wet vehicle in a driveway and some ponded water with soap bubbles in a nearby gutter upstream from the site.
- **Historical Data:** Results of previous monitoring efforts can sometimes be useful in determining the source of the discharge, even when no direct (observed) or indirect evidence of discharge is noted at the time of the present site visit. Other useful historical data may include local groundwater monitoring well data or results from complaint investigations or inspections.

4.4 Discharge Elimination

If the source of the discharge is identified, the source elimination status on the datasheet is recorded as “Yes” if it was eliminated, “No” if it was not eliminated, or “na” if the site was dry. An example of discharge elimination includes discontinued washing activities from a business or resident after speaking with the responsible party. If multiple discharge sources were identified, and some, but not all sources were eliminated, “No” should be marked, and a full explanation of actions taken to eliminate any sources should be described in the comments.

4.5 Discharge Prioritization for Follow-Up Investigation

As part of the field screening, when flowing or ponded water is observed, the field team will review historical data and make observations in the immediate upstream vicinity of the site to see if the primary source or sources of water can be identified. Any identified or suspected specific sources of a discharge will be recorded and placed into one of the categories listed below. These categories differ slightly from the ones described in the County's *San Diego County Permittees Draft Investigation Procedures* manual. However, the categories listed below can be used to prioritize sources for follow-up and are listed in descending order of priority, with Category I being the highest priority.

1. **Category I:** Observed illegal discharges or illegal connections. Discharges in this category may also pose a threat to human or aquatic health.
2. **Category II:** Discharge type prohibited in 2013 Municipal Permit but allowed in the 2007 Municipal Permit. Examples include irrigation runoff and discharges from foundation or footing drains.
3. **Category III:** Source of discharge is unknown or unable to be determined. For instance, if seepage is observed but it is unknown if the water is from interflow or groundwater.
4. **Category IV:** Conditionally exempt discharges, such as individual residential car washing and air conditioning condensate. Note that if observation data, such as high turbidity or sewage smell, indicates that these discharges are significant sources of pollutants, they are classified under Category I instead.
5. **Category V:** Discharges from natural sources or NPDES permitted discharges, such as groundwater infiltration.

Whenever evidence of a Category I discharge is observed, the City's project manager is contacted immediately for direction about whether additional upstream investigation should be completed. Category V sources do not require any follow-up investigation, although detailed documentation should be collected directly or from past studies to prove that water observed in the MS4 is in fact a Category V discharge. For sources classified as Categories II, III, or IV, the following will also be considered, in order of importance and in combination with staff's best professional judgment, when prioritizing for further investigation:

1. **Flow rate:** Higher flow rates are typically placed at a higher priority.
2. **Flow reaches receiving water:** Discharges observed to reach a receiving water body or highly likely to reach a receiving water body should be higher priority than discharges that do not reach the receiving water body.

3. **Historical data:** Sites with that consistently have flowing water should usually be higher priority than sites that sometimes are flowing but sometimes are dry or ponded.

4.6 Additional Investigation Methods

If a discharge source cannot be identified using the typical investigation methods described above, and there is persistent flow or it is possible an IC/ID may be contributing flow to the site, the field team may use alternate methods for identifying the discharge source. Further details regarding different source constituents and follow-up procedures for each source category can be found in the County of San Diego's *San Diego County Permittees Draft Investigation Procedures* manual. A few of the more common alternate source investigation methods are summarized on the following page.

Review of Plans

As-built drawings for the area of concern may be obtained to verify connections. However, an illegal connection is likely to have occurred after the as-built drawings were created, so additional techniques should also be employed.

Dye Testing

Dye testing is useful to confirm hydraulic connections between the potential source and the location downstream. Fluorescent dye is discharged at the source of the potential IC/ID and is monitored downstream. This method is used only when necessary because the public and appropriate regulatory agencies in the surrounding area need to be informed of the cause of the water discoloration.

Smoke Testing

Smoke testing can be used only on underground stormwater conveyance facilities, to determine potential hydraulic connections between the source and downstream location. Again, the public and appropriate agencies need to be informed of the cause for smoke coming from the MS4.

Video Monitoring

Mobile video cameras may be used to record observations in an underground stormwater conveyance facility. The public and regulatory agencies generally do not need to be informed prior to initiating this kind of investigation.

Confined Space Entry

In some cases, underground conveyances are large enough that a crew trained in confined space entry may investigate the section of pipe or culvert in question instead of using video monitoring. All applicable health and safety regulations must be followed. The public and regulatory agencies, however, generally do not need to be informed prior to initiating a confined space entry.

Potential Sewage IC/IDs

Further testing of suspected sewage-related flows is conducted when visual and odor observations do not adequately confirm the presence of sewage.

- Ammonia - Sewage frequently contains ammonia levels of 30 mg/L or greater. This can be measured with an inexpensive field screening kit.
- Bacteria - Sewage generally has high levels of total and fecal coliforms and *Enterococci*. Sewage treatment plants and many laboratories routinely conduct these indicator analyses.
- When the discharge source is traced to a private property or other public entity, the City may require the responsible party to engage in their own additional investigation and report the findings to the City. Alternatively, the City may choose to perform a joint investigation with the responsible party or other public entities in order to identify the discharge source.

Additional Field or Laboratory Testing

- Measuring the chlorine concentration and conductivity to assess whether a water line break or leak may be contributing to flow at the site.
- Measuring the conductivity at the site. Higher conductivity values may indicate the infiltration of groundwater into the MS4 pipe, and further investigation may be necessary to confirm this conclusion (e.g. analyzing local ground water monitoring well data if available, sending a camera through the MS4 line, etc).

5 Persistent Flow Outfall Monitoring

Pursuant to Section D.2.b.(2) of the Municipal Permit, if during transitional and routine MS4 outfall discharge monitoring, sites are found to have persistent flow, the City will determine which persistent non-stormwater discharges contain pollutant concentrations in excess of the respective non-stormwater action level (NAL) at a minimum of five of these sites within its jurisdiction and within each WMA.

The NALs for non-stormwater discharges are included in Attachment 2 of this document. If there are less than five persistently flowing sites in a WMA, the City will monitor all of its major MS4 outfalls with persistent flows.

The highest priority sites will be monitored during dry weather at least semi-annually until one of the following occurs:

- The non-stormwater discharges have been effectively eliminated (i.e. no flowing, pooled, or ponded water) for three consecutive dry weather monitoring events.

- The source(s) of the persistent flows has been identified as a category of non-stormwater discharges that does not require an NPDES permit and does not have to be addressed as an illegal discharge because it was not identified as a source of pollutants (i.e. constituents in non-stormwater discharge do not exceed NALs), and the persistent flow can be re-prioritized to a lower priority.
- The constituents in the persistent flow non-stormwater discharge do not exceed NALs, and the persistent flow can be re-prioritized to a lower priority.
- The source(s) of the persistent flows has been identified as a non-stormwater discharge authorized by a separate NPDES permit.

If none of the conditions listed on the following page are not met, but threat to water quality has been reduced, the site can be reprioritized as a lower priority. The City records removal or re-prioritization of the highest priority persistently flowing MS4 outfalls in the Water Quality Improvement Plan Annual Report.

5.1 Persistent Flow Outfall Discharge Analytical Monitoring

During each semi-annual monitoring event in which measurable flow is present, each Copermittee must collect and analyze samples from each of the highest priority persistent flow MS4 outfall monitoring stations within its jurisdiction. Analytes that are field measured are not required to be analyzed by a laboratory. Grab or composite samples are analyzed at a qualified laboratory for the following constituents:

- Constituents contributing to the highest priority water quality conditions identified in the Water Quality Improvement Plan.
- Constituents listed as a cause for impairment of receiving waters in the WMA listed on the 303(d) list.
- Constituents for implementation plans or load reduction plans (e.g. Bacteria Load Reduction Plans, Comprehensive Load Reduction Plans, etc.) developed for watersheds where the Copermittees are listed responsible parties under the Total Maximum Daily Loads in Attachment E of the Municipal Permit.
- Applicable NAL constituents.
- Constituents listed in Table D-7 of the Municipal Permit (and included in the bulleted list below). The Copermittees may adjust the list of constituents for the WMA if historical data or supporting information can be provided that demonstrates or justifies the analysis of a constituent is not necessary.

Based on the criteria listed above, the City's non-stormwater persistent flow outfalls will be monitored semi-annually for the constituents listed in the Water Quality Improvement Plan's

Monitoring and Assessment Program for the San Dieguito and the Los Peñasquitos WMAs. Sampling, analysis and quality assurance/quality control are conducted in accordance with the Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, adopted by the State Water Resources Control Board. All chemical, bacteriological, and toxicity analyses will be conducted at a laboratory certified for such analyses by the California Department of Public Health or a laboratory approved by the RWQCB.

6 Enforcement

If the source of a discharge is identified as a category of non-exempt non-stormwater discharges, and the discharge is in exceedance of NALs listed in the Water Quality Improvement Plan, then the City will determine if it is an isolated incident or a set of circumstances that will be addressed through its Enforcement Response Plan, or the category of discharge must be addressed and classified as a prohibited discharge.

7 Reporting

All field datasheets, reports, and data associated with the City's MS4 outfall monitoring program will be made available to the RWQCB in a standardized and compatible format. The City's JRMP Annual Report will also include the number of IC/IDs detected, identified, and eliminated within the reporting period. Reporting IC/IDs to other agencies such as the RWQCB and the County of San Diego Department of Environmental Health is discussed in the City's JRMP document.

8 References

California Regional Water Quality Control Board, San Diego Region. May 8, 2013. Order No. R9-2013-0001, as amended by Order No. R9-2015-0001; 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 Region.*

County of San Diego. May 2011. Dry Weather and MS4 Analytical and Field Screening Monitoring Procedures *Manual.*

County of San Diego. June 2013. *San Diego County Permittees Draft Investigation Procedures.*

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Attachment 1

Dry Weather Major MS4 Outfall Monitoring Field Datasheet

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City of Poway Dry Weather Major MS4 Outfall Monitoring Field Datasheet

Visit Type: Visual Follow-Up **Station Class:** Field Removed, _____

Site ID:	Latitude:	Outfall Size:
Location:	Longitude:	
	HSA:	
	Observer(s):	
Date:	Time:	

Conveyance (select only one) Outlet Manhole Concrete Channel Natural Creek Earthen Channel Other

Atmospheric Conditions

Weather Clear Partly Cloudy Overcast Fog
Last Rain > 72 hours < 72 hours but ≤ 0.1"

Flow

Water Flow Flowing Ponded Dry **Flow reaches receiving water?:** Yes No
Flow Rate: _____ gpm cfs *Fill in flow rate calculation supporting information below if applicable.* Unknown

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec

*Flow rate(gpm) = area(ft²)*velocity(ft/sec)*448.8
 Area = Ta*diameter² (See tabulated values (Ta) chart)*

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec

1 Liter/sec = 15.85 gpm

Velocity Area Method (Leaf Float)

Width		in
Depth		in
Velocity		ft/sec

*Flow rate(gpm) = width(ft)*depth(ft)*velocity(ft/sec)*448.8
 Use correction factor of 0.5 to 0.9 depending on conveyance surface roughness.*

Observations

Odor None Sewage Sulfides Petroleum Manure Other na (dry)
Color None Yellow Brown White Gray Other na (dry)
Clarity Clear Cloudy (> 4" vis) Murky (< 4" vis) Other na (dry)
Floatables None Trash Bubbles Foam Oily Sheen Other na (dry)
Deposits None Coarse Particulates Fine Particulates Stains Oily Deposits Other
Structural Condition (select only one) Normal Damaged Scour Pond Erosion Blockage Other

Trash Assessment

Rating High (>400 pieces) Medium (50 to 400 pieces) Low (<50 pieces) None
Evidence of Illegal Dumping: Yes (describe in comments) No **Potential Threat To:** Human Health Aquatic Health

Comments: _____

Source Identification and Elimination

Evidence of Obvious IC/ID: Odor Color Clarity Floatables High Flow Non-Standard Connection Other _____ No
Flow Source: Groundwater Seepage Irrigation Runoff Vehicle Washing Wet Cleaning Construction na (dry)
 Pool or Spa Water Line Break NPDES Permitted Discharge Other _____ Unable to Determine
Basis for Source Identification: Observed Discharge Indirect Evidence Historical Data Other _____ na (Not Determined/Dry)
If Identified, Was Source Eliminated? (If yes, describe in notes below) Yes No na (dry)

Source ID/Elimination Notes: _____

Field Screening Samples Collected? Yes No **Analytical Lab Samples Collected?** Yes No

Water Temp (°C)		NH3-N (mg/L)		NO3 (mg/L)		Ortho-PO4 (mg/L)	
pH (pH units)		Turb. (NTU)		NO3-N (mg/L)		Ortho-PO4 -P (mg/L)	
Cond. (mS/cm)		MBAS (mg/L)					

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Attachment 2

Non-Storm Water Action Levels

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C. ACTION LEVELS

The purpose of this provision is for the Copermittees to incorporate numeric action levels in the Water Quality Improvement Plans. The goal of the action levels is to guide Water Quality Improvement Plan implementation efforts and measure progress towards the protection of water quality and designated beneficial uses of waters of the state from adverse impacts caused or contributed to by MS4 discharges. This goal will be accomplished through monitoring and assessing the quality of the MS4 discharges during the implementation of the Water Quality Improvement Plans.

1. Non-Storm Water Action Levels⁷

The Copermittees must develop and incorporate numeric non-storm water action levels (NALs) into the Water Quality Improvement Plan to: 1) support the development and prioritization of water quality improvement strategies for effectively prohibiting non-storm water discharges to the MS4s, 2) assess the effectiveness of the water quality improvement strategies toward addressing MS4 non-storm water discharges, required pursuant to Provision [D.4.b.\(1\)](#), and 3) support the detection and elimination of non-storm water and illicit discharges to the MS4, required pursuant to Provision [E.2](#).⁸

a. The following NALs must be incorporated:

(1) Non-Storm Water Discharges from MS4s to Ocean Surf Zone

Table C-1. Non-Storm Water Action Levels for Discharges from MS4s to Ocean Surf Zone

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Total Coliform	MPN/100 ml	1,000	-	10,000/1,000 ¹	OP
Fecal Coliform	MPN/100 ml	200 ²	-	400	OP
<i>Enterococci</i>	MPN/100 ml	35	-	104 ³	OP

Abbreviations/Acronyms

AMAL – average monthly action level
OP – Ocean Plan water quality objective

MDAL – maximum daily action level
MPN/100 ml – most probable number per 100 milliliters

Notes:

- Total coliform density NAL is 1,000 MPN/100 ml when the fecal/total coliform ratio exceeds 0.1.
- Fecal coliform density NAL is 200 MPN per 100 ml during any 30 day period.
- This value has been set to the Basin Plan water quality objective for saltwater “designated beach areas.”

⁷ NALs incorporated into the Water Quality Improvement Plans are not considered by the San Diego Water Board to be enforceable effluent limitations, unless the NAL is based on a WQBEL expressed as an interim or final effluent limitation for a TMDL in [Attachment E](#) and the interim or final compliance date has passed.

⁸ The Copermittees may utilize NALs or other benchmarks currently established by the Copermittees as interim NALs until the Water Quality Improvement Plans are accepted by the San Diego Water Board Executive Officer.

(2) Non-Storm Water Discharges from MS4s to Bays, Harbors, and Lagoons/Estuaries

Table C-2. Non-Storm Water Action Levels for Discharges from MS4s to Bays, Harbors, and Lagoons/Estuaries

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Turbidity	NTU	75	-	225	OP
pH	Units	Within limit of 6.0 to 9.0 at all times			OP
Fecal Coliform	MPN/100 ml	200 ¹	-	400 ²	BP
<i>Enterococci</i>	MPN/100 ml	35	-	104 ³	BP
Priority Pollutants	µg/L	See Table C-3			

Abbreviations/Acronyms:

AMAL – average monthly action level
 OP – Ocean Plan water quality objective
 NTU – Nephelometric Turbidity Units
 µg/L – micrograms per liter

MDAL – maximum daily action level
 BP – Basin Plan water quality objective
 MPN/100 ml – most probable number per 100 milliliters

Notes:

1. Based on a minimum of not less than five samples for any 30-day period.
2. The NAL is reached if more than 10 percent of total samples exceed 400 MPN per 100 ml during any 30 day period.
3. This value has been set to the Basin Plan water quality objective for saltwater “designated beach areas” and is not applicable to water bodies that are not designated with the water contact recreation (REC-1) beneficial use.

Table C-3. Non-Storm Water Action Levels for Priority Pollutants

Parameter	Units	Freshwater (CTR)		Saltwater (CTR)	
		MDAL	AMAL	MDAL	AMAL
Cadmium	µg/L	**	**	16	8
Copper	µg/L	*	*	5.8	2.9
Chromium III	µg/L	**	**	-	-
Chromium VI	µg/L	16	8.1	83	41
Lead	µg/L	*	*	14	2.9
Nickel	µg/L	**	**	14	6.8
Silver	µg/L	*	*	2.2	1.1
Zinc	µg/L	*	*	95	47

Abbreviations/Acronyms:

CTR – California Toxic Rule
 AMAL – average monthly action level
 µg/L – micrograms per liter
 MDAL – maximum daily action level

Notes:

- * Action levels developed on a case-by-case basis (see below)
 ** Action levels developed on a case-by-case basis (see below), but calculated criteria are not to exceed Maximum Contaminant Levels (MCLs) under the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64431

The Cadmium, Copper, Chromium (III), Lead, Nickel, Silver and Zinc NALs for MS4 discharges to freshwater receiving waters will be developed on a case-by-case basis based on site-specific water quality data (receiving water hardness). For these priority pollutants, refer to 40 CFR 131.38(b)(2).

(3) Non-Storm Water Discharges from MS4s to Inland Surface Waters

Table C-4. Non-Storm Water Action Levels for Discharges from MS4s to Inland Surface Waters

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Dissolved Oxygen	mg/L	Not less than 5.0 in WARM waters and not less than 6.0 in COLD waters			BP
Turbidity	NTU	-	20	See MDAL	BP
pH	Units	Within limit of 6.5 to 8.5 at all times			BP
Fecal Coliform	MPN/100 ml	200 ¹	-	400 ²	BP
<i>Enterococci</i>	MPN/100 ml	33	-	61 ³	BP
Total Nitrogen	mg/L	-	1.0	See MDAL	BP
Total Phosphorus	mg/L	-	0.1	See MDAL	BP
MBAS	mg/L	-	0.5	See MDAL	BP
Iron	mg/L	-	0.3	See MDAL	BP
Manganese	mg/L	-	0.05	See MDAL	BP
Priority Pollutants	µg/L	See Table C-3			

Abbreviations/Acronyms:

AMAL – average monthly action level
 BP – Basin Plan water quality objective
 COLD – cold freshwater habitat beneficial use
 NTU – Nephelometric Turbidity Units
 mg/L – milligrams per liter

MDAL – maximum daily action level
 WARM – warm freshwater habitat beneficial use
 MBAS – Methylene Blue Active Substances
 MPN/100 ml – most probable number per 100 milliliters
 µg/L – micrograms per liter

Notes:

1. Based on a minimum of not less than five samples for any 30-day period.
2. The NAL is reached if more than 10 percent of total samples exceed 400 MPN per 100 ml during any 30 day period.
3. This value has been set to the Basin Plan water quality objective for freshwater “designated beach areas” and is not applicable to water bodies that are not designated with the water contact recreation (REC-1) beneficial use.

- b. If not identified in Provision [C.1.a](#), NALs must be identified, developed and incorporated in the Water Quality Improvement Plan for any pollutants or waste constituents that cause or contribute, or are threatening to cause or contribute to a condition of pollution or nuisance in receiving waters associated with the highest priority water quality conditions related to non-storm water discharges from the MS4s. NALs must be based on:

- (1) Applicable water quality standards which may be dependent upon site-specific or receiving water-specific conditions or assumptions to be identified by the Copermitttees; or
- (2) Applicable numeric WQBELs required to meet the WLAs established for the TMDLs in [Attachment E](#) to this Order.

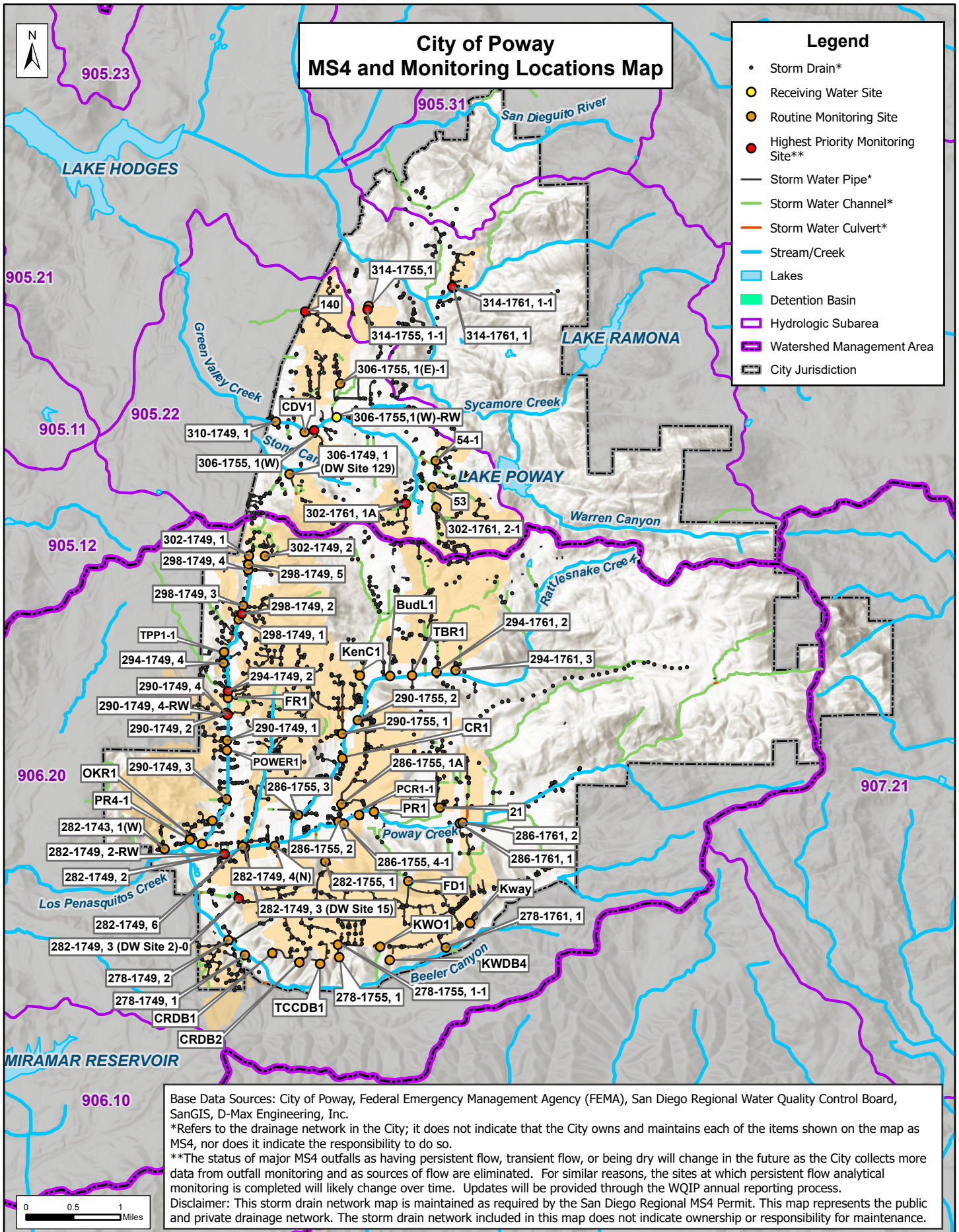
- c. For the NALs incorporated into the Water Quality Improvement Plan, the Copermitttees may develop and incorporate secondary NALs specific to the Watershed Management Area at levels greater than the NALs required by Provisions [C.1.a](#) and [C.1.b](#) which can be utilized to further refine the prioritization and assessment of water quality improvement strategies for effectively prohibiting non-storm water discharges to the MS4s, as well as the detection and elimination of non-storm water and illicit discharges to and from the MS4. The

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Appendix C.2.

MS4 and Monitoring Locations Map

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City of Poway MS4 and Monitoring Locations Map

- ### Legend
- Storm Drain*
 - Receiving Water Site
 - Routine Monitoring Site
 - Highest Priority Monitoring Site**
 - Storm Water Pipe*
 - Storm Water Channel*
 - Storm Water Culvert*
 - Stream/Creek
 - Lakes
 - Detention Basin
 - Hydrologic Subarea
 - Watershed Management Area
 - City Jurisdiction

Base Data Sources: City of Poway, Federal Emergency Management Agency (FEMA), San Diego Regional Water Quality Control Board, SanGIS, D-Max Engineering, Inc.

*Refers to the drainage network in the City; it does not indicate that the City owns and maintains each of the items shown on the map as MS4, nor does it indicate the responsibility to do so.

**The status of major MS4 outfalls as having persistent flow, transient flow, or being dry will change in the future as the City collects more data from outfall monitoring and as sources of flow are eliminated. For similar reasons, the sites at which persistent flow analytical monitoring is completed will likely change over time. Updates will be provided through the WQIP annual reporting process.

Disclaimer: This storm drain network map is maintained as required by the San Diego Regional MS4 Permit. This map represents the public and private drainage network. The storm drain network included in this map does not indicate ownership or responsibility for maintenance.

Note: The portion of Warren Canyon Creek from Lake Poway to City's eastern boundary is not within the City of Poway's jurisdiction per the City's conversation with the San Diego Water Board on July 19, 2021.

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Appendix D
Enforcement Response Plan

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City of Poway Enforcement Response Plan

1 Introduction

The City of Poway (City) enforces compliance with the requirements of its Stormwater Management and Discharge Control Ordinance (Storm Water Ordinance), codified in Poway Municipal Code (PMC) Chapter 13.09, including the minimum best management practice (BMP) requirements included in the City's BMP Manual (found in Appendix C of the City's Jurisdictional Runoff Management Program (JRMP) document). In accordance with Section E.6 of the California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit), compliance with the City's ordinances will be assessed through a variety of means, including inspections, responses to hotline calls, and routine municipal separate storm sewer system (MS4) outfall monitoring. Where violations are observed, the enforcement actions and procedures described in this Enforcement Response Plan will be employed to enforce the requirements.

The City typically employs a tiered, escalating enforcement system. However, the City reserves the right to use whatever tools the authorized enforcement official deems most appropriate for a given situation, as dictated by the specifics of each case.

Enforcement actions, including escalated enforcement actions, are described in the following sections. It should be noted that experience and professional judgment of City staff are important in guiding the appropriate response to a violation. Escalated enforcement actions will continue to increase in severity, as necessary, to compel compliance as soon as possible.

2 Administrative Enforcement Actions

The various administrative enforcement measures are employed by the City are discussed below.

2.1 Written and Verbal Warnings (PMC §§ 13.09.120.A.2-3)

A written or verbal warning is typically the City's first level of enforcement action when a violation of the City's Storm Water Ordinance is observed such as a prohibited non-storm water discharge or an illegal connection. Written warnings can be given using a variety of methods including code violation warnings, Notices of Violation (NOVs), cease and desist orders, and notice and order to clean, test, or abate.

If it is determined by an authorized enforcement official that the public interest requires the posting of a bond or other security to assure the violation is corrected, such bond or security may be required. Notice and orders to clean, test, or abate may be issued to perform any act

required by the PMC. When written warnings are issued, the violation is noted, a time frame to correct the violation is given, and a follow-up date is scheduled. City staff follow-up with violations as necessary to determine whether or not compliance has been achieved.

2.2 Administrative Citations and Penalties (PMC Chapter 1.10, PMC § 13.09.120.A.1)

City staff may issue storm water field citations for violations of the PMC or the Municipal Permit. Maximum citation amounts depend on the number of previous violations by the same responsible party that have taken place within the last 12 months, as follows:

- First violation: \$100 (per day/per violation)
- Second violation: \$200 (per day/per violation)
- Third violation: \$500 (per day/per violation)
- Additional violations: \$1,000 (per day/per violation)

Every day that a violation of the PMC occurs or is left unresolved is considered to be a separate violation. Therefore, a separate citation may be issued for each day that a violation occurs. To be considered an additional violation beyond the first violation, the violation must relate to the same ordinance, term, or condition and result in citing the same responsible party. However, subsequent violations do not have to occur at the same physical location, involve the same personnel, or be for exactly the same reason to be considered additional violations beyond the first violation.

When an administrative citation is issued, the responsible party may request a hearing to contest the enforcement official's determination that a violation of the City's storm water requirements has occurred. Details on the City's hearing and appeals process can be found in Chapter 1.10 of the PMC.

2.3 Public Nuisance Abatement (PMC § 13.09.120.A.4)

Violations that are deemed to be a threat to public health, safety, and welfare may be identified as a public nuisance. City costs for pollution detection and abatement, if not paid in full by the discharger in addition to any other penalties, may be made a lien against the property in accordance with the abatement procedure (PMC § 8.72.030.D). Costs for pollution detection and abatement may be recovered from the discharger in addition to any other penalties.

2.4 Stop Work Orders (PMC § 13.09.120.A.5, PMC § 16.52.120)

Whenever any work is being done contrary to the PMC, or other laws or ordinances, City enforcement staff may order the work stopped by notice in writing to any person engaged in

doing or causing such work to be done. Any person receiving a Stop Work Order is required to immediately stop such work until approved by City staff to proceed with the work.

Stop Work Orders are typically given if written warnings have been issued and the violation has not been corrected, or if an observed violation poses a significant threat to water quality. Stop Work Orders prohibit further activity until the problem is resolved. The Stop Work Order describes the infraction and specifies what corrective action must be taken. A copy of the Stop Work Order is given to the responsible party and placed in the site's active inspection file. To restart work once a Stop Work Order has been issued, the responsible party must request a re-inspection of the site to verify that the violation has been satisfactorily corrected. Once it is verified by City staff that the appropriate corrections have been implemented, activities may resume.

2.5 Permit Suspension or Revocation (PMC § 13.09.120.A.6)

Violations of the PMC may be grounds for permit and/or other city license suspension or revocation. City permits, licenses, or other approvals may be suspended or revoked after notice and an opportunity for a hearing. For instance, in severe cases of non-compliance, or significant discharges relating to development and/or construction activities, the City may revoke the building or grading permits that a contractor is working under for the project or deny future permits on the project. The responsible party will then need to re-apply for permits and meet the requirements the City may have placed on the project before resuming the project.

2.6 Enforcement of Contracts

If a contractor is performing work for the City, then the City may use the provisions within the contract for enforcement of non-compliance. Such contract provisions may allow the City to refuse payment, stop work (without time penalties), and/or revoke contracts if contractors performing activities do not comply with all appropriate permits, laws, regulations, and ordinances.

3 Judicial Enforcement Actions

In addition to administrative enforcement procedures, the City also may take the judicial enforcement actions described below.

3.1 Civil Penalties and Remedies (PMC § 13.09.120.B.1)

The City Attorney is authorized to file criminal and civil actions and to seek civil penalties and/or other remedies to enforce the City's ordinances. The penalty for a storm water infraction will be relatively minor for a first offense, but repeated violations will result in escalating fines or misdemeanor charges. There is no requirement that administrative enforcement procedures be pursued before such actions are filed.

3.2 Injunctive Relief (PMC § 13.09.120.B.2)

The City may pursue enforcement by judicial action for injunctive relief for any violation of the Storm Water Ordinance.

3.3 Arrest or Issue Citations (PMC § 13.09.120.B.3)

The assistance of a peace officer may be enlisted to arrest violators as provided in California Penal Code, and/or a citation and notice to appear as prescribed in the Penal Code, including Section 853.6, may be issued. There is no requirement that administrative enforcement remedies be used before such actions are taken.

3.4 Criminal Violations – Misdemeanors and Infractions (PMC §§ 13.09.140.B-C)

It is unlawful for any person, firm, corporation, or other responsible entity to violate any provision or fail to comply with any of the restrictions or requirements of the PMC, including the Storm Water Ordinance. Non-compliance with any part of the Storm Water Ordinance may be charged as an infraction or a misdemeanor and may be enforced and punished as prescribed in the Penal Code and Government Code of the State of California, and the PMC.

4 Enforcement Documentation

During each investigation, all observed non-compliance activity is documented. The following information, is recorded for use in administrative and judicial enforcement actions, where applicable:

- Chronology of events
- Case summary
- Time and expense log
- Inspection reports
- Complaints
- Phone conversation records
- Correspondence
- Maps and diagrams
- Photographs
- Witness list
- Explanation of the violations
- Request-to-file form
- Field notes
- Emergency incident reports
- Lab results
- Chain-of-custody for samples
- Permit applications
- Sampling plans
- Other supporting documents
- Reports from regulatory agencies

5 Municipal Enforcement

During routine municipal facility inspections, City or contract staff will assess facility areas and activities to ensure all are maintained in accordance with City regulations, ordinances, and BMP

requirements. If BMPs are found to be deficient or otherwise ineffective, the responsible party or department will be provided with required corrective actions. If the responsible City staff member or department/division does not perform the necessary corrective actions in response to the direction of their immediate superior, escalated enforcement action will be taken by involving higher ranking representatives within the responsible department or division, who may enact internal disciplinary procedures, until the deficiencies are resolved.

If the inspector notes that specific areas of a leased facility require additional BMPs, the City can require the implementation of BMPs in addition to the required minimum for the specific area/activity. If a leased facility continues to be out of compliance, the City may choose to discontinue the lease, which would remove the tenant from that particular site. Discontinuing a lease is considered an escalated enforcement action.

As required by the Municipal Permit, City staff will seek to resolve incidents of observed non-compliance within 30 calendar days, or prior to the next rain event, whichever is sooner. In cases where the violation cannot be resolved within 30 calendar days, the reason additional time was needed for case resolution will be documented and kept on file.

6 Industrial and Commercial Enforcement

6.1 Fixed Facility Enforcement

The City ensures that BMPs are implemented by enforcing its Storm Water Ordinance. City inspectors and enforcement staff properly document each observed violation at facilities failing to comply with storm water requirements, and enforcement action is taken where necessary to bring about compliance.

Depending on the nature and severity of the violation, enforcement may consist of any of the following actions listed in sections 2 or 3 of this Enforcement Response Plan. Typical enforcement actions are listed below; escalated enforcement actions are marked with an asterisk (*):

- Verbal warnings
- Written warnings
- Administrative citations*
- Public nuisance abatement*
- Revocation of permits or licenses*

Inspectors seek to resolve non-compliance promptly and establish appropriate compliance time frames on a case-by-case basis. Escalated enforcement measures are used as needed to ensure

compliance. Note that the City maintains the authority to require facilities to prepare a written BMP plan or to conduct sampling and analysis where deemed necessary by the City.

If the City inspector observes a significant and/or immediate threat to water quality, action will be taken to require the facility owner and/or operator to immediately cease and correct the discharge or activity. Conditions that would warrant such action may include observations of runoff from the industrial site that are not reasonably controlled by the protective measures or observation of a failure in BMPs resulting in or potentially resulting in a release of pollutants to a degree that may substantially degrade water quality. Discharges related to non-compliance deemed to pose a threat to human or environmental health will be reported to the RWQCB verbally within 24 hours and in writing within five days, as required by Attachment B of the Municipal Permit.

Events of non-compliance are evaluated according to the following criteria to determine whether the events pose a threat to human or environmental health:

- The event of non-compliance resulted in a spill or discharge of hazardous materials, pollutants, or runoff containing pollutants that had an effect on a receiving water body.
- The quantity and/or concentration of the pollutants in the spill or discharge affecting the receiving water was such that it may cause or contribute to an exceedance in water quality objectives as specified in the Water Quality Control Plan for the San Diego Basin Plan.

As required by the Municipal Permit, City inspectors will seek to resolve incidents of observed non-compliance within 30 calendar days, or prior to the next rain event, whichever is sooner. In cases where the violation cannot be resolved within 30 calendar days, the reason additional time was needed for case resolution will be documented and kept on file.

6.2 Mobile Business Enforcement

Most violations associated with mobile businesses are anticipated to be related to illegal discharges. The City's enforcement approach to such discharges will require the discharge to be stopped and the area cleaned of discharged materials when applicable and feasible. Education may also be provided to operators who are not aware of the City's storm water requirements. Businesses that do not possess the materials necessary to implement the required BMPs will likely be required to demonstrate to the City that they have obtained such materials and can properly use them before the City allows such businesses to resume operations in the City. Mobile businesses that do not have City business licenses will be required to obtain them. Discharges related to non-compliance deemed to pose a threat to human or environmental health will be reported to the RWQCB verbally within 24 hours and in writing within five days, as required by Attachment B of the Municipal Permit.

As required by the Municipal Permit, City inspectors will seek to resolve incidents of observed non-compliance within 30 calendar days, or prior to the next rain event, whichever is sooner. In cases where the violation cannot be resolved within 30 calendar days, the reason additional time was needed for case resolution will be documented and kept on file.

7 Residential Enforcement

The following mechanisms will be used by the City to determine areas where enforcement actions may be necessary, where appropriate:

- Public reporting hotline
- Analysis of field screening and analytical monitoring results
- Observations from City personnel

There are two methods of discovering residential activities contributing to urban runoff. One is through complaint/referral process. Complaints may be received through direct contact with City, contract staff, or through calls to the City's Storm Water Hotline. The other route is through observations made by City staff during residential area inspections, during scheduled MS4 outfall monitoring, and during routine City activities such as storm water conveyance maintenance. Additionally, focused investigations of areas upstream of outfalls with obvious pollutants present during the Dry Weather Major MS4 Outfall Discharge Monitoring Program and complaint response investigations provide further information about potential problem areas. The City believes that the combination of monitoring, public reporting, direct observations by City staff that are routinely in the field, and targeted additional investigations, where necessary, provide sufficient oversight of residential areas and activities.

During investigations of incidents reported to the hotline, or discovered during routine storm water conveyance outfall monitoring, that are associated with a residential source, City staff will address issues of storm water concern where feasible, and provide education where appropriate. Voluntary compliance and escalating enforcement mechanisms are implemented to eliminate an illegal connection and illegal discharge (IC/ID) once the source has been identified. Violations to the PMC will be investigated by City enforcement and/or storm water staff. Violations are documented and depending on the nature and severity of the violation, enforcement may consist of any of the enforcement measures described in sections 2 and 3 of this Enforcement Response Plan. Details of enforcement mechanisms pertaining to IC/IDs can be found in Section 10 of this Enforcement Response Plan.

Follow-up inspections conducted as a result of residential BMP deficiencies will be performed. Violations will continue to be investigated by City personnel with enforcement authority within a reasonable timeframe. Depending on the nature and severity of the violation, enforcement may consist of any of the actions listed in sections 3.1 or 3.2 of the Enforcement Response Plan.

Typical enforcement actions are listed below; escalated enforcement actions are marked with an asterisk (*):

- Verbal warnings
- Written warnings
- Administrative citations*
- Public nuisance abatement*

Discharges related to non-compliance deemed to pose a threat to human or environmental health will be reported will be reported to the RWQCB verbally within 24 hours and in writing within five days, as required by Attachment B of the Municipal Permit.

As required by the Municipal Permit, City inspectors will seek to resolve incidents of observed noncompliance within 30 calendar days, or prior to the next rain event, whichever is sooner. In cases where the violation cannot be resolved within 30 calendar days, the reason additional time was needed for case resolution will be documented and kept on file.

8 Development Planning Enforcement

The City will use a variety of enforcement methods to ensure storm water requirements for all development projects within the City's jurisdiction are implemented. Enforcement measures will escalate with continued violations as necessary. The City's current plan check process includes steps to enforce the implementation of development requirements during construction.

Since all structural BMPs are required to be shown on the project's plans, inspectors check to make sure these BMPs have been correctly installed during their routine inspections. If any mistakes in BMP installation are noted during plan checks, the City requires the project to promptly correct these errors until BMP installation is consistent with the specification on the project's approved plans.

Once a project has been completed, ongoing operation and maintenance is verified through inspections or through review of submitted maintenance verification certifications. If a project is found not to be maintaining BMPs as required, depending on the nature and severity of the violation, enforcement may consist of any of the actions listed in sections 2 or 3 of the Enforcement Response Plan. Typical enforcement actions are listed below; escalated enforcement actions are marked with an asterisk (*):

- Verbal warnings
- Written warnings
- Administrative citations*

- Public nuisance abatement, which may include placing a lien against the property*

If an inspector finds maintenance deficiencies with any structural BMPs at a site, he or she first attempts to explain the deficiencies and necessary corrective actions to the responsible party, if the responsible party is present. If the responsible party performs all necessary corrective actions promptly in response to the verbal explanation from the inspector, the case is closed, and the resolution is documented. Otherwise, a written notice is issued to the responsible party. The notice indicates the type and location of each BMP and describes the deficiencies observed by the inspector as well as the required corrective actions. Responsible parties are required to perform the corrective actions and demonstrate that all necessary maintenance activities were completed through a re-inspection with the City inspector or through providing photographs of corrections. The inspector may also request additional documentation or perform a re-inspection at their discretion.

The maintenance condition of structural BMPs are determined through an annual self-certification program where the City requires reports from authorized parties demonstrating proper maintenance and operation of BMPs. If the responsible party fails to provide the annual report, the City will issue a written notice requiring the responsible party to provide the report within a given timeframe.

If a responsible party fails to sufficiently respond to a notice from the City by the response deadline, the inspector may issue a NOV. If the responsible party still fails to perform the necessary corrective actions, the inspector may issue an administrative citation.

Follow-up inspections conducted as a result of structural or treatment control BMP deficiencies will be performed. All enforcement actions will be documented appropriately in the development project's database file. If a development site receives frequent citations or is not responsive to previously issued enforcement actions, more severe actions, such as court actions, will be used as necessary.

As required by the Municipal Permit, City inspectors will seek to resolve incidents of observed non-compliance within 30 calendar days, or prior to the next rain event, whichever is sooner. In cases where the violation cannot be resolved within 30 calendar days, the reason additional time was needed for case resolution will be documented and kept in the project's file.

9 Construction Management Enforcement

The City is responsible for enforcement of applicable local ordinances and permits at all construction sites in its jurisdiction. When violations are observed and documented during a site inspection, the City will implement appropriate enforcement measures based on the severity of the violation. Enforcement can range from written warnings to more severe enforcement such as Stop Work Orders. Stronger enforcement measures will be used as

necessary if proper corrective actions are not implemented during the allotted time frame or if the severity of the violation warrants stricter enforcement.

The typical progressive enforcement steps that the City will implement include the following: actions considered escalated enforcement are marked with an asterisk (*):

- Written warnings, including inspection reports, code violation warnings, correct work notices, and NOVs
- Stop Work Orders
- Enforcement of contracts (City projects)
- First administrative citation (\$100)
- Additional administrative citations (\$200 to \$1,000)*
- BMP implementation by City-hired contractor, with cost reimbursement to the City*
- Revocation of permits*
- Civil and/or criminal court action*

Escalated enforcement actions will be reported to the RWQCB within five days, as required by the Municipal Permit.

The City works closely with all development projects prior to the commencement of construction activities. All construction sites are expected to be aware of the City's BMP requirements. Accordingly, a written warning will typically be the first enforcement step, and additional enforcement actions will be taken if that is not sufficient to achieve compliance. The City seeks to resolve violations as quickly as possible, including prior to rain events where feasible. In cases of significant or repeated non-compliance, the City may hire an outside contractor to implement required BMPs at a construction site when there is at least a 50% chance of rain within the next 72 hours. The City will require cost recovery from the responsible party (private projects) or contractor (City projects) for the costs of BMP implementation in this scenario. In cases where a violation cannot be resolved within 30 calendar days, the reason additional time was needed for case resolution will be documented and kept in the project's file, as required by the Municipal Permit.

When a site is subject to the SWRCB Order No. 2009-0009-DWQ, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ (Construction General Permit), City staff may also collaborate with RWQCB staff on enforcement actions. The City will notify the RWQCB in writing within five calendar days of issuing escalated enforcement to a construction site that poses a significant threat to water quality as a result of violations of other noncompliance. Written notification may be provided to the appropriate RWQCB staff member by email. The City will also notify the RWQCB of any construction sites required to obtain coverage under the Construction General Permit that, to the City's knowledge, have not filed NOIs, within five

calendar days from the time the City became aware of the circumstances. At minimum, the construction project location and name of owner or operator will be provided to the RWQCB. Written notification may be provided electronically by email to Nonfilers_R9@waterboards.ca.gov.

Any non-compliance that may endanger health or the environment will be reported to the RWQCB verbally within 24 hours and in writing within five days, as required by Attachment B of the Municipal Permit. Criteria listed below will be used to determine the threats to human health or the environment associated with a non-compliance event, whether from storm water or non-storm water discharges, where applicable:

- Estimated area of erosion caused by discharge
- Total suspended solids concentration and turbidity of discharge
- Other materials discharged that pose a threat (concrete washout, sanitary washes, etc.)

10 Illegal Discharge Detection and Elimination Enforcement

The City implements and enforces its ordinances, orders, or other legal authority to prevent IC/IDs to its storm water conveyance. If the City identifies the source as a controllable source of non-storm water or as an IC/ID, the administrative and judicial enforcement measures previously listed will be used, as necessary, to eliminate IC/IDs.

If a complaint is received that indicates an IC/ID, City staff will conduct a field investigation for complaints with details suggesting an actual or potential discharge to the storm water conveyance or receiving water body. If investigators find evidence of a violation with the potential to release pollutants or an actual IC/ID, every effort is made to find the responsible party and inform them of the complaint or issue a written warning. Parties found to be responsible for a violation or IC/IDs are required to clean up or remove pollutants to the maximum extent practicable. Any refusal by the responsible party to perform clean up of a violation or discharge will be handled by City enforcement staff and appropriate enforcement actions will be taken.

The nature of the City's enforcement approach is determined on a case-by-case basis and is based on factors such as the severity of the violation, the threat to human or environmental health, site-specific circumstances, and past compliance history. If the situation is determined to pose an immediate risk to public health or the environment, the City may coordinate with other agencies or teams that are specially trained to assess and mitigate emergency situations as necessary (e.g., those involving hazardous wastes/materials, etc.). The discharge is also reported to the RWQCB as required by the Municipal Permit.

Any non-compliance that may endanger health or the environment will be reported to the RWQCB verbally within 24 hours and in writing within five days, as required by Attachment B of the Municipal Permit. Criteria listed below will be used to determine the threats to health or the environment associated with a non-compliance event, whether from storm water or non-storm water discharges, where applicable:

- Estimated volume of discharge
- Types of pollutants discharged, including if toxic materials were discharged
- Sensitivity of the receiving water body, including if it is 303(d) listed for any of the pollutants in the discharge
- Proximity of site to sensitive habitat/endangered species
- Proximity of site to public water supply (well head, monitoring wells)
- Quantity, if any of the discharge reached the receiving water body
- Beneficial uses for affected water bodies

Additionally, water observed at major MS4 outfalls and traced to an anthropogenic source(s) is considered an illegal discharge. If the anthropogenic source(s) is/are found to be from an industrial/commercial site, an inspection of the facility will be performed in a timely manner to investigate the discharge. The inspection report will include a note describing that the inspection was prompted due to recent IC/ID discovery associated with MS4 outfall monitoring.

If the anthropogenic source is found to be from a residential area, the City's staff may provide education and/or a written notification informing the responsible party of the illegal discharge and their responsibility to eliminate it. Follow-up inspections are conducted as necessary to ensure the discharge has been eliminated.

If the anthropogenic source is traced a municipal source, the enforcement actions discussed in Section 5 is taken.

Any IC/ID observed to have potential to immediately impact human health or the environment is immediately reported to Code Compliance staff and the Fire Department, if necessary, and all associated enforcement action(s) will be handled by Code Compliance staff.

As required by the Municipal Permit, City staff will seek to resolve incidents of observed non-compliance within 30 calendar days, or prior to the next rain event, whichever is sooner. In cases where the violation cannot be resolved within 30 calendar days, the reason additional time was needed for case resolution will be documented and kept on file.

Appendix E

Existing Development Retrofit and Stream Rehabilitation Program

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Existing Development Retrofit and Stream Rehabilitation Program

1 Introduction

The Municipal Permit¹ requires the 18 municipalities in San Diego County, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District, including the City of Poway (City) (collectively referred to as “Copermittees”) to develop a program that will retrofit areas of existing development and a program to rehabilitate streams, channels, and/or habitats in the City’s jurisdiction within the San Dieguito and Los Peñasquitos Watershed Management Areas (WMAs).

The primary objective of these programs is to address the identified sources of pollutants and/or stressors that contribute to the highest priority water quality conditions (HPWQCs) outlined in the Water Quality Improvement Plans (WQIPs) for both WMAs. The City will focus its retrofit and rehabilitation programs on reducing bacteria, a HPWQC for both WMAs, and sediment, a HPWQC for the Los Peñasquitos WMA.

Two general steps are necessary to complete retrofit or rehabilitation projects: identifying candidate projects and then identifying potential implementation approaches for identified projects. The following sections discuss the strategies the City will utilize to identify, prioritize, and implement potential projects that will address the HPWQCs.

2 Program Organization

Over time, the City will develop a retrofit and rehabilitation program that will include feasible and cost-effective opportunities to modify water quality conditions created, in part, by existing development. Although this effort has been initiated through the WQIP process, it will be refined as the City gains a better understanding of the dynamic between its existing development and the HPWQCs. Listed below are some strategies the City will consider and/or implement as it develops its retrofit and rehabilitation programs.

- Alternative compliance provisions for development projects, which allow offsite retrofit or rehabilitation projects in lieu of meeting the relevant storm water requirements solely through onsite best management practices (BMPs). Because this effort is being considered by the City and the watersheds in which it participates and/or is under

¹ California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001

development by other agencies, the processes for approving, implementing, maintaining, and reporting on such projects will be identified when this effort has been more refined.

- Obtaining grants for storm water retrofits or stream, channel, and/or habitat rehabilitation projects, led by the Development Services Department.
- Implementing projects, typically green streets or other structural water quality improvement BMPs.

3 Retrofitting Areas of Existing Development

As defined by the Municipal Permit, a retrofit is a “storm water management practice put into place after development has occurred in watersheds where the practice previously did not exist or are ineffective.” Potential projects can include disconnecting roof downspouts, and impervious surfaces and redirecting them to pervious areas, replacing impervious surfaces with pervious surfaces, installing rain barrel and rain gardens, green streets, infrastructure projects, and multiuse treatment areas amongst other options. The following factors are considered when identifying candidate projects.

Directly targets the HPWQC and help make progress toward WQIP numeric goals. One of the City’s goals, as outlined in the WQIP, is to reduce bacteria levels in both WMAs. Retrofit projects with the potential to target bacteria levels, including both targeting point sources of bacteria and sources of dry weather flow that transport bacteria during non-storm conditions will be considered first.

Feasibility of project. The feasibility of the project is an important consideration that takes into account a project’s likelihood of obtaining funding, constructability, ease of implementation and operation, and any potential impediments. The project’s viability takes into account the amount of resources City staff are able to commit to the project. Candidates that may place a considerable administrative burden on City staff, or that may require significant City resources to maintain and operate are generally less desirable projects and may be entirely infeasible.

Total area of high TTWQ properties. The total area of inventoried existing development (industrial, commercial, municipal, and residential) classified as having a high TTWQ draining to a candidate project will be considered. The facility’s or area’s TTWQ is based on the prioritization processes discussed in the JRMP document which takes into account the facility’s or area’s pollutant discharge potential and proximity to and sensitivity of the water body in which the area drains to.

Land use. Land use of the area tributary to a potential retrofit project is an important consideration when selecting retrofit project candidates. Land uses commonly associated with the HPWQCs described above will be considered before other land uses. For instance,

commercial areas can be sources of bacteria since outdoor trash areas often have concentrated bacteria levels.

Multiple benefits of project. Candidate projects with the potential to contribute to the overall enhancement of the local environment are preferred. Other benefits of retrofit projects can include, but are not limited to, the following:

- Enhanced walkability or pedestrian safety and access.
- Community beautification, such as streetscape aesthetics or incorporating murals other features with significant artistic value.
- Improved flood protection.
- Improved access to green spaces or recreational opportunities.
- Environmental justice.

Land availability. It would be difficult to complete a retrofit project if the potential project is completely surrounded by development. Land ownership is another factor to consider when identifying areas for potential projects. The best case scenario is when the City owns the property where a project is being considered. If another public agency, like a school district, owns the property, then that is second best, whereas, if the land is privately owned, and especially if there are multiple land owners, the project could become more complicated or infeasible to execute.

Amount of impervious area. Projects that have the potential to treat a large area of impervious surfaces are ideal project candidates. Impervious surfaces are generally recognized as sources of common storm water pollutants such as oil and grease, heavy metals, and sediment (CASQA, 2003).

Cost effectiveness. Projects that are able to remove the greatest unit of pollution for the lowest cost are preferred. Long term BMP maintenance cost will also be considered.

Opportunities for infiltration or retention. Ideal candidates will incorporate structural BMPs suitable for infiltration or retention. The project's suitability is primarily determined by the soil type for the proposed project area, but also by depth to groundwater and proximity to neighboring buildings and infrastructure. Infiltration is the most effective BMP, since it has close to 100 percent pollutant removal efficiency and also reduces runoff volume, and is relatively low maintenance (CASQA, 2003). Since there are few areas within San Diego County where infiltration is feasible, if a project is able to incorporate infiltration BMPs, it should be considered.

New development or redevelopment projects. Through the City's permitting approval process, the following retrofits for new development or redevelopment projects may be required, if applicable:

- Structural roofs for trash enclosures
- Water efficient landscaping

Existing retrofit projects within the City include the following:

- Community Detention Basin (9.5 acre drainage area)
- Gate Detention Basin (206 acre drainage area)
- Kirkham Detention Basin (150 acre drainage area)
- Stotler Detention Basin (32 acre drainage area)
- Stowe Detention Basin (200 acre drainage area)

4 Stream Rehabilitation Projects

Stream, channel, and/or habitat rehabilitation projects may be utilized to address storm water runoff flows and durations from areas of existing development that cause or contribute to hydromodification in receiving waters, rehabilitate channelized or hydromodified streams, restore wetland and riparian habitat, restore watershed functions, and/or restore beneficial uses of receiving waters. The Municipal Permit states that rehabilitation methods can include in-stream restoration, off-line storm water management practices installed in the system corridor or upland areas, or a combination of in-stream and out of stream techniques. Some of these techniques may include riparian zone restoration, constructed wetlands, channel modifications, and daylighting of drainage systems. The following factors will be considered when identifying project candidates.

Directly targets the City's HPWQC and helps make progress toward WQIP numeric goals. Rehabilitation projects with the potential to target sediment and bacteria, including both targeting point sources of bacteria and sources of dry weather flows which transport bacteria during non-storm conditions, will be considered first for both WMAs.

Feasibility of project. The feasibility of the project is an important consideration that takes into account a project's likelihood of obtaining funding, constructability, ease of implementation and operation, and any potential impediments. The project's viability takes into account the amount of resources City staff are able to commit to the project. Candidates that may place a considerable administrative burden on City staff, or that may require significant City resources to maintain and operate are generally less desirable projects and may be entirely infeasible.

Multiple benefits of project. Candidate projects with the potential to contribute to the overall enhancement of the local environment are preferred. Other benefits of rehabilitation projects can include, but are not limited to, the following:

- Enhanced walkability or pedestrian safety and access.
- Community beautification, such as streetscape aesthetics or incorporating murals other features with significant artistic value.
- Improved flood protection.
- Improved access to green spaces or recreational opportunities.
- Environmental justice.

Beneficial uses. Stream segments with the following beneficial uses designated by the Basin Plan should be considered for rehabilitation before others. All beneficial use abbreviations and definitions are taken from the *Water Quality Control Plan for the San Diego Basin* (RWQCB, 2011).

- Biological Habitats of Special Significance (BIOL) – Includes uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance), where the preservation or enhancement of natural resources requires special protection.
- Cold Freshwater Habitat (COLD) – Includes uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.
- Estuarine Habitat (EST) – Includes uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).
- Freshwater Replenishment (FRSH) – Includes uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity).
- Rare, Threatened or Endangered Species (RARE) – Includes uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.
- Inland Saline Water Habitat (SAL) – Includes uses of water that support inland saline water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish or wildlife, including invertebrates.

- Spawning, Reproduction, and/or Early Development (SPWN) – Includes uses of water that support high quality habitats suitable for reproduction, early development, and sustenance of marine fish and/or cold freshwater fish.
- Warm Freshwater Habitat (WARM) – Includes uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

Stream or channel segments with multiple beneficial uses are desirable candidates.

Land availability. It would be difficult to complete a potential restoration project if there is development completely surrounding a stream segment. Land ownership is another factor to consider when identifying candidate projects. If the City owns the property where a project is being considered, that is the best case scenario. If another public agency, like a school district, owns the property, then that is second best. Whereas, if the land is privately owned, especially if there are many land owners, the project could become more complicated to execute.

Amount of impervious area. Projects that have the potential to treat a large area of impervious surfaces are ideal project candidates. Impervious surfaces are generally recognized as sources of common storm water pollutants such as oil and grease, heavy metals, and sediment (CASQA, 2003). Additionally, projects with a large percentage of impervious surfaces which are considered for daylighting or for removal of concrete structures to restore riparian habitat, wetland function, or other beneficial uses will be considered.

Existing stream, channel, and habitat rehabilitation projects within the City include the following:

- Rattlesnake Creek Project (stabilization of ephemeral tributary segment to Rattlesnake Creek). This project involves the stabilization of a section of an ephemeral tributary to Rattlesnake Creek, which is located west of Midland Road, between Kentfield Drive and Norwalk Street. The project will involve grading in order to widen the channel bottom and contour the banks. It will include installation of rip rap, turf reinforcement matting, concrete pillow blocks, and a headwall, landscape removal and replacement, temporary BMPs, a temporary diversion system, and temporary irrigation.

5 Candidate Projects

The purpose of a candidate project list is to identify potential retrofit or rehabilitation projects. The City of Poway is a responsible party for the Los Peñasquitos WQIP, which also serves as the Comprehensive Load Reduction Plan (CLRP) for the Total Maximum Daily Load (TMDL) for sedimentation in the Los Peñasquitos Lagoon. The City has also been identified as a responsible party to the bacteria TMDL for the Los Peñasquitos WMA.

During the preparation of the Los Peñasquitos WQIP and CLRPs, efforts were made by the City and the other responsible parties to identify potential areas for retrofit projects and stream/habitat restoration that may reduce sediment and bacteria loads to receiving waters. Most candidate projects have been identified only at a basic conceptual stage, and a more detailed investigation may find that they are not feasible. Implementation of projects on the candidate project list is also contingent upon funding availability. As a result of WQIP/CLRP development, the following candidate project list (potential project areas within the City of Poway) has been prepared:

- A total of 0.26 acres has been identified as potential opportunities for green infrastructure (e.g., bioswales, constructed wetlands, green roofs, etc.) implementation on public parcels.
- A total of 32.42 acres of permeable pavement and 32.47 acres of bioretention have been identified as potential opportunities for green street projects.
- If interim load reduction goals are not met and additional multiuse treatment areas are required, a constructed wetland system can be implemented in the open space adjacent to Carriage Road. This project would involve the construction, operation, and maintenance of a constructed wetland system that would treat runoff from a drainage area of approximately 9,567 on 1.7 acres of available space.
- If interim load reduction goals are not met and additional multiuse treatment areas are required, a dry extended detention basin can be implemented in Hilleary Park. This project would involve the construction, operation, and maintenance of a dry extended detention basin that would treat runoff from a drainage area of approximately 138 acres on 1.6 acres of available space.
- In order to meet WQIP numeric goals, the City may also implement 28.8 acres with a total storage volume of 57.7 ac-ft. of multiuse treatment area projects on private parcels and/or through public-private partnerships

Prioritization of candidate projects for implementation may consist of assigning a weighted score for each of the categories listed in sections 3 and 4, then summing the scores for each potential project. For instance, project feasibility may be assigned a numerical score of 5, whereas suitability for infiltration or retention may be assigned a score of 1, since the feasibility of a project is a more important factor to consider.

The Municipal Permit requires the City to identify candidate retrofit and stream, channel, and habitat rehabilitation projects. When resources to complete a project become available, having a list of candidate projects can be a useful resource. In developing a candidate project list, the City may consider projects proposed by Priority Development Project applicants. If proposed

projects are accepted by the City, the City may develop and implement an in-lieu fee structure for the offsite alternative compliance project. The City may also consider the development of an alternative compliance water quality credit system option, which would be submitted to the RWQCB for review as part of the WQIPs. Additionally, partnering with other neighboring jurisdictions to install regional BMPs where retrofit projects are deemed to provide a greater net benefit to the City than projects implemented only by the City is also considered.

References

California Regional Water Quality Control Board, San Diego Region, 2013. Order No. R9-2013-0001, as amended by Order No. R9-2015-0001; NPDES No. CAS0109266. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

California Regional Water Quality Control Board, San Diego Region, 2011. *Water Quality Control Plan for the San Diego Basin.* Originally published in 1994, with amendments effective on or before April 4, 2011.

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – New Development & Redevelopment.*

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Appendix F

Municipal Facilities Inventory

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Municipal Facilities Inventory

#	Facility Name	Facility Address	Watershed Management Area	HSA	Adjacent to ESA? ¹	TTWQ	Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding Substances	Bacteria & Viruses	Trash & Debris	Likely Source ²
1	Adobe Ridge Mini Park	12244 Adobe Ridge Road	Operational	906.20	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
2	Arbolitos Park	Pomerado Road & Ted Williams Parkway	Operational	906.20	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
3	Aubrey Park	13544 Aubrey Street	Operational	906.20	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
4	Bendixon Neighborhood Park	12342 Old Pomerado Road	Operational	906.20	Yes	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
5	Blue Sky Ecological Reserve	Located in Northeast Poway	Operational	905.21	Yes	High	PO*	UL	PO*	PO	UL	PO	PO	PO	UL	
6	City Operations Center	14445 Lake Poway Road	Operational	905.22	Yes	High	L	L	L	PO****	PO****	PO****	PO	PO	PO	X
7	Community Park	13094 Civic Center Drive	Operational	906.20	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
8	Emergency Vehicle Maintenance	Throughout City	Operational	All	Yes	High	L	L	L	UL	UL	UL	UL	UL	UL	
9	Fire Station No. 1	13050 Community Road	Operational	906.20	Yes	High	L	L	L	PO****	PO****	PO****	PO	PO	PO	
10	Fire Station No. 2	16912 Westling Ct	Operational	905.22	Yes	High	L	L	L	PO****	PO****	PO****	PO	PO	PO	X
11	Fire Station No. 3	14322 Pomerado Road	Operational	906.20	No	High	L	L	L	PO****	PO****	PO****	PO	PO	PO	
12	Fire Training Tower	12325 Crosthwaite Circle	Operational	906.20	No	High	L	L	L	PO****	PO****	PO****	PO	PO	PO	
13	Garden Road Park	14820 Garden Road	Operational	906.20	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
14	Hilleary Park	13500 Community Road	Operational	906.20	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
15	Lake Poway Park	14656 Lake Poway Road	Operational	905.22	Yes	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
16	Landscape Maintenance	Throughout City	Operational	All	Yes	High	PO	PO	PO	PO	L	L	PO	PO	PO	X
17	Lester J. Berglund Treatment Plant	14521 Lake Poway Road	Operational	905.22	Yes	High	PO*	PO	PO*	PO****	PO****	PO****	PO	PO	PO	
18	Material Handling Yard	12325 Crosthwaite Circle	Operational	906.20	No	High	L	L	L	L	PO	PO	PO	PO	PO	X
19	MS4	Throughout City	Operational	All	Yes	High	UL	UL	UL	PO**	UL	UL	PO**	PO**	UL	
20	Old Poway Park Complex	Midland Road	Operational	906.20	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
21	Poway Oaks Mini-Park	Whispering Tree Lane, West of Shady Oak Ct	Operational	906.20	Yes	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
22	Power Washing	Throughout City	Operational	All	Yes	High	PO	PO	PO	PO	PO	PO	PO	PO	PO	
23	Roads and Streets	Throughout City	Operational	All	Yes	High	L	L	L	L	UL	UL	UL	PO	L	X
24	Sanitary Sewer System	Throughout City	Operational	All	Yes	High	UL	UL	UL	UL	UL	PO***	PO***	PO***	UL	
25	Silverset Park	14795 Silverset Street	Operational	906.20	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
26	Skate Park	13090 Civic Center Drive	Operational	906.20	No	High	PO*	UL	PO*	PO****	PO****	PO****	PO	PO	PO	
27	South Poway Sports Park	McIvers Court and Stowe Drive	Operational	906.20	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
28	Special Events	Throughout City	Operational	All	Yes	High	PO*	PO	PO*	UL	UL	UL	PO	PO	L	
29	Starridge Park	13743 Starridge Street	Operational	906.20	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
30	Street and Sidewalk Repair	Throughout City	Operational	All	Yes	High	PO	PO	PO	PO	UL	UL	UL	UL	PO	
31	Sycamore Creek Mini-Parks	Near Hidden Valley in Southeast Poway	Operational	906.20	Yes	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
32	Valle Verde Park	16899 St. Andrews Drive	Operational	905.22	No	High	PO*	UL	PO*	L	L	L	PO	PO	PO	X
33	Vehicle Maintenance Facility	14415 Lake Poway Road	Operational	905.22	Yes	High	L	L	L	PO****	PO****	PO****	PO	PO	PO	X
34	City Hall	13325 Civic Center Drive	Operational	906.20	Yes	Medium	PO*	UL	PO*	PO****	PO****	PO****	PO	PO	PO	
35	Clyde Rexrode Wilderness Area	Located in Northeast Poway	Operational	905.21	Yes	Low	PO*	UL	PO*	PO	UL	PO	PO	PO	UL	
36	Iron Mountain Wilderness Area	Located on Eastern Border of Poway	Operational	906.20	Yes	Low	PO*	UL	PO*	PO	UL	UL	PO	PO	PO	
37	Kumeyaay-Ipai Interpretive Center	13104 Ipai Waaypuk Trail	Operational	906.20	No	Low	PO*	UL	PO*	PO****	PO****	PO****	PO	PO	PO	
38	Lake Poway	Located in Northeast Poway	Operational	905.21	Yes	Low	UL	UL	UL	UL	UL	UL	PO	UL	UL	
39	LS1 City-Owned Lift Station	Available Upon Request	Operational	905.21	Yes	Low	PO*	UL	PO*	PO****	UL	PO****	PO****	PO****	UL	
40	LS2 City-Owned Lift Station	Available Upon Request	Operational	905.21	No	Low	PO*	UL	PO*	PO****	UL	PO****	PO****	PO****	UL	
41	LS3 City-Owned Lift Station	Available Upon Request	Operational	905.22	Yes	Low	PO*	UL	PO*	PO****	UL	PO****	PO****	PO****	UL	
42	LS4 City-Owned Lift Station	Available Upon Request	Operational	905.21	Yes	Low	PO*	UL	PO*	PO****	UL	PO****	PO****	PO****	UL	
43	LS5 City-Owned Lift Station	Available Upon Request	Operational	905.31	Yes	Low	PO*	UL	PO*	PO****	UL	PO****	PO****	PO****	UL	
44	Meadowbrook Gymnasium	12320 Meadowbrook Lane	Operational	906.20	No	Low	PO*	UL	PO*	PO****	PO****	PO****	PO	PO	PO	
45	Mount Woodson Wilderness Area	Located in Northeast Poway	Operational	905.21	Yes	Low	PO*	UL	PO*	PO	UL	PO	PO	PO	UL	

Municipal Facilities Inventory (continued)

#	Facility Name	Facility Address	Watershed Management Area	HSA	Adjacent to ESA? ¹	TTWQ	Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding Substances	Bacteria & Viruses	Trash & Debris	Likely Source ²
46	Old Coach Trail Open Space Preserve	Located in Northern Poway	Operational	905.21	Yes	Low	PO*	UL	PO*	PO	UL	PO	PO	PO	UL	
47	Panorama Hills Park	1555 Tannin Drive	Operational	905.22	No	Low	PO*	UL	PO*	L	L	L	PO	PO	PO	X
48	Performing Arts Center	15498 Espola Road	Operational	905.22	No	Low	PO*	UL	PO*	PO****	PO****	PO****	PO	PO	PO	
49	Performing Arts Center Parking Lot	15498 Espola Road	Operational	906.20	No	Low	PO	PO	PO	UL	UL	UL	UL	UL	UL	
50	PS1 City-Owned Raw Water Station	Available Upon Request	Operational	905.22	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
51	PS10 City-Owned Potable Water Station	Available Upon Request	Operational	906.20	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
52	PS11 City-Owned Potable Water Station	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
53	PS12 City-Owned Potable Water Station	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
54	PS13 City-Owned Potable Water Station	Available Upon Request	Operational	905.21	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
55	PS14 City-Owned Potable Water Station	Available Upon Request	Operational	905.21	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
56	PS15 City-Owned Potable Water Station	Available Upon Request	Operational	905.21	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
57	PS2 City-Owned Raw Water Station	Available Upon Request	Operational	905.22	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
58	PS3 City-Owned Potable Water Station	Available Upon Request	Operational	905.22	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
59	PS4 City-Owned Potable Water Station	Available Upon Request	Operational	905.22	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
60	PS5 City-Owned Potable Water Station	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
61	PS6 City-Owned Potable Water Station	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
62	PS7 City-Owned Potable Water Station	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
63	PS8 City-Owned Potable Water Station	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
64	PS9 City-Owned Potable Water Station	Available Upon Request	Operational	906.20	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
65	Public Services Administration Building	14467 Lake Poway Road	Operational	905.22	Yes	Low	PO*	UL	PO*	PO****	PO****	PO****	PO	PO	PO	
66	R1 City-Owned Potable Water Reservoir	Available Upon Request	Operational	905.22	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
67	R10 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
68	R11 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
69	R12 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
70	R13 City-Owned Potable Water Reservoir	Available Upon Request	Operational	905.31	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
71	R14 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
72	R15 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
73	R16 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
74	R17 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
75	R18 City-Owned Potable Water Reservoir	Available Upon Request	Operational	905.21	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
76	R19 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
77	R2 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
78	R3 City-Owned Potable Water Reservoir	Available Upon Request	Operational	905.22	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
79	R4 City-Owned Potable Water Reservoir	Available Upon Request	Operational	905.22	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
80	R5 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
81	R6 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
82	R7 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
83	R8 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	Yes	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
84	R9 City-Owned Potable Water Reservoir	Available Upon Request	Operational	906.20	No	Low	UL	UL	UL	UL	UL	UL	UL	UL	UL	
85	South Poway Open Space Area	Located in Southern Poway	Operational	906.20	Yes	Low	PO*	UL	PO*	PO	UL	UL	PO	PO	PO	

Municipal Facilities Inventory (continued)

#	Facility Name	Facility Address	Watershed Management Area	HSA	Adjacent to ESA? ¹	TTWQ	Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding Substances	Bacteria & Viruses	Trash & Debris	Likely Source ²
86	The Pond	1106 Old Pomerado Drive	Operational	906.20	Yes	Low	PO*	UL	PO*	PO	UL	UL	PO	PO	PO	
87	Twin Peaks Multi-Purpose Center	14640 Tierra Bonita Road	Operational	906.20	No	Low	PO*	UL	PO*	PO****	PO****	PO****	PO	PO	PO	
88	FS-2 City-Owned Lift Station	Available Upon Request	Operational	905.22	Yes	Low	PO*	UL	PO*	PO****	UL	PO****	PO****	PO****	UL	
89	Godwin Trailer Pump	Available Upon Request	Operational	905.22	No	Low	PO*	UL	PO*	PO	UL	UL	PO	PO	PO	
90	TPS	Available Upon Request	Operational	906.20	No	Low	PO*	UL	PO*	PO	UL	UL	PO	PO	PO	

Notes:

HSA = hydrologic subarea; ESA = environmentally sensitive area; TTWQ = threat to water quality; L = Likely, PO = Possible, UL= Unlikely; "X" indicates the facility is a likely source of pollutants for which the receiving water is impaired.

Likely Source – Has a pollutant discharge potential of “Likely” for one or more of the pollutants of concern associated with the receiving water.

-All facilities are active.

-The SIC (Standard Industrial Classification) and NAICS (North American Industry Classification System) code systems were designed for businesses and are not considered applicable to municipal facilities.

¹ Adjacent to means within a distance of less than 200 feet.

² Is the facility or area tributary to **and** within the same HSA as a water body segment listed as impaired on the 303(d) list **and** generates pollutants for which the water body segment is impaired? The most recent (2010) 303(d) list includes the following relevant impairments: Poway Creek (906.20) for selenium and toxicity; Los Peñasquitos Creek (906.20) for *Enterococcus*, fecal coliform, selenium, total dissolved solids, total nitrogen as N, and toxicity; Green Valley Creek (905.22) for chloride, manganese, pentachlorophenol, and sulfates; and San Dieguito River (905.21) for *Enterococcus*, fecal coliform, nitrogen, phosphorus, total dissolved solids, and toxicity; Lake Hodges (905.21) for color, manganese, mercury, nitrogen, pH, phosphorus, turbidity.

* Discharge of metals and oil and grease is possible if the facility has on-site parking; otherwise, the discharge of these pollutants is unlikely.

** Sediment and oxygen demanding substances are possible pollutants for earthen or natural conveyances. Bacteria, but generally not viruses and other pathogens, may regrow in MS4s under certain conditions. While other pollutants may be discharged from the MS4, the MS4 itself is not a direct source of those pollutants.

*** The sanitary sewer system is only a potential source of pollutants in the event of sewer line breaks or SSOs.

****Discharge of sediment, pesticides, and nutrients is possible if the facility has onsite landscaping or other unpaved areas; otherwise, the discharge of these pollutants is unlikely.

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Appendix G

Jurisdictional Runoff Management Program Annual Report Form

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**JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
 ANNUAL REPORT FORM
 FY _____**

I. COPERMITTEE INFORMATION	
Copermittee Name:	
Copermittee Primary Contact Name:	
Copermittee Primary Contact Information:	
Address:	
City:	County:
State:	Zip:
Telephone:	Fax:
Email:	
II. LEGAL AUTHORITY	
Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES <input type="checkbox"/> NO <input type="checkbox"/>
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES <input type="checkbox"/> NO <input type="checkbox"/>
III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE	
Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES <input type="checkbox"/> NO <input type="checkbox"/>
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES <input type="checkbox"/> NO <input type="checkbox"/>
IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM	
Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Number of non-storm water discharges reported by the public	
Number of non-storm water discharges detected by Copermittee staff or contractors	
Number of non-storm water discharges investigated by the Copermittee	
Number of sources of non-storm water discharges identified	
Number of non-storm water discharges eliminated	
Number of sources of illicit discharges or connections identified	
Number of illicit discharges or connections eliminated	
Number of enforcement actions issued	
Number of escalated enforcement actions issued	
V. DEVELOPMENT PLANNING PROGRAM	
Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES <input type="checkbox"/> NO <input type="checkbox"/>
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Number of proposed development projects in review	
Number of Priority Development Projects in review	
Number of Priority Development Projects approved	
Number of approved Priority Development Projects exempt from any BMP requirements	
Number of approved Priority Development Projects allowed alternative compliance	
Number of Priority Development Projects granted occupancy	
Number of completed Priority Development Projects in inventory	
Number of high priority Priority Development Project structural BMP inspections	
Number of Priority Development Project structural BMP violations	
Number of enforcement actions issued	
Number of escalated enforcement actions issued	

**JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
 ANNUAL REPORT FORM
 FY _____**

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001? YES
NO

Number of construction sites in inventory	
Number of active construction sites in inventory	
Number of inactive construction sites in inventory	
Number of construction sites closed/completed during reporting period	
Number of construction site inspections	
Number of construction site violations	
Number of enforcement actions issued	
Number of escalated enforcement actions issued	

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001? YES
NO

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory				
Number of existing development inspections				
Number of follow-up inspections				
Number of violations				
Number of enforcement actions issued				
Number of escalated enforcement actions issued				

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001? YES
NO

Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001? YES
NO

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001? YES
NO

X. CERTIFICATION

I [Principal Executive Officer Ranking Elected Official Duly Authorized Representative] certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature

Date

Print Name

Title

Telephone Number

Email