STATEMENT OF CERTIFICATION

City of San Marcos Jurisdictional Runoff Management Plan

I certify, under penalty of law, that this Jurisdictional Runoff Management Plan submittal 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 known violations.

Matthew Little
Deputy City Manager/City Engineer

1/26/17
Date

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1 Introduction

The San Diego Regional Water Quality Control Board (RWQCB) adopted the Municipal Stormwater Permit Order No. R9-2013-0001, NPDES No. CA50109266, (Permit) on May 8, 2013 to control waste discharges in urban runoff from the Municipal Separate Storm Sewer Systems (MS4s) draining the watersheds in the County of San Diego, the incorporated cities of San Diego County and the San Diego Unified Port District, collectively known as Copermittees.

The Permit describes all requirements, including the content of the Jurisdictional Runoff Management Plan (JRMP) to be prepared and submitted to the RWQCB by each Copermittee.

1.1 Purpose and Objectives

The purpose of the City's JRMP is to implement strategies that effectively prohibit non-stormwater discharges to the MS4 and reduce the discharge of pollutants in stormwater to the maximum extent practicable (MEP). Improving the quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

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 appropriate information and program modifications in the Carlsbad Water Quality Improvement Plan annual reports. Any program modifications will be for the advancement of the City's program and will comply with all requirements as presented in the Permit.

1.2 Overview of the City of San Marcos

The City of San Marcos is located north of San Diego County. The Cities of Vista, Escondido and unincorporated portions of the County of San Diego surround the City. The City covers an area of approximately 24 square miles with a population of approximately 86,500 people. Highway 78 runs through the City providing east west access from Interstates 5 and 15. The City of San Marcos is also home to two major educational institutions, Palomar College and California State University San Marcos. For more general information regarding the City of San Marcos, see the City's website at http://www.ci.san-marcos.ca.us.

1.3 Regulatory Setting

303(d) Impaired Waters and Environmentally Sensitive Areas

Based on the 2010 303(d) list of impaired water bodies provided by the State Water Resources Control Board, the City of San Marcos has the following 303(d) listed water bodies within or downstream of its jurisdictional boundaries:

- San Marcos Creek – Phosphorous
- San Marcos Creek – Sediment Toxicity
- San Marcos Creek – Dichlorodiphenyldichloroethylene (DDE)
- San Marcos Lake (County of San Diego) – Ammonia as Nitrogen
- San Marcos Lake (County of San Diego) – Nutrients
- San Marcos Lake (County of San Diego) – Selenium

The 303(d) water bodies within the City of San Marcos identified above are also Environmentally Sensitive Areas (ESAs).

Total Maximum Daily Load for Indicator Bacteria

The Pacific Ocean Shoreline of the San Marcos Hydrologic Area (HA) has been identified as a waterbody subject to the requirements of Revised Total Maximum Daily Loads (TMDL) for Indicator Bacteria, Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek), which became fully effective on April 4, 2011. The TMDL is for REC-1 beneficial use impairments of waterbodies throughout San Diego County. Based on an analysis conducted in 2012[1], it was determined that the Pacific Ocean Shoreline at San Marcos HA would not have qualified for REC-1 beneficial use impairment at any time. Therefore, the HA was inappropriately included in the TMDL. The San Marcos HA Responsible Parties (including the City of San Marcos) are not responsible for any further Bacteria TMDL action, including preparation and submittal of a Load Reduction Plan or Monitoring Plan, as long as monitoring data continues to support compliance with water quality standards. However, if at any time the Pacific Ocean Shoreline becomes impaired under the Listing Policy[2], the Responsible Parties will make appropriate modifications to the Water Quality Improvement Plan to meet the requirements of the Bacteria TMDL. The Responsible Parties will monitor the Pacific Ocean receiving waters and assess the potential for further TMDL actions.

Voluntary Participation Agreement

Lake San Marcos (Lake) is listed as impaired on the 303(d) for nutrients (i.e., nitrogen and phosphorous). An overabundance of nutrients can lead to excessive algal growth and other negative impacts to the Lake's ecosystem. Several public agencies, organizations, and private entities including the City of San Marcos, the County of San Diego, the City of Escondido, the Vallecitos Water District, the California Department of Transportation, and the San Marcos Unified School District, have all agreed to work voluntarily with the RWQCB to address the nutrient impairment in the Lake.

1.4 Water Quality Improvement Plans

Provision B of the Permit requires Responsible Agencies, in each of the region's Watershed Management Areas (WMAs) to develop Water Quality Improvement Plans (WQIPs). Through the WQIP approach, highest priority water quality conditions (HPWQCs) within the WMA are identified and strategies are identified for implementation through jurisdictional runoff management programs (JRMPs) to progress toward improvements in water quality. The Permit and the WQIP process allow Copermittees to focus JRMPs on particular areas or water quality issues of concern.

This approach represents a paradigm shift from previous permit requirements where jurisdictions essentially implemented the same activities throughout their jurisdictions with little or no regard for prioritizing water quality conditions or pollutant generating activities that occur within specific geographically based areas. The Permit enables jurisdictions to focus resources and efforts on WMAs and to prioritize implementation efforts by receiving waters. The WQIPs guide the development and implementation of each Responsible Party's JRMP.

The City of San Marcos is located within the Carlsbad WMA and the Agua Hedionda, San Marcos and Escondido Creek HAs. The WQIP identifies focus areas within the City and is reflected in the City's JRMP which contains the strategies, standards and protocols by which the City will implement its individual program in response to the priorities and goals established in the WQIP.

[1] San Marcos Hydrologic Area Responsible Parties analyzed available monitoring data in 2012 and presented to RWQCB
[2] California Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List

WQIP Focus Areas

Within the City of San Marcos, four sub-basins comprise the upper section of the San Marcos HA. The City has identified all four sub-basins as the WQIP focus areas within the City; these basins are identified as Drainage Basins A, B, C, and D. The focus areas are considered a higher threat to water quality due to the fact that all four sub-basins drain through Upper San Marcos Creek or its tributaries to Lake San Marcos. These focus areas have been identified to specifically address the Highest Priority Water Quality Condition of nutrients in the Upper San Marcos Creek watershed. The areas are shown in the figures below:

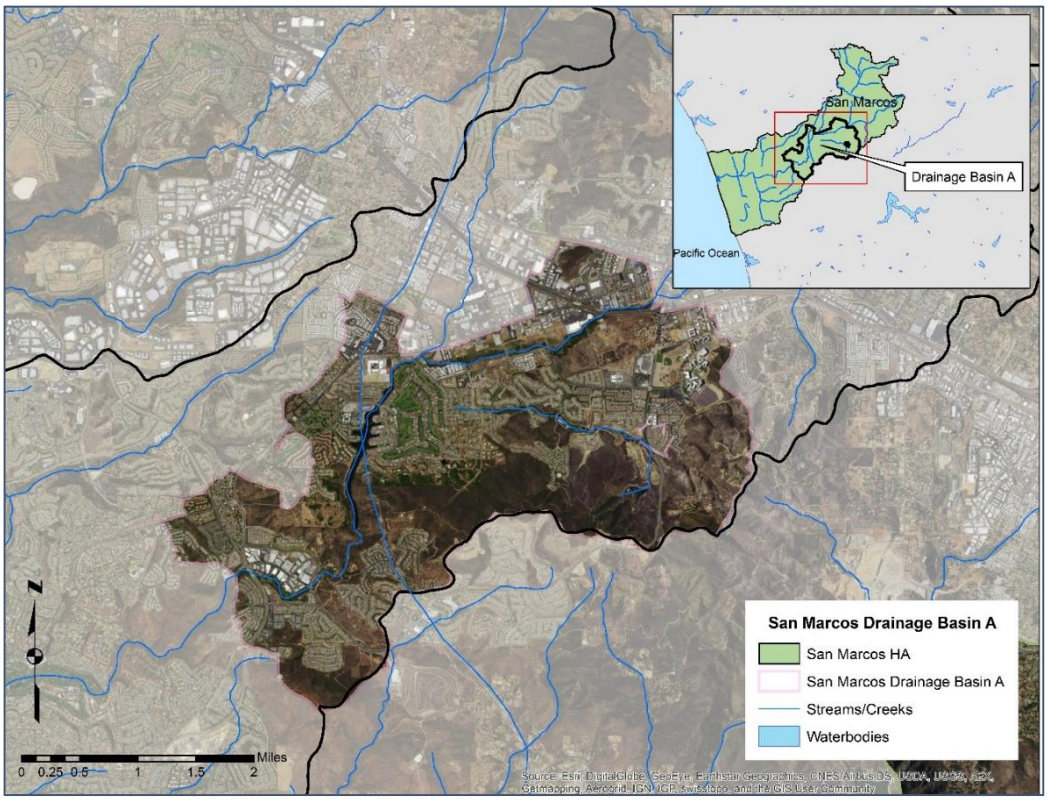

Figure 1: San Marcos Drainage Basin A

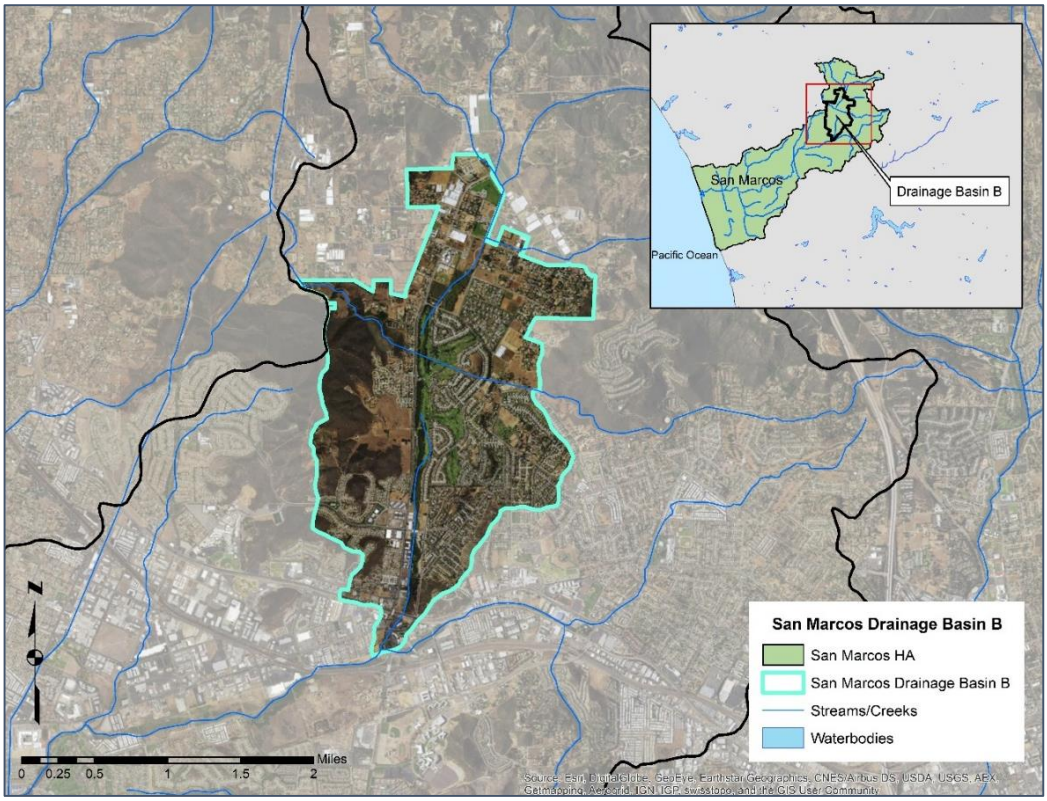

Figure 2: San Marcos Drainage Basin B

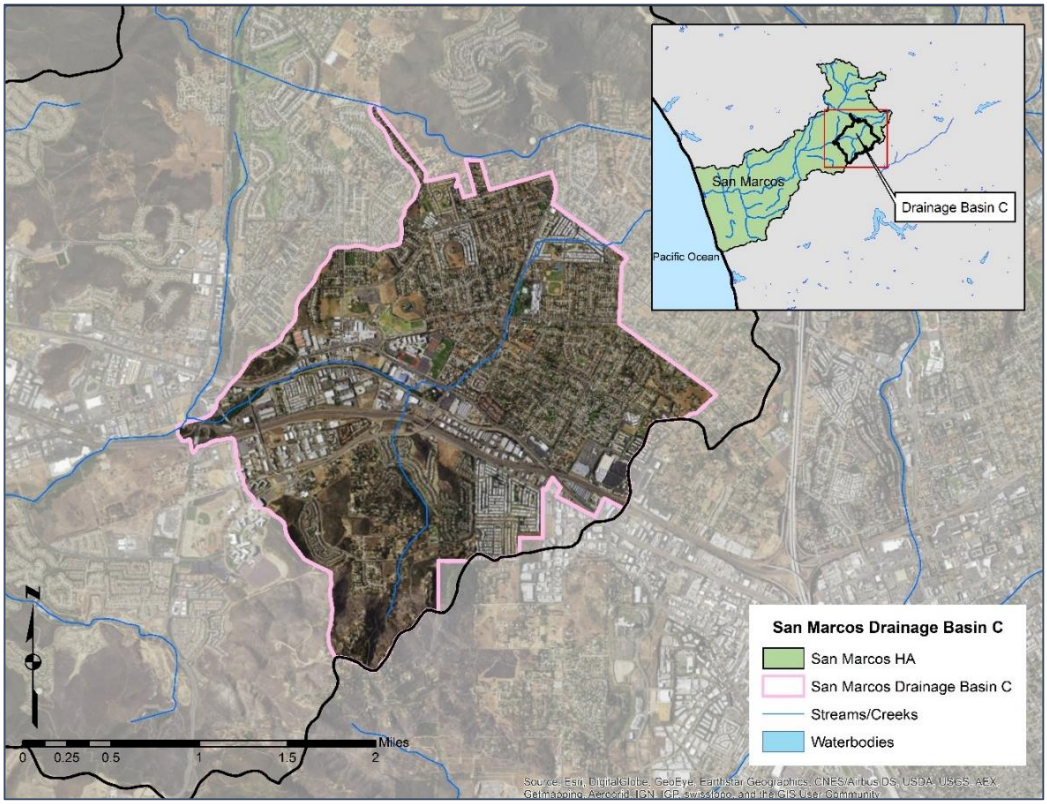

Figure 3: San Marcos Drainage Basin C

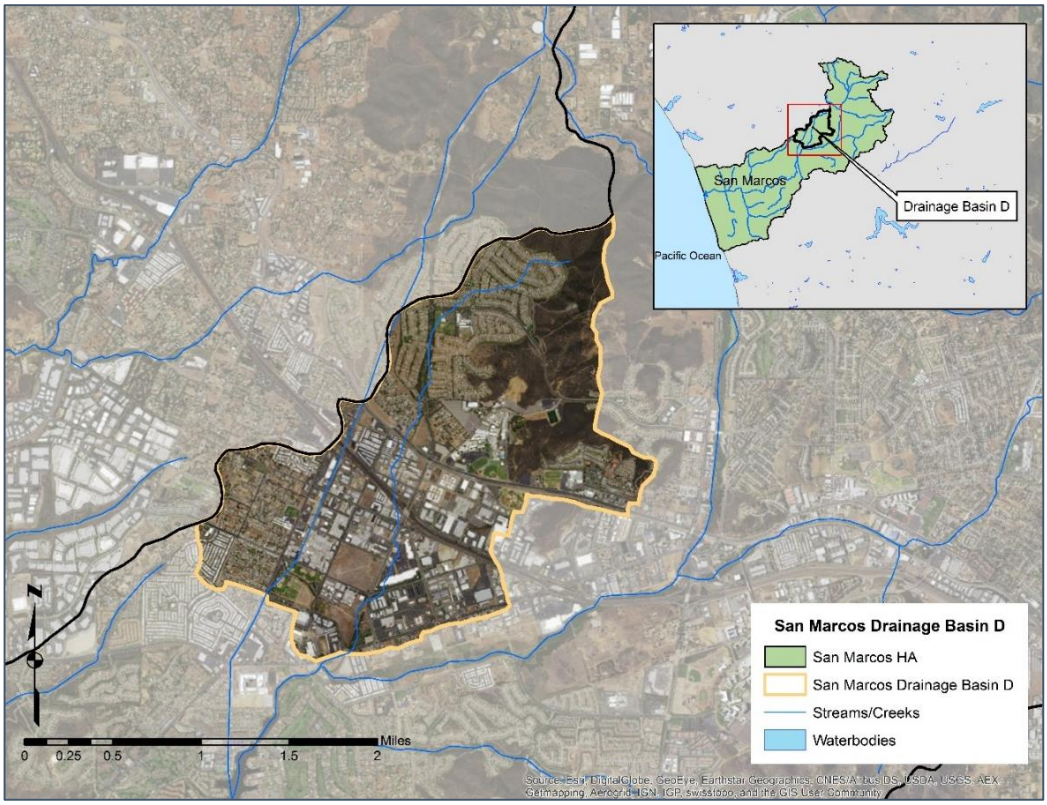

Figure 4: San Marcos Drainage Basin D

1.4.1 WQIP Priorities and Goals

The City identified the Priority Water Quality Conditions (PWQCs) and Highest Priority Water Quality Conditions (HPWQCs) to focus implementation efforts. Numeric goals and strategies were developed to address the identified HPWQC and PWQCs. Strategies typically address multiple conditions; therefore, it is anticipated that all priority conditions will be improved by the selection and implementation of water quality improvement strategies.

The evaluation process to determine the HPWQC included the following criteria:

1) The PWQC is determined to be prevalent and supported by science-based data and/or information.
2) There are known MS4 sources contributing to the condition.
3) There are known effective water quality improvement strategies.
4) There is potential for strategies to have positive effects on multiple pollutant sources, discharges and conditions.
5) There are acceptable standards/criteria established for conditions (e.g., TMDL targets and nutrient numeric endpoints).

For the City of San Marcos, the HPWQCs identified are riparian habitat degradation and hydromodification impacts in the Agua Hedionda Hydrologic Area (HA); nutrients (upper) and indicator bacteria (lower) in the San Marcos HA; and riparian habitat degradation in the Escondido Creek HA. Riparian habitat degradation was selected as a HPWQC because restoration of riparian habitats can improve water quality by allowing filtration of pollutants and reducing sedimentation through riverbank

stabilization. Hydromodification impacts can also contribute to the degradation of riparian habitat and water quality. The rationale for identification of indicator bacteria includes its prevalence in receiving waters and MS4 outfalls. Indicator bacteria was identified during both dry and wet weather conditions at locations within the receiving waters as well as MS4 outfalls during regional monitoring efforts.

The City developed numeric goals and schedules for achieving the goals in order to address the HPWQCs of indicator bacteria, nutrients, hydromodification impacts, and riparian habitat degradation. The focus on the HPWQCs will not result in PWQCs or other conditions being overlooked, rather, preference is given to strategies that have a variety of benefits to improve multiple priority conditions. PWQCs in the HAs are targeted through implementation of specific program strategies.

1.4.2 Strategies

The City of San Marcos has identified strategies for implementation throughout the jurisdictional limits. The strategies can be categorized into two groupings: program core strategies and focus area strategies.

- Program Core Strategies are the base program strategies that the City implements throughout its jurisdictional boundaries. These strategies establish minimum requirements for land development/redevelopment processes, construction activities, and existing development throughout the City. Furthermore, the program core strategies include the activities the City implements to ensure that the regulated communities implement the minimum requirements, including the City's own staff. The following is a listing of typical program core strategies that are implemented throughout the City:
    - Administrative Activities[3]
    - Activity BMPs[4]
    - MS4 Inspections/Cleaning
    - Street Sweeping
    - Structural BMPs
    - Education and Outreach
    - Employee Training
    - Inspections
    - Investigations
    - Enforcement (correcting non-compliance)

  Program core strategies are described throughout the City's JRMP.

- Focus Area Strategies are strategies that are identified and selected for implementation within specific geographic areas of the City in response to the HPWQCs, PWQCs and the goals established through the WQIP process. These strategies are intended to address the pollutant generating activities (including non-stormwater discharges) at sources that are expected to have positive measurable outcomes related to the WQIP goals.

  Focus area strategies are a mix of non-program core strategies and also of modified program core strategies. Throughout the JRMP, focus area strategies will be highlighted to identify the strategies that will be implemented in specific geographic areas and not necessarily throughout the entire City.

[3] Examples of Administrative Activities include: Plan development, program standardization, maintaining and prioritizing inventories, updating education materials, etc.

[4] Activity BMPs are those related to regulated community implementation of basic pollution prevention BMPs: cover, contain and control BMPs

2 Legal Authority and Program Responsibilities

This section describes the City's legal authority and department roles and responsibilities regarding stormwater management. The City maintains adequate legal authority within its jurisdiction to control pollutant discharge into and from its MS4 through statue, ordinance, permit, contact, order, or similar means.

2.1 Legal Authority

The City's local ordinances and Municipal Code provide legal authority for enforcing the JRMP requirements. The primary ordinances relating to stormwater and the JRMP include the following:

- San Marcos Municipal Code Chapter 14.15 – Stormwater Management and Discharge Control
- San Marcos Municipal Code Chapter 17.32 – Building, Construction and Related Activities

2.2 Department Roles and Responsibilities

While the primary responsibility of managing the Jurisdictional Runoff Management Program (JRMP) lies with the Department of Public Works, other City departments participate in the implementation of the program. Each Department and associated Division has an established role in implementing the components of the JRMP. For this reason, the City's JRMP is considered a City-wide approach to control pollution and stormwater runoff. The organizational chart in Figure 5 shows the relationship of the City's Departments and staff positions.

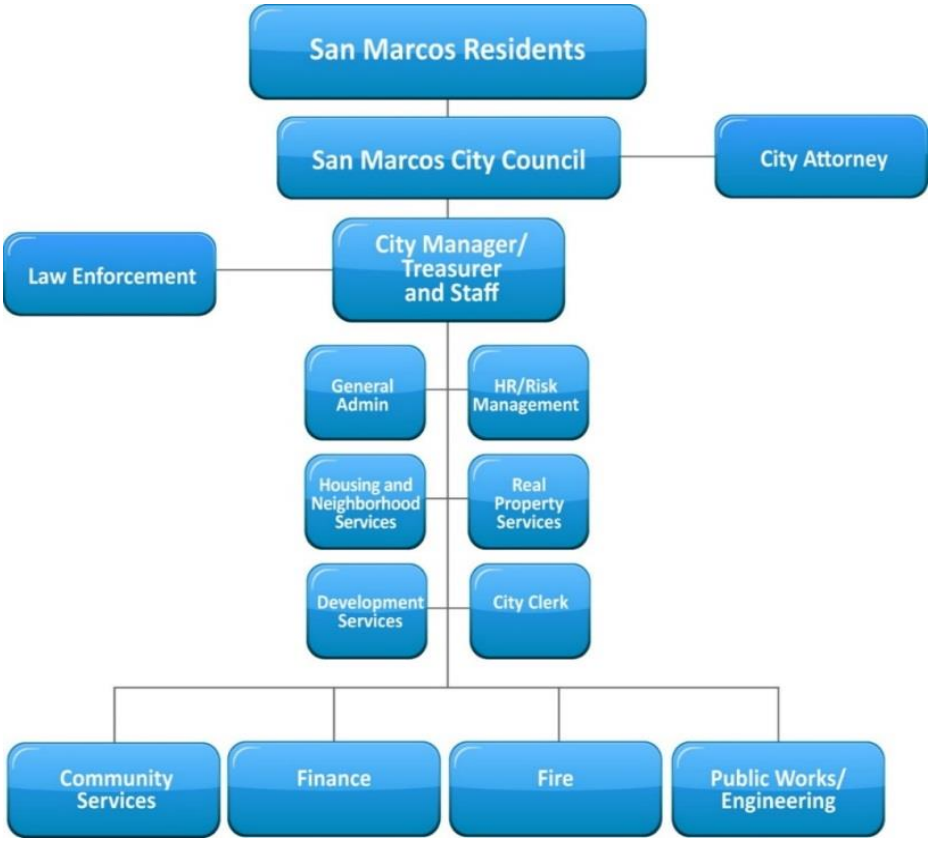

Figure 5: City of San Marcos Organizational Chart

Table 1 identifies the departments and staff that conduct stormwater management activities and their roles under the City's JRMP. Broader descriptions of the departments are available at the City's website at www.ci.san-marcos.ca.us.

Table 1: Department Roles and Responsibilities

Department	Roles
Public Works Engineering – Stormwater Program	General oversight and implementation of the Jurisdictional Runoff Management Program; coordination with watershed Copermittees in developing and implementing Water Quality Improvement Plan, and serve as liaison to City Departments regarding implementation of the Order and JRMP;
Public Works Engineering - Public Works Inspectors)	Conduct inspections and regulate construction sites regarding erosion, sediment control and other site management activities; contribute to education and outreach for construction audience; oversee structural BMP implementation and approval; provide necessary information for reporting purposes
Public Works Operations – Parks and Landscape	Application of pesticides; herbicides and fertilizers; maintenance of parks and park facilities; maintenance of BMPs; provide necessary information for reporting purposes
Public Works Operations – Streets, Drainage, and Lighting	Provides general, routine maintenance, and BMP maintenance at City-owned buildings; administer street sweeping program; maintenance of City streets and roads; operate and maintain the City's stormwater system and publicly owned structural controls; conduct preventative maintenance; provide necessary information for reporting purposes.
Development Services – Building - Code Compliance	Enforcement of the City's Municipal Code
Administration – Administrative Analyst	Oversees other City Environmental Programs including general trash and recycling programs and the Household Hazardous Waste Management Program; provide necessary information for reporting purposes.
Finance – Information Technology	GIS development and implementation; TRAKit and other database management; maintains City business license program
City Attorney	Certification of adequate legal authority; enforcement assistance when applicable
City Clerk	Maintains records of programs and implementation; provides public records request support when applicable
Development Services – Planning Division	General Plan update; Environmental Review process update and implementation; review of projects for compliance with all City development codes; conditions of approval for project permitting process;
Public Works Engineering - Capital Improvement	Coordinates with Stormwater Program to ensure that capital improvement projects meet Development Planning design requirements; Verifies that an adequate erosion control plan or Stormwater Pollution Prevention Plan has been submitted to ensure that the capital improvement projects construction activities have adequate BMPs; provide necessary information for reporting purposes.
Public Works Engineering – Land Development	Modifications to development requirements; ensure that new development and significant redevelopment requirements are included in all development projects; maintain inventory of permits; assist in development of and implementation of Hydromodification Management Plan; provide necessary information for reporting purposes
Fire Department	Implementation of BMPs at Fire Stations and during non-emergency fire-fighting activities; provide necessary information for reporting purposes.

2.3 Enforcement Procedures

The City utilizes a tiered, increasing enforcement system for violations of the City's Municipal Code. The various increasing enforcement mechanisms and penalties are described in Section 12, Enforcement Response Plan.

3 Non-Stormwater Discharges

This section describes the City's approach to controlling the non-stormwater discharges to the MS4. The City addresses non-stormwater discharges as illicit discharges unless a non-stormwater discharge is authorized by a separate NPDES permit or qualifies as a conditional discharge, as explained in Section 3.2 below.

3.1 Introduction

Non-stormwater discharges are runoff flows from any type of activity other than weather generated precipitation or naturally occurring groundwater. Typical non-stormwater discharges include, but are not limited to:

- Irrigation runoff (e.g., overspray and over irrigation)
- Vehicle washing
- Street, sidewalk and parking lot washing (e.g., hosing down and high pressure washing)
- Air conditioning condensation
- Swimming pool discharges
- Sanitary sewer overflows
- Septic system overflows

The City prohibits all non-stormwater discharges unless a discharge is authorized by a separate NPDES permit or qualifies as a conditional discharge (see Section 3.2 below).

Identifying and eliminating non-stormwater discharges from entering the City's MS4 is a cost-effective best management practice (BMP) for improving water quality. Through the Illicit Discharge Detection and Elimination Program (IDDE), the City investigates and eliminates any observed illicit non-stormwater discharge. The IDDE program is described in more detail in Section 4.

3.2 Conditional Non-Stormwater Discharges

The following categories of non-stormwater discharges are conditionally allowed by the City if the discharger meets the criteria described below. If a discharge does not meet the criteria, then the discharge is prohibited by the City.

3.2.1 Discharges Associated with Separate NPDES Permit

The RWQCB may permit a discharger to discharge water to the City's MS4, as long as the City does not determine that the discharge is a source of pollutants. For scheduled discharges, the discharger shall notify the City's Stormwater Staff at least 30 days prior to the scheduled date of discharge. At a minimum, the City requires notification prior to discharges due to emergency situations.

Pumping and Groundwater

The following non-stormwater discharges *are allowed* if the discharge is covered under the NPDES Permit No. CAG919002 (Order No. R9-2008-0002, or subsequent order):

- Uncontaminated pumped ground water;
- Discharges from foundation drains (if the system is located at or below the groundwater table to extract groundwater);
- Water from crawl space pumps; and
- Water from footing drains (if the system is located at or below the groundwater table to extract groundwater).

Water Line Flushing and Breaks

The City considers non-stormwater discharges associated with water line flushing or breaks as an illicit discharge, unless the discharge has coverage under NPDES Permit No. CAG 679001 (Order No. R9-2010-0003 or subsequent order). In addition, discharges from recycled or reclaimed water lines are illicit, unless covered under a separate NPDES permit.

3.2.2 Controlled Non-Stormwater Discharges

The City of San Marcos allows the following non-stormwater discharges to enter the MS4 if the following controls and criteria are implemented:

Air Conditioning Condensation

The discharge should be directed to landscaped areas or other pervious surfaces.

Individual Residential Vehicle Washing

The use of water and washing detergent should be minimized and the discharge of wash water should be directed to landscaped areas or other pervious surfaces. Additional acceptable industry Best Management Practices shall also be implemented and/or adhered to. Under no conditions shall vehicle washing take place within a public right of way (i.e. City street, sidewalk, dedicated easement).

Dechlorinated Swimming Pool Discharges

Prior to discharging to the MS4, residual chlorine, algaecide, filter backwash, or other pollutants in the swimming pool water, must be eliminated. Additional acceptable industry Best Management Practices shall also be implemented and/or adhered to.

The discharge of saline swimming pools must be directed to the sanitary sewer with approval from the local sewer agency, landscaped areas, or other pervious surfaces that can accommodate the volume of water. Prior to discharge, the path to the MS4 should be cleared and flow rates should be non-erosive.

3.2.3 Discretionary Discharges

The following discharges are not prohibited unless they are identified by the City or the RWQCB as pollutant sources to receiving waters:

- Diverted stream flows;
- Rising ground waters;
- Uncontaminated ground water infiltration to MS4s;
- Springs;
- Flows from riparian habitats and wetlands;
- Direct discharges from potable water sources;
- Direct discharges from foundation drains[5];
- Direct discharges from footing drains[5].

[5] If the system is designed to be located above the groundwater table at all times of the year, and the system is only expected to discharge non-stormwater under unusual circumstances.

4 Illicit Discharge Detection and Elimination

This section describes the responsibilities of staff with respect to implementation of the Illicit Discharge Detection and Elimination (IDDE) component of the JRMP. This program section is intended to provide direction to actively seek and eliminate illicit discharges and connections.

4.1 Introduction

In general, illicit discharges to the MS4 are any discharges not composed entirely of stormwater (e.g., stormwater containing pollutant or non-stormwater discharges) unless they are authorized under a separate NPDES permit. The City's program to actively seek and eliminate illicit discharges to the MS4 is comprised of several elements:

- Visual outfall monitoring;
- Source specific observations;
- Use of City staff for reporting observations;
- Use of public hotline and electronic reporting methods;
- Investigations and enforcement;
- Spill reporting, response and prevention;
- Public education and outreach materials.

In almost all cases of illicit discharges, elimination of the discharge requires some level of enforcement and/or abatement action. Specifications in the San Marcos Municipal Code grant the City the powers to enforce its regulations pertaining to illicit discharges. The City Code also requires a responsible party to conduct abatement activities required to eliminate an illicit discharge or for the City to conduct those activities itself at the cost of the responsible party.

4.2 Program Elements

4.2.1 MS4 Map

The City maintains an updated map of its MS4 and the corresponding drainage areas. This map is available upon request and includes the following:

- Segments of the MS4 owned, operated, and maintained by the City;
- Locations of inlets;
- Known locations of connections with other MS4s, not owned by the City;
- Known locations of MS4 outfalls and private outfalls that discharge runoff collected from areas within the City;
- Segments of receiving waters within the City that receive and convey runoff discharge from the MS4 outfalls;
- Locations of MS4 outfall discharge monitoring stations; and
- Locations of non-stormwater persistent flow MS4 outfall discharge monitoring stations.

4.2.2 Monitoring Programs

The City conducts field screenings of MS4 outfalls and portions of the MS4 infrastructure, to detect illicit discharges. The following sections briefly describe the monitoring programs performed by the City. For more details regarding monitoring, see Section 15, Monitoring.

Dry Weather MS4 Outfall Discharge Monitoring

The intent of the Dry Weather MS4 Outfall Discharge Monitoring Program is to investigate any observed discharge from the MS4 and determine if the discharge is an illicit connection or discharge. If flowing

water is observed at an outfall, City Stormwater Staff document the findings and investigate the source of the flow. In most instances, the flow can be eliminated after the source is identified. If the discharge requires enforcement actions, City staff would implement enforcement procedures described in Section 12, Enforcement Response Plan. Visual outfall monitoring is performed semi-annually at MS4 Permit mandated outfalls during the dry weather season.

Non-Stormwater Persistent Flow MS4 Outfall Discharge Monitoring

The Non-Stormwater Persistent Flow MS4 Outfall Discharge Monitoring Program focuses analytical monitoring at locations known to have persistent flow. The City monitors five highest priority major MS4 outfalls two times per year during dry weather conditions in the Carlsbad WMA.

Monitoring is required to continue unless one of the following events occurs:

- The flow is eliminated;
- The flow is identified as an allowable non-stormwater discharge;
- The non-stormwater discharge does not exceed numerical action levels (NALs) and the flow can be re-prioritized to a lower priority; and/or
- The flow is identified as a non-stormwater discharge authorized by a separate NPDES permit.

4.2.3 Source Specific Observations

The City inspects municipal, industrial, commercial, residential, and construction activities to identify sources of illicit discharge. These inspections contribute to the identification and elimination of illicit discharge sources. Often, when an illicit discharge is detected during one of these inspections, it can be eliminated before it affects receiving water.

4.2.4 Observation Reporting by City Staff

The municipal staff and public are important in the detection of illicit discharges. As the public and City staff continue to be educated about urban runoff and its impacts on water quality, they serve as the best source for the timely detection of illicit discharges. The City staff are trained and educated on how to detect and eliminate urban runoff. Staff is required to report any observation of runoff and the appropriate staff will investigate the runoff issue.

4.2.5 Public Reporting Methods

The City utilizes both the San Diego County regional public hotline and its own hotline for jurisdictional runoff related reports and complaints. The San Diego County hotline is answered during business hours by County staff. Bilingual staff is available to handle calls by Spanish speakers. The City's hotline is answered by Stormwater Program staff. The City's hotline number is (760) 481-3878. Callers with emergencies are notified to call other appropriate numbers such as those for the police and fire dispatcher.

In addition to the public hotlines, the City also utilizes a general San Marcos Watershed/Stormwater email (see http://www.ci.san-marcos.ca.us/index.aspx?page=359) to collect stormwater specific concerns. When a member of the public sends an email to this address, it is sent directly to the City's Stormwater Program Manager. The City has also recently implemented a Citizen Response Management (CRM) program to efficiently collect, track, and respond to public issues and concerns under one database. The CRM module is part of the larger TRAKiT software that is used for plan reviews, permit issuance, code complaints, and inspections. There are two methods by which a resident may have their issue or complaint entered into the CRM database. The first is through CRM portal on the City's website where the resident would enter the information in directly. The second method is for the resident to

contact City staff and provide information on the issues or complaint. City staff will then enter the information directly into CRM.

When issues or concerns are reported, a complete and accurate account of all third party complaints are documented to facilitate a timely investigation. Documented information includes all complaint information provided, violator information, location and description of the discharge, and materials and waste involved.

Once a complaint is received, City Staff visit the location of the complaint, investigate, and determine the appropriate course of action. Depending on the severity of the violation, staff may provide educational information or materials to the discharger or follow the appropriate enforcement action(s) as described in Section 12, Enforcement Response Plan. City Staff may conduct a follow-up investigation to ensure the violation has been addressed.

4.3 Irrigation Runoff Reduction Program (IRRP)

The objective of the IRRP is to eliminate or reduce dry weather flow contributions, concurrent with the final goals, coming from irrigation runoff, regardless of the time of day the discharges occur. Reducing or eliminating runoff from irrigation will reduce non-storm water flows thereby reducing nutrient and bacterial contributions (as well as other pollutants) in both dry weather and wet weather scenarios. An irrigation runoff program is expected to target such pollutants as heavy metals, oil and grease, sediment, and pesticides, in addition to nutrients and bacteria. Core elements include:

- Developing municipal codes that prohibit irrigation runoff;
- Developing educational materials and outreach program specific towards irrigation runoff;
- Assessing dry weather flows at outfall(s);
- Identifying key times to perform site observations;
- Perform site observations to identify sources of irrigation runoff;
- Collaboration with the City of San Marcos Public Works Department, as appropriate, to address municipal property irrigation systems;
- Initiating contact and correspondence with property managers/owners;
- Periodically assessing flows; and
- Optionally developing and implementing an incentive program to encourage the elimination of irrigation runoff.

4.4 Spill Reporting, Response, and Prevention

The City of San Marcos does not own or operate sewer infrastructure or services within City limits. The majority of the sewer infrastructure is owned and maintained by Vallecitos Water District. Small areas in the northwest, north, and eastern portions of the City are serviced by Vista Sanitation District.

For the majority of the City, responses to sewer spills are conducted in accordance to the Vallecitos Water District's Sanitary Sewer Overflow Response Plan (SSORP). Responses to other spills are conducted by the Fire Department or qualified personnel in the Public Works Department, as appropriate to the situation. The Vallecitos Water District's 2014 Sewer System Response Plan describes response procedures for spills that occur in the District's right-of-way.

Because the City of San Marcos does not own the required equipment or personnel for responding to sanitary sewer spills, the City and the Vallecitos Water District have agreed upon procedures for response to private sanitary sewage spills. The Vallecitos Water District also:

- Responds to private sewage spills;
- Performs emergency repairs; and
- Performs cleanup of sewage spills.

The City also has a similar process with the Vista Sanitation District. However, collaboration is less frequent due to the much smaller service area provided within the City.

4.5 Enforcement

The City investigates illicit discharges or connections to the MS4 immediately after they are reported or observed. City staff documents reports, observations and responses through internal memorandums, emails, and work orders.

For any enforcement actions, the City follows the established processes described in Section 12, Enforcement Response Plan.

5 Development Planning

5.1 Introduction

The development planning process is a comprehensive process that includes planning, engineering, construction and post-construction phases. Each phase includes review, conditional requirements and verification that the requirements have been satisfied. The construction portion of the development process is described in Section 6 of the JRMP. Because the process weaves through various phases, there are several City Departments/Divisions involved in the development process, including, Planning, Building, Engineering, and Public Works Capital Improvement Program and Construction Inspection. Figure 6 shows the relationship between the land development phases and the City departments involved.

This section describes the responsibilities of staff with respect to implementation of the Development Planning component. As land development, or redevelopment, occurs, the City requires projects to plan for, design and construct post-construction BMPs to mitigate the water quality impacts of the planned land use.

Development Planning is intended to:

- reduce discharges of pollutants from developed properties;
- prevent discharges from the MS4 from causing or contributing to a violation of water quality standards, and;
- manage increases in runoff discharge rates and durations from developed properties that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

5.2 Land Use Planning

The City is tasked with ensuring that land uses in San Marcos comply with City codes, the General Plan, City Council and Planning Commission policies, and state law requirements. Approval of projects through the planning process is required prior to issuing grading and building permits. The Planning Division handles environmental review of public and private projects.

The City relies on the General Plan to provide guidance for the conservation, development and utilization of natural resources within the City, including water resources. The main objectives of the Conservation/Open Space Element are: to provide a safe and adequate water supply; prevent and control the pollution of streams and other surface waters; regulate the use of land near streams and rivers to accomplish the City's conservation objectives; and control erosion of soils and shores. The Land Use Element identifies the general distribution and location of land for various uses, including residential, commercial, industrial, public, open space, and education. The Land Use Element also identifies general goals, objectives, and policies to direct land use decisions consistent with the City's plan for future development.

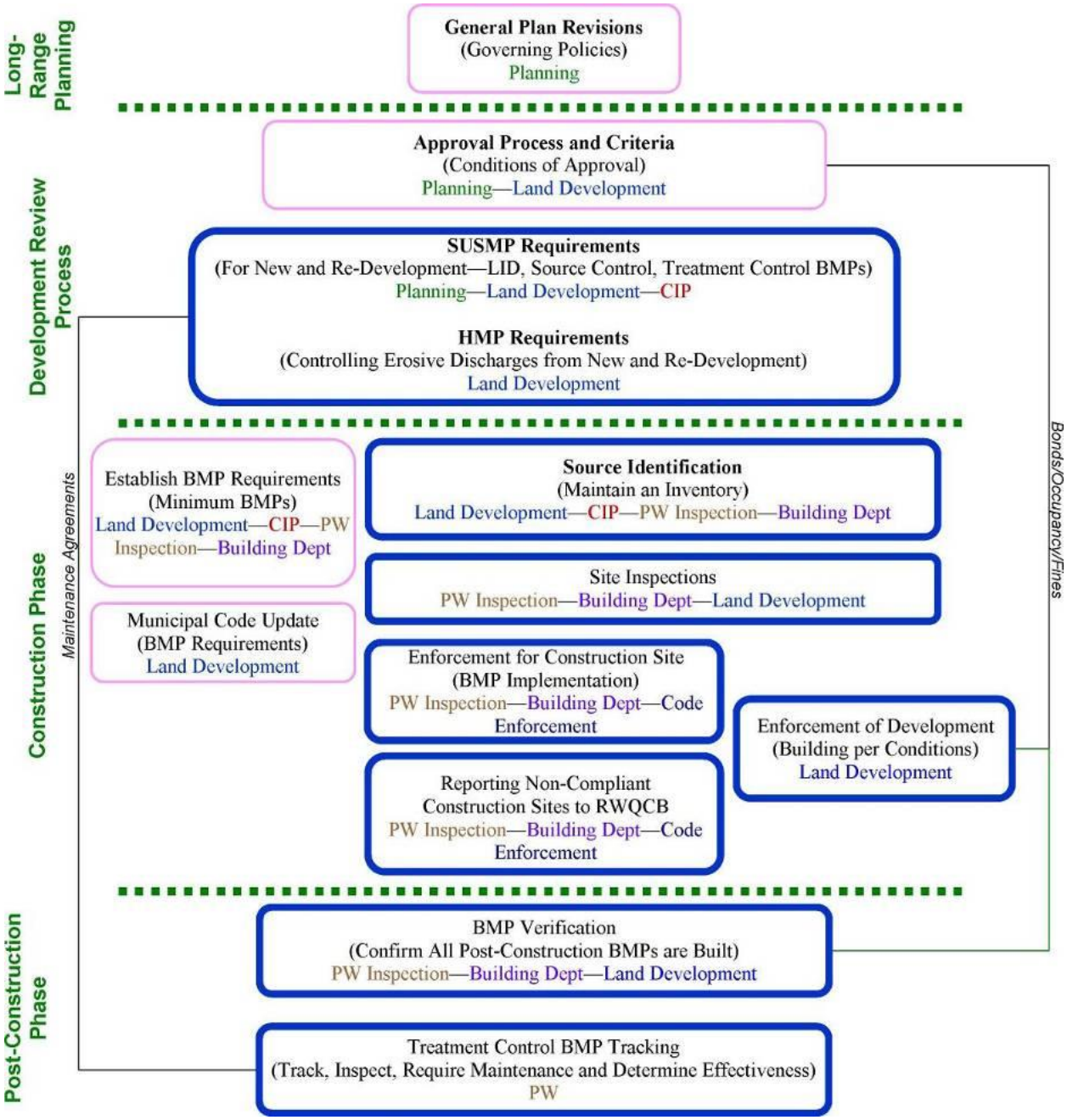

Figure 6: Land Development Phases

In addition to the General Plan, the City uses several BMP principles and tools to implement the requirements of the JRMP in its land use planning process. These include:

- Municipal Code;
- Stormwater Standards Manual;
- Standard Conditions of Approval;
- Grading, Improvements, Building and Landscape Inspections;
- Certifications, e.g., Occupancy;
- Outreach to the Development Community; and
- Staff Training and Education.

To address water quality issues, the development project approval process includes specific development project requirements and conditions of approval to address water quality issues.

5.3 Development Project BMP Requirements

Land Development in the City of San Marcos consists of various types of projects, ranging from single family homes to large subdivisions, commercial; industrial projects and includes City Capital Improvement Program (CIP) projects. Because Land Use Planning addresses all development projects, including municipal capital projects, essentially all project types are addressed through this program component.

Source control BMPs are intended to control the sources of pollutants – not allowing for the pollutants to come into contact with runoff or to be discharged from a development site. Source control BMPs are sometimes physical features and elements, however, they are often practices that are implemented to counteract or modify the actions taken by residents, businesses and employees that may cause pollution.

LID BMPs are intended to mimic a project site's pre-project hydrology by using design features and elements to effectively capture, filter, store, evaporate, detain and infiltrate runoff within the development footprint.

Structural BMPs are considered part of the tools available to treat or control runoff from developments that have been determined to be a threat to water quality or downstream conditions, based on existing water quality conditions or the activities associated with the development. These BMPs are considered a necessary part of controlling pollutants and flows from entering the receiving waters.

The City's local Stormwater Standards Manual will be updated and will identify specific post-construction LID, source control and structural BMPs that must be incorporated into development projects. The BMP Design Manual will provide information on selection and implementation of

BMP Design Manual

The City, in cooperation with the other regional jurisdictions, developed a Model BMP Design Manual (formerly the Standard Urban Stormwater Mitigation Plan or SUSMP) as a foundation for consistent application of requirements for post-construction BMPs. The City will tailor the Model BMP Design Manual and formally incorporate the Model BMP Design Manual into the City's Stormwater Standards Manual prior to December 31, 2015. Appropriate updates will be posted to the City's website.

Until the City's local "BMP Design Manual" is formally implemented, the City's current SUSMP (Stormwater Standards Manual) is effective and has the requirements that development projects must satisfy.

the LID, source control and structural BMPs for pollution control and hydromodification controls.

5.4 Program Implementation

The City relies on its Stormwater Standards Manual and Municipal Code as the foundation for its development planning implementation. These documents require new development and significant redevelopment projects to incorporate into their project plans and specifications, stormwater best management practices to control stormwater pollution and potential impacts to downstream channels from erosive flows.

The development process is comprehensive in that it encompasses planning, engineering and building plan check, construction inspections and final verification of construction. A description of how City requirements are implemented throughout this process is described in the sub-sections below.

Additionally, The City has developed a database to track the information required of the Structural BMP Maintenance element of the program. Initial project information is tracked in the early planning phases of the project. As more definitive data and information is developed, it is incorporated into the database for tracking and inspection purposes.

5.4.1 Planning Phase

Land Development projects are proposed through the City's Planning Application process. The Planning Application package contains a form to determine if a project is a Priority Development Project (PDP). During initial review the project application is routed via the City's tracking system to determine if a project is a PDP, Standard Project, or Exempt from development planning requirements (ex. Interior remodels, etc.) Once the project status has been determined, conditions are provided that include minimum BMP requirements for all projects and stormwater pollutant control and hydromodification management BMP requirements for PDPs. The PDP requirements are provided and reviewed via the plan check process described below.

It should be noted, that there are frequent times when a project applicant will request an Informational Meeting to discuss Planning Application processes or specifics prior to preparation and submittal. Land Development and/or Stormwater Program personnel generally attend these meetings to provide stormwater guidelines, requirements and expectations related to development planning.

5.4.2 Plan Check Phase

During the plan check phase, the project proponent submits plans and studies that describe the proposed project in detail. Several departments review the projects for conformance with the conditions of approval, engineering, zoning, public right-of-way, building code and other issues. 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 of the project may begin.

This part of the process includes the submittal of Water Quality Plan Sheets and a drainage study to demonstrate that all required LID site design, source control and Structural and Hydromodification Management BMPs have been incorporated. The specific requirements of the WQTR are provided in the City's Stormwater Standards Manual – see Appendix A. The Water Quality Plan Sheets are generally incorporated into Grading Plans, Improvements Plans, and/or Landscape Plans. The plan sheet approach helps to ensure verification that all BMP requirements are being addressed and subsequently implemented. Lastly, the plan check process includes the establishment of a structural BMP

maintenance agreement between the City and the responsible party prior to the issuance of any construction permits.

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 Structural and Hydromodification Management BMPs using the Water Quality Plan Sheets to verify installation and implementation. The Water Quality Plan Sheet are also used to update the City's watershed based inventory.

5.4.3 Construction Verification Process (Prior to Occupancy and release of Bonds)

Construction Inspectors in the Public Works Department inspect the construction and installation of BMPs that are associated with private permits (grading permits and public improvement permits) and Capital Improvement Program (CIP) projects. The Construction Inspectors review the projects for compliance with the water quality requirements for the project and coordinate directly with Stormwater staff to ensure compliance is met. For Priority Development Projects that are private developments, the Certificate of Occupancy will not be issued unless the required BMPs have been inspected and signed off as being constructed properly.
For Capital Improvement Projects that are Priority Development Projects, enforcement may include withholding operational acceptance or notification of completion until it is verified that required BMPs are installed.

Prior to certifying a project ready for occupancy (one of the final project releases) or returning the applicant's bonds, the City will verify that each required BMP that was to be incorporated has been constructed/implemented

5.4.4 Post-Construction Phase

Structural BMP Maintenance Tracking

The City implements a watershed-based database to track and inventory Structural BMPs and Structural BMP maintenance within the jurisdiction. The database shall be used to verify that Structural BMPs are regularly maintained by the parties responsible.

The Structural BMP information for the database is collected during the plan check process using information provided by the project applicant. The existing database includes a host of information regarding Structural BMPs collected for all projects approved since 2001, including the following minimum requirements:

1. Geographic Location (address and hydrologic subarea);
2. Description of Structural BMP Type (CASQA identifier);
3. Priority level;
4. Date of construction;
5. Party responsible for Structural BMP maintenance;
6. Dates and findings of Structural BMP maintenance verifications; and
7. Corrective actions and/or resolutions, when applicable.

Structural BMP Inspection and Verification Program

At a minimum all Structural BMPs for High Priority PDPs will be inspected by City staff annually prior to the rainy season. The inspection process will include records review prior to a site inspection. During the inspection, the inspector will evaluate if the Structural BMP is properly maintained and is effectively operating. Additionally, the City will continue its Annual Verification Program for all private PDPs that

have Structural BMPs regardless of priority. The Annual Verification forms contain information to document if the BMP is operating effectively, a description of the maintenance performed, and certification from the responsible party that the BMPs were maintained and are operating. Follow up measures that may include re-inspections or enforcement, are conducted when deficiencies are found during inspections or through the verification program. All records are currently documented in an excel spreadsheet database.

6 Construction

6.1 Introduction

The City implements a Construction Management Program that includes a project approval process, construction site inventory and tracking system, best management practices (BMPs) implementation, site inspections and enforcement procedures.

Construction and grading activities have the potential to impact nearby water bodies due to the presence of disturbed soils and building materials. Stormwater or non-stormwater discharges may transport pollutants from the site to the City's municipal separate storm sewer system (MS4) and receiving waters. The City's program is implemented to prevent construction site discharges from entering the MS4 to the maximum extent practicable (MEP).

There are several entities that share the responsibilities for implementing the Construction Component of the City's program including the following:

- City Staff:
    - Land Development – permit reviewers and approvers;
    - Engineers – capital project managers;
    - Public Works Crews – performing construction activities;
    - Public Works Inspectors – inspection of land development and capital projects;
    - Building Inspectors – inspection of land development, specifically building permits.
- Private Entities:
    - Project Applicants: Entities applying for permits to conduct construction projects;
    - Contractors & Sub-contractors –Contractors who construct the projects and implement required BMPs;
        - Private Development;
        - Public Projects.

The City's Construction Urban Runoff Requirements Manual, located in Appendix B, identifies the minimum BMPs required for all construction activities. It also includes the requirements for project submittals that applicants must complete to demonstrate that minimum requirements have been satisfied.

6.2 Construction Site Inventory

City stormwater staff maintains a watershed-based inventory for all active and inactive construction sites within its jurisdiction – a copy of the current construction site inventory is available upon request. Construction sites are sites where an activity such as grading, excavation, clearing, road construction, or demolition results in a disturbance of soil. Sources identified by the City of San Marcos include City-issued Construction Permits and Capital Improvement Program (CIP) Projects.

All construction projects issued a local grading permit, allowing ground and soil disturbance activities, are maintained in a database as the City's construction inventory. The inventory includes the following minimum information for each project:

- Relevant contact information (site owner, site operator, 24-hour emergency contact, QSD where applicable) for each site (e.g., name, address, phone and email for the owner and contractor)

- The basic site information including location (address and hydrologic subarea), Waste Discharge Identification (WDID) number (if applicable), size of the site and area of disturbance (prior and current)
- Whether or not the site is considered a high treat to water quality, Risk Level if applicable
- Proximity to a water body, water body status (303(d) listed, etc.)
- Project start and completion dates
- Inspection frequency (see Section 6.6 below)
- Date the City approved the pollution control plan, construction BMP plan, and/or erosion and sediment control plan
- Whether or not there are ongoing enforcement actions administered to the site

Once a project enters the construction phase it becomes the responsibility of the Public Works Department, Engineering Division with oversight from the Stormwater Program. Public Works Inspectors enter the project information once it becomes active and updates the inventory at least monthly. Updates to the inventory include the addition of new construction projects, the removal of completed construction projects, updates to construction phases and as appropriate, the re-prioritization of threat to water quality (TTWQ) designations for active construction sites.

6.3 Threat to Water Quality Prioritization

All construction sites within the City's jurisdiction are assigned an inspection priority of either high or low based on their TTWQ. Inspection priorities are directly related to the minimum inspection frequencies that the City will use for scheduling site inspections – see Section 6.5 below. Sites that meet any of the following criteria will be considered a high TTWQ:

- Sites 50 acres or more in size and grading will occur during the wet season
- Sites located within, directly adjacent to, or discharging directly to a receiving water within an Environmentally Sensitive Area (ESA)
- Sites located within a hydrologic subarea where sediment is known or suspected to contribute to the highest priority water quality conditions identified in the WQIP
- Sites located within the same hydrologic subarea and tributary to a water body segment listed as impaired for sediment on the CWA section 303(d) list
- Other projects sites, determined by the City or RWQCB as a high threat to water quality

In addition, City Staff use the following criteria to prioritize sites and activities during the different phases of construction:

- A site determined by the City to have high erosion potential and significant slopes
- Amount of disturbed soils at site
- Enrollment under Statewide Construction General Permit and Risk Level
- Scope of construction project (e.g., grading, sidewalk installation, street light installation, house addition, redevelopment of commercial property)

Based on the responses to the questions, an inspection prioritization and frequency is determined. In addition to the initial inspection prioritization, City staff may re-assign the priority based on the phase of construction (e.g., grading or final landscaping).

6.4 Construction Site BMP Requirements

Minimum BMPs must be implemented at all construction sites at all times. Every construction site within the City's jurisdiction is required to select, install, and maintain general site management, erosion

control, and sediment control BMPs to prevent and control pollutant discharges. The BMPs are selected based on individual site characteristics, dry or rainy season considerations, and construction phase[6]. Construction sites covered by the CGP are also required to implement mandated BMPs according to risk level or type.

At a minimum, the City requires BMPs from each subcategory below be installed and maintained for all grading and building projects. Responsible parties must implement an effective combination of BMPs to prevent onsite erosion to the MEP and to prevent sediment from leaving the project site, effectively prohibiting non-stormwater discharges from entering the MS4. These BMPs are described in the City's Construction Urban Runoff Requirements Manual, Appendix B and additional requirements can be found within California Green Building Codes Sections 4 and 5. Depending on project scope and potential associated discharges, additional BMPs may be needed. The following BMP categories shall be implemented:

- Project planning/scheduling;
- When Feasible conduct work during dry weather (May 1st – September 30th);
- Minimize grading to just those areas necessary to perform work;
- Preserve/protect slopes;
- Retain site top soil for re-application;
- Maintain vegetated buffer, when feasible between disturbed soil areas and abutting sites, watercourses, etc.;
- Good site management ("Housekeeping"), including waste management;
- Non-stormwater management;
- Erosion control;
- Sediment control;
- Run-on and run-off control;
- Active/passive sediment treatment systems, where applicable.

Construction sites are required to implement all minimum construction BMPs as necessary, to prevent pollution discharges regardless of the season (wet or dry). The following are core minimum BMPs required for each project site:

- Adequate perimeter protection BMPs must be installed and maintained;
- Adequate sediment control BMPs must be installed and maintained;
- All exposed disturbed areas must have erosion control controls properly installed including building pads, unfinished roads, and slopes;
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.;
- Properly protected, designated storage areas are required for materials and wastes;
- All stockpiles of materials and wastes should be covered and adequately contained;
- Storm drain inlets must be protected at all times.

The City implements the same minimum construction BMPs for Capital Improvement Projects (CIPs) as private projects, and all public projects are subject to the same review process as private projects. All

[6] Typical construction phases include: clearing and grubbing; grading; trenching; building; and landscaping. Phases that include ground disturbing or stockpiling activities require different BMPs than phases that include only building and landscaping activities.

contractors involved with CIP projects are educated about stormwater requirements through the same approach used for proponents involved in private development projects.

Site Management Requirements

To ensure that all approved construction BMPs are properly implemented and maintained daily at construction sites, the City has established specific site management requirements, which include some of the following:

- A qualified person who is trained and competent in the use of BMPs shall be on site daily, although not necessarily full time, to evaluate the conditions of the site with respect to stormwater pollution prevention. This qualified contact person shall represent the contractor/owner on stormwater issues.
- A qualified person shall implement the conditions of all approved plans, contract documents, and local ordinances with respect to erosion and sediment control and other waste management regulations.
- A qualified person is responsible for monitoring the weather and implementation of any emergency plans as needed.
- A qualified person is responsible for overseeing any site grading and operations and evaluating the effectiveness of the BMPs. This person shall modify the BMPs as necessary to keep the dynamics of the site in compliance. The person or other qualified persons are responsible for checking the BMPs routinely for maintenance and documenting the BMPs being implemented.
- For sites requiring a WDID#/SWPPP a qualified professional shall be as specified within the Construction General Permit.

6.5 Project Approval Process

Construction activity and development is part of a comprehensive process that includes planning, engineering, construction and post-construction phases. Each phase includes review, conditional requirements and verification that the requirements have been satisfied. Because the process involves various phases, there are several City Departments/Divisions involved in the development process, including, Planning, Land Development, Engineering, Construction Inspection and the Building Department. Figure 6 in Section 5, shows the relationship between the land development phases and the City departments involved.

Project Applicant Process

City staff will use the applicant's submittals to evaluate compliance with the City's Stormwater and Grading Ordinances. This process also provides City staff with the information necessary to determine: (1) if the project is exempt, (2) if the project requires additional permit coverage (e.g. State General Construction Permit); (3) California Green Building Codes Sections 4 and 5 applicability and, (4) the project's inspection frequency priority.

The process requires project proponents to do the following:

- Implement a plan to manage stormwater and non-stormwater discharges from the site at all times.
- When Feasible conduct work during dry weather (May 1st – September 30th).
- Preserve/protect slopes.
- Retain site top soil for re-application.
- Maintain vegetated buffer, when feasible between disturbed soil areas and abutting sites, watercourses, etc.

- Minimize grading during the wet season and coincide grading with seasonal dry weather periods to the extent feasible. If grading does occur during the wet season, require project proponent to implement additional BMPs for any rain events that may occur.
- Emphasize erosion prevention as the most important measure for keeping sediment onsite during construction.
- Utilize sediment controls as a supplement to erosion prevention for keeping sediment onsite during construction, and never as the single or primary method.
- Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction.
- Minimize exposure time of disturbed soil areas.
- Temporarily stabilize and/or re-seed disturbed soil areas as rapidly as possible.
- Permanently re-vegetate or landscape as early as feasible.
- Stabilize all slopes.
- When applicable, provide evidence of existing coverage under the State's General NPDES Permit for Construction Activities.

Depending on the type of construction work to be performed, projects fall within one of the following categories:

- Exempt projects;
- Building permit projects;
- Projects subject to California Green Building Codes Sections 4 and 5;
- Grading/Building projects not subject to the requirements of the State NPDES General Construction Permit;
- Grading/Building Projects that are required to obtain the State NPDES General Construction Permit.

City Approval Process

Prior to issuing a construction permit, City staff confirm that the applicant has completed the required submittals and verifies their completeness and accuracy. At a minimum, staff will:

- Verify that the project applicant has obtained coverage under the Statewide Construction General Permit (CGP), if applicable;
- Confirm that the project applicant has submitted grading plans, stormwater pollution prevention plans (SWPPPs), and erosion & sediment control plans, as applicable;
- Confirm that the grading plans, SWPPPs, and erosion & sediment control plans, comply with the City's grading and/or building permit(s) and the requirements of the Permit, as applicable;
- Confirm that the grading plans, SWPPPs, and erosion & sediment control plans, includes seasonally appropriate and effective BMPs and management measures described in the Construction Urban Runoff Requirements Manual, as applicable;
- Verify that the project applicant has obtained coverage under other applicable water quality permits (i.e. US Fish and Wildlife, Army Corps), if applicable;
- Verify that the applicant is at a minimum adhering to the requirements of California Green Building Codes Sections 4 and 5, if applicable.

If the City determines that any submittals are inadequate or missing information, submitted documents would be returned to the applicant for revision and resubmittal. Once the applicant's submittals, including stormwater requirements, are determined to be complete and accurate, the City will grant appropriate building and/or grading permits.

6.6 Construction Site Inspections

The inspection program to evaluate construction sites includes both private projects and City Capital Improvement Program projects within the City's jurisdiction. Site inspections are performed by City Public Works Inspectors, contract staff, or Stormwater personnel to evaluate compliance with minimum BMP requirements and applicable ordinances and permits. Inspectors are responsible for ensuring construction activities are being performed in accordance with project plans, building and grading permits, and all applicable codes, regulations and ordinances. From a stormwater perspective, Inspectors are responsible for ensuring the minimum BMP requirements are implemented, maintained and effective in accordance with the requirements identified in the City's Construction Urban Runoff Requirements Manual, Appendix B.

The Construction Inspector will perform follow-up inspections for construction sites found to be in violation of the City's construction stormwater requirements. All inspections and follow-up inspections are tracked by the City and are documented in the Construction Inspection Database.

Inspection Frequency

The City Inspectors conduct inspections at all inventoried sites at the frequency described below. The criteria used to determine construction site inspection frequency is based on the site's TTWQ presented above in Section 6.2.1, appropriate season (wet versus dry), and phases of construction activities. The following table presents the different TTWQ categories and their corresponding minimum inspection frequencies for the wet (October 1 through April 30) and dry (May 1 through September 30) seasons.

Table 2: Construction Site Inspection Frequency

Construction Site TTWQ	Wet Season Inspection Frequency	Dry Season Inspection Frequency
High	Every two weeks	As needed
Low (with grading)	Once per season	
Low (without grading)	As needed	

City Staff will re-evaluate a construction site's TTWQ and subsequent minimum inspection frequencies on a regular basis, particularly when construction phases change. The need for additional inspections can vary depending on site conditions, previous violations, history of developer or contractor past performance, and/or weather patterns. Inspections conducted at each construction site are tracked to ensure all construction sites in the City's inventory are being inspected at the appropriate frequency. For CIPs that are covered under the Construction General Permit, inspection frequencies will at a minimum adhere to the inspection frequencies specified within the Construction General Permit and/or this JRMP depending upon which one is more protective of water quality.

Inspection Content

Inspections conducted by City staff include the following content:

- Verification of coverage under the Construction General Permit (Notice of Intent (NOI) and/or WDID number) during initial inspections, when applicable;
- Assessment of compliance with local permits and applicable local ordinances related to pollution prevention, including the implementation and maintenance of applicable BMPs;
- Assessment of BMP adequacy and effectiveness;
- Visual observations of actual non-stormwater discharges;

- Visual observations of actual or potential discharge of sediment and/or construction related materials from the site;
- Visual observations of actual or potential illicit connections;
- If any violations are found and BMP corrections are needed, inspectors must take and document appropriate actions in accordance with the Enforcement Response Plan; and
- Verification where applicable for sites under coverage of the Construction General Permit that Change of Information (COI) and Notice of Termination (NOT) have been submitted, when applicable.

Inspection Tracking and Records

City staff track and record all inspections at all inventoried construction sites. A list of the data collected and tracked during inspections is provided below and all records are available upon request by the RWQCB.

- Site name, location (address and hydrologic area), and WDID number (if applicable);
- Inspection date;
- Approximate amount of rainfall since last inspection, date of last rainfall;
- Current weather conditions (i.e. clear, windy, cloudy, rainy);
- 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 and rationales for any longer compliance times allowed;
- Description of enforcement actions issued in accordance with the City's Enforcement Response Plan (see Section 12);
- Resolution of problems noted and date problems were fixed; and
- Whether or not compliance issues will be referred to another department and/or agency and which department and/or agency for follow-up and/or assistance.

6.7 Enforcement Measures for Construction Sites

The City implements enforcement of applicable local ordinances and permits through the use of the Enforcement Response Plan, at all construction sites in its jurisdiction. All City Staff have the direct authority or resources to take immediate enforcement actions when necessary. This facilitates correction of inadequate BMP implementation quickly, reducing the risk of pollutants discharging from the site. Refer to the Section 12, Enforcement Response Plan, for a complete description of enforcement activities and tools.

Intentionally Inserted for Printing Purposes

7 Municipal

7.1 Introduction

The City owns and maintains a variety of municipal facilities, areas, and activities. Municipal facilities represent a physical location at which activities occur, such as administration buildings and fire stations. Areas include municipally owned spaces such as streets, roads, highways, parking lots, sanitary sewers and municipal separate storm sewer systems (MS4s). Activities may take place at a fixed facility/area or in the field and include street sweeping, graffiti abatement, street and sidewalk repair, painting, MS4 maintenance, and regular maintenance of the sanitary sewer system to prevent overflows.

The purpose of this program is to reduce or eliminate prohibited non-stormwater discharges and pollutants in runoff to the Maximum Extent Practicable (MEP) from municipal facilities, areas and activities, to protect local receiving water bodies and to comply with the Permit and strategies in the applicable Water Quality Improvement Plans (WQIPs).

7.2 Municipal Facilities and Activities Inventory and Tracking

The City's two types of municipal operations are fixed facilities and field activities. Fixed facilities represent a physical location at which activities occur and field activities are actions or functions implemented at a variety of locations around the City. Basic inventory information includes:

- Facility name;
- Contact information (Name, title, department, telephone number and emergency contact number);
- Location information (hydrological subarea and address);
- Facility category (e.g., fire station, public works facility and MS4);
- Industrial General Permit NOI and/or WDID number, if applicable;
- Identification of pollutants generated and potentially generated by the facility or area;
- Whether facility is adjacent to an ESA and/or water body and water body status {303(d)} listed;
- Whether the facility or area is tributary to and within the same hydrologic subarea as a water body segment listed as impaired on the CWA section 303(d) list and if the facility or area generates pollutants for which the water body segment is impaired for; and
- Additional requirements as detailed within the new Industrial General Permit will be implemented as time and resources allow.

7.3 Best Management Practice Requirements

The City's Municipal BMP Manual (Appendix C) identifies the BMPs required for all fixed facilities and field activities. The BMPs required include minimum pollution prevention, operational and maintenance practices for facilities and field activities.

7.4 Municipal Inspections

The City implements an inspection program throughout its jurisdiction. The City's Stormwater Staff utilize a combination of inspections types (patrols, property-based and conventional) to monitor and inspect industrial and municipal facilities, commercial businesses, and residential areas for stormwater violations per the City's ordinances. Inspections are a proactive way to enforce compliance with the stormwater ordinances, discover and abate hotspots and trouble areas, and continue the education of municipal staff regarding the City's stormwater requirements.

Patrol and property-based inspections allow the City to perform an all-inclusive inspection effort where the following land-uses and facilities can be inspected in a designated area:

- Municipal facilities;
- Treatment control BMPs;
- MS4 systems;
- Industrial and commercial;
- Residential areas.

Inspection Process

Inspections of municipal facilities, areas and activities include the following:

- Assessment of BMP implementation, maintenance and effectiveness.
- Assessment of compliance with Copermittee ordinances and permits related to stormwater runoff.
- Check for presence of non-stormwater discharges, presence of actual or potential discharge of pollutants and presence of actual or potential illicit connections.
- Verification that the description of the facility or area in the inventory has not changed.
- If any problems or violations are found, proper documentation and appropriate actions will be taken in accordance with the City's Enforcement Response Plan.

Inspection Tracking and Records

City staff track and record all inspections and follow-up inspections at all locations in municipal inventory. This information is retained in an electronic database. The information and data gathered as part of the inspections includes, but is not limited to:

- Name and location of the facility (address and hydrologic subarea) consistent with inventory name and location;
- Current weather conditions, date of last rain event, if within a week;
- Inspection and re-inspection date(s);
- Inspection method(s) (drive-by or onsite);
- Observations and findings from the inspection(s);
- Descriptions of any problems or violations found during the inspection;
- Description of enforcement actions issued in accordance with the City's Enforcement Response Plan; and
- The date that problems or violations were resolved or were confirmed resolved.

7.4.1 Inspection Frequency

At a minimum, City staff inspects each inventoried municipal facility, area and activity once every five years. Annually, the City conducts onsite inspections of an equivalent of at least equal to 20% of its municipal inventory. In addition, municipal facilities will be inspected on an as-needed basis, in response to valid public complaints of illegal discharges. More frequent inspections are based on the potential for a facility or activity to discharge non-stormwater and pollutants, and the highest priority water quality conditions determined in the Carlsbad WQIP.

Follow-up Inspections

City staff conducts follow-up inspections to determine if corrective actions have been taken in accordance with City ordinances and minimum BMP requirements. Increasing enforcement steps, providing flexibility for the inspectors or investigators to establish appropriate compliance time frames on a case-by-case basis, are used to ensure compliance. Follow-up and enforcement inspections are documented in the inspection records.

7.5 Municipal Separate Storm Sewer System Program

The City's Public Works Department is responsible for the routine and emergency maintenance of the City's stormwater conveyance system and flood control channels. The City storm drain maintenance crews (or contractors) inspect and clean catch basins, curb inlets, under sidewalk drains, detention basins, channels and culverts using manual procedures and equipment, including backhoes, and excavators. The City's MS4 facilities inventory includes the following information:

- Number/Identifier;
- Type;
- Location; and
- Design Capacity (if applicable).

The City inspects and cleans all MS4 facilities throughout the year, however more frequent inspections and cleanings occur for areas that receive or collect high volumes of trash and debris. These locations are assessed periodically to determine if inspection frequency revisions are necessary. Any catch basin or storm drain inlet that has accumulated trash and debris greater than 33% of design capacity, is cleaned in a timely manner. Any MS4 facility that is designed to be self-cleaning is cleaned of any accumulated trash and debris immediately.

7.6 Street Sweeping Program

Street sweeping is widely recognized as an effective BMP for reducing the amount of pollutants (litter, green waste, oils, grease and sediment) on street surfaces that may impact receiving waters. Streets are swept on a revolving schedule and at a rate of approximately 1,100 miles every month.

Based on historic sweeping volumes collected and traffic loadings for the street network, the City has stratified its street network into high, moderate and low priority areas within the City. At a minimum, the following street sweeping frequencies are implemented:

- High – Minimum of twice per month
  - Arterials and Collectors
- Moderate – Minimum of monthly
  - Residential
- Low – Minimum of once per year
  - Parking Lots

7.7 Application of Pesticides, Herbicides, and Fertilizers

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application, handling, training and testing requirements. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs. These certifications require the implementation of Integrated Pest Management (IPM) practices during maintenance activities. All City staff that apply pesticides and herbicides in "agricultural use" areas such as parks, golf courses, rights-of-way and recreation areas, are certified in accordance with state regulations. All certifications are kept on file at the City's Parks Department. Contracts for landscape maintenance include similar requirements.

All employees that work with pesticides are responsible for implementing safety precautions from the Safety Data Sheet (SDS) (They are now called SDS; in March 2012, the Occupational Safety and Hazard Administration updated its HAZCOM standard (29 CFR 1910.1200) to align with the Globally Harmonized

System of Classification and Labeling of Chemicals) files. In addition, municipal facilities or activities that require the use of pesticides, herbicides, and/or fertilizers implement BMPs to address application, storage, and disposal. Improper use, handling, or storage of pesticides, herbicides, and fertilizers may allow these chemicals to come into contact with receiving waters via stormwater or urban runoff. BMPs are applied at all municipal facilities, public rights-of-ways, parks, recreational facilities, and other landscaped areas.

7.8 Sanitary Sewer Systems

The City of San Marcos does not own or operate a sanitary sewer (wastewater) system. The majority of the City resides within the Vallecitos Water District (VWD) service area. A small area within the western portion of the City is serviced by the Buena Sanitation District. The VWD serve the residents, businesses and the City with both potable and wastewater services. Vista Irrigation District provides potable water within the Buena Sanitation District.

Both districts regularly inspect, maintain and repair their wastewater collection and treatment systems. The City of San Marcos has no legal authority over the operations of the Districts. Due to the large area of service that VWD provides, the City and VWD have formed a long-standing cooperative relationship for mutual interests, including water quality protection. The City also works proactively with Buena Sanitation District but do so in a much smaller capacity.

7.9 Special Events

Periodically the City hosts special events such as street festivals and marathons/races. These special events typically have a high density of people per square foot, raising the potential for pollutant generation. The pollutant generating activities and their potential pollutant types are listed in Table 3 below.

Table 3: Pollutant Generating Activities and Potential Pollutant Types

Pollutant Generating Activity	Potential Pollutant Type
Setup and teardown of equipment booths	Illicit discharges and trash generation
Booth operation	Trash generation
Food/drink preparation and consumption	Illicit discharges, trash generation, and organic materials
Temporary portable restrooms	Chemicals and bacteria

Event organizers must complete a special event permit application that is reviewed and approved by the City prior to permit issuance. The application package includes a list of BMPs required to be implemented during the special event. Based on the type of special event, pre and post-event inspections may occur. In the event that the Special Event Organizer fails to adequately clean the venue, the City will clean the site and seek retribution for costs through enforcement actions.

7.10 Program for Non-Emergency Fire Fighting Flows

The City implements a program to reduce or eliminate pollutants in non-emergency firefighting discharges. The program includes BMPs to reduce or prevent discharges from entering the City's MS4.

The City encourages the implementation of BMPs to reduce or eliminate pollutants in emergency firefighting discharges and to prevent flows from entering the MS4s. BMPs and educational methods are used to reduce the discharge of pollutants to the MEP, however, in emergency situations, priority of efforts will be directed towards life, property and the environment.

The City of San Marcos owns, operates and maintains a Regional Emergency Service Training Center. With this facility, the City is able to conduct all non-emergency fire-fighting activities in a controlled environment.

The drill tower has a 60,000-gallon water tank and all water used on the tower operations is recycled via an area drain surrounding the entire tower. The underground tank has a filtration and recycling system that processes the used water. The fire-training center utilizes a groundwater well, pumping system, collection and filtration system for its training process. In general, water is drawn from the groundwater well and stored in a wet well that is continuously filtered until it is needed for training purposes. If the water level in the wet well drops below a pre-determined point (e.g., via evaporation) then the wet well is replenished from a groundwater well.

The treatment process begins with the use of the waters for non-emergency fire-fighting purposes. Then the perimeter storm drain system collects the waters used during training activities and directs it towards four interceptors that are positioned around the training tower. The interceptors provide initial solids separation prior to the waters entering the filtration system. From the interceptors, the water drains towards a wet well. From the wet well, the water is passed through a solids screening filter and then through a Tekleen filter system to remove pollutants. After passing through the Tekleen filter, the water is then treated using an ozone process to disinfect it. The water is then returned to the wet well and is continuously recycled through the filtration and ozone process. When required, the water is pumped from the wet well for training purposes and then is collected and recycled through the filtration process again.

Because the system is subject to precipitation, an overflow outlet leads from the storage wet well to the nearby San Marcos Creek. The City considers the filtration system to be a highly effective BMP for reducing the pollutants in the non-emergency fire-fighting flows.

Maintenance of the treatment system includes annual inspections and cleaning of the filtration system and drawing down the wet well for cleaning. This process is implemented in the dry weather months when there is little chance for overflowing the wet well. The system is not utilized for a period of at least seven days to allow any solid materials to settle in the wet well and the interceptors. Prior to removing the solids that have accumulated in the bottom of the wet well, the water is drawn down and the solids that have accumulated in the bottoms of the interceptors and wet well are then vacuumed out using a contracted vactor truck. The solids are then disposed of properly by the contractor. Annually, the water in the wet well is sampled and analyzed for pollutants. If pollutants are found that exceed the basin plan requirements, the water is drawn out and disposed of properly by a contractor.

7.11 Enforcement

If the City determines that a municipal facility or activity is out of compliance with requirements, the corrective actions are documented and implemented in order to bring the site into compliance. For further details regarding the City's enforcement procedures see Section 12, Enforcement Response Plan.

Intentionally Inserted for Printing Purposes

8 Commercial and Industrial

8.1 Introduction

This section describes the responsibilities of City staff to implement the Industrial and Commercial Component of the JRMP. This program section is intended to (1) reduce industrial and commercial discharges to the MS4 to the maximum extent practical (MEP); and (2) prevent discharges from the MS4 to receiving waters from causing or contributing to an exceedance of water quality standards.

8.2 Commercial and Industrial Site Inventory

City Stormwater Staff maintain a watershed-based inventory of all industrial facilities and commercial sites/sources within the City's jurisdiction. A copy of the current commercial and industrial inventory is available upon request. Basic inventory information includes:

- Facility name
- Contact information
- Location information (address and watershed)
- Identification of business type (stationary or mobile)
- Industrial General Permit NOI and/or WDID number, if applicable
- Identification of pollutants generated and potentially generated by the facility or area
- Whether facility is adjacent to an ESA
- Whether the facility or area is tributary to and within the same hydrologic subarea as a water body segment listed as impaired on the CWA section 303(d) list and if the facility or area generates pollutants for which the water body segment is impaired for.
- Additional information as required within the Statewide Industrial General Permit will be added as time and resources permit.

The City's commercial and industrial inventory includes both stationary and mobile businesses. Stationary businesses include for example, repair shops, restaurants, and various types of wholesalers. Industrial facilities are also stationary and include facilities such as manufacturing and hazardous waste treatment. Mobile businesses include mobile automobile or other vehicle washing, pest control services, mobile carpet, drape or furniture cleaning, construction contractors, power washers, and landscapers.

Because not all mobile businesses have obtained business licenses in the City or have a base of operation in the City, the inventory is updated frequently and as needed to include known mobile businesses. Sources for such inventory updates will include reported incidents, general observations by City staff, and available business licenses. The City may opt to implement a self-reporting and self-monitoring program for mobile businesses.

At a minimum, the commercial and industrial inventory is updated annually through reviewing business license records for new businesses, performing routine inspections, and responding to reported incidents.

8.2.1 Threat to Water Quality Prioritization of Facilities

The potential threat to water quality (TTWQ) of each business is evaluated according to several factors. A summary of the factors used in assigning TTWQ prioritization is listed below:

- Water Quality Improvement Plan Priority Water Quality Conditions and Goals;
- Results from inspections and institutional knowledge;
    - Non-stormwater discharges;

    - Size of facility and total area of the site;
    - Facility design, including degree of exposure of storage and/or activities;
    - Compliance history;
- Business activity type, based primarily on SIC code;
    - Materials used;
    - Wastes generated;
    - Pollutant discharge potential;
- Proximity to the receiving water body;
- Coverage under the General Industrial Permit or an individual NPDES permit;
    - Businesses with WDID numbers, with SIC codes unconditionally subject to the General Industrial Permit, or with conditional SIC codes but believed to have significant outdoor exposure;
- Additional information as required within the Statewide Industrial General Permit will be added as time and resources permit.

8.3 Best Management Practice Requirements

Industrial and commercial facilities produce a range of pollutants that can threaten human and environmental health if washed into the storm drain system by stormwater runoff. The City requires all inventoried industrial and commercial facilities to ensure proper implementation, operation and maintenance of required BMPs. The City also requires the use of pollution prevention methods to address the HPWQCs (i.e., indicator bacteria, nutrients, hydromodification impacts, and riparian habitat degradation) and strategies in the WQIP(s).

Businesses that utilize pesticides, herbicides, and/or fertilizers are required to implement BMPs to address application, storage, and disposal. Improper use, handling, or storage of pesticides, herbicides, and fertilizers may allow these chemicals to come into contact with receiving waters via stormwater or urban runoff.

The minimum BMPs required to be implemented by all industrial businesses are included in the Industrial Urban Runoff Requirements Manual located in Appendix D. The minimum BMPs required to be implemented by all commercial businesses are included in the Commercial Urban Runoff Requirements Manual located in Appendix E.

8.4 Commercial and Industrial Facility Inspections

The City implements an inspection program throughout its jurisdiction. The City's Stormwater Staff utilize a combination of inspection types (patrols, property-based and conventional) to monitor and inspect industrial and commercial businesses, municipal facilities, and residential areas for stormwater violations per the City's ordinances. Inspections are a proactive way to enforce compliance with the stormwater ordinances, discover and abate hotspots and trouble areas, and educate business owners, property managers, and residents regarding the City's stormwater requirements.

Patrol and property-based inspections allow the City to perform an all-inclusive inspection effort where the following land-uses and facilities can be inspected in a designated area:

- Industrial and commercial;
- Municipal facilities;
- Treatment control BMPs;
- MS4 systems;

- Residential areas.

Inspection Process

Inspections of commercial and industrial facilities include the following:

- Assessment of BMP implementation, maintenance and effectiveness.
- Check for coverage under the IGP (Notice of Intent and/or Waste Discharge Identification Number), if applicable.
- Assessment of compliance with Copermittee ordinances and permits related to stormwater runoff.
- Check for presence of non-stormwater discharges, presence of actual or potential discharge of pollutants and presence of actual or potential illicit connections.
- Verification that the description of the facility or area in the inventory has not changed.
- Review facility monitoring data, if applicable.
- If any problems or violations are found, proper documentation and appropriate actions will be taken in accordance with the City's Enforcement Response Plan.

Inspection Tracking and Records

City staff track and record all inspections and follow-up inspections at all locations in the industrial and commercial inventory. This information is retained in an electronic database. The information and data gathered as part of the inspections includes, but is not limited to:

- Name and location of the facility (address and hydrologic subarea) consistent with inventory name and location;
- Inspection and re-inspection date(s);
- Inspection method(s) (drive-by or onsite);
- Observations and findings from the inspection(s);
- Descriptions of any problems or violations found during the inspection;
- Description of enforcement actions issued in accordance with the City's Enforcement Response Plan; and
- The date that problems or violations were resolved.

Inspection Frequency

At a minimum, City staff inspects each inventoried commercial and industrial facility once every five years. Annually, the City conducts onsite inspections of an equivalent of at least equal to 20% of its commercial and industrial inventory. In addition, commercial and industrial facilities will be inspected on an as-needed basis, in response to valid public complaints of illegal discharges.

More frequent inspections are based on the potential for a facility to discharge non-stormwater and pollutants, past record of compliance and the highest priority water quality conditions determined in the Carlsbad WQIP.

Follow-up Inspections

As necessary, City staff conducts follow-up inspections to determine if corrective actions have been taken in accordance with City ordinances and minimum BMP requirements. Increasing enforcement steps, providing flexibility for the inspectors or investigators to establish appropriate compliance time frames on a case-by-case basis, are used to ensure compliance. Follow-up and enforcement inspections are documented in the inspection records.

Mobile Businesses

Mobile businesses are inspected by the City on an as-needed basis. Inspections are generally initiated by complaints and visual observations by City staff. The inspections and investigations follow the same procedure process as stationary commercial and industrial business. The City may opt to implement a self-reporting and self-monitoring program for mobile businesses similar to that implemented with the Delta region of California within San Joaquin County.

8.5 Vallecitos Water District (VWD) Fats, Oils, and Grease (FOG) Program Collaboration

The City of San Marcos will continue coordination between the City of San Marcos and VWD programs. The City of San Marcos anticipates a collaborative work effort between the City of San Marcos' inspection program and VWD's FOG program in order to reduce sewer backups and overflows that result from accumulation of FOG in the sewer system. The following tasks are completed for this program:

- VWD established an Ordinance to regulate FOG;
- VWD visited all the Food Service Establishments (FSEs) within the City of San Marcos to provide an overview of the program and expectations;
- VWD created a guidance manual provided to each FSE that includes BMP information, maintenance requirements, and record keeping documents. The City of San Marcos is prepared to utilize these documents during independent inspections or investigations;
- VWD will inspect all FSEs at least once per year and collaborate with the City of San Marcos to perform dual inspections when needed; and
- Inspection results for both parties will be shared regularly to better identify problem areas more efficiently and to coordinate effective corrective actions.

8.6 Enforcement

In the event that during a site inspection the inspector determines that the site is out of compliance with the City's requirements, the inspector will document the corrective actions necessary to bring the site into compliance. Documentation of the corrective actions includes a compliance date at which the inspector has determined that the site needs to be in compliance. This compliance date is based on the best professional judgment of the inspector. The inspector will perform a follow-up inspection to determine compliance. The results of the follow-up inspection are included on the inspection form documentation.

For further details regarding the City's enforcement procedures see Section 12, Enforcement Response Plan.

9 Residential

9.1 Introduction

This section describes the responsibilities of staff with respect to implementation of the Residential Component of the JRMP. This program section is intended to (1) reduce residential discharges of pollutants from the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP) and (2) prevent residential discharges from the MS4 from causing or contributing to an exceedance of water quality standards.

9.2 Source Characterization

This section provides a discussion of the rationale and methodology used to prioritize the City's residential activities and areas with respect to their potential threat to water quality.

9.2.1 High Priority Residential Activities and Areas

The City characterizes possible pollutant sources in residential properties and areas that may pose a threat to water quality (TTWQ). Pollutant sources in residential areas may include:

- Automobile repair, maintenance, washing, and parking.
- Home and garden care activities and product use (pesticides, herbicides, and fertilizers).
- Disposal of trash, pet waste, green waste, and household hazardous waste (e.g., paints, cleaning products).
- Sanitary sewer spills from private laterals.
- Any residential areas tributary to a Clean Water Act section 303(d) impaired waterbody, where the residential property or activity generates pollutants for which the waterbody is impaired for.
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (ESA).
- Any other residential source that the City determines may contribute a significant pollutant load to the MS4.

The City uses the following criteria to establish oversight and inspection procedures:

- Type of activity;
- Material used;
- Waste generated;
- Pollutant discharge potential;
- Non-stormwater discharges;
- Proximity of area or activity to receiving waters;
- Sensitivity of receiving waters;
- Any other factors identified by the City as relevant.

9.3 Residential Management Areas

The City's residential area inventory is categorized by residential management areas (RMAs). The goal of designating and organizing residential areas is to make the implementation of the JRMP as efficient as possible. The City identified the following residential management areas (inventory and mapping available upon request):

Home Owner Associations (HOAs)

The City identifies HOAs by reviewing land use data as well as residential inventory data. Because all properties within HOAs are managed collectively, it may be more efficient to patrol, track issues and conduct follow-up inspections, as compared to individual home owners and individual properties.

Housing Developments

Housing developments or communities of homes that are not considered HOAs, but still are grouped together geographically and share common areas are also considered a RMA. Grouping these types of residences together make sense geographically and make it possible for patrols and inspections to cover multiple residences at the same time and frequency.

Neighborhoods

For residential areas that are not located within an HOA or Housing Development, the City has developed RMAs for these areas based on neighborhood features.

9.4 Best Management Practice Requirements

The City promotes and encourages the use of pollution prevention methods and BMPs by all residential areas. If particular BMPs are not feasible for any specific residential area, the City requires implementation of other equivalent BMPs.

The City's Residential Urban Runoff Requirements Manual (see Appendix F) includes general and specific BMP requirements for residential properties and areas. General residential BMPs include erosion control, non-stormwater discharge management, elimination of illicit connections and discharges, and sweeping rather than hosing off driveways and sidewalks.

Pesticides, Herbicides and Fertilizers

The City encourages the implementation of BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable and effectively prohibit non-stormwater discharges associated with the application, storage, and disposal of pesticides, herbicides and fertilizers from all residential areas in its inventory.

9.5 Residential Inspections

The City implements an inspection program throughout its jurisdiction. The City's Stormwater Staff utilize a combination of inspections types (patrols, property-based and conventional) to monitor and inspect industrial and municipal facilities, commercial businesses, and residential areas for stormwater violations per the City's ordinances. Inspections are a proactive way to enforce compliance with the stormwater ordinances, discover and abate hotspots and trouble areas, and continue the education of the general public regarding the City's stormwater requirements.

Patrol and property-based inspections allow the City to perform an all-inclusive inspection effort where the following land-uses and facilities can be inspected in a designated area:

- Residential areas;
- Municipal facilities;
- Treatment control BMPs;
- MS4 systems;
- Industrial and commercial;

Inspection Process

Inspections of residential areas and activities include the following:

- Assessment of BMP implementation, maintenance and effectiveness.
- Assessment of compliance with Copermittee ordinances and permits related to stormwater runoff.

- Check for presence of non-stormwater discharges, presence of actual or potential discharge of pollutants and presence of actual or potential illicit connections.
- Verification that the description of the residential area in the inventory has not changed.
- If any problems or violations are found, proper documentation and appropriate actions will be taken in accordance with the City's Enforcement Response Plan.

Inspection Tracking and Records

City staff track and record all inspections and follow-up inspections at all locations. This information is retained in an electronic database. The information and data gathered as part of the inspections includes, but is not limited to:

- Residential area identifier – which may require specific street addresses if necessary;
- Inspection and re-inspection date(s);
- Inspection method(s) (drive-by or onsite);
- Observations and findings from the inspection(s);
- Descriptions of any problems or violations found during the inspection;
- Description of enforcement actions issued in accordance with the City's Enforcement Response Plan;
- The date that problems or violations were resolved or were confirmed resolved.

9.5.1 Inspection Frequency

At a minimum, the City inspects each residential area once in five years. Annually, the City conducts onsite inspections of an equivalent of at least equal to 20% of its municipal inventory. In addition, municipal facilities will be inspected on an as-needed basis, in response to valid public complaints of illegal discharges.

More frequent inspections are based on the potential for a residential area or activity to discharge non-stormwater and pollutants. The City will inspect RMAs that have the potential to discharge pollutants associated with the highest priority water quality condition at an increased frequency to implement WQIPs strategies and ensure BMPs are effectively prohibiting non-stormwater discharges to the MS4.

Follow-up Inspections

The City conducts follow-up inspections to determine if corrective actions have been taken in accordance with City ordinances and minimum BMP requirements. Escalating enforcement steps, providing flexibility for the inspectors to establish appropriate compliance time frames on a case-by-case basis, will be used to ensure compliance. Follow-up and enforcement inspections are documented in the inspection inventory.

Complaint Response

The City's complaint response system is a best management practice implemented in residential areas and throughout the City. Residents can submit a complaint by calling the City directly, calling the City hotline, sending an email, or by calling the County of San Diego's Stormwater hotline. Once a complaint is received, Code Compliance staff create a complaint response form. Field staff then visit the location of the complaint, investigate, and determine the appropriate course of action. Depending on the severity of the violation, City staff may provide informational materials to educate the resident or follow the appropriate enforcement action(s) as described in Section 12, Enforcement Response Plan. If deemed necessary, field staff will conduct a follow-up investigation to ensure the correction has been made. This process encourages pollution prevention methods and verifies the implementation of required BMPs. Information from the City's Residential Complaint Response Program is included in the JRMP Annual

Reports and provides confirmation that the designated BMPs are implemented, or required to be implemented, for residential areas and activities.

9.6 Used Oil and Waste Collection Services

The City of San Marcos has six state certified used oil collection centers for residents to properly dispose of used oil and used oil filters. The California Integrated Waste Management Board provides data for the six centers including how many gallons of used oil are collected on a quarterly basis.

City of San Marcos residents can also recycle used oil, dispose of Household Hazardous Waste (HHW), and universal waste at the Vista and Poway HHW Collection Facilities. State law mandates that all universal waste may not be placed in the trash. Universal waste is defined as batteries, electronic waste (not just limited to cathode ray tubes), fluorescent, high intensity discharge (HID), metal halide, and sodium light bulbs, and any items containing mercury. They are open every Saturday, 9 a.m. to 3 p.m., except holiday weekends. The objective is to increase the collection of used oil, HHW, e-waste and universal waste by providing residents continued free access to these collection facilities.

The City's solid waste hauler is EDCO Waste and Recycling Services. EDCO Waste and Recycling Services provides valuable HHW and universal waste information for San Marcos residents via its website. Brochures, pamphlets, magnets and other premiums promoting the proper disposal of used oil, household hazardous waste, and universal waste are distributed to the public at several community events and are available at City offices.

9.7 Enforcement

If City staff determine that a site is out of compliance with requirements, the violation, corrective actions, and a compliance date are documented. The City inspector or investigator will perform a follow-up inspection to determine compliance. If compliance has not been achieved by the follow-up inspection, the inspector or investigator will follow the City's enforcement procedures. For more information regarding enforcement, see Section 12, Enforcement Response Plan.

10 Retrofitting Areas of Existing Development

10.1 Introduction

The City's retrofit and rehabilitation program identifies opportunities to implement retrofits and stream, channel and/or habitat rehabilitation within areas of existing development. The intent of the City's program is to encourage or require retrofits or rehabilitation projects in areas of existing development where controls do not exist or are ineffective. Implementation of retrofits and rehabilitation projects in areas of existing development are expected to improve the discharges from the City's MS4. The City's program is described below.

10.2 Identifying Candidate Retrofits and Rehabilitation Projects

Using the Urban Subwatershed Restoration Manual Series (CWP, 2005, 2007) as a guide, the City's Stormwater Division, Planning Department, and Environmental Liaison will develop and maintain a list of candidate retrofits and rehabilitation projects using a system of identification and field verification. Identification will be conducted using desktop analyses to identify key areas in the City where it is expected that retrofits and rehabilitation projects will have effective and efficient benefits. Field confirmations will be used for final verification that the identified retrofits and rehabilitation projects are appropriate applications of BMPs and controls both in type and location.

The process for identifying retrofits will evaluate the following considerations:

- Water Quality Improvement Plan (WQIP) Priority and Highest Priority Water Quality Conditions;
- Likely sources of pollutants generating pollutants related to WQIP conditions;
- Focus areas identified in WQIP;
- Vintage of geographic areas of the City – time period existing development was constructed;
- Public retrofit opportunities through Capital Improvement Program (CIP) projects;
- Areas of persistent discharges;
- Inspection/Illicit Discharge Detection and Elimination program findings; and
- Identified areas of hydromodification or other stream impacts.

Using the considerations above, the City will identify areas where opportunities could provide water quality improvement benefits. Evaluation will include layering of the findings to determine where compounding factors overlap. The City will consider the locations where overlapping occurs and significance of the factors to prioritize areas suited for retrofits and rehabilitation projects.

Once specific areas within the City have been identified and prioritized for retrofits and/or rehabilitation projects, the City will perform field verifications on an as-needed basis to substantiate the:

- need for retrofits or rehabilitation projects;
- locations of potential retrofits or rehabilitation projects;
- appropriate type(s) of retrofit or rehabilitation project; and
- appropriate responsible party to implement the retrofits or rehabilitation projects.

10.3 Retrofit Types

The type of retrofit recommended for a specific area will depend on the site conditions and consider the desktop analyses conducted during the initial candidate evaluations. Types of retrofits range from large storage systems to on-site applications of source control and treatment. The types of retrofits the City will consider when evaluating applicability include:

- Installing inline filtration (e.g., inlet, vaults);

- Disconnecting impervious surfaces (e.g., roof drainage from conveyance system);
- Creating buffer areas around irrigated systems;
- Creating storage in areas adjacent to conveyance systems (e.g., culverts, outfalls);
- Installing source control systems, e.g., covering pollutant generating activity areas (e.g., trash enclosures, material storage);
- Creating storage within the conveyance system;
- Installing bioretention systems;
- Converting impervious surfaces to pervious;
- Upgrading irrigation systems to low-flow or direct systems;
- Installing green roofs;
- Installation of green streets;
- Installation of additional covered trash receptacles in key areas; and
- Stabilization of erodible areas.

Geographic areas identified and prioritized for retrofits as well as site specific retrofit candidates will be maintained by the City and available to the various departments that may require or use the list for implementation of retrofits.

10.3.1 Rehabilitation Types

The type of rehabilitation recommended for a specific area will depend on the site conditions and consider the desktop analyses conducted during the initial candidate evaluations. Types of rehabilitation projects range from in-channel improvements to habitat improvements. The types of rehabilitation projects the City will consider when evaluating applicability include:

- Stream/channel modifications;
- Hard bank stabilization;
- Soft bank stabilization;
- Grade controls;
- Flow deflection/diversion;
- Habitat enhancement;
- Habitat restoration; and
- Wetland restoration.

Geographic areas identified and prioritized for rehabilitation projects as well as site specific rehabilitation project candidates will be maintained by the City and available to the various departments that may require or use the list for implementation.

10.4 Implementing Candidate Retrofits and Rehabilitation Projects

Facilitating the construction of retrofits and rehabilitation projects is a multi-pronged long-term process that includes public and private support. The City will continue to develop this aspect of the program and provide appropriate updates.

Methods to implement retrofits and rehabilitation projects within existing development areas include:

- Developing and implementing demonstration retrofits and rehabilitation projects that are highly visible and receive foot traffic. This may include parks, public facilities, trails, or schools;
- Mitigation for identified sources of pollutants from private properties;
- Offsite alternative compliance (OAC) pathways for land development requirements – currently there is no City of San Marcos OAC program;
- Retrofits on public lands or rights-of-way (e.g., streets, trails);

- Encouraged retrofits within home owners association or other private entity common areas;
- Incorporating into Capital Improvement Program (CIP) Projects; and
- Implementation of redevelopment requirements.

Mechanisms to fund retrofits and rehabilitation projects may come from public or private sources and may include:

- Grants;
- Development impact fees;
- Developer implementing OAC requirements – currently there is no City of San Marcos OAC program;
- City funding; and/or
- Private property owners.

As the City matches appropriate mechanisms and funding to implement candidate retrofits and/or rehabilitation projects, projects may be implemented on a case-by-case basis.

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11 Special Activities/Programs

11.1 Introduction

The City of San Marcos has designed special activities and programs to be implemented within the Carlsbad Watershed WMA. These activities and programs will be implemented by the City in addition to the requirements of Permit Provisions E.2 through E.7. Furthermore, Watershed Management Area Strategies have been designed for the watershed. These strategies are optional regional or multi-jurisdictional BMPs, incentives, or programs that may be implemented to effectively prohibit non-storm water discharged to the MS4, reduce pollutants in storm water discharges from the MS4 to the maximum extent practicable, protect the beneficial uses of receiving waters from MS4 discharges, and/or achieve the interim and final numeric goals.

11.2 Citywide Landscape Conversion Program

Following the approach of the recently completed City of San Marcos Civic Center Landscape Demonstration Project, the City will implement similar conversions to several medians and other public maintained areas throughout the City and within the Upper San Marcos Creek Watershed. This program will include landscape renovation from mainly turf grass to native drought tolerant plants/turf and irrigation systems will be upgraded for better efficiency and to reduce or eliminate irrigation runoff.

11.3 Filter Retrofit Program

The City of San Marcos will continue to implement the filter upgrade program provided through an existing grant program. Aging filters located within public facilities in need of repair are retrofitted with new proprietary filters systems that contain media filters to treat dissolvable pollutants including nutrients and bacteria. This program is targeted for Municipal Fixed Facilities, Streets, and Parking Facilities and will focus on nutrients, bacteria/pathogens, and oil and grease.

11.4 Implement Preferred Watershed Remedy as Proposed through the Draft RI/FS

Based on the Draft Remedial Investigation/Feasibility study (RI/FS), the selected preferred remedy for the Upper San Marcos Creek Watershed consists of supplementary agricultural BMPs (to be implemented through the proposed Agricultural WDR) and stream restoration/flocculation (phosphorous inactivation). Agricultural BMPs consist of installing supplemental buffer strips, conducting or maintaining watershed-wide facility inspections for appropriate managerial practices (manure/fertilizer management), and implementing an agricultural irrigation optimization/reduction program.

City of San Marcos will collaborate with the City of Escondido and County of San Diego on efforts to restore San Marcos Creek in coming years to address nutrient loading in the creek. A pilot stream restoration project will be designed to reduce nutrient loading in the creek as described in the Draft RI/FS and is expected to have supplemental reductions to bacteria and sediment. A pilot study will be conducted to determine efficacy of stream restoration to reduce nutrients in one of the potential areas identified in the Draft RI/FS. The Responsible Agencies (RAs) anticipate conducting the pilot study within the next five years dependent on RI/FS process and RWQCB input. Once a detailed schedule is established, the RAs will include updates on the pilot study in each WQIP Annual Report.

The stream restoration/flocculation remedy include the following proposed options as funds are available pending on approval of environmental documents, obtaining permits, and the feasibility of effectiveness based on the results of the pilot study:

- Widening or modifying the impaired creek channel to disperse and slow flow to increase residence time and nutrient uptake.
- Re-sloping streambanks to reduce erosion and Total Suspended Solids (TSS) and nutrient loading downstream.
- Streambank stabilization by revetments, log cribs, groins, or gabions reduce erosion and TSS and nutrient loading downstream.
- Floodplain restoration and reconnection with the stream course to increase retention time and groundwater recharge.
- Restored native basins to temporarily capture and reduce flow and promote nutrient uptake and groundwater recharge.
- Refurbishment of existing basins for desilting and groundwater recharge.
- Replacing invasive vegetation species with native vegetation that has increased nutrient uptake.
- Removing impediments or impairments to the existing impaired natural wetlands environment to increase nutrient uptake.
- Encouraging further natural development of the existing wetlands so that nutrient uptake is further facilitated.
- Periodic microfloc alum addition to bind dissolved orthophosphate and reduce total phosphorus loading to the Lake.
- Stream gauge installation for long-term flow monitoring.
- Access improvement to facilitate monitoring and periodic alum addition to reduce nutrient loading to the Lake.

Depending on the results of the Pilot Study, the City of San Marcos, City of Escondido and County of San Diego will continue stream restoration efforts, as needed and if funds are available.

The Draft RI/FS is currently being reviewed by the San Diego RWQCB and will follow the regulatory process. Upon completion of the RI/FS and based on RWQCB input, the RAs will subsequently reevaluate the goals, strategies, and schedules for the Upper San Marcos HA. The RAs will also ensure their responsive efforts to the RI/FS are consistent with Addendum B of the Participation Agreement. http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000003261

11.5 Implement San Marcos Creek District 401 Water Quality Certification No. 11C058

In early 2012, Clean Water Act Section 401 Water Quality Certification No. 11C-058 for the San Marcos Specific Plan Project (San Marcos Creek District) was issued by the San Diego RWQCB. The project includes the construction of a raised development pad along the north side of San Marcos Creek and an earthen, vegetated levee along San Marcos Creek between Bent Avenue and Via Vera Cruz to provide the necessary floodway infrastructure. Several roadway improvements are also proposed including widening Discovery Street from McMahr Road to the Bent Avenue/Craven Road intersection, constructing bridges at Via Vera Cruz and Bent Avenue, and widening San Marcos Boulevard by approximately 20 feet to include an additional through lane. Park land in the project area would include trails, grassy areas for picnicking, and other amenities, as well as access to a pedestrian bridge across San Marcos Creek between McMahr Road and Via Vera Cruz, and sidewalks/public trails along the new Via Vera Cruz and Bent Avenue bridges.

Compensatory mitigation and management for riparian habitat including wetlands will occur on the San Marcos Creek and Los Posas Branch floodplains and will consist of:

Table 4: Proposed Wetland Habitat

Type	Acres	Linear Feet
Establishment	23.56	13,975
Re-establishment	1.76	4,515
Enhancement	17.12	13,425
Preservation	9.92	7,280
Buffers	7.91	13,575

Additionally, there is no structural water quality BMPs presently installed in the proposed 217 acres of redevelopment area, and runoff flows into San Marcos and Las Posas Branch untreated. With implementation of the project, non-storm water flows will be eliminated and storm water and flows will be treated with structural BMPs. Proposed water quality BMPs are described in the Final San Marcos Creek Specific Plan Master Water Quality and Hydromodification Management Plan (Final Master WQTR), dated December 15, 2011, and in subsequent revisions dated October 16, 2015. The Final Master WQTR will ensure consistency in the application of water quality and hydromodification compliance requirements within each private development project located in the San Marcos Creek Specific Plan area, and will ensure that the Specific Plan area functions in accordance with ongoing watershed planning and pollutant load reduction efforts so that each project takes into consideration its role within the Specific Plan area as well as within the overall Upper San Marcos Creek Watershed.

The combination of riparian habitat mitigation and structural BMP implementation is anticipated to have a positive impact to nutrient reductions and provide overall improved water quality within the project limits and on a larger scale, the Upper San Marcos Creek HA. The 401 permit for the San Marcos Creek project requires bioassessment monitoring before, during, and after impacts have occurred and been mitigated to assess the biological integrity of San Marcos Creek within the project area. In addition, dry and wet weather water quality monitoring is also required to assess structural BMP effectiveness and demonstrate water quality improvements within the project area.

The first phase of the project includes the construction of the raised development pad, levee, roadway and public infrastructure improvements, park land, pedestrian bridge, sidewalk/public trails, and structural post-construction BMPs designed to mitigate water quality and hydromodification impacts associated with the first phase of project development. It should be noted that an amendment to Water Quality Certification No.11C-058 was recently submitted to the San Diego RWQCB for review. In general, the amendment includes minor adjustments to the acre size for some of the mitigation types. Once approved, this strategy section will be updated to reflect the changes identified in the amendment.

11.6 Watershed Management Area Strategies

11.6.1 Integrated Regional Watershed Management (IRWM)

Coordinate with Integrated Regional Watershed Management (IRWM) regional water managers to plan for and implement water quality improvement projects (retrofits, stream rehabilitation, or other projects). In order to trigger the implementation of this strategy, the following must occur:

- Interim goals are not met;
- Progress towards numeric goals is not adequate;
- Staff resources are identified and secured; and/or
- Adaptive management informs the jurisdictions to implement.

Resources required to implement the strategy include participation as a stakeholder in the IRWM Program as appropriate, council approval of an IRWM proposed project, and staffing necessary to implement any identified project. Participation as a stakeholder in the IRWM program will occur as needed and if funded, to encourage applicable project adoption in the Carlsbad WMA. Individual projects and further participation in grant funding offered through this IRWM will be assessed on a case-by-case basis.

11.6.2 Sustainable Landscape Incentive Program

The purpose of the Sustainable Landscape Incentive Program is to encourage landscape retrofits. Implementation of this strategy may be triggered if (1) it has been determined by the County of San Diego through adaptive management that implementation is necessary, and (2) all of the necessary resources have been secured. Resources required to implement this strategy include staff resources, grant funding, incentive items, and partnerships. The timeline to secure resources for this strategy will be implemented in FY 2016-2017, and continuous until grant funding incentives are depleted; future implementation schedule one year once triggered. This strategy addresses pollutants from residential areas, nurseries, and greenhouses.

11.7 Optional/Contingency WQIP Strategies

11.7.1 Structural or Retrofit BMPs

Implement structural (engineered) BMPs or retrofitting existing structural BMPs to address flow and/or pollutant issues. This strategy is triggered if interim goals are not met, progress towards numeric goals is not adequate, staff resources are identified and secured, and adaptive management informs the City to implement. If implemented, structural BMPs will be integrated into the City's Capital Improvement Program for planning, design and construction. Many of the City's typical capital projects are funded through dedicated sources, e.g. transportation tax dollars. Structural BMPs will have to identify alternative sources of funding, e.g., grants or partnerships, and therefore may take longer to process than typical capital projects. It is estimated that structural BMP projects may take five years to secure the resources necessary to initiate each project within the strategy.

11.7.2 Offsite Alternative Compliance Program

The County is currently implementing Phase 1 of the Offsite Alternative Compliance Program as defined in the WPO, Section 67.811(b)(4)(c). This phase allows for an Applicant-Implemented Offsite Alternative Compliance Project (ACP) project. This program became effective on February 26, 2016 and allows for a developer to wholly or partially satisfy their on-site storm water compliance obligations through the implementation of an ACP that is owned or constructed by the PDP project applicant. The City will develop an alternative compliance program utilizing the guidelines established in the accepted Water Quality Equivalency Guidance for Region 9 and will incorporate potential candidate project areas identified in the Watershed Management Area Analysis. The City is also exploring the development of a possible In-Lieu Fee program.

Following the finalization of water quality equivalency and crediting systems on a regional basis, it is anticipated that another one to three years would be needed to develop and implement the program.

11.7.3 Stream Restoration Activities

The goal of this optional strategy is to implement stream restoration projects on publicly owned parcels of land. This strategy is triggered if interim goals are not met, progress towards numeric goals is not adequate, Staff resources are identified and secured, or Adaptive management informs the County to implement. In order to implement this strategy, the following resources are required: grant funding or

alternative source; contractor funding necessary to implement the planning, design and construction of such projects; procurement of equipment; required permits from state and federal regulatory agencies; and ongoing funding for operation/maintenance. The implementation schedule is 2-3 years once the strategy is triggered.

11.7.4 Invasive Non-Native Plant Removal Program

Implement a program to remove invasive non-native plants in upstream areas, rivers, or tributaries to restore natural habitat with the potential to improve hydrology and water quality. This program would address pollutants such as, bacteria/pathogens; trash; heavy metals; nutrients; toxicity; oil and grease; riparian habitat; sediment; and pesticides. The implementation schedule is 3-5 years once triggered.

Intentionally Inserted for Printing Purposes

12 Enforcement Response Plan

The City implements an Enforcement Response Plan as part of its jurisdictional runoff management program. The Enforcement Response Plan describes the applicable approaches and options to enforce the City's legal authority to achieve compliance with the requirements of the Permit.

12.1 Introduction

The City enforces its Municipal Code throughout its jurisdiction and implements escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for the IDDE, development planning, construction management, and existing development components of the JRMP. A stormwater enforcement action would typically occur as a result of an inspection or in response to a reported incident by the public or City staff.

12.2 Enforcement Procedures

The City is required to enforce its Municipal Code throughout the City. A stormwater enforcement action would typically occur as a result of an inspection or in response to a public or municipal staff reporting. The City employs several enforcement mechanisms and penalties to ensure the compliance with its Municipal Code. The levels of enforcement and associated penalties are typically issued at the discretion of the Code Compliance officer with consideration of relevant circumstances regarding the violation. It is always the City's intent to educate any individual or group of individuals prior to taking formal enforcement action, giving due process. The general process for applying enforcement for runoff related violations is described below.

Warnings

The City does not maintain a standardized system for recording and tracking verbal warnings and therefore does not encourage the use of verbal warnings by staff. A case in which a verbal warning may be appropriate is when a violation has not been noted but is thought by the inspector or Code Compliance officer to be foreseeable. In most cases, written warnings are used instead of verbal warnings.

In the case of any verbal warning, the officer who issued the warning is responsible for recording such warning and conducting follow up activities as determined necessary.

Notice of Violation

The City's written warning notice is a Notice of Violation (NOV). A written warning is issued for those cases of violations that do not involve circumstances that would warrant a fine or a more serious penalty. Such circumstances could be:

- The violation was considered minor and is a first time offense.
- The violation was considered minor and was not deliberate.
- The violation could be easily remedied and had not resulted in a threat to human or environmental health.
- The violation is not a repeat violation.

Written warnings contain information describing the infraction and possibly other information, as the issuing officer deems necessary. A copy of the warning will be given to the violator and a copy is retained for City records. Follow-up activities, such as inspections, will be conducted as deemed necessary by the City staff.

Administrative Citations

Administrative Citations are issued for infractions that involve circumstances that require a greater level of enforcement than a warning. Administrative Citations may also be appropriate in the case where a warning has been served but the infraction continued to occur or when an administrative abatement notice and order (described below) was issued and the required abatement activities were not implemented.

Administrative Citations include fines with increasing value depending on the number of violations within a year. The first violation involves a fine not exceeding one hundred dollars, the second violation involves a fine not exceeding two hundred dollars, and all subsequent violations include a fine not exceeding five hundred dollars. The fourth and each additional violation may include a fine up to one thousand dollars and may also be charged as a misdemeanor. Cases at this level are often forwarded to the City Attorney's office.

Corrective Actions

An infraction may include corrective actions procedures. The corrective action procedures may require the violator to conduct activities necessary to resolve the infraction at his or her own expense. The activities necessary to resolve the infraction are directed by the enforcing inspector/officer and described on the notice. A deadline for correcting the infraction is also provided by the enforcing officer. In the event that the officer determines that the violator is incapable of performing such activities by the compliance date or if the individual chooses not to perform the activities, the City may conduct the necessary activities and charge the resulting costs to the violator.

The corrective action notices include details describing the abatement activities required of the violator and a deadline for compliance. Follow-up inspections are conducted to ensure that the abatement activities are successfully and adequately implemented.

Some examples of circumstances that could require a corrective actions notice include:

- A required BMP is not implemented or is not implemented properly.
- A leak or discharge is detected and requires elimination.
- A spill or other discharge occurred and cleanup of the spill or discharge is required.

Suspension or Termination of City Contracts

The City includes procedures that provide for the suspension or termination of City contracts. The City can choose to exercise its rights to suspend or terminate a contract/agreement with its consultants, vendors, or contractors based on the conditions of the infraction. The decision to exercise this right should include consultation with the inspector/enforcing officer, the City's legal counsel, and other appropriate City staff. Cases for which the suspension or termination of a City contract may be appropriate include those when a contracted service/activity:

- Results in a continuous infraction that cannot be or will not be remedied.
- Involves an infraction that can only be stopped and remedied by ceasing the permitted activity.
- Is continuously resulting in infractions and previous enforcement actions have not been successful in preventing further infractions.

Suspension, Revocation, or Denial of Permits

The City includes procedures that provide for the suspension, revocation, or denial of permits. Most permits issued allow the City to suspend or revoke the permit if an infraction results from the permitted

activities. The City can choose to exercise its rights to suspend or revoke a permit based on the conditions of the infraction. The decision to exercise this right includes consultation with the enforcing officer, the City's legal counsel, and other appropriate City staff. The suspension or revocation may be appropriate when a permitted activity:

- Results in a continuous infraction that cannot be or will not be remedied.
- Involves an infraction that can only be stopped and remedied by ceasing the permitted activity.
- Is continuously resulting in infractions and previous enforcement actions have not been successful in preventing further infractions.

Stop Work Order

If work is found to be in conflict with the City's JRMP or Municipal Code provisions, an inspector or Code Compliance officer may order the work to be stopped. The work will remain stopped until authorized by the inspector or Code Compliance officer to proceed with the work. All corrective actions associated with the Stop Work Order will be completed and implemented prior to the issuance to proceed with work. Stop Work Orders will be reported to the Regional Water Quality Control Board.

Civil and/or Criminal Court Actions

The City may use civil and or criminal court actions under the State Porter Cologne Water Quality Act or the Federal Clean Water Act, which may result in significant fines levied upon the non-compliant responsible parties. A criminal misdemeanor can typically be charged for infractions and can involve a fine up to one thousand dollars and/or imprisonment up to six months. Criminal and civil court actions are typically used for cases involving multiple infractions, severe infractions, where the infraction was deliberate, and where the infraction resulted in harm to human or environmental health. Civil and criminal court actions will be reported to the RWQCB.

12.3 Enforcement Response Plan Components

12.3.1 Illicit Discharge Detection Elimination

The City implements investigational source identification procedures with these programs in order to track down the sources and eliminate the discharge. The City's procedures for conducting source investigations, follow up inspections and enforcement with which the City identifies the source of an illicit discharge and eliminates the illicit discharge is found in Appendix G.

12.3.2 Development Planning

The City has several mechanisms for enforcing land development activities. In general, enforcement actions related to land development are required because project proponents are not fulfilling the obligated requirements of their project conditions of approval or permit. In these cases, general enforcement procedures outlined above are implemented to achieve compliance with the site.

When non-permitted grading activities are discovered, the City takes action to immediately stop the illegal grading activities and implement appropriate BMPs to prevent erosion and sediment discharges. City staff communicates with the property owner explaining that a grading permit is required. Once communication is made, the illegal grading activities are addressed following general enforcement procedures.

Construction Management

The City enforces local ordinances and permits though the Enforcement Response Plan, at all construction sites in its jurisdiction. All City Staff have the direct authority or resources to take

immediate enforcement actions when necessary. This facilitates the correction of inadequate BMP implementation quickly, reducing the risk of pollutants discharging from the site.

In the event that during a site inspection, the inspector determines that the site is out of compliance with the City's requirements, the inspector will document the corrective actions necessary to bring the site into compliance. The Enforcement Response Plan will typically utilize the following methods to restore compliance at an out of compliance site:

- Verbal warnings
- Written warnings
- NOVs
- Enforcement of contracts (CIPs)
- Stop work orders
- Denial or revocation of permits
- Civil and/or criminal court actions

12.3.3 Existing Development

Municipal

If the City determines that a municipal facility or activity is out of compliance with requirements, the corrective actions are documented and implemented in order to bring the site into compliance.

Industrial and Commercial

In the event that during a site inspection the inspector determines that a site is out of compliance with the City's requirements, the inspector will document the corrective actions necessary to bring the site into compliance. Documentation of the corrective actions includes a compliance date and time at which the inspector has determined that the site needs to be in compliance. This compliance date is based on the best professional judgment of the inspector. The inspector will perform a follow-up inspection to determine compliance. If compliance has not been achieved, the inspector will escalate the enforcement actions. The results of the follow-up inspection are included on the inspection form documentation.

Residential

In the event that an inspector determines that a site is out of compliance with the City's requirements, the inspector will document the corrective actions necessary to bring the site into compliance and include a compliance date. The inspector will perform a follow-up inspection to determine compliance. If compliance has not been achieved, the inspector will escalate the enforcement actions. The results of the follow-up inspection are included on the inspection form documentation.

12.3.4 Correction of Violations

The City requires any violation to be corrected in a timely manner with the goal of correcting the violations within 30 calendar days after the violations are discovered, or prior to the next predicted rain event, whichever is sooner. If more than 30 calendar days are required to achieve compliance, then the City documents the rationale in the violation tracking database.

12.3.5 Reporting of Non-Compliant Sites

The City of San Marcos will notify the RWQCB in writing within five (5) calendar days of issuing Escalated Enforcement to a construction site that poses a significant threat to water quality as a result of violations or other non-compliance with its permits and applicable location ordinances, and the requirements of the Permit.

The City will notify the RWQCB of any persons required to obtain coverage under the statewide Industrial General Permit and Construction General Permit and failing to do so, within five (5) calendar days from the time the City becomes aware of the circumstances.

Intentionally Inserted for Printing Purposes

13 Education

The City implements a public education program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in stormwater and prevent and eliminate non-stormwater discharges.

13.1 Introduction

The City's educational programs and activities are tailored to meet the needs of the following target audiences, as applicable:

- Municipal staff;
- Construction site owners and developers;
- Industrial and commercial business owners and operators;
- Residents;
- School-aged children; and
- Underserved target audiences.

Many educational efforts (e.g., direct interaction during inspections, meetings and responding to concerns through various media are conducted on an ongoing basis. Educational materials are available to the public throughout the year. Targeted mailings, focused training sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of complaints, and other similar factors.

13.2 Municipal Staff Training

The City provides training to staff involved with the implementation of the JRMP. Annual trainings are held for the City's Fire Department and Public Works staff; other Municipal departments are trained on an as-needed basis. Staff training includes presentations, field trainings, and tailgate meetings. The City continually updates its educational program to include information about current BMP technologies and any other relevant stormwater information.

The objectives of the employee training program are to:

- Promote a clear understanding of the JRMP and water quality issues, including activities that may potentially pollute receiving water bodies.
- Identify and implement strategies for BMPs.
- Promote employee ownership of the problems and their ability to apply solutions.
- Integrate employee feedback into training and BMP implementation.

13.3 Special Target Audiences

Where English is not the Primary Language

For households where English is not the primary language and/or Low Socio-Economic Status (SES) communities have been traditionally underserved with respect to outreach. The City now focuses efforts on tailoring messages specifically to target the underserved audiences. The City will continue to explore new opportunities to provide outreach to these communities.

Household Hazardous Waste Education

In addition to maintaining the relationship with Clean Harbors to dispose of San Marcos household hazardous waste, the City provides information on disposal locations to targeted audiences throughout the City. This is accomplished through EDCO's, the City's solid waste hauler, website and at public

community events. Further information about the City's Household Hazardous Waste program is located in Section 9.6 of this JRMP.

Over Irrigation within Residential Areas

The City has developed over irrigation outreach materials that are used to educate the public on the problems associated with over irrigation. With collaboration with Vallecitos Water District joint notices of been developed to encourage water conservation and BMP's. The City's Stormwater Hotline and online reporting tool has been developed to allow the citizens to report run-off in their communities. This is another tool to enforce municipal codes and well as determining where the violations are occurring.

13.4 New Development and Construction

The City is committed to working with construction site owners and developers to ensure that BMPs are implemented at all construction sites. The Development Services Department provides information and education to applicants and developers during one-on-one or small group meetings, inspections, complaint investigations, during pre-construction meetings and during "tail-gate" meetings. Construction site owners and developers are provided template SWPPPs for engineers, contractors, and applicants to help guide the preparation of documents for proposed development projects. Copies of these documents and the Stormwater Standards Manual are available at the City's Development Counter. The Stormwater Standards Manual is also available through the City's website.

The City distributes BMP and pollution prevention information to site owners and developers regarding several topics including: materials storage, perimeter controls, building and staging areas, dumpsters and port-a-potty services, tracking controls, concrete trucks and pumpers, washout areas, dirt and grading, earthmoving equipment, and storm drain protection.

13.5 Commercial and Industrial Owners and Operators

Commercial sites include a wide range of businesses including restaurants, automotive facilities, landscape maintenance services and mobile businesses. Many activities from industrial facilities are considered a high threat to water quality due to the nature of the activities and associated wastes. Pollutants may be generated from daily operations (e.g., vehicle and equipment fueling and cleaning, material loading and unloading, material and waste storage) and have the potential to enter stormwater runoff if stormwater management practices are not conducted in accordance with the Permit and City ordinances.

All industrial and commercial owners and operators are given information regarding requirements of the Permit, San Marcos Municipal Code, and minimum BMPs for the activities at each facility. The City provides an educational program for commercial business owners and operators through the use of printed materials and individual educational efforts during and after inspections.

13.6 Residential, General Public and School Children

The City distributes electronic and printed materials, develops public outreach events, presentations, articles, press releases and videos. The City actively pursues a comprehensive environmental education and outreach program, combining the activities of stormwater, solid waste and water conservation under the umbrella of Environmental Programs. The purpose is to create a unified message, better educate the public, and allow easy access for the public.

Residential Community

The City provides residents with appropriate educational materials to help increase overall awareness, and encourage behavioral changes that reduce the potential for pollutants to enter the MS4 and receiving waters.

General Public

Stormwater information is available to the general public via the City's website, social media, advertisements, newspapers, magazines, and bulletins.

School Children

Outreach efforts for school children includes attending career days at various schools, participating in cleanup events, and providing outreach materials for general City community events.

13.7 Enhancements to Education Program for Focus Areas

Nutrients and other priority pollutant specific education and outreach program to be conducted in the Upper San Marcos HA Focus Areas for target sources identified above. The materials will focus on results obtained through the various program components such as property based inspections and will have an emphasis on discharges to the City of San Marcos' MS4 and the receiving water impacts.

Developing and implementing a training/seminar for property managers and others that have direct responsibility for common areas within HOAs and commercial properties. Educational materials and information will be developed and provided to the managers for them to distribute to their residents and tenants.

As part of the residential outreach program, the City of San Marcos will work with residents and property owners to educate through various means, which may include the use of the City's website, social medial platforms, and published community newsletters, school programs, collaborative workshops, block parties, volunteer events, and one-on-one meetings.

13.7.1 HOA and Property Manager Outreach Program

The City of San Marcos will implement an education and outreach program that encourages and/or incentivizes Home Owner Associations and business property managers to reduce dry weather and/or wet weather flows leaving their properties. Practices could include proper installation and maintenance of irrigation systems, conversion to drought tolerant landscaping, downspout disconnections, LID retrofits, etc.

Intentionally Inserted for Printing Purposes

14 Public Participation

14.1 Introduction

The City implements a public education and participation program in accordance with the strategies identified in the Water Quality Improvement Plan (WQIP) to promote and encourage the development of programs, management practices, and behaviors that reduce the discharge of pollutants in stormwater to the MEP, prevent controllable non-stormwater discharges from entering the MS4, and protect water quality of receiving waters.

Public participation promotes community stewardship of the City's JRMP. The goals of the Public Participation Component are to develop mechanisms for public participation in the implementation of the JRMP and obtain committed participation from the community.

14.2 Water Quality Improvement Plans

The City is located within the Carlsbad Watershed Management Areas (WMAs). The City, along with other jurisdictions, is required to develop and implement Water Quality Improvement Plans (WQIPs) for each WMA. WQIPs are intended to focus stormwater management efforts on priority water quality conditions and pollutant sources.

The process of developing and implementing the WQIPs incorporates a significant public participation process, through engaging stakeholders by holding public workshops, coordinating with Consultation Panels (made up of stakeholders), as well as providing significant public review and comment periods for all WQIP documents. The public participation process not only influences the development of the WQIP, but also the implementation mechanisms included in the City's JRMP.

14.3 Public Participation Opportunities

Listed below are several opportunities for members of the public to participate in the City's JRMP development and implementation processes.

Public's Daily Activities

The City asks the public to focus on reducing pollutant discharges during normal daily activities. The public's effort to recycle, carpool, reduce pesticide use, eliminate off-site drainage and reduce pollution within the City right-of-way, will assist the City in implementing a successful JRMP.

WQIP Implementation

Development and implementation of the WQIP relies on public participation, feedback and input in order to designate the priority conditions in the individual WMAs. The City encourages public participation in WQIP general public meetings, consultation panels, and by submitting comments online regarding WQIP documents at www.projectcleanwater.org. The public participation process influences the implementation mechanisms included in the City's JRMP.

Public Feedback

The public is encouraged to get involved in the JRMP, take ownership of the City's MS4, and report violations. The City encourages the public to provide comments to City staff or City Council during meetings and public workshops.

Staff Feedback

City staff are encouraged to report violations and provide feedback on the implementation of the JRMP. City staff provide valuable information on how to improve implementation of the JRMP.

Education and Outreach

Through education and outreach, the public is encouraged to provide feedback. The City distributes fliers with text requesting that readers contact the City Stormwater Manager by mail, email, or phone, with any comments regarding the City's JRMP. During public workshops, the public is encouraged to provide input on the implementation and effectiveness of the JRMP.

Code Enforcement

The City's Code Enforcement staff are directly involved in enforcing the JRMP and provide feedback to the Stormwater Manager on the implementation of the program.

Regional Hotline

The City utilizes multiple hotlines (City specific and County of San Diego's hotline) and a San Marcos Stormwater email address to facilitate public complaints and reports of illicit discharges or water quality impacts associated with discharges into or from the MS4, including sewage spills from private laterals and septic systems.

The City process for tracking and following up on hotline reports is further described in Section 4.2.5 of this JRMP.

Project Clean Water

The City actively participates in the County of San Diego's Project Clean Water. Members of the public participated in the Project Clean Water–sponsored meetings, which served as the program development tool for many of the JRMP components. Project Clean Water consists of Technical Advisory Committees, Technical Workgroups and sub-committees.

Copermittee Meetings

Like Project Clean Water, Copermittees meetings are open to the public and involve public participation. Attendees include a wide variety of experts, including representatives of federal, state and local agencies, industry, environmental groups, consulting firms, product vendors, general public, and academic and research institutions. Throughout the meeting, opportunities exist for local municipalities and the public to share the latest water quality events and information with the other the attendees. The meeting provides a venue to discuss the latest issues facing various Copermittees and provides valuable insight into the current issues being addressed regionally. The City representative conveys the relevant information back to the appropriate City Staff, Council and public.

15 Monitoring

The City conducts wet and dry weather monitoring of MS4 outfalls and receiving waters to assess water quality improvement efforts with respect to 303(d) listed constituents and the Highest Priority Water Quality Conditions (HPWQCs) as identified in the Carlsbad Watershed Management Area (WMA) Water Quality Improvement Plan (WQIP). This section describes the City's monitoring and assessment efforts performed on a jurisdictional level and as part of the Carlsbad WMA.

15.1 Dry Weather Major MS4 Outfall Discharge Field Screening Monitoring

The City has 43 major MS4 outfalls within its jurisdiction. As a component of its Dry Weather Monitoring (DWM) efforts, field screening is conducted at major MS4 outfalls to:

- identify and investigate observed discharges;
- prioritize dry weather MS4 discharges to eliminate;
- assess effectiveness of source elimination; and
- to differentiate monitoring conducted for the highest priority MS4 outfalls with persistent and transient non-stormwater discharge.

The minimum number of field screenings conducted annually will be the 80% of the quantity of major MS4 outfalls within the City – currently 35 screenings. However, specific outfall locations and frequencies of visual monitoring may change according to non-stormwater discharges observed, source elimination, and the HPWQCs of the WMA.

Major MS4 outfalls are assessed through field observations and data measurements. Field observations collected are unique to specific major MS4 outfalls and describe:

- Site conditions (i.e. vegetation, structural condition, trash, etc.);
- Evidence of illicit Evidence of illicit connections or illegal dumping; and
- Presence and characteristics of flow, pooled or ponded water found.

When field observations or field screening monitoring identifies an obvious illicit discharge, immediate action is taken to identify the source – see Section 4 Illicit Discharge Detection and Elimination.

15.2 Non-Stormwater Persistent Flow MS4 Discharge Monitoring

The City conducts non-stormwater persistent flow MS4 outfall discharge monitoring at specific major MS4 outfalls identified during an assessment of the City's MS4. Monitoring of persistent flow is performed to identify which persistent non-stormwater discharges contain concentrations of pollutants below NALs and which have the potential to impact receiving water quality during dry weather. The City prioritizes all persistently flowing major MS4 outfalls based on:

- Transitional monitoring results;
- HPWQCs;
- Historical data (DWM/CSDM);
- 3rd party data;
- Historical Temporary Watershed Assessment Station (TWAS) monitoring; and
- Historical Mass Loading Station (MLS) monitoring.

The City identified 5 major MS4 outfalls and classified them as the highest priority outfalls for additional monitoring. These highest priority major outfalls and their locations within the Carlsbad WMA are listed in Table 5. The City monitors these high priority outfalls semi-annually during dry weather conditions until results from non-stormwater discharges no longer qualify as a highest priority outfall. This occurs when:

- Discharge has been eliminated for three consecutive dry-weather monitoring events;
- Data evaluation illustrates that constituents fall below an NAL; and/or
- The outfall is found to be an authorized discharge or covered by a separate NPDES permit.

Table 5: Highest Priority Major Outfalls and Location Description

MS4 Outfall ID	Location
OUT002	33.14598; 117.16009
OUT043	33.09546; 117.17979
OUT068	33.16559; 117.18886
OUT053	33.13117; 117.20248
OUT023	33.15826; 117.15826

The City will periodically reevaluate and prioritize (as needed) its non-stormwater persistent flow MS4 outfalls. This process ensures that the highest priority major MS4 outfalls are focused on for their contributions. In general, the City will continue to focus on addressing the highest priority MS4 outfalls until one of the conditions above are met and lower priority outfalls will be integrated into the highest priority MS4 outfall listing.

Discharge monitoring includes DWM field observations identified above (Section 15.1) with the addition of field parameter measurements and collection of grab samples when discharge is either ponded/pooled or flowing. Field parameters measured are shown below in Table 6.

Table 6: Field Measurements

Parameter	Units
Temperature	^{o}C
Specific Conductivity	µmhos/cm
pH	pH Units
Dissolved Oxygen	mg/L
Turbidity	NTU

When active flow is present, the non-stormwater discharge is sampled and is analyzed for the constituents identified in the Carlsbad WMA MS4 Outfall Monitoring Plan: Attachment D – Table D-3. The current monitoring plan can be found at the Project Clean Water website under the Carlsbad WMA page.

Collection methods of samples and field parameters follow SWRCB approved SWAMP guidelines and/or EPA methods described, unless a site-specific method must be used enable to collect representative data.

15.3 Wet Weather MS4 Outfall Discharge Monitoring

The City performs wet weather MS4 outfall monitoring to identify pollutants in stormwater discharges from the MS4s and to guide pollutant source identification and mitigation efforts. MS4 wet weather monitoring stations within the Carlsbad WMA were selected to best represent land use types (i.e. residential, commercial, industrial and mixed) within its limits. The City performs monitoring at one MS4 outfall monitoring station. The City's wet weather monitoring station is outfall OUT002.

During the wet season (October 1- April 30), the City monitors at least one wet weather event at OUT002 using the procedures identified in the Carlsbad WMA MS4 Outfall Monitoring Plan. If pollutants are identified that cause or contribute to a HPWQC at the wet weather monitoring station, additional wet weather monitoring and source investigation will be scheduled to guide pollutant source identification efforts until eliminated. For each wet weather monitoring event, the City records the following information:

1. A narrative description of the location and condition of the monitoring station.
2. A narrative description and quantification of the storm event conditions.
3. Results of field measurements listed in Table 6. Collected grab samples may be used to collect field measurements with the addition of hardness and indicator bacteria.
4. Results of time-weighted, flow-weighted, manual compositing or a blend composite sample for a duration of a storm event to represent the changes in pollutant concentration and runoff flows.

Samples are collected using methods and protocols approved by the SWRCB and described in the MS4 Outfall Monitoring Plan. Composite samples are analyzed for constituents that have been identified in the Carlsbad WMA MS4 Outfall Monitoring Plan: Attachment D – Table D-4.

The City analyzes the wet weather monitoring results to support and assess the effectiveness of the water quality improvement efforts. Based on the results, the City may implement additional efforts to achieve water quality benchmarks set for the WMA.

15.4 Data Assessment, Reporting, and Quality Control

The City assesses collected dry and wet weather monitoring data for assessing the effectiveness of the current water quality improvements implemented. Results from dry weather MS4 outfall discharge monitoring is used as part of a prioritization procedure for non-stormwater discharges to be addressed by the IDDE program. It is a key component in the iterative approach to water quality improvements and provides the City with adaptive management options to best address water quality concerns.

Monitoring efforts that occur at a greater frequency than expressed in this Monitoring and Assessment section are reported to the RWQCB at prescribed intervals. Annually, collected monitoring data are uploaded using specified templates to the California Environmental Data Exchange Network (CEDEN) Southern California Regional Data Center. The uploaded regional water quality information is ultimately available to the general public through the CEDEN website.

As a quality control component, the City maintains monitoring and calibration data for a minimum of five years from date sampled, measured, reported or applied. Sample collection methods involve the inclusion of a quality assurance/quality control (QAQC) program. The sampling, analysis, and, QAQC were conducted in accordance with the Quality Assurance Management Plan (QAMP) for SWAMP.

15.5 WQIP WMA Monitoring Requirements

As part of the Carlsbad WMA, the City works in collaboration with the other stakeholders within the WMA boundary. The goal is to create a bridge between the overall health of the receiving waters within the WMA and water quality from MS4 systems. These requirements include:

- Sediment Quality Monitoring;
- Long-term Receiving Water Monitoring Requirements; and
- Special Studies.

These monitoring programs are described in the following documents:

- Carlsbad WMA Water Quality Improvement Plan;
- Carlsbad WMA Sediment Monitoring Plan; and
- Carlsbad Receiving Water Monitoring Plan.

The current versions of these documents are located at the Project Clean Water website under the Carlsbad WMA page – www.projectcleanwater.org.

16 Fiscal Analysis

Effective programs require adequate funding to implement planned strategies. The first step in securing adequate program funding is to provide a strategy for effectively conducting a fiscal analysis of the Program in its entirety. The fiscal analysis evaluates the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities of the Program. The fiscal analyses will be completed annually and included in the Carlsbad Water Quality Improvement Plan Annual Reports.

16.1 Expenditure Categories

The City has identified categories of expenditures related to stormwater management and implementation. The following are category descriptions of specific implementation, capital, operation and maintenance activities. Six expenditure categories were identified for fiscal analysis to effectively communicate the types of program costs. Descriptions for these categories of expenditures are provided below:

Administration

Administrative activities include a range of tasks such as general government services related to stormwater management programs and miscellaneous administrative tasks such as contract management, invoice processing, and accounting.

Development Planning

Activities identified in this category represent expenditures related to issuance or oversight of permits or of plans (e.g., permit counter support, plan checks, permit or application processing), project planning and engineering (e.g. project design specifications, capital improvement projects).

Construction

Activities identified in this category represent expenditures related to construction site inspections and enforcement.

Existing Development, Education, and Public Participation

Activities identified in this category represent expenditures related to municipal facility operations and maintenance, BMP implementation, evaluation and enforcement of program requirements at industrial, commercial, and residential sites or sources (e.g. inspections, complaint investigations, and patrols), staffing outreach events, and outreach material development.

Illicit Discharge Detection and Elimination

Activities identified in this category represent expenditures related to the identification and elimination of illicit discharges or connections, enforcing the City of San Marcos' stormwater ordinance, and any expenditures related to monitoring programs (e.g. MS4 monitoring, special investigations, field or sampling equipment, materials and supplies).

Watershed and Regional

This category covers watershed and regional expenditures for activities that will be tracked according to program type.

16.2 Staff Resources

To meet the stormwater management requirements in the Municipal Permit, implementation efforts and costs are shared across the entire City. For the fiscal analysis the City staff will identify the staff resources needed to implement the City's overall program. City staff resources will be analyzed according to their functions related to the City using the Expenditure Categories identified above.

16.3 Expenditures and Sources of Funds

Annually, the City will present its expenditures for the fiscal year as well as a proposed budget for the next fiscal year. The fiscal year expenditures are presented in tabular format with separate rows for different divisions and subdivisions. The budget for the next fiscal year is presented in similar format and includes the anticipated total expenditures.

The sources of the funds needed to fund the current and next fiscal year will be included in the analysis and include any identified restrictions on the use of those funds.